6-30-1970


University of New Mexico

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1969-70

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THE PRESIDENT'S REPORT

No President's Report for 1970
Please see the Annual Reports for the Report of the
President.
THE REPORT OF THE DEPARTMENT of INTERCOLLEGIATE ATHLETICS

July 1, 1969 - June 30, 1970

Pete McDavid
Athletic Director

I. Significant Developments during the Academic Year, 1969-70.

At the varsity level our teams have competed in the following sports: football, basketball, track, cross country, baseball, tennis, wrestling, swimming, golf, and gymnastics. Freshman teams played regular schedules in football and basketball. A total of 157 athletes received major letter awards; 59 freshmen athletes were awarded numerals in football and basketball, making a grand total of 216. Skiing will be recognized as a major sport for the 1970-71 season.

We have completed our fourth season in the new University Basketball Arena. We set another new attendance record - a total for the season of 191,424, an average of 13,673 each game. Attendance ranked third in the nation. All past records as far as gate receipts taken during the season were broken.

The Lobo Invitational was again one of the most successful tournaments in the country, and this is reflected in the great number of outstanding teams that will be participating in future tournaments. Some of these include Stanford, California, Michigan State, Indiana, Minnesota, Columbia, and Bradley.
Coach Rusty Mitchell's Gymnastics team turned in another outstanding performance, winning the Western Athletic Conference championship, and placing second in the N.C.A.A. championships.

We are particularly proud of the great number of athletes who made various all-academic teams. Ron Becker made the All-American academic basketball team, and Larry Minarsich made the academic All-American baseball team. Additionally, the following football players made the Western Athletic Conference academic team: Joe Hartshorne, Henry Noe, Rocky Long, and Mike Buck. Andy Boyd was named to the golf team. The following student athletes made the Western Athletic Conference All-Star teams: Willie Long, basketball; and the following baseball players, Larry Minarsich, Bob Faford, Rick Wicks, and Jim Kremmel. Stormy Eaton again brought national recognition to our campus by being named an All-American gymnast.

The following attractions were held this year in either Johnson Gymnasium or the University Arena:

1. Western Athletic Conference gymnastics championships
2. New Mexico Education Association Annual Convention
3. New Mexico High School Swimming Tournament
4. New Mexico High School Wrestling Tournament
5. New Mexico High School Band Festival
6. New Mexico High School Cheerleaders Clinic
7. New Mexico State Science Fair
8. Fifth Annual Lobo Invitational Basketball Tournament
9. National Youth Sports Program sponsored by the University of New Mexico in collaboration with the National College Athletic Association and the President's Council on Physical Fitness.

In addition, our Athletic Department acted as hosts to the following events:

1. New Mexico High School Track Championships
2. New Mexico High School Golf Championships
3. New Mexico High School Tennis Championships
4. New Mexico High School Cross Country Championships
5. New Mexico High School Pentathlon Championships
6. New Mexico High School Decathlon Championships
7. New Mexico High School Activities Association Wrestling Clinic
8. New Mexico High School Coaches Association - Downtown Lions Coaching School and All-Star Basketball and Football Games
9. Annual Fall Tucker Golf Tournament

II. Significant Plans and Recommendations during the Academic Year 1970-71.

We expect to move into our new Athletic Building sometime in November 1970. This will complete our athletic complex on the South Campus and will provide facilities for our various sports programs among the best anywhere in the nation. The building will provide space and services necessary in the functioning of a good all-around athletic program.
We will be on Regional TV for two of our basketball games this coming season. We are also pleased that KOB-TV will be carrying delayed TV on most of our home games and live TV on all out of town games. KOB and KGGM will both be carrying by radio all our football and basketball games, both home and away. With these two stations, it is felt that we will be reaching very adequately our many alumni who are interested in these programs.

III. Outside Professional Activities of Staff Members:

Athletic Director - Pete McDavid - N.C.A.A. Committee on Committees

National Athletic Directors Association
Policy Committee

National Association of Collegiate Directors of Athletics Executive Committee

IV. Appointments to Staff:

Jerry Hardy --------- Assistant Football Coach
Gary Sloan --------- Assistant Football Coach
Reed Johnson ------- Assistant Football Coach
Ed Filmer --------- Assistant Equipment Manager

V. Separations from Staff:

Damon Bame --------- Assistant Football Coach
Dale Perini --------- Assistant Football Coach
Larry Bielat --------- Assistant Football Coach
Arthur Arellano ------ Assistant Equipment Manager
During this fiscal year the following buildings were completed at the University of New Mexico: the 1967 Dormitories with Commons Building, the Addition to the Heating Plant, the Addition to the Dressing Rooms at University Basketball Arena, the Chemistry Building Addition, the KNME Studio Building, and the Alterations to the Naval ROTC Building. Completed work totalled $7,171,087, project cost; $5,826,462 in construction contracts. At the end of the year the construction contracts underway totalled $4,365,195, indicating a $1.5 million decline in dollar volume of construction work.

This was again a year of escalating construction costs. Using the Engineering News Record Building Construction Index for this area, construction costs increased approximately 12.5% during the fiscal year. At the same time Federal funds to assist in construction of facilities for higher education became almost non-existent.

BUILDINGS COMPLETED DURING THE YEAR

1. Naval Science Alterations, UNM Project NO. 646

Bids were opened for this project on February 7, 1969, and the alterations were completed on September 1, 1969.

The building on Yale Boulevard was originally a dormitory and later Student Health Center. The alterations to the building provided new facilities for the Naval ROTC unit with a wardroom, an armory, storage, offices, a seminar room and a lounge area. The west end of both wings
were modified to provide classrooms. Final project cost, including fees and inspection costs, totalled $65,000.

Architect: Crawford and Oravec
General Contractor: C. W. Murphey Construction Co.

2. 1967 Dormitories and Commons, UNM Project No. 629

The bid opening date for this project was May 15, 1968, and substantial completion of the entire complex was September 8, 1969.

The 1967 dormitory complex is situated on Redondo Drive east of Hokona Dormitory. The complex consists of two dormitory buildings and a commons building. Each dormitory building is divided into three houses, of 50 students each. The dormitories were named Laguna Hall and DeVargas Hall. They have a high percentage of single rooms and all double bedrooms have an adjacent study room. Bathrooms are semi-private accommodating five students or less. Student recreational areas, laundry, linen, mechanical and maintenance facilities are in the basement.

Immediately east of the two dormitories is the Student Commons Building, La Posada, which was designed to provide food service for up to 1500 students which includes some from other dormitories. La Posada contains a central patio with fountain surrounded by split level dining rooms on two sides, a large main dining room, and a cafeteria with double serving lines adjacent to the kitchen. Student housing offices are located on the second floor level. The lower level provides a loading dock, mail facilities, food storage, trash pickup and mechanical and maintenance facilities.

The structure of the dormitories is a steel frame supporting reinforced concrete floor and roof slabs, with exterior walls of precast concrete panels. The Commons building structural system is a reinforced
concrete frame with concrete floor and roof joists. The exterior walls are precast concrete panels above form marked concrete foundation and retaining walls.

- **Architect:** William W. Ellison and Assoc.
- **Consultant:** Ernest Kump and Assoc.
- **Structural Engineer:** Randy Holt
- **Mechanical Engineer:** Bridgers and Paxton
- **Electrical Engineer:** W. Dean Powell
- **General Contractor:** Lembke Construction Co., Inc.

The total project cost, including surveying and testing, fees, inspection costs, site improvements, utility connections and movable equipment was $3,727,959.

3. **1967 Heating Plant Expansion, UNM Project No. 634**

This project started on July 8, 1968 and was completed on October 26, 1969.

This project provided a major addition to the existing Heating Plant which upon completion of the project was named Ford Utility Center. The addition is east of the existing building and houses a new 100,000 lb. per hour boiler and has sufficient space for installation of a similar boiler in the future. Many accessories and connections were replaced in order to modernize the entire heating plant facility and to increase its efficiency. The addition includes offices for plant personnel and a small laboratory facility for water testing. The addition is of steel frame construction with concrete block exterior walls and exterior stuccoing to match the existing building.

The total project cost including fees, inspection costs, and other costs was $796,855.

- **Engineers:** Bridgers and Paxton
- **Architects:** Hollen and Buckley
- **Structural Engineer:** Fred J. Fricke
- **Electrical Engineer:** Uhl and Lopez
- **General Contractor:** George A. Rutherford, Inc.
4. **Dressing Room Addition, UNM Project No. 626**

Bids were opened for this project on June 4, 1969 with a substantial completion date of December 23, 1969.

This project provides additional dressing rooms, training rooms and offices for the home team. The existing dressing rooms now are used by the visiting team.

The total project cost was $81,178.

Architect: Joe Boehning  
Mechanical Engineer: Bridgers and Paxton  
Electrical Engineer: Uhl and Lopez  
Structural Engineer: Howard Cottrell  
General Contractor: K. L. House Construction Co.

5. **Chemistry Building Addition, UNM Project No. 628**

Bids were opened for this project on September 26, 1968, and the addition was completed on December 31, 1969.

The addition to the Chemistry Building provides flexible teaching and research laboratories and offices for undergraduate, graduate students, and faculty.

The addition adjoins the existing building on the south and has three floors above ground and one below. Undergraduate teaching laboratories are located on the ground floor with direct access to the outside. Graduate research laboratories with permanent work and study stations for graduate assistants are on the top floor.

This is a concrete frame building with post tensioned beams and slabs. The exterior walls are concrete with an applied color coating. Utilities are carried vertically and exposed on all floors. All heating and cooling equipment is on the roof and the equipment room is projected over the south wall of the main mass to provide fresh air supply as remote as
possible from the fume hood exhausts on the north side of the building.

The stairways are projected beyond the building on the south side and are unenclosed.

The total project cost for this project, including all overhead, was $1,843,465.

Architect: Ferguson, Stevens, Mallory & Pearl
Structural Engineer: Fred J. Fricke
Mechanical Engineer: Bridgers & Paxton
Electrical Engineer: Carl A. Albach
General Contractor: R. M. Swain and Son

6. KNME Studio Building, UNM Project No. 637

The notice to proceed date was May 19, 1969, with a completion date of April 14, 1970.

This project located on University Boulevard north of Lomas Boulevard provides a new facility for KNME-TV. The operation of this educational television station is a joint venture between the University of New Mexico and the Albuquerque Public Schools. This new facility provides office space for all of the personnel and shop facilities, and a large studio and control room. The design provides for the addition of another similar studio on the north at a later date.

The total project cost was $635,000.

Architect: Neuner and Cabaniss
Mechanical Engineer: Allison Engineering, Inc.
Electrical Engineer: A. L. Zerwer
General Contractor: Bradbury and Stamm Construction Co.
PROJECTS BEGUN DURING THE FISCAL YEAR

1. New Bratton Hall, UNM Project No. 636

Bids were opened for this project on September 30, 1969, with an expected contract completion date of December 18, 1970.

This building, which will provide new facilities for the School of Law, is located on Stanford Blvd. NE about two blocks north of the Basic Medical Sciences Building. The 63,000 gross square feet of area which this facility will provide for the School of Law, through a unique design, provides the space on five different levels in a building that is essentially a two story height. A large concourse area on the main level is carpeted with a border area of brick. The circular moot court is in approximately the center of the concourse. The office for the Dean and the other administrative offices are off the concourse to the east. On the west are two large arena-type classrooms with sloping floors and a third, smaller, conventional classroom. The faculty offices are on two levels. The library facilities are also on two levels, with rather spacious provisions for reading areas, stack facilities, and study carrels. The glass library wall, faces northeast toward the Sandia Mountains and provides a spectacular vista from the reading rooms.

The contract for this project was awarded in the amount of $1,719,393.

Architects: George Wright and Associates
Structural Engineers: Howard Cottrell
Mechanical Engineers: Bridgers and Paxton Engineering, Inc.
Electrical Engineers: Bradbury and Stamm Const. Co.
General Contractor:

2. Building for the Department of Athletics, UNM Project No. 626

The notice to proceed date for this project was January 29, 1970, with an anticipated construction date of September 11, 1970.
This building, presently under construction, is located on the South Campus immediately south of Zimmerman Field. Upon completion of this facility most of the intercollegiate athletic functions will be removed from the Central Campus. This building will provide team rooms and other facilities for football, baseball and track; the director of athletics and his staff; all the intercollegiate coaches; and the ticket sales offices.

The construction contract awarded for this project was in the amount of $650,990.

Architect: Joe Boehning
Structural Engineer: Cottrell, Vaughn and Assoc.
Mechanical Engineer: Bridgers and Paxton
Electrical Engineer: Uhl and Lopez
General Contractor: Nation-Payne

3. 1969 Computing Center Addition, UNM Project No. 743

Bids were opened for this project on January 30, 1970. The contract completion date is to be September 11, 1970.

This is a two level addition south of the present building with the lower level at the existing grade of the parking lot to the west and the second level connected to the main floor of the present research building. The lower level will provide space for the computer and its auxiliary equipment including storage and offices. The second level has offices for programmers and staff of the Data Processing Center. The Data Processing Center is presently located in the College of Education Complex.

The contract amount for this project was $322,920.

Architect: William W. Buckley
Structural Engineer: Fred J. Fricke
Mechanical Engineer: Bridgers and Paxton
Electrical Engineer: Carl A. Albach
General Contractor: C. W. Murphey
4. Fine Arts Center Addition, UNM Project No. 080

Bids were opened for this project on March 24, 1970 and the project has a contract completion date of November 11, 1970. This addition, on the west side of the Music Building, includes a new loading dock and a work storage area for the Fine Arts Museum, a Visual Arts laboratory, classrooms, additional reading rooms, book stacks and slide collection space for the Fine Arts Library. A few faculty offices are also included.

The construction contract amount was $223,438.

Architect: William W. Buckley
Structural Engineer: Fred J. Fricke
Mechanical Engineer: Bridgers and Paxton
Electrical Engineer: Carl A. Albach
General Contractor: C. W. Murphey

5. Faculty Office - Classroom Building, UNM Project No. 640

Bids were opened for this project on May 20, 1970. The expected contract completion date is July 21, 1971.

This building is located at the northwest corner of the old Zimmerman Football Field. The Stadium building was removed some eight months prior to the start of construction. This will be a four story building with the first floor at existing ground level. Audio-visual classrooms, language laboratories and main control rooms are on the ground floor. The second floor level has a number of general classrooms which will be entered directly from an exterior walkway thus eliminating interior corridors. The third and fourth level consist of faculty offices, conference rooms and administrative offices for the departments of Modern Language and Political Science. The Dean of the College of Arts and Sciences will be in this building.

The contract amount for this project was $1,398,455.

Architect: Ferguson, Stevens, Mallory & Pearl
Structural Engineer: James MacCornack & Assoc.
Mechanical Engineer: Lyon Engineering
Electrical Engineer: Uhl and Lopez
General Contractor: K. L. House Construction Co.
6. Tamarind Institute, UNM Project No. 240

Bids were opened for this project on June 24, 1970, with an anticipated construction completion date of approximately the middle of September.

This project involves the remodeling of two store buildings, purchased by the University, located at 108 Cornell Drive, SE. These buildings will be leased to the Tamarind Institute, a school of lithography, recently moved to Albuquerque from Los Angeles.

The contract amount for this project was $49,999.

Architect: Long and Waters
General Contractor: C. W. Murphey Const. Co.

PROJECTS IN THE PLANNING STAGE

1. Johnson Gym Addition, UNM Project No. 619

The addition, to house an Olympic-size swimming pool, a hydro-therapy pool, offices and equipment rooms will be located on the north side of Johnson Gymnasium with covered connections to the existing building. Existing locker and restroom facilities in the Johnson Gymnasium will be used in conjunction with this pool. The site is to be walled and landscaped. This project will also include some alterations to spaces in Johnson Gym. The estimated total project cost: $1,040,000.

Architect: Buckley, Luna and Merker (joint venture)

2. Psychology Building, UNM Project No. 622

The proposed site for the new Psychology Building is at the intersection of Terrace Blvd. and Redondo Drive, west of the Biology Building. This location is recommended to the Campus Planning Committee because of the strong relationship of the Psychology department and Biology departments. The building will house the department of Psychology, its faculty, research
programs and instructional laboratories. Funds originally requested to support the construction of this building from the National Institute of Health have not materialized, so additional funding will be requested next year from the 1971 State bond issue allocation. The estimated total project cost is $1,953,000.

Architects: Flatow, Moore, Bryan and Fairburn

3. Law Building Alterations, UNM Project No. 647

The existing Bratton Hall now occupied by School of Law will be remodelled when the new Law Building is completed on North Campus to provide facilities for the departments of Sociology and Economics.

Architect: George Wright

4. Anthropology Building Addition, UNM Project No. 648

An addition on the south side of the present building will provide additional museum space, storage, work rooms, faculty offices and laboratories for the Department of Anthropology in about 10 gross square feet. Some remodelling will be done in the existing building. National Science Foundation is participating in the cost. Estimated project cost is $1,000,000.

Architects: McHugh and Kidder

5. Geology Building Addition, UNM Project No. 649

Federal funds did not become available for this project so it will have to be funded from 1971 state bond issue. This project consists of remodelling half of the existing third floor west side of the Geology Building, the addition of a complete third floor to the present north wing, and the air-conditioning of the entire building. The major portion
of the space provided will be for graduate and research work. The estimated project cost is $548,000.

Architect: William W. Buckley

6. Physics Laboratories - Lecture Hall, UNM Project No. 050

This project will have the building located between the existing Farris Engineering Center and the proposed Psychology Building described earlier. The structure will be underground and consist of eight Physics Laboratories, a shop area and storage space as well as some facilities for graduate assistants. Above grade there will be a 300-seat lecture hall and preparation rooms. The estimated total project cost is $800,000.

Architects: Pacheco & Graham

7. Nursing-Pharmacy-Dental Hygiene, UNM Project No. 060

The programming for this project has just started. It is anticipated that it will be able to receive support of federal funds. The estimated total project cost is $2,250,000.

8. Science Lecture Hall, UNM Project No. 170

The programming for this project is expected to start later on in the year. This lecture hall is to be planned to have 1200 seats. The estimated total project cost is $1,000,000.00.
During the fiscal year 1969-1970 the Computing Center underwent a pronounced growth in personnel, facilities, number and quality of services and use of these services.

The decisions which preceded and accompanied this growth prompted such questions as:

1. What computing services does the University community want?
2. What will it want five years from now?
3. What can it afford?
4. How does the Center provide the best compromise between requests for services and economic reality?

A major decision was made to bring in a leased IBM System/360 Model 67 in February. In accordance with a previous decision, the purchased IBM System/360 Model 40 was turned over to the Data Processing Center on July 1, 1970.

This report is divided into seven parts: Policy, the Computer Use Committee, Facilities, Software, Staff, Services, Use of Facilities.
Policy

Through the Computing Center the University provides computer resources to faculty, staff and students on an equal basis. In general, jobs making the least demand on the resources are run first. All Computing Center services are focused on helping users make optimum use of the facilities.

Although the staff is available to all segments of the University for advice and consultation, it is not the policy of the University to assign Computing Center Staff on a project basis. Users do their own analysis, program design, coding and keypunching.
Computer Use Committee

The Computer Use Committee, a joint faculty and administrative committee charged to "study future needs... for all forms of computer services... and review and approve recommendations to the President in matters of future computer needs", met six times during the year.

In accordance with the wishes of the Committee, the Computing Center staff prepared and distributed a questionnaire which was intended to provide data essential to long range planning for computing needs within the University. The response was disappointing in that it provided little data for its designed purpose.

The Committee members were as follows:

D. R. McLaughlin, Chairman (Chemistry)
A. Blumenfeld (Bus. Admin)
M. Howard (Art)
P. Johnson (Psychology)
R.L. Johnson (Civil Engineering)
C. Leavitt (Physics and Astronomy)
I. Miller (Medicine and Math)
E. Spolsky (English)
A. Ugalde (Sociology)
J. Perovich (Vice President for Business and Finance)
S.E. Smith (Administrative Vice President)
C. Travelstead (Academic Vice President)
S. Bell (Director, Computing Center)
R. Allen (Mathematics and Statistics)
Facilities

As of July 1, 1969 the computing equipment consisted of:

- **2040H*** Central Processing Unit (256K bytes of core storage)(purchased)
- **2841** Disk controller (purchased)
- **5-2311** Disk drives (purchased)
- **5-2403/2402** Tape drives (one 7-track, four 9-track drives)(purchased)
- **2821** Unit record control (purchased)
- **2540** Card reader/punch (purchased)
- **1403** Printer (purchased)
- **3-2848** Control units (each control unit supports 8-2260 visual display units)(purchased)
- **2702** Transmission control(can support a maximum of 31 terminals, 1050, 2741, or ASR 33/35)(leased)

1 - IBM 083 Sorter (purchased)
1 - Computer Industries 30" plotter (MTD-345)(purchased)
4 - 1050 terminals (located at Los Alamos, Sandia (2) and Physics)(leased)
24 - 2260 Display terminals (Mathematics Laboratory)(purchased)
1 - 1620 II (Electrical Engineering)(leased)
5 - public keypunches (3 purchased)
3 - staff keypunches (leased)

On February 21 the IBM 360/67 was installed consisting of:

- **2067** Model 1 Central Processing Unit (leased)
- **2365** Core Storage (256K bytes, K=1024)(leased)
- **2860** Model 2 selector channel (leased)
- **2870** Multiplexor channel (leased)
- **2314** Direct access storage facility (4 modules)(leased)
- **2821*** Unit record control (leased)
- **2540*** Card reader/punch (leased)
- **1403*** Printer (leased)
- **2-2415*** Tape drives (leased)
- **2741** Typewriter terminal (used as operator console)(leased)
- **2911*** Switch Unit (to allow switching terminals between the Mod 67 and Mod 40 to allow RAX testing on the Mod 67)(leased)

* On July 1, 1970, according to plan, the Data Processing Center took possession of the 2040 central processor. The remaining items were returned to IBM.
Software

As of July 1, 1969 the following major software was available to the Computing Center users.

OS Release 13.0

FORTRAN IV level E
FORTRAN IV level G and H
Cobol E and Cobol F
PL/I
360 Assembler F
BMD, CSMP, ECAP, GPSS, MPS, ICES

RAX Version 4.0 (highly modified)

FORTRAN IV level D
360 Basic Assembler
WATFOR
SSP
Conversational Statistics

Highlights of Systems Software Changes
July 1, 1969 to June 30, 1970

August 1969 OS Release 17.0 implemented

October 1969 VTOC4MAT implemented under OS to aid users in their disk pack maintenance

November 1969 COBOLXREF implemented under OS to aid Cobol users in debugging their programs

January 1970 TAPEDUMP utility implemented under OS to give users an easy-to-use tape utility
KWIC implemented under OS to give users a keyword indexing capability such as is useful when listing titles of books.
ICES converted for OS Release 17 as a Civil Engineering problem solving tool.

February 1970 Work began to prepare RAX, OS and CP-67 for use on the Model 67. This work will continue through September 1970.
FORMAT, a document writer, was converted for OS Release 17.

March 1970 OS Release 18 tested in a production environment on the Model 67 (scheduled for full production in July 1970)
RAX Version 4.2 implemented

May 1970 User conversion from OS Release 17 (used on the Model 40) to OS Release 18 (used on the Model 67) began.
Staff

Full time staff as of June 30, 1970, including additions and separations are as follows:

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<td>Moynihan, Michelle</td>
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<tr>
<td>Ruiz, Rebecca</td>
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<td>6/69</td>
<td>11/69</td>
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<tr>
<td>Sparks, Dale</td>
<td>Associate Director</td>
<td>2/59</td>
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<tr>
<td>Wolf, Gertrude</td>
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Applications

| Boyce, Richard         | Applications Programming Supv. | 1/68 | 5/70 |
| Cox, Patricia          | Applications Programmer        | 5/70 |     |
| Fitzer, Paul           | Applications Programmer        | 4/70 |     |
| Friedenbach, K. J.     | Applications Programmer        | 8/69 | 3/70 |
| McMahan, W.H.          | Customer Service Supervisor    | 7/69 |     |
| Selmier, Margaret      | Keypunch Operator             | 4/67 | 3/70 |
| Speechly, Betty N.     | Applications Programmer        | 6/67 |     |
| Whetstone, Anner       | Keypunch Operator             | 3/70 |     |

Operations

| Aragon, J.D.           | Operations Supervisor        | 8/69 |     |
| Howard, Eldon B.       | Computer Operator            | 2/69 |     |
| Kirkwood, Billy M.     | Machine Room Supervisor      | 2/62 |     |
| Molina, Carlos M.      | Computer Operator            | 1/68 |     |
| Paton, John P.         | Computer Operator            | 11/69|     |
| Paul, Phyllis          | Computer Operator            | 9/69 |     |
| Specter, Christopher   | Computer Operator            | 12/69|     |
| Trimble, Robert W.     | Computer Operator            | 2/69 |     |
| Whitford, Cheryl J.    | Computer Operator            | 12/67|     |

Systems

| Dowe, James W.         | Systems Programmer          | 10/69|     |
| Fisher, Stephen N.     | Systems Programmer Trainee  | 3/69 |     |
| Gatchell, Douglas      | Systems Programmer          | 4/70 |     |
| Iden, James L.         | Student Systems Programmer  | 6/69 |     |
| McDonald, Rufe J.      | Systems Programming Supervisor | 9/67 |     |
| Pettit, R.G.           | Systems Programmer Trainee  | 7/69 |     |

* Became Special Applications Programming Supervisor September 18, 1969
** Became Applications Supervisor September 18, 1969
*** Became Applications Programmer December 1, 1969
**** Became Systems Programmer January 26, 1970 (full time)
Services

Among the services provided to Computing Center users as of July 1, 1969 were the following:

- Consultation to users who were experiencing difficulties in accomplishing the goals of their programming efforts;
- Distribution of reference manuals for University users (other than students);
- Maintenance of a document reference room for all users that contains both UNMCC equipment-specific documents and documents of general interest in the computing field;
- Distribution of a newsletter on an unscheduled basis.

During the year, consultation services were expanded to include more hours of the day and to provide more emphasis on the provision of this service to student users; the document reference room hours of operation were extended and the newsletter was issued on a more regular (monthly) basis.
Use of Facilities

The following rates were in effect during fiscal year 1970:

Free to UNM students and faculty for course and unsponsored research

$100 per hour for funded research projects

$125 per hour for use by other governmental agencies

$175 per hour for use by all other users

The following two pages summarize the usage for the year. "Other" categories include Computing Center staff work, non-academic departments, high school students under the direction of faculty members, commercial users, and Computer Science Club,
### UNIVERSITY OF NEW MEXICO
COMPUTING CENTER

#### REPORT ON COMPUTER USE FOR
ALL USERS OF IBM 360 MOD 640
FOR THE PERIOD
MAY 16, 1970 THROUGH JUNE 15, 1970

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THE REPORT OF THE DEVELOPMENT/ALUMNI OFFICE

July 1, 1969 - June 30, 1970

Lars Halama, Director
   Development Office
   and
   Executive Director,
   Alumni Association

Gwinn (Bub) Henry, Director
   Alumni Relations
# TABLE OF CONTENTS

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<td>Greater UNM Fund</td>
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*Appendix I - Alumni Association Board of Directors, 1970*
*Appendix II - Personnel; Appendix III - Awards; Appendix IV - Alumni Demography; Appendix V - Record of Mailings and Appendix VI - Sources of Financial Support.*
INTRODUCTION

Fiscal Year 1969-70 records reflect a step forward for the Development/Alumni Office.

In terms of financial support, the Development Office had an overall gain of $21,635.91 over the previous year.

The Alumni Office made steady progress in increased communication with alumni, Student Government, and with other students. It has worked to develop a strong Board of Directors, committees and Alumni staff.

GREATER UNM FUND

The Greater UNM Fund which was established in 1963 to help certain features that are characteristic of a quality institution but which are often beyond the ability of the State to provide, continues to work toward its goals. Through contributions from alumni and friends, funds are available for such items as equipment and library materials as well as faculty research.

GIFT ACCEPTANCE

The Development Office continues to be the principal repository of records of gifts made to The University of New Mexico. Gifts are accepted, receipted, recorded and acknowledged by this office. From records so compiled, the Greater UNM Fund Report issue is published annually to show the source and purpose of gifts and to list the individual donors. This office reports to national
organizations such as the Council for Financial Aid to Education and the American Alumni Council in order that the University of New Mexico's record of private support may be included in compilations of non-governmental financial aid to higher education.

**FUND DEVELOPMENT**

The Development Office serves continuously as a clearing house for all gifts made to the University. Gifts to the Greater UNM Fund for fiscal year 1969-70 are compiled in Appendix VII, together with a compilation of the purposes for which gifts were donated. As usual, the compilation does not include gifts in kind such as land, books, and objects of art. Only cash and securities are included.

The Development Office continues to receive good cooperation from other campus departments and offices in reporting gifts to this office. This enables us to give proper recognition to donors in the annual gift report.

The services of the Greater UNM Fund board members are acknowledged with appreciation. The board members are:

- Mr. Glenn Emmons, Chairman
- Mr. Robert Clemmenson, Alumnus
- Mrs. Neil Foley, Alumnus
- Mr. Joe Boehning, Alumnus
- Dr. Chester Travelstead, Academic Vice President
- Mr. John Perovich, Vice President for Business and Finance
- Mr. Jack Sheehan, Director of Student Aids
- Mr. Lars Halama, Director of Development
- Mr. Gwinn "Bub" Henry, Director, Alumni Association.
In accordance with statutory requirements and University policy, those gifts which were earmarked for a specific purpose were allocated and spent for the intended purposes.

Unrestricted gifts were disbursed by the Allocations Committee composed of alumni, faculty, and administrative staff as follows:

Dr. Arnold Koschmann, Chairman
Dr. Ned J. Davison
Dr. Chester Travelstead
Mrs. Clyde Hill
Mr. John Perovich
Mr. Lars Halama

The Allocations Committee works within a schedule of priorities of purposes for which unrestricted funds are to be spent:

Community and State relations
Undergraduate instruction
Gallery and museum acquisitions
Pilot projects requiring a one time allocation

Below is a recapitulation of sums spent in recent years with the 1969-70 fiscal year figure added:

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<tr>
<td>1965-66</td>
<td>$11,015.00</td>
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<td>18,650.00</td>
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<tr>
<td>1969-70</td>
<td>10,500.00</td>
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</table>

The recapitulation that follows indicates the purposes for which the $10,500 was spent during 1969-70.
D.H. Lawrence Ranch $2,500.00
Student Recruitment 4,000.00
Rothenberg Lectures 1,000.00
UNM Band 3,000.00

$10,500.00

GIFTS TO GUNM FUND RECEIVED IN THE DEVELOPMENT OFFICE DURING 1969-70:

Chapel 3,445.20
Scholarships 3,855.26
Library 4,832.34
Faculty Research 35.00
Unrestricted 17,443.34
Escrowed 70.00
Campus Beautification 35.00
Friends of Architecture 355.00
Miscellaneous 7,898.00

$37,969.14

SPECIAL GIFTS

The Development Office has accepted gifts of scholarships, art collections, securities, land and other gifts.

Land, 52.25 acres, was donated to the Gallup Branch by Claire E. Gurley and Irene J. Gurley for a total of $162,625.

The Lions Club donated 6.6 acres of land to the Gallup Branch which included a clubhouse, totaling $78,562 value.

The Ford Foundation funded the establishment of the Tamarind Institute at UNM in the amount of $93,000 with more funding to follow each year from a $705,000 grant from the Ford Foundation.
OTHER ACTIVITIES

Lars Halama went on Roadrunner trip to Raton, Las Vegas and Santa Fe, August 13-14, 1969.

Lars Halama attended the American College Public Relations Association Special Emergency Committee meeting, Washington, D.C., September 24-26, 1969.

Bub Henry and Lars Halama attended Alumni Tour to New York on September 18-21, 1969.


The Governor's Prayer Breakfast was attended by Lars Halama on January 22, 1970 in Santa Fe.


Lars Halama attended the Conference for Managing for Results, American College Public Relations Association and American Alumni Symposia on Tax Reform, in Chicago, February 10-14, 1970.

ALUMNI ASSOCIATION

The Association's programs are expected to interpret the progress and development of the University to all former students. And these same former students expect the Executive Committee as well as the office staff to bring back their ideas and criticisms to the University. In short,
the programs provide a two-way street for meshing ideas of the University administrators and its concerned alumni.

The Alumni Program is a continuous operation and assumes the responsibility for the following:

1. To maintain an office which serves as a focal point for alumni, students, and friends of the University. Inquiries of all types are received and processed in this office.

During this fiscal year (September, 1969) the Alumni Office moved from the office space it had occupied for eight years in the south end of the New Mexico Union second floor to Suite 200 in the north end of the second floor of the same building. This suite was formerly the guest house or hotel for UNM visitors and was redone for our use. Several walls were cut out, and the bedroom spaces became offices. We were able to unify our entire program into this one suite. The Development Offices have better space, and Winifred Reiter, Editor of the Alumnus, is now within the office space proper.

We were able to utilize the carpeting that was in the old guest facility, and we are extremely pleased with the space. It has a much more congenial atmosphere for meeting with alums visiting on campus.

2. To maintain addresses and records of all graduates as well as all former students (See App.VI.)

a) The Alumni Office has over 60,000 cards on file. The current active mailing list consists of
32,500 addresses. At the present time, the office staff is not capable of placing all former students within our address system, although directed to do so by the Association. We presently place all graduates and anyone who asks for a transcript within our alumni file.

b) The Alumni lists are used frequently, upon request, by many departments and organizations for information.

c) The Development Office uses the lists regularly.

d) The current mailing is done by outmoded and ancient addressograph equipment. This system will be phased out soon and replaced. The University Data Processing Department, headed by Dick Leurig, will make this transition. A punch card and type system will be utilized, and the Data Processing Department will be the holding agent, although the Alumni Office will continue to upgrade addresses and maintain biographical information.

e) The office maintains a national alumni demography list. (See App. IV.)

3. To publish and distribute The University of New Mexico Alumnus six times each year to all alumni with a current address.

a) The Editor of the magazine, Winifred Reiter, is a fulltime employee and works under the supervision of the Executive Director of the Alumni Association, Lars Halama. Mrs. Reiter has been on leave during the school year, July 1969 to June 30, 1970. Don Peterson, of Jesse Price's Public
Information Staff, filled in for Mrs. Reiter while she was on leave.

b) Dick Ransom, Chairman of the Publicity and Publications Committee, with the assistance of Joe Boehning, President of the Association, initiated several new features this year, such as "The Alumni President Speaks," and have sought out alumni comment, and anticipate using student writing if qualified.

4. The Alumni Association Board of Directors has assumed a new and vital role in projecting the University to major communities and the general alumni replacing the Alumni Club concept. This system has evolved during the terms of office of Jack Mulcahy and Joe Boehning. The thinking of these two presidents, as well as the Executive Committee, has been that clubs may fail or thrive, depending upon the officers and their derived programs. However, a Board Member is expected to assume the duties and carry out the programs as derived by the officers and Executive Committee of the Alumni Association.

a) There are ninety-nine at-large members within the Board of Directors, eight college representatives, and presently, six chartered organizations. Thirty-three of these Board Members reside in Albuquerque, an additional thirty-three within the State of New Mexico, and the remaining thirty-three throughout the United States.

b) The Alumni Office assists in arranging programs for the Board Members.
c) The Alumni Office prepares and sends out notices concerning programs arranged by a Board Member for his community without charge.

d) The Alumni Office prepares and sends out lists of alumni to each club or Board Member upon request.

e) When feasible, the Alumni Relations Director attends derived meetings upon request. Faculty and staff personnel are utilized as speakers whenever possible.

f) When a community or organization wishes a charter, a manual of organization for alumni clubs (Lobo Clubs) is available to serve as a guide for their operation and is furnished to all club officers.

g) When possible the Alumni Office works closely with these clubs and Board Members to develop mutually worthwhile goals and programs.

h) Holds three Alumni Board meetings yearly: May, during Homecoming, and February, to discuss current and proposed Alumni Association programs. (See minutes, Appendix V.)

i) Maintains complete list of UNM Alumni Association Board Members and their terms of office. (See Appendix I.)

5. To work with committees and sponsor special activities.

a) The Alumni Office assists committees each year in the organization of reunions for three classes.

1) The 10th, 25th and 50th year classes meet at Homecoming each year. (For future plans, see Sec. 5 of Future Development Plans.)
2) We work with any class year reunion if a desire is projected.

b) We work with general student committee(s) in the overall planning of Homecoming, assist in the promotion of this yearly event, and attempt to stimulate large numbers of alumni to return to the campus.

c) The Alumni Association sponsors the football luncheon during Homecoming.

The Lobo luncheon attracts approximately 700-800 alumni each year.

d) We attempt to provide some type of function at some of the away-from-home football or basketball games. The selection of such event should be in areas where there are substantial numbers of alumni. When possible, the Alumni Relations Director should travel with the team. These luncheons or cocktail parties should be of an informal, social nature, and serve mostly as a meeting place for the alumni before or after the game.

e) Tours for alumni groups will be planned for appropriate occasions. Two alumni trips were sponsored this year by the Alumni Office:

1) The first, to West Point, New York, September 18-21, 1969 for the Army-Lobo Football game, drew a response from approximately eighty alums;

2) The second, to New Orleans for the Sugar Bowl to see UNM play basketball, December 29 - January 2, 1970, drew about ninety alums.

Work has already begun on two projected trips for 1970-71, one to Phoenix, Arizona for the Lobo-Arizona State Football game at Tempe, and possibly one to San Francisco. In addition, work has been started
on the projected Hawaii football trip November 26-December 5, 1971, and already reservations are coming in.

6. To work with the Awards Committee under the direction of the Board of Directors to make the following awards during the year. (See App. III for complete description of the awards and list of recipients.)

   a) James F. Zimmerman Award
   b) Bernard S. Rodey Award
   c) Award of Distinction
   d) Honorary Lobo Award
   e) Alumni Service Award
   f) University Service Award
   g) Alumni Citizenship Award
   h) Alumni President's Award

7. To work with the High School Achievement Awards. Jack Schooley, the new Traveling Field Secretary for the Alumni Association, effective January 20, 1970, has within his duties the committee work of senior activities, student recruiting, and he has tabulated for this report these most interesting and vital facts:

   a) Student Recruiting

   We have visited high schools and students in Hobbs, Gallup, Silver City, Central, and Albuquerque (Highland and West Mesa) talking to small, informal groups of students. Unfortunately, these meetings for the most part were arranged by the respective high school counselors. This office has a primary responsibility to UNM alumni and that responsibility implies trying to get interested alums actively involved in a variety of projects relating to The University of New Mexico. One way we can increase this involvement is to ask past UNM graduates to aid us in deriving a student
recruiting program within their respective communities. Such an activity would not only augment positive interest of alums in this University, but would undoubtedly increase UNM's chances of enrolling students having strong scholarship and leadership qualities. Therefore, a student recruitment program out of our office should be accomplished with the help of alumni, not solely with the help of high school counselors. This can only be accomplished with greater rapport between our office (and the UNM campus) and those people off campus. Thus, our goal for the coming year is to try to establish this rapport among citizens of the state with our University so that they will voluntarily support UNM and aid in recruiting the outstanding students from their communities. We will ask UNM alumni throughout the state to think about which of their high school students would be interested in attending UNM. Then we will ask them to derive a place where we can meet with these students to answer their questions. And, finally, we will ask our alumni to keep track of these students as they finish their high school careers, and to continue to discuss with them the possibility of attending this University. We feel such an activity cannot help but establish the much talked of "rapport" among citizens of this state and the University. We hope that eventually monies for scholarships will be available as a result of people getting together and discussing the possibility of sending some of their more outstanding students to UNM.
In the fall of 1970, I hope to become more involved with student recruiting around the state. Money will be available through the Student Aid Work/Study Program -- they pay 70% of the student's salary; we pay 30% -- to allow us to hire two students who will aid us in this endeavor. We will try to be out and around the state weekly, talking to alumni and arranging meetings with senior high school age students. The purpose of these meetings will not be to entice a quantity of students to UNM; rather, we hope to focus our recruiting in terms of quality. That is, we wish to meet with a small but select group of students from various New Mexico communities and to offer them information concerning our campus. We feel UNM will draw its share of students even without the aid of a recruiting program. But we feel that the "good" student (and the future "good" New Mexico citizen) will be more likely to attend this University if he receives some special (and deserved) recognition and attention.

b) High School Achievement Award

One very effective tool we have for involving our alumni with their high schools is the High School Achievement Award. This program was originated in 1963 and has grown continually ever since. Every high school in the state receives a letter from our office detailing the necessary information of this program. We ask the teachers, counselors and principals of these schools to choose one student to receive an Achievement Award in the field of Humanities and one in the combined fields of science and math. They may
also elect to choose a student to receive a similar award for good citizenship as a substitute for one of the other two awards. (As the letter reads, it appears this third award is somewhat inferior to the other two. I wish to change that next year so that all three awards will be of equal honor and distinction.)

The high schools notify us of their selections and we arrange to have those names engraved on a plaque. We then send the plaques back to the high schools in time for the annual end-of-the-year Awards Assembly. We try to arrange to have a local Board Member or an alumnus of UNM present the awards at the assembly. This aspect of the award is very important.

There is an added benefit to those achievement award recipients who enroll in UNM for further study. Within the first month or two of the fall semester, the Alumni Association presents $50 stipends to those who received our award and enrolled on our campus. Originally, the UNM student government helped financially with this project, but they have not put forth any contributions for two years. (The cost for this program is listed on the next page.)
THE HIGH SCHOOL ACHIEVEMENT AWARD

Projected Cost 1970-71, Resulting from Spring, 1970 Visitations

<table>
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<th></th>
<th>$598.50 -- for plaques, engraving, workmanship, etc.</th>
<th>3250.00 -- approximate cost for $50 stipends, based on 40% of 164 participants in Spring, 1970 (figured on basis of records of previous years in which 35% - 40% of total number of participants enrolled at UNM.)</th>
<th>$3848.50 -- total approximate cost</th>
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<td>for plaques, engraving, workmanship, etc.</td>
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<td>$3848.50 total cost</td>
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<td>Compared to Prior Years</td>
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<td>1966 -- 77 enrolled</td>
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<td>$3250 total cost</td>
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</tr>
<tr>
<td>1969 -- 65 enrolled</td>
<td>$50 stipend</td>
<td>$3250 total cost</td>
<td></td>
</tr>
<tr>
<td>1963 1964 1965 1966 1967 1968 1969</td>
<td>20 31 35 95 76 80 65</td>
<td>Number of Recipients at UNM 30 32 77 52 47 65</td>
<td>Grade Point Average 3.125 3.333 3.225</td>
</tr>
</tbody>
</table>

 Participating high schools 20 31 35 95 76 80 65
 Number of Awards Given 39 62 68 195 142 156 144
 Number of Recipients at UNM 30 32 77 52 47 65
 Grade Point Average 3.125 3.333 3.225

1970
 Participating high schools 86
 Awards given 164
8. To work with the Development Office in its contacts with alumni and friends of the University.

9. To work with the President and various University departments in organizing and planning alumni and service club meetings around the state to take news of the University to the people.

   a) For example, during the past year, President Heady visited three alumni groups in the following areas: Roswell, Artesia, and Gallup. In the coming year, 1970-71, Dr. Heady plans five alumni meetings in diverse areas of the state: Alamogordo, Carlsbad, Clovis, Farmington, and Grants. Other UNM administrators such as Vice President Sherman Smith, Vice President Robert Stone, Vice President Chester Travelstead, among others, have agreed to accompany us into the field.

   Within our thinking, it seems most important to be in the eight communities within New Mexico that are over 20,000 population, and of course, we anticipate including El Paso, Texas as number nine within this group in the near future. These communities include Alamogordo, Carlsbad, Clovis, Farmington, Hobbs, Cruces, Roswell, and Santa Fe. We hope to be in these communities at least three times a year, and in some as many as five. There are additional communities in the state in which we feel it is extremely important to project the University, and we hope to be in these eleven additional communities a minimum of one time each year. As I said before, we intend to use our Alumni Association Board of Directors to develop and carry on our program.
10. To attend regional and national conferences of the American Alumni Council to discuss alumni programs and practices utilized by other schools.

11. To work within the policies and bylaws established by The University of New Mexico Alumni Association, its Board, and Executive Committee.

   a) The Executive Committee is the program-deriving body and consists of the President, Vice President, and seven members-at-large. It meets twelve times annually on the first Tuesday of each month.

   b) The Board determines the policy of, and may change the constitution and bylaws of, the Alumni Association.

   c) The Executive Committee subdivides the Board (particularly the Albuquerque members) into committees:

      1) **Albuquerque Activities Committee**

         Purpose: to consider, propose, formulate, and carry out programs to involve more alumni in the Albuquerque area in alumni activities.

      2) **Awards Committee**

         Purpose: to propose the names of persons to be considered to receive alumni awards.

      3) **Finance Committee**

         Purpose: to be responsible for reviewing all programs and budgetary requests from Association committees that require expenditures.
4) **Committee on Hall of Fame and Preservation of Historic Items**

Purpose: to list all items of historic interest on campus that have been or will be removed because of new construction; to study and investigate ways in which these items may be made part of a permanent display; to investigate means by which a permanent Hall of Fame can be maintained for display on campus; to propose criteria by which persons could be nominated for the Hall of Fame. This committee could also be put to good use in overseeing the use and upkeep of the Alumni Chapel.

5) **Homecoming Committee**

6) **Nominating Committee**

Purpose: to nominate persons to serve on the Board of Directors and on the Executive Committee in accordance with Alumni Association by-laws.

7) **Publications Committee**

Purpose: to assist the staff in the publication of the best possible magazine and newsletter to the alumni.

8) **Senior Activities Committee**

Purpose: to make known programs and needs of the Alumni Association to senior students, and to select a worthy recipient for the senior student citizenship award.

9) **Student Recruitment Committee**

Purpose: to assist the University in getting outstanding high school seniors to enroll at UNM.
12. To create and maintain a program to develop good student relations, knowing that these students will soon become alumni.

a) The Director of Alumni Relations often serves on student committees, such as ASUNM Rally Committee, Advisor to Chaparrals, liaison to Student Homecoming Committee.

DEPARTMENT PERSONNEL

Alumni Field Representative

Our new Alumni Field Representative, Mr. Jack Schooley, came to work for us on January 20, 1970, succeeding Mr. Dennis Marr, who left the Alumni Office for a better paying position. (For more on Mr. Schooley, see Section 7, High School Achievement Awards.)

Editor, Alumnus Magazine and Alumnus Newsletter

Mrs. Winifred Reiter, Editor, has been on leave during the 1969-70 school year at the Andean Center in Quito, Ecuador. During her absence, Don Peterson of Jesse Price's Public Information Staff, has ably filled in for her.

Alumni Mail Clerk

Mrs. Norma Bartholdi was succeeded by Mrs. May Felsman on December 15, 1969.

FUTURE DEVELOPMENT PLANS

1. Office Space

As we indicated previously in this report, our new office space is very beautiful and quite large, and we are extremely pleased with it; however, within
the thinking of our Executive Committee and other alumni, it is believed that an Alumni House or perhaps one called "University House" would be more desirable than the present arrangement. We certainly realize that this is a large undertaking, and we have thought of many alternatives or solutions to this new alumni meeting place. We have thought a combination Faculty-Alumni House would be desirable, enhancing the total membership and certainly enabling the University House or Alumni House to be on a sounder financial basis. The other good aspects of this proposal would be that we could develop a first class supper club, which is sorely needed in Albuquerque, and further, that this would furnish a means of communication between the faculty, staff and the alumni by meeting and greeting one another in mutually desirable surroundings. Thirdly, the undesirable aspect of having a liquor licensed club where drinks are served could easily be overcome by combining both alumni and faculty into a single unit.

2. Mail Room Upgrading

Within the new system soon to be completed by Data Processing, we anticipate removing the older addressograph equipment from our mailroom. This will enable us to have more space for our present office equipment and staff, and will also enable us to be cleaner and neater. We are looking forward to being able to fulfill our complete obligation of placing all students who have attended UNM within our record system. Also, with the new system, we feel the possibility is good that we can mail to the senior students the spring
issue of the Alumnus Magazine during their last months on campus. In addition, it is felt many parents become very close to the University during the time their children are enrolled here; it would be desirable to mail to these parents as well when the budget will allow us to do so.

3. Scholarship Development Funds from Major Communities Within New Mexico

Joe Boehning, Alumni President, has expressed great interest in each community with leadership provided by our Board Member in sponsoring a worthy high school graduating senior for a scholarship at The University of New Mexico. He feels this would encourage alumni with the thought that the money so provided will directly benefit New Mexico, and especially their own home town community, as well as the young people.

4. President's Athletic Box

Our Awards Committee has been very active during this past year. We have had numerous guests on hand, and quite often we develop these award programs on a day when an athletic or other auspicious event is taking place on campus. Certainly these awards promote prestige and goodwill for the University, and while these individuals are on campus, they should be treated with special care and dignity. It is our hope that in the near future, with the assistance of the Athletic Department, we can secure a special group of seats or a box set aside for the special guests of the University.
ALUMNI ASSOCIATION BOARD OF DIRECTORS 1970

TERM EXPIRES 1971

Albuquerque

1920s
Dean Less C. Clavin ‘25
City 91106—Ph. 242-7035

1930s
Mrs. William E. Marron ‘30
City 87106—Ph. 328-6372

1940s
Mrs. A. J. Frazier ‘48
1500 Alcalde S.W.
City 87112—Ph. 365-7068

1950s
Anthony J. Bermudez ‘52
600 Alcalde S.W.
City 87112—Ph. 299-6288

1960s
Ray Cremer ‘68
500 Nichols Dr.
City 87112—Ph. 238-0109

Jack Nalinsky ‘68
7000 Southwest S.E.
City 87106—Ph. 266-7268

Mrs. Charles E. Nevels ‘64
(Phyllis Godfrey)
2530 La Posada Dr.
City 87111—Ph. 874-1300

Mrs. Norma A. Ribble ‘66
(Christopher Ng Lee)
1420 Columbus Dr. N.E.
City 87110—Ph. 248-7808

1970s
Tommy J. Williams, Jr. ‘72
1519 Hidalgo Ct. N.E.
City 87112—Ph. 299-9381

1980s
Barry Cole ‘82
4910 Desert View Dr.
City 87110—Ph. 268-8227

Mrs. Robert L. Cedero ‘60
(Dorothy Logistic)
17512 Norma Grande N.E.
City 87112—Ph. 286-9282

Stanley L. Heiflum ‘76
14011 Natelle Dr. N.E.
City 87112—Ph. 299-5536

TERM EXPIRES 1972

Albuquerque

1920s
John Nudwest ‘28
600 Alamedo S.W.
City 87104—Ph. 242-024

1930s
Mrs. Wallace Ferguson ‘30
(Sharon Miller)
401 Mimosas S.E.
City 87108—Ph. 268-8953

Mrs. Earl Pacheco ‘33
(Eloise Moulton)
1112 Stanford N.E.
City 87112—Ph. 265-6220

1940s
Ceclo Drumm ‘41
1234 W. N.W.
City 87104—Ph. 247-8221

Robert St. Nacaste ‘41
St. R. Box 845
City 87115—Ph. 242-5792

1950s
Dr. Byron Bedda ‘51
1501 Harvard Dr. N.E.
City 87116—Ph. 268-5411

Roland Kool ‘56
6101 Mountain Rd. N.E.
City 87110—Ph. 250-774

Dick Ransome ‘54
5400 Sante Dr. N.W.
City 87107—Ph. 334-3810

Collister Redmond ‘58
902 Sigma Chi Rd. N.E.
City 87110—Ph. 242-7520

1960s
Mrs. Robie Black ‘62
(Dorothy Wade)
905 Fairview N.W.
City 87107—Ph. 344-1280

Charles P. Roberts Sr. ‘60
1108 Princeton S.E.
City 87106—Ph. 242-2271

New Mexico

1940s
J. Norman Hodges ‘47
Box 290
Silver City 88051—Ph. 538-3844

Leonard D. Leavitt ‘46
114 La Paloma
Santa Fe 87501—Ph. 883-7583

1950s
Dr. J. Douglas Balcom ‘56
110 Paseo Paseo
Los Alamos 87544—Ph. 657-7425

Ray M. Gunderson ‘50
Box 959
Grant 87020—Ph. 287-4235

John W. Hall, Jr. ‘56
600 W. Country Club Rd.
Roswell 88316—Ph. 622-7220

John F. Jassau ‘53
103 Jefferson St.
Clayton 88115—Ph. 374-2446

Robert K. Lue Jr. ’66
El Paso 88002—Ph. 864-7704

1960s
Mrs. Ronald L. Favret ‘65
(Judith Marke)
1250 La Verne Dr.
Santa Fe 87501—Ph. 882-1232

Joe Stil, Jr. ‘61
2105 Mountain View Dr.
Carlsbad 88220—Ph. 880-8417

1970s
Richard Lowey ’11 ’61
Box 790
Clovis 88101—Ph. 763-4922

Bob Dean ‘63
1111 W. Ave. J
Lovington 88250—Ph. 396-3270

Out of State

1940s
Mrs. Benjamin E. Byrnes ‘46
(Howard Fisher)
12776 Regal Lane
Jasper, Ga. 30150

Miss Kathryn (Pat Leachon) ’44
3446 Washington Blvd.
Indianapolis, Ind. 46205

Eugene Sproul ‘45
294 B. I. E. Condee
Orange, Cal. 92667

1950s
Dr. H. Hard ‘52
20260 S. Redfield Hwy. Apt. 8
Lake Oswego, Ore. 97034

Dr. Bob Notley ‘53
1101 W. Fifth
Marshfield, Wisc. 5444

John R. Mace ‘51
22481 Hwy. Road
Shaker Heights, Ohio 44120

Edward J. Smith ‘53
1460 Lake Street
Deerfield, Ill. 60015

1960s
J. Charles Lucep ‘60
1193 Long Street
Boulder, Colo. 80302

Kay Fossler ‘54
15 Washington Rd. 101
Denver, Colo. 80202

1970s
Mrs. Charles M. Allen ‘62
625 Southwater Ave.
6299 Nashville Drive
Leesburg, Tex. 75103

Appendix I

EXECUTIVE COMMITTEE

PRESIDENT
Dwight Shoemaker ‘50 continuing
1725 Hite Dr. NE
City 87116—Ph. 284-5100

VICE PRESIDENT
John W. Cavallo ’61
518 Harvard Dr. NE
City 87106—Ph. 284-5100

Dorothy Metzger ‘52
935 Franklin NW.
City 87107—Ph. 344-1380

Dorothy Caves ’54
1713 Lafayette NE
City 87106—Ph. 255-4064

Bob Mattengen ‘67
4513 Alasra NE
City 87110—Ph. 299-4449

Dick Ransome ‘54
5400 Sante Dr. NW
City 87110—Ph. 344-9310

Collister Redmond ‘58
902 Sigma Chi Rd. NE
City 87110—Ph. 242-9401

Dorothy Ribble ‘55
110 Avenue Mannan NE
City 87110—Ph. 268-1008

ALUMNI ASSOCIATION BOARD OF DIRECTORS COLLEGE REPRESENTATIVES (Appointed)

College of Pharmacy
Manuel C. Archuleta ’65
3301 Rio Ave.
City 87112—Ph. 299-6718

College of Fine Arts
Robert Foster ‘65
Pamela Music Center
1323 Wisconsin NE.
City 87110—Ph. 286-7747

College of Nursing
Mary K. Feisstech ‘66
1816 Carol N.E.
City 87112—Ph. 277-5017 (O)
286-2800 (H)

College of Arts and Sciences
Robert K. Matakides’79
4513 Alasra N.E.
City 87110—Ph. 286-6757

College of Engineering
Marie Farnwasser ’41
3700 Heather NE.
City 87110—Ph. 286-4861

College of Medicine
Dr. Elie Medicine ’61
1000 Almedo N.E.
City 87106—Ph. 284-6661

College of Business Administration
Rodney Schenckers ’60
1725 Hite Dr. N.E.
City 87116—Ph. 284-6661

College of Law
Judge Joe W. Wood (Court of Appeals) ’47
1822 Pl. Union Dr.
Santa Fe 87501—Ph. 882-8419

Faculty Representative
Dr. Martin W. Price Jr. ’58
1406 Oldham Dr. S.W.
### Terms Expires 1972

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<tr>
<td>Mrs. R. Howard Brandenburg '38 (Helen Emily Zimmerman)</td>
<td>Veon Klech '24</td>
</tr>
<tr>
<td>Box 1096</td>
<td>Box 2345</td>
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<td>741 Fourth</td>
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<td>Santa Fe 87501 - Ph. 472-3822</td>
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<td>Las Cruces 88001 - Ph. 524-5061</td>
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<td>Alamogordo 88310 - Ph. 437-1303</td>
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<td>2396 A 38th St.</td>
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<td>1447 W. Maplewood Ave.</td>
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<td>Gallup 87301 - Ph. 860-6226</td>
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<td>Gilbert Archuleta, Jr. '68</td>
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PERSONNEL
UNM ALUMNI ASSOCIATION
1969-70

Executive Director of Development: Lars Halama
Director of Alumni Relations: Gwinn "Bub" Henry
Editor of Alumnus Magazine and Newsletter: Winifred Reiter*

*Mrs. Reiter was on leave from June, 1969 to July, 1970, and was replaced by Don Peterson of the UNM Public Information staff during this period.

Alumni Field Secretary: Dennis Marr
9/15/69 - 1/5/70
Jack Schooley
1/20/70 to present

Secretary to Director of Development: Ann Lucero
Secretary to Alumni Director: Evelyn Ross Elder
Alumni Bookkeeper: Mary Nelson
Alumni Mail Clerk: Norma Bartholdi
1/20/69 - 11/30/69
May Felsman
12/15/69 to present

Receptionist: Doris Schuler
UNM Alumni Association

Awards

James F. Zimmerman

This award shall be used for the purpose of honoring those persons who have performed noteworthy service in their chosen fields. The recipient of the award need not be an alumnus of The University of New Mexico and the service he has performed need not be directly connected with the University. The choice of the recipient shall be made by the Board of Directors of the Alumni Association from the nominations submitted by the Awards Committee. This award shall be considered the highest award given by The University of New Mexico Alumni Association.

Award of Distinction

This award shall recognize outstanding citizens within the communities of New Mexico, not necessarily alumni, who have performed outstanding services for the State of New Mexico and/or their community. Recommendations may be made by any member of the Awards Committee, the Executive Director of the Alumni Association, or the Director of Alumni Relations.

Bernard S. Rodey

This award shall be made only to those persons not on the paid staff of the Alumni Association who have devoted an unusual amount of time in a leadership capacity, and whose efforts are crowned with unusual success on behalf of The University of New Mexico. It is intended that not more than one of these awards be made annually but no such restriction is placed on this award. Choice of the recipient shall be made by the Executive Committee from nominations submitted by the Awards Committee.

Honorary Lobo Award

This award shall be presented to a woman who has given outstanding personal service to The University of New Mexico or for special achievement in her career which reflects credit on The University of New Mexico. The recipient shall be selected by the Awards Committee from nominations made to the Awards Committee by any interested person or group. It shall be presented during Homecoming.

Alumni Service Award

This award shall be made to such alumni of the University who have made outstanding contributions to the growth and development of the Alumni Association in its various fields of activity. This award shall be restricted to those persons who have matriculated at The University of New Mexico. The Executive Committee shall select the recipient from nominees submitted by the Awards Committee.

(Continued p. 2)
Awards (continued)

**University Service Award**

This award shall be made to such persons who have made outstanding contributions to the growth and development of The University of New Mexico in its various fields of activity.

**President's Award**

This award shall be presented to each outgoing President of the UNM Alumni Association in appreciation of his dedicated service and outstanding contributions to the Alumni Association.

**Alumni Citizenship Award**

This award shall be presented to a student of the University in recognition of continued endeavor, helpfulness, cooperation, and good will spent while attending the University, rather than to cap outstanding achievement as a student. It shall be presented at the University Honors Assembly. The recipient shall be selected by the Awards Committee from nominations made by the faculty and staff of The University of New Mexico.
AWARDS

ZIMMERMAN AWARD
Tom L. Popejoy (1968)
Scott Momaday (1969)
Tom Wiley (1969)

AWARD OF DISTINCTION
Don Perkins (1969)
Guy Rogers (1970)
Reese Cagle (1970)
Hickum Galles (1970)

RODEY AWARD
Dr. Albert G. Simms, II (1964)
Judge D. A. Macpherson, Jr. (1964)
Ben C. Hernandez (1964)
Alfred A. Valdez (1964)
Lyhn B. Mitchell (1969)

LOBO AWARD
Mrs. J. F. Zimmerman (1950)
Mrs. Lynn B. Mitchell (1951)
Miss Lillian Huggett (1951)

ALUMNI SERVICE AWARD
Betty Perkins (1964)
Mary Helen Hendrix (1964)

AWARDS
Frank Grubbs (1964)
George Ambabo (1964)
Lee Seligman (1964)
Norman Mugleston (1964)
Jim Paulantis (1964)
Ray Rodey (1964)
Lars Halama (1964)
Jack Mulcahy (1965)
Al Valdez (Retiring Pres. 1967)
Lena Clauve (1968)
Jim Fleming (1968)
Ken Gattas (1968)
Chuck Lanier (1968)
Randall Montgomery (1968)
W. W. Atkinson (1968)
Jay Rosenbaum (1968)
Bob Werdig (1968)
Winifred Reiter (1968)
Eric McCrossen (1969)
Paul McCollum (1969)
Harvey Whitehill (1969)
Stan Hultberg (1970)

PRESIDENT'S AWARD
Jack Mulcahy (1969)
Joe Boehning (1970)

UNIVERSITY SERVICE AWARD
Gwinn Henry, Sr., posthumous (1969)

CITIZENSHIP AWARD (UNM Senior)

Roy Johnson (1969)
Maurice Moulder (1969)

James Caylor (1965)
Tom Isgar (1966)
John E. Brooks (1967)
Paulette Key (1968)
John Bakas (1969)
Laurence Goddard (1970)
Awards (continued)

ZIMMERMAN PRESENTATION IN ROSWELL, JANUARY 10, 1964

James D. Shinkle
Clarence E. Hinkle
Gladys Palmer
Esther Morgan
Gladys Webb
Burr Powell
Col. Ewing Lusk
Col. Charles F. Ward
Carroll White
Rodman M. Cookson
Poe W. Corn
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App. IV
### RECORD OF MAILINGS

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ALUMNI COUNT April 1966 22,301 plus 375 exchanges
ALUMNI COUNT April 1968 26,236
ALUMNI COUNT April 1969 31,000
ALUMNI COUNT June 1969 31,261
ALUMNI COUNT April 1970 31,857 154 new names added
campus mail of Deans & Chairman of Departments.
### APPENDIX VI

#### SOURCES OF FINANCIAL SUPPORT

<table>
<thead>
<tr>
<th>Number Donors</th>
<th>Alumnus</th>
<th>Number Donors</th>
<th>Friends</th>
<th>Number Donors</th>
<th>Organizations</th>
<th>Number Donors</th>
<th>New Mexico Business</th>
<th>Number Donors</th>
<th>National Business</th>
<th>Number Donors</th>
<th>Fidtns., Estates, Misc.</th>
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#### PURPOSES FOR WHICH GIFTS WERE DONATED

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<tr>
<th>Scholarships, Fellowships &amp; Student Loans</th>
<th>1967-68</th>
<th>1968-69</th>
<th>1969-70</th>
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<td>$749,521</td>
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Popejoy Hall
The University of New Mexico
Annual Report 1969-70
William J. Martín, Director

Popejoy Hall was in use 253 days during fiscal 1969-70 and presented 136 programs to an overall attendance of 130,000. A list of programs and rehearsals is attached.

Popejoy Hall Staff includes the following:

- William J. Martin: Director
- Georg. Schreiber: Technical Director
- Jayne P. Lund: Secretary
- Neola Rundell
- Nancy Bower
- 10 Students, part-time: Stage Crew
- 2 students, part-time: Box office help
- Mortarboards (Las Campanas): Usherettes
- Angel Flight: Cashiers

Popejoy Hall and the Cultural Committee of the Associated Students continued the joint arrangement whereby student fees ($25,000.00) were applied to offset a portion of the costs of programming. In return, members of the student body were offered the opportunity to subscribe to the programs at a 75% discount, and to purchase tickets to non-subscriber events at one half price. The programs thus jointly sponsored are listed in the attached booklet. Total discount tickets issued to students were 13,000 (down from 13,500 last year) – valued at $32,750.00 (down from $33,500 in 1968-69)
Gross ticket sales to all events $161,841.90
Gross revenue from rents & service charges 59,981.16
Total Gross Revenue $221,823.06

Gross cost of operation (including programs)$232,674.08
Operating Loss 10,851.02

The Albuquerque Opera Guild again sponsored a series of four plays
on their second nights. This benefit produced about $20,000.00 in sales.
The sponsors received about $1,000.00 for their efforts.

The stage crew continued to maintain the equipment in the Recital Hall
of the Fine Arts Center. Approximately $1,000.00 in labor was applied.

The Cultural Committee of the Associated Students was satisfied with
the co-sponsorship arrangement and decided to continue the arrangement for
another year. The Committee requested $25,000.00 for fiscal year 1970-71
and that amount was approved by a vote of the student body. The Cultural
Program Committee also approved the schedule of events in the attached
booklet.
POPEJOY HALL  PROGRAMS FROM JULY 1, 1969 through  JUNE 30, 1970

July, 1969

18  Albuq. Civic Light Opera - West Side Story  8:15 p.m.
19  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
25  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
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27  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
28  Univ. New Mexico Orchestra - rehearsal  7:00 p.m.
29  Univ. New Mexico Orchestra - performance  8:15 p.m.
30  Ballet West - rehearsal  7:00 p.m.
31  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 

August, 1969

1  Ballet West - Performance  8:15 p.m.
4  Albuq. Civic Light Opera - rehearsal  7:00-11:00 p.m.
5  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
6  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
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18  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
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21  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
22  Albuq. Civic Light Opera - performance Peter Pan 8:15 P.m.
23  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
24  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 
27  Public School Orientation of New Teachers  7:30 a.m.
29  Albuq. Civic Light Opera - Peter Pan  8:15 p.m.
30  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 

September, 1969

9  UIM Freshman Orientation  9:00 a.m.
26  Cabaret - Theater Series  8:15 p.m.
27  " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 

October, 1969

1  Albuquerque Symphony Orchestra - rehearsal  7:00 p.m.
2  Albuquerque Symphony Orchestra - performance  8:15 p.m.
3  Albuquerque Youth Symphony  8:00 a.m.
October, 1969

7  Ed Lark - Travel Adventure Series                  7:30 p.m.
8  Jr. League - rehearsal                            7:00 p.m.
9  Jr. League - performance Headlines 1969          8:15 p.m.
10  Albuquerque Youth Symphony - rehearsal           4:00 p.m.
11  Albuquerque Youth Symphony - performance         7:30 p.m.
15  Fiesta Mexicana - International Series           8:15 p.m.
16  UNM Orchestra - rehearsal                        3:00 p.m.
17  UNM Orchestra - performance                      8:15 p.m.
18  String Clinic                                    8:00 a.m.
21  Phyllis Curtin - The Romeros - International    8:15 p.m.
23  N.M.E.A. Workshop                                10:00-12:00
25  Lutheran Churches - Reformation Service         7:30 p.m.

November, 1969

2  New Mexico Music Teachers Assn.                   4:00 p.m.
3  Newman Forum - Walter Kerr                        8:00 p.m.
6  Albuquerque Symphony Orchestra - De Coteau        8:15 p.m.
8  Your Own Thing - Theater Series                  8:15 p.m.
9  Your Own Thing - Opera Guild                     3:15 p.m.
12  Czechoslovakia & Summer of Tanks - T.A. Series   7:30 p.m.
13  Prague - Summer of Tanks Film                    7:30 p.m.
14  Paris - The Student Revolution Film              8:00 p.m.
21  Lovelace Memorial Lecture - George Ball          8:00 p.m.
22  Community Concerts - Simon Estes                 8:15 p.m.
26  Hallelujah Train - International Series          8:15 p.m.

December 1969

4  Albuquerque Symphony Orchestra - Simon            8:15 p.m.
5  Idaho Adventures - Travel Adventure Film          7:30 p.m.
7  Speakers Committee - Congressman Gerald Ford      8:00 p.m.
13  Albuquerque Symphony Youth Concert               3:00 p.m.
14  Ballet West - The Nutcracker Suite               8:15 p.m.
17  Ballet West                                     8:15 p.m.
17  UNM Chorus                                      8:15 p.m.
26  Albuquerque Civic Light Opera - Performance      8:15 p.m.
27  "                                               8:15 p.m.
28  "                                               2:15 p.m.

January 1970

5  Mame - Theater Series                             8:15 p.m.
6  Mame - Opera Guild                                8:15 p.m.
8  UNM Orchestra                                     8:15 p.m.
10  Wildlife Assn. - The Wally Tabor Show            8:00 p.m.
12  American Ballet Theater                           8:15 p.m.
14  UNM Band                                         8:15 p.m.
**January 1970** (contd.)

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**February 1970**

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<td>Community Concerts - New York Pro Musica</td>
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<td>4</td>
<td>Travel-Adventure Film - Central America</td>
<td>7:30 p.m.</td>
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<td>9</td>
<td>National Ballet of Washington-Coppelia</td>
<td>8:15 p.m.</td>
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<td>14</td>
<td>Santa Fe Theater - Lilian Gish</td>
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<td>Albuquerque Symphony Orchestra - McDermott</td>
<td>8:15 p.m.</td>
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<td>Hamlet - Theater Series</td>
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<td>Rosencrantz &amp; Guildenstern are Dead</td>
<td>8:15 p.m.</td>
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<td>28</td>
<td>Albuquerque Symphony Orchestra Youth Concerts</td>
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<td>Harold Taylor Lecture</td>
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<td>Rhodes Dept. Store - Style Show</td>
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<td>27</td>
<td>Carlos Espinosa Concert</td>
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**March 1970**

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<td>Speaker's Committee - Strom Thurmond</td>
<td>8:00 p.m.</td>
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<td>6</td>
<td>Pilot Club - Style Show</td>
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<td>7</td>
<td>Repertory Dance Theater</td>
<td>8:15 p.m.</td>
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<td>10</td>
<td>Community Concerts - Stockholm Orch.</td>
<td>8:15 p.m.</td>
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<td>11</td>
<td>Travel-Adventure - Kenneth Richter</td>
<td>7:30 p.m.</td>
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<tr>
<td>14</td>
<td>Animal Humane - Style Show</td>
<td>8:15 p.m.</td>
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<td>16</td>
<td>UNM Band</td>
<td>8:15 p.m.</td>
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<tr>
<td>17</td>
<td>Marcel Marceau - Theater Series</td>
<td>8:15 p.m.</td>
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<tr>
<td>19</td>
<td>UNM Orchestra</td>
<td>8:15 p.m.</td>
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<td>20</td>
<td>Manzano High School Band Concert</td>
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<tr>
<td>21</td>
<td>Albuquerque Symphony Youth Concert</td>
<td>3:00 p.m.</td>
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<td>23</td>
<td>Ginsburg Lecture</td>
<td>3:00 p.m.</td>
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<td>I Do, I Do - Theater Series</td>
<td>8:15 P.M.</td>
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<tr>
<td>25</td>
<td>I Do, I Do - Theater Series</td>
<td>8:15 p.m.</td>
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**April 1970**

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<tr>
<td>2</td>
<td>Albuq. Civic Light Opera - Sound of Music</td>
<td>8:15 p.m.</td>
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<tr>
<td>3</td>
<td>Albuq. Civic Light Opera-Sound of Music</td>
<td>8:15 p.m.</td>
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<td>&quot; &quot; &quot; &quot; &quot; &quot; &quot; &quot; &quot;</td>
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<td>&quot; &quot; &quot; &quot; &quot; &quot; &quot; &quot; &quot;</td>
<td>2:15 p.m.</td>
</tr>
<tr>
<td>6</td>
<td>Community Concerts - Jaime Laredo</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>9</td>
<td>Albuq. Opera Guild - Opera Italian Style</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>15</td>
<td>Albuquerque Symphony Orchestra - Gutter</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>16</td>
<td>Dist. 7 NMMEA - All City Chorus</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>20</td>
<td>UNM Modern Languages - Paris Rive Gauche</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>21</td>
<td>Newman Forum - Prof. Fred E. Inbau</td>
<td>8:00 p.m.</td>
</tr>
<tr>
<td>23</td>
<td>Dist 7 NMMEA - Band Concert</td>
<td>8:15 p.m.</td>
</tr>
</tbody>
</table>
### April 1970

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>J. C. Wives Assn. Little Lame Prince</td>
<td>4:00 p.m.</td>
</tr>
<tr>
<td>30</td>
<td>Albuquerque Symphony Orchestra - Facey</td>
<td>8:15 p.m.</td>
</tr>
</tbody>
</table>

### May 1970

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Ballet West</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>5</td>
<td>Speaker's Committee - John Kenneth Galbraith</td>
<td>8:00 p.m.</td>
</tr>
<tr>
<td>11</td>
<td>UNM Concert Band</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>14</td>
<td>Speaker's Committee - Jesse Jackson</td>
<td>8:00 p.m.</td>
</tr>
<tr>
<td>16</td>
<td>Barbershop Harmony</td>
<td>8:00 p.m.</td>
</tr>
<tr>
<td>17</td>
<td>Albuquerque Symphony Youth Concert</td>
<td>3:00 p.m.</td>
</tr>
<tr>
<td>20</td>
<td>UNM Orchestra &amp; Chorus</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>29</td>
<td>Litka School of Dance</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>30</td>
<td>Hayden School of Dance</td>
<td>8:15 p.m.</td>
</tr>
</tbody>
</table>

### June 1970

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Medical School Graduation</td>
<td>8:00 p.m.</td>
</tr>
<tr>
<td>12</td>
<td>Albuq. Civic Light Opera - Desert Song</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>13</td>
<td>&quot;</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>14</td>
<td>&quot;</td>
<td>2:15 p.m.</td>
</tr>
<tr>
<td>19</td>
<td>&quot;</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>20</td>
<td>&quot;</td>
<td>8:15 p.m.</td>
</tr>
<tr>
<td>21</td>
<td>&quot;</td>
<td>2:15 p.m.</td>
</tr>
<tr>
<td>24</td>
<td>UNM Band Concert</td>
<td>8:15 p.m.</td>
</tr>
</tbody>
</table>
On May 1, 1970, KNME Television, Channel 5, entered into its thirteenth year of broadcasting.

The license is still in the name of the Board of Regents of the University of New Mexico and the Board of Education of the Albuquerque Public Schools. Programs are broadcast thirteen hours per day, Monday through Friday, and Sunday from 4:00 to 10:00 P.M. For fourteen weeks in the summer months, the schedule is reduced to a five-hour day, five days a week, Monday through Friday and Sunday.

The Corporation for Public Broadcasting network provides eleven hours of evening broadcasting per week. Discussions are underway to increase this to fifteen or twenty hours next year. The Corporation for Public Broadcasting network now has 200 non-commercial stations receiving its programs. The latest surveys show that Channel 5 is in the top 10% technically, and also in the top 5% in viewer penetration.

UNIVERSITY OF NEW MEXICO TELECOURSES

Humanities, Electrical Engineering 361, 362 and 202 were dropped from open circuit broadcasting; however, the Electrical Engineering Courses continued over closed circuit. Funds were not made available for Humanities to continue. Dr. H. G. Alexander, Department of Philosophy, is considering a new series for next year which will not be in the telecourse classification and, therefore, will not be for credit.

Sociology 1 and 2 was broadcast open circuit as a credit course.
UNIVERSITY RELATED PROGRAMS

The Corporation for Public Broadcasting provided Channel 5 with a grant of $10,000.00. These funds were directed into programming which would relay the University to the community. The program was called THE EDUCATIONAL PROCESS and presented fourteen one-hour programs dealing with the administration and the mission of the University of New Mexico. This was followed with a program entitled THE INTERNATIONAL SERVICES. This series was eight one-hour programs dealing with the mission of the International Services Program at the University of New Mexico. The format was designed as a talk program with four or five participants for the first half-hour followed by one-half hour of questions via telephone by the viewing audience.

The Geology Department arranged four one-half hour programs which dealt with the topography of the City of Albuquerque.

A pre-recorded program which was purchased from the Great Plains Library was a series called AMERICANS FROM AFRICA. There were thirty half-hour programs designed to trace the history of the Negroes in America.

The University of New Mexico, in cooperation with the Indian population of the State, produced thirty-two one-half hour programs called THE INDIAN SPEAKS in which the administration problems and missions of the Indian population were discussed.

LOBO LAIR

The fifteen minute sports hour with Eddie Groth, Sports Information Director with the University of New Mexico, continued as it had for the past ten years.

Four half-hour programs, YOUR LAND, was a cooperative effort by the
University of New Mexico Faculty Members and the Forest Service in which the use of public land was discussed for the use of the people.

A program entitled DENTAL HEALTH was also a cooperative effort between the University of New Mexico Dental Hygienists and the Albuquerque Public Schools for Dental Health Week.

In 1970, the State of New Mexico and the University of New Mexico cooperated with the Constitutional Convention by presenting eight one-hour programs called THE NEW MEXICO CONSTITUTION. The University of New Mexico Speech Department served as parliamentarian and coordinator for the programs.

TELECOURESES FOR THE ALBUQUERQUE PUBLIC SCHOOLS AND 43 SCHOOL DISTRICTS IN THE STATE OF NEW MEXICO

ELEMENTARY SCIENCE SIX, a twice-a-week twenty minute program of science instruction for the Sixth Grade, and SUPPLEMENTARY SCIENCE 6 were broadcast with George Fischbeck as a Science teacher.

ELEMENTARY SCIENCE 5 and SCIENCE FARE 5 continued also twice a week for a twenty minute period with George Fischbeck.

ELEMENTARY MUSIC 4, 5 and 6 taught by Marinell Dungan, Kathleen McVicker and Nancy Johnson respectively continued their twice-a-week twenty minute programs.

ELEMENTARY SPANISH, HABLEMOS ESPANOL, was video taped in 1969 at the time it was presented and continued through 1970 via video tape.

Discussions are under way during the Spring and Summer to provide other in-school programming in the areas of drugs, sex education and New Mexico History.
SERVICE PROGRAMS FOR THE ALBUQUERQUE PUBLIC SCHOOLS

Service programs for the teachers and the administration of the Albuquerque Public Schools were in the areas of Elementary Music Orientation, Elementary Science Orientation, Science Fare and Dental Health.

GENERAL PROGRAMMING (LOCALLY PRODUCED)

TV KINDERGARTEN, a pre-school program, designed for the children in New Mexico will terminate this year. It will be replaced by programming from the Corporation for Public Broadcasting called SESAME STREET. SESAME STREET was introduced in November of this year and continued through May. It was a one-hour program broken into many segments in an attempt to hold the interest of the pre-school children. The program has received excellent national reviews and has been highly advertised from its own $1,000,000.00 advertising budget. Total cost of the one-hour twenty-six week program series, five days a week, was $8,000,000.00.

Two programs at KNME which had been presented for nine years, SHIRT-SLEEVE SESSION and CHANNEL 5 REPORTS were discontinued last year and replaced by a Public Service Program produced by KOAT Television, PROJECT 7 with Dick Knipfing as host, and another Public Service Program from KOB Television called A CLOSER LOOK. The reason for the substitution was that all television stations in the area were attempting to use the same public figures and citizens to discuss local issues.

NEW MEXICO OUTDOORS, a weekly program for the sportsman which is produced by the Department of Game and Fish, continued and is scheduled next year also.
COMPLETED PLANS

The KNME Studio Building, started in the middle of June last year, was completed the first of May this year. Although the building did not reflect the external design characteristics suggested by the KNME Staff, the internal traffic plan was held as suggested. During odd moments, the move was made to the new building by the KNME Staff. The target date for the final move and operation in the new building located at 1130 University Boulevard, North, is during the December Christmas hiatus. However, it is possible with such a diligent crew that the move can be made before that time.

SPECIAL PROJECTS

KNME Television, cooperated with the D. H. Lawrence Committee of which F. C. Hempen was a member, in making matching funds available in order that the D. H. Lawrence Festival could be held in Taos. During the first week of October, 1970, KNME produced eight one-half hour programs with persons from the United States, England and France. All topics related to D. H. Lawrence and his life.

The Rocky Mountain Corporation Public Broadcasting System is continuing into its second year with a delay center and program service located in Denver, Colorado. However, at a meeting in June, 1970, they indicated that the delay center and the program service may not continue beyond July 1 because of lack of funds.

KNME Television made application through the Broadcast Facilities Act for a $350,000.00 grant to purchase new and additional color cameras. KNME
Television has been full color this past year with purchase of live color camera. Previous to this year, KNME has for the past five years been able to broadcast in color via tape and film. Last year with the Corporation for Public Broadcasting interconnect, we broadcast network color. With the addition of new color cameras, KNME Television is technically one of the top stations in the Nation including commercial broadcasting television stations.
COLLEGE OF ARTS AND SCIENCES

ANNUAL REPORT, 1969-70

Nathaniel Wollman, Dean

CONTENTS

Administration of the College

Enrollments and Student Performance

Faculty Promotions, Retirements, Appointments, and Separations

Departmental and Faculty Items of Special Note, 1969-70

Educational Developments, Problems and Plans

Departmental Reports
ADMINISTRATION OF THE COLLEGE

The appointment of Howard J. Dittmer was changed from one-fourth time as assistant dean to one-half time as associate dean; Robert Jespersen was appointed one-half time as assistant dean. For 1970-71 Ralph Norman will work approximately one-third time as associate dean, with his time largely being contributed by the Psychology Department and himself.

Mr. Dittmer is responsible for matters relating to the academic status of students in the College. Mr. Jespersen is responsible for several administrative tasks of which allocation of travel funds and supervision of summer school budget are examples and for conducting various kinds of analytical studies related to manpower and budget of the College. Mr. Norman will be responsible for curriculum investigation and planning, along with faculty and student committees.

During the year a student advisory committee consisting of an elected representative of each department and the Division of Inter-American Affairs was established. Also established was an advisory committee consisting of an elected faculty member of each department. Names are given elsewhere. The College instituted regular meetings of department chairmen.

Several ad hoc committees were appointed in different departments to devise a salary system that would be appropriate for their department. Perhaps some uniformities will emerge that will provide the basis for a college-wide system. At present there are apparent anomalies, although the main problem is that which plagues the University as a whole--inadequate spread between salaries of junior and senior faculty. At the upper end--i.e. associate professors and full professors--minimum and average salaries are 15-20 per cent too low, measured by competing offers and what would be called a "rational" scale.
It is my own feeling that too much time goes into determination each year of each faculty member's salary. The fine tuning that this requires is beyond the capacity of the department chairman, let alone the dean, and is a vestige of a much smaller, more personal system. A more workable system would be one where each faculty member's role and performance is carefully scrutinized when recommended for promotion, and promotion granted or denied. Otherwise, absolute salary and salary increments would be based upon publicly known schedules. I think that such system, with one open schedule at the rank of super-professor (or whatever else it may be designated) is now needed.

A few areas in which administrative improvements in the College need further study are: (1) the way in which courses are scheduled over a sequence of semesters and summer school and allocation of manpower among lower division, upper division, and graduate classes; (2) disposition of travel funds—which are in short supply by several thousand dollars to meet the most austere standards; (3) selection of and approval by dean's office of faculty that teach only summer courses; (4) administration and use of Teaching Assistants and Graduate Assistants in different departments.

Another administrative area that deserves some study, although there are no urgent problems, is the relationship between the College and activities such as the New Mexico Historical Review, the Division of Government Research, and the Language and Area Center for Latin America. These activities have been closely related to particular A&S departments, but it is not clear whether A&S has any responsibility toward them. If the College does, the Dean has been derelict in exercising it. Similar ambiguity and possible display of unconcern may become more apparent in the future and lead, perhaps, to more serious consequences in the case of ethnic studies.
Table I shows the number of students that were enrolled in the College of Arts and Sciences—sophomores, juniors, and seniors. In Semester II of 1969-70, it will be noted, enrollment fell below that of Semester II of 1968-69. This reduction reflects transfer of students from A&S to University College under the Bachelor of University Studies degree program. A sample of students graduating with the B.U.S. degree indicated that 70 per cent had transferred from A&S. Once the B.U.S. clientele is stabilized, it is likely that second semester enrollments relative to second semester enrollments of the preceding year will not display unusual behavior.

**TABLE I**

**NUMBER OF STUDENTS ENROLLED**

**COLLEGE OF ARTS AND SCIENCES, 1964-65—1969-70**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Sem. I</th>
<th>% Inc. over Prev. Year</th>
<th>Sem. II</th>
<th>% Inc. over Prev. Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964-65</td>
<td>1,438</td>
<td>13.2</td>
<td>1,532</td>
<td>18.2</td>
</tr>
<tr>
<td>1965-66</td>
<td>1,667</td>
<td>15.9</td>
<td>1,860</td>
<td>21.4</td>
</tr>
<tr>
<td>1966-67</td>
<td>1,993</td>
<td>19.5</td>
<td>2,032</td>
<td>9.2</td>
</tr>
<tr>
<td>1967-68</td>
<td>2,239</td>
<td>12.3</td>
<td>2,248</td>
<td>10.6</td>
</tr>
<tr>
<td>1968-69</td>
<td>2,367</td>
<td>5.7</td>
<td>2,474</td>
<td>10.0</td>
</tr>
<tr>
<td>1969-70</td>
<td>2,454</td>
<td>3.7</td>
<td>2,412</td>
<td>-2.5</td>
</tr>
</tbody>
</table>

**Increase over**

| 1966-65  | 1,016  | 70.7                   | 380     | 57.4                   |

As shown in Table II, student credit hours have increased each year but at a rate below that for the University as a whole. On the average, over the period shown, A&S class enrollments have fallen about 0.8 per cent per year as a fraction.
of total University enrollments. In spite of such decline, the student-faculty ratio in the College remains too high and have shown relatively little improvement. In 1969-70 the College accounted for 64 per cent of total student credit hours but accounted for approximately only half of the University faculty.

Within the College (see Table III) the largest relative increases in enrollments over the period 1964-65--1969-70 were in Anthropology, Geography, Journalism, Philosophy, and Speech, where the growth in SCH exceeded 60 per cent. The Journalism department's SCH more than doubled--129 per cent increase. Increases that ranged between 50-60 per cent were suffered by Economics, Geology, and Psychology.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>STUDENT CREDIT HOURS</th>
<th>A&amp;S PER CENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNM</td>
<td>A&amp;S</td>
</tr>
<tr>
<td>1964-65</td>
<td>248,253</td>
<td>168,552</td>
</tr>
<tr>
<td>1965-66</td>
<td>290,852</td>
<td>194,863</td>
</tr>
<tr>
<td>1966-67</td>
<td>317,490</td>
<td>208,845</td>
</tr>
<tr>
<td>1967-68</td>
<td>336,749</td>
<td>219,298</td>
</tr>
<tr>
<td>1968-69</td>
<td>348,706</td>
<td>226,690</td>
</tr>
<tr>
<td>1969-70</td>
<td>368,479</td>
<td>234,288</td>
</tr>
<tr>
<td>Increase:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969-70 over</td>
<td>5.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>1968-69 over</td>
<td>19,773</td>
<td>7,590</td>
</tr>
<tr>
<td>1969-70 over</td>
<td>48.4%</td>
<td>39.4%</td>
</tr>
<tr>
<td>1964-65 over</td>
<td>120,226</td>
<td>65,736</td>
</tr>
</tbody>
</table>

TABLE II
STUDENT CREDIT HOURS TAUGHT, UNM AND A&S
### TABLE III

**STUDENT CREDIT HOURS BY DEPARTMENTS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anth.</td>
<td>8,505</td>
<td>10,523</td>
<td>12,380</td>
<td>13,139</td>
<td>15,098</td>
<td>16,190</td>
<td>90.4</td>
</tr>
<tr>
<td>Biol.</td>
<td>15,195</td>
<td>17,122</td>
<td>17,816</td>
<td>18,665</td>
<td>18,794</td>
<td>18,218</td>
<td>19.9</td>
</tr>
<tr>
<td>Chem.</td>
<td>9,709</td>
<td>11,270</td>
<td>12,227</td>
<td>12,620</td>
<td>12,597</td>
<td>11,805</td>
<td>21.6</td>
</tr>
<tr>
<td>Econ.</td>
<td>5,986</td>
<td>7,482</td>
<td>8,347</td>
<td>9,609</td>
<td>9,298</td>
<td>9,387</td>
<td>56.8</td>
</tr>
<tr>
<td>Engl.</td>
<td>28,331</td>
<td>32,841</td>
<td>33,069</td>
<td>35,014</td>
<td>34,917</td>
<td>37,610</td>
<td>32.8</td>
</tr>
<tr>
<td>Geog.</td>
<td>2,474</td>
<td>2,829</td>
<td>3,165</td>
<td>4,017</td>
<td>3,794</td>
<td>4,141</td>
<td>67.4</td>
</tr>
<tr>
<td>Geol.</td>
<td>6,196</td>
<td>7,385</td>
<td>7,328</td>
<td>7,858</td>
<td>9,100</td>
<td>9,803</td>
<td>58.2</td>
</tr>
<tr>
<td>Hist.</td>
<td>16,884</td>
<td>19,612</td>
<td>21,672</td>
<td>23,058</td>
<td>23,684</td>
<td>22,938</td>
<td>35.9</td>
</tr>
<tr>
<td>Journ.</td>
<td>884</td>
<td>1,060</td>
<td>1,392</td>
<td>1,601</td>
<td>1,747</td>
<td>2,020</td>
<td>128.5</td>
</tr>
<tr>
<td>Math.</td>
<td>19,810</td>
<td>22,269</td>
<td>24,517</td>
<td>24,733</td>
<td>23,417</td>
<td>23,787</td>
<td>20.1</td>
</tr>
<tr>
<td>SCIL</td>
<td>16,357</td>
<td>17,346</td>
<td>18,479</td>
<td>19,397</td>
<td>20,888</td>
<td>21,101</td>
<td>29.0</td>
</tr>
<tr>
<td>Philos.</td>
<td>3,638</td>
<td>4,215</td>
<td>4,589</td>
<td>5,198</td>
<td>4,709</td>
<td>6,808</td>
<td>87.1</td>
</tr>
<tr>
<td>Physics</td>
<td>6,529</td>
<td>7,265</td>
<td>7,608</td>
<td>8,091</td>
<td>8,753</td>
<td>8,508</td>
<td>30.3</td>
</tr>
<tr>
<td>Pol. Sci.</td>
<td>6,991</td>
<td>8,232</td>
<td>8,436</td>
<td>7,892</td>
<td>9,638</td>
<td>9,990</td>
<td>42.9</td>
</tr>
<tr>
<td>Psych.</td>
<td>10,976</td>
<td>12,623</td>
<td>13,634</td>
<td>13,911</td>
<td>15,563</td>
<td>16,649</td>
<td>51.7</td>
</tr>
<tr>
<td>Socio.</td>
<td>5,702</td>
<td>6,995</td>
<td>8,171</td>
<td>8,843</td>
<td>8,119</td>
<td>8,234</td>
<td>44.4</td>
</tr>
<tr>
<td>Speech</td>
<td>4,385</td>
<td>5,761</td>
<td>6,015</td>
<td>6,497</td>
<td>6,529</td>
<td>7,099</td>
<td>61.9</td>
</tr>
<tr>
<td>Inter- Dept.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,155(a)</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

**TOTALS** 168,552 194,830 208,845 219,298 226,690 234,288 39.0

(a) Student credit hours earned in an experimental interdisciplinary course taught during Semester I, 1967-68. The course attracted many students who would ordinarily have enrolled in political science, sociology, and other departments.
Table IV, which lists the number of degrees granted over the years 1965-70, shows no increase in bachelor degrees between 1969 and 1970. Here, again, the explanation lies with the B.U.S. Had the latter degree not been awarded it is likely that the number of bachelor degrees awarded by the College of Arts and Sciences would have risen over the preceding year by about 70, based on a sample of transferes from A&S to B.U.S. (See note, Table IV). According to Table V, in spite of the B.U.S. degree, the percentage increase in number of degrees awarded over the period 1965-70 by the College of Arts and Sciences at both bachelor and advanced levels exceeded that for the University as a whole.

**TABLE IV**

**DEGREES AWARDED, COLLEGE OF ARTS AND SCIENCES**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BACHELOR'S DEGREES</th>
<th>ADVANCED DEGREES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Degrees % Inc. Over Prev. Year</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>1965</td>
<td>351 16.3</td>
<td>89 17.1</td>
</tr>
<tr>
<td>1966</td>
<td>396 12.3</td>
<td>112 25.8</td>
</tr>
<tr>
<td>1967</td>
<td>423 6.8</td>
<td>130 16.0</td>
</tr>
<tr>
<td>1968</td>
<td>511 20.8</td>
<td>171 31.5</td>
</tr>
<tr>
<td>1969</td>
<td>601 17.6</td>
<td>162 - 5.3</td>
</tr>
<tr>
<td>1970(b)</td>
<td>601 3.0</td>
<td>167 3.1</td>
</tr>
<tr>
<td>5-Year Incr.</td>
<td>250 71.2</td>
<td>78 87.6</td>
</tr>
</tbody>
</table>

(a) These figures do not include Master of Arts in Teaching and Master of Education in Science degrees.

(b) This is the first year for granting the B.U.S. degree. A total of 110 were granted for the year—many of them transferred from A&S. Of 20 students with names beginning with A, B, and C who graduated in June with B.U.S. degrees, 14 had transferred from A&S.
TABLE V


<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>Bachelor's Degrees</th>
<th></th>
<th>Advanced Degrees</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Sciences</td>
<td>351</td>
<td>601</td>
<td>71.2</td>
<td>118</td>
</tr>
<tr>
<td>Other Colleges *</td>
<td>604</td>
<td>952</td>
<td>57.6</td>
<td>278</td>
</tr>
<tr>
<td>UNM</td>
<td>955</td>
<td>1553</td>
<td>62.6</td>
<td>396</td>
</tr>
</tbody>
</table>

* Excludes Law and Medicine.

Within the College (see Table VI) in the academic year 1969-70, the History department graduated the largest number of majors, followed by Biology and English. These three departments together accounted for 37 per cent of the A&S bachelor degrees. At the master's and doctor's level combined the department of Modern and Classical Languages led all others (Table VI); next came English, History, Biology, and Mathematics. Psychology had the largest number of Ph. D's, followed by English and Mathematics.

Attention is called to Table VII, which shows those bachelor degree recipients from the College of Education that graduated with a major in one of the A&S departments. These are students in addition to those listed in Table VI. The largest number in 1970 was in English followed by History.

Tables VIII and IX are an interesting combination when viewed in the light of the May disturbance and the grading options made available to the students. The observed effects of the options seem to be more predictable at the bottom end of the academic scale (Table VIII) than at the upper (Table IX). There was a perceptible decline in the number of students suspended or put on probation and a perceptible increase in
the number released from probation at the end of Semester II, 1969-70, compared with previous semesters. There was a slight decrease, relative and absolute, in the number of students having GPA's for the semester's work of 3.00 or better. However, the number and per cent of students having a GPA of 3.5 or better, perceptibly increased. Table X summarizes the distribution of academic honors awarded to A&S students during the year.
### TABLE VI

**DEGREES AWARDED, BY DEPARTMENT, 1968-70**

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>B.A.</th>
<th>B.S.</th>
<th>M.A.</th>
<th>M.S.</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>American St.**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>37</td>
<td>31</td>
<td>35</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Art*</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>60</td>
<td>70</td>
<td>77</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Chemistry</td>
<td>29</td>
<td>45</td>
<td>35</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Comp. Lit.</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dietetics*</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>18</td>
<td>21</td>
<td>20</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Econ.-Phil.</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>61</td>
<td>75</td>
<td>71</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>Engl.-Phil.</td>
<td>7</td>
<td>1</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Studies</td>
<td>22</td>
<td>24</td>
<td>12</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Geography</td>
<td>4</td>
<td>13</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>History</td>
<td>72</td>
<td>56</td>
<td>89</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Ibero-American</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>15</td>
<td>31</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math. &amp; Stat.</td>
<td>24</td>
<td>22</td>
<td>24</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Med. Tech.</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>37</td>
<td>40</td>
<td>54</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Philosophy</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Physics &amp; Astr.</td>
<td>13</td>
<td>17</td>
<td>14</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Pol. Sci.</td>
<td>41</td>
<td>55</td>
<td>53</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Psychology</td>
<td>40</td>
<td>63</td>
<td>51</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Sociology</td>
<td>21</td>
<td>22</td>
<td>32</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Speech</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Homo Econ.*</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ed. Ed. Sci.***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAIS**

|      | 540 | 639 | 638 | 201 | 170 | 196 | 47  | 62  | 72  |

---

* Not departments of the College of Arts and Sciences, but major or minor is allowed under certain conditions.

** Interdisciplinary programs at the doctoral level.

*** Excluding the M.A. Ed. and M. Ed. Science degrees, the totals for A&S are 171, 162, and 167.
### TABLE VII

**BACHELOR DEGREES AWARDED BY COLLEGE OF EDUCATION WITH A&S MAJORS, 1968-70**

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>1968</th>
<th>1969</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Biology</td>
<td>7</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>English</td>
<td>34</td>
<td>50</td>
<td>34</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Geology</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>History</td>
<td>35</td>
<td>37</td>
<td>20</td>
</tr>
<tr>
<td>Journalism</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Math. &amp; Stat.</td>
<td>10</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>M&amp;CL</td>
<td>7</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Political Science</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Psychology</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sociology</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Speech</td>
<td>9</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Communication Arts</td>
<td>19</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>28</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Science Composite</td>
<td>11</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>167</td>
<td>178</td>
<td>125</td>
</tr>
</tbody>
</table>
TABLE VIII

ACADEMIC PROBATIONS, SUSPENSIONS AND RELEASES

COLLEGE OF ARTS AND SCIENCES

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>1967-68</th>
<th>1968-69</th>
<th>1969-70</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Semester I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Probation</td>
<td>283</td>
<td>12.6</td>
<td>246</td>
</tr>
<tr>
<td>Suspended</td>
<td>44</td>
<td>2.0</td>
<td>31</td>
</tr>
<tr>
<td>Released from Probation</td>
<td>68</td>
<td>3.0</td>
<td>94</td>
</tr>
<tr>
<td>Semester II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Probation</td>
<td>245</td>
<td>10.9</td>
<td>212</td>
</tr>
<tr>
<td>Suspended</td>
<td>47</td>
<td>2.1</td>
<td>37</td>
</tr>
<tr>
<td>Released from Probation</td>
<td>73</td>
<td>3.2</td>
<td>72</td>
</tr>
</tbody>
</table>

Number of students enrolled in A&S:

Semester I, 1969-70 2,454
Semester II, 1969-70 2,412

TABLE IX

DEAN'S LIST, COLLEGE OF ARTS AND SCIENCES:

NUMBER OF STUDENTS WITH GRADE POINT AVERAGE OF 3.00 AND ABOVE FOR WORK TAKEN IN THE SEMESTER

<table>
<thead>
<tr>
<th>Grade-Point Average</th>
<th>1968-1969</th>
<th>1969-1970</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semester I</td>
<td>Semester II</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>4.00</td>
<td>37</td>
<td>1.6</td>
</tr>
<tr>
<td>3.50-3.99</td>
<td>137</td>
<td>5.8</td>
</tr>
<tr>
<td>3.00-3.49</td>
<td>297</td>
<td>12.5</td>
</tr>
<tr>
<td>TOTALS</td>
<td>471</td>
<td>19.9</td>
</tr>
</tbody>
</table>

NOTE: % represents the percentage of the total A&S enrollment for the semester indicated.
### TABLE X

<table>
<thead>
<tr>
<th>Honors in General Studies:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cum laude</td>
<td>11</td>
</tr>
<tr>
<td>Magna cum laude</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Departmental Honors:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>2</td>
</tr>
<tr>
<td>English</td>
<td>9</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>8</td>
</tr>
<tr>
<td>Psychology</td>
<td>2</td>
</tr>
</tbody>
</table>

Graduated with Distinction 48

Elected to Phi Kappa Phi:
<table>
<thead>
<tr>
<th>Juniors (Information Not Available)</th>
<th></th>
</tr>
</thead>
</table>

Elected to Phi Beta Kappa:
| Juniors | 7 |
| Seniors  | 35  |

- 12 -
FACULTY PROMOTIONS, RETIREMENTS,
APPOINTMENTS AND SEPARATIONS

PROMOTIONS:

To Full Professor:

Edith Buchanan  English
Reuben Hersh Mathematics
Leonard L. Jermain Journalism
Joseph H. Kuntz English
Martin C. Needler Political Science
Lawrence F. Shampine Mathematics
Richard F. Tomasson Sociology
Jack Edward Tomlins Modern Languages
W. Warren Nagar History

To Associate Professor:

Seymour S. Alpert Physics and Astronomy
Dolores S. Butt Speech
Richard Jerome Griego Mathematics
Joanne Field Holland English
Robert C. Jespersen Modern Languages
Gordon V. Johnson Biology
Peder J. Johnson Psychology
David S. King Physics and Astronomy
Harold C. Neier Sociology
Alfred L. Parker Economics
Theodore A. Sackett Modern Languages
Derek B. Swinson Physics and Astronomy
James L. Thorson English
Nicholas E. Vanderborgh Chemistry
Frederick Warner English
T. Phillip Wolf Political Science

RETIREMENTS:

John G. Breiland Physics
Dorothy Cline Political Science
Martin W. Fleck Biology
Vincent C. Kelley Geology
APPOINTMENTS:

Anthropology:
- Richard Barrett
- William Judge
- Kenneth Morgan

Biology:
- David Duszynski
- James R. Gosz
- Paul Kerkof

Chemistry:
- Fritz Allen

Economics:
- Albert Church

English:
- Morris Eaves
- Lee McKay Johnson
- C. Clayton Rich
- J. Michael Stroud
- Tom Mayer
- Harvena Richter

Geography:
- Robert Campbell

Institute of Meteoritics:
- Martin Prinz

Political Science:
- Michael Gehlen
- Jay L. Sorenson
- Randall Cruikshanks
- Chris Garcia
- Marilyn Holt
- Bernard Saalfeld
- Robert Wrinkle

History:
- German Tjarks
- Jake Spidle
# Mathematics:

- Richard Wildner: Visiting Professor
- Walter Kyner: Professor
- Robert Cogburn: Visiting Associate Professor
- James Donaldson: Associate Professor
- Edgar Gilbert: Associate Professor
- P. K. Pathak: Associate Professor
- Alexander Stone: Associate Professor
- John Ulrich: Associate Professor
- James A. Ellison: Assistant Professor
- Ben Jerral Jones: Assistant Professor
- Steven Pruess: Assistant Professor

# Modern and Classical Languages:

- Guillermo Ara: Visiting Professor
- Gary Brower: Associate Professor
- John Bergen: Assistant Professor (Visiting 1969)
- George Peters: Assistant Professor
- Stanislas Guillaume: Visiting Lecturer

# Philosophy:

- Charlene McDermott: Assistant Professor

# Physics:

- Colston Chandler: Assistant Professor
- Byron Dale Dieterle: Assistant Professor

# Psychology:

- Thomas P. Friden: Assistant Professor
- Samuel Rolls: Assistant Professor

# Sociology:

- Theodore Abel: Visiting Professor
- Frieda Gehlen: Visiting Assistant Professor
- Harold G. McCann: Assistant Professor
- Patrick Mahamara: Assistant Professor
- David Stratman: Assistant Professor (Visiting 1969)

# Speech:

- David Draper: Assistant Professor
- Gerald Goldhaber: Assistant Professor
- John Kline: Assistant Professor
- William Shiner: Assistant Professor
- Donald D. Shell: Assistant Professor
Anthropology:

Sally Binford
William Stuart

Chemistry:

Raymond W. Castle

English:

Jane Baltzell Kopp
John Martin
James L. Ruff

Geology:

Lawrence Frakes

Political Science:

T. Phillip Wolf
Norma Gilbert

Journalism:

Emma McLeod

Mathematics:

D. Basu
Enzio Marchi
S. Jacks
James Derr
Julian Gevirtz
Ih Ching Hsu
Joaquin Loustanau

Modern Languages:

Fred Davison
David Thompson

Sociology:

Horrie Forslund

Speech:

Wayne Dundy
Samuel Fletcher
Jim Hughey
Brenda Hancock

Assistant Professor
Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor
Associate Professor
Assistant Professor
Assistant Professor
Assistant Professor
Professor
Assistant Professor
Assistant Professor
Appointments at the rank of Associate Professor and Professor are:

**Geography**--Robert Campbell, formerly chairman, Department of Geography, George Washington University, more recently, Vice President, Matrix Corporation, Alexandria, Virginia.

**Institute of Meteoritics**--Martin Prinz, Senior Research Associate, from Tufts University, Medford, Mass.

**History**--Gerrit Wjarks, Visiting Professor, most recently at the University of Florida.

**Mathematics**--Robert Cogburn, University of California, Berkeley; Walter Kyner, University of Southern California; James Donaldson, Howard University, Washington, D.C.; Edgar Gilbert, Sandia Corporation; P. K. Pathak, University of Illinois, Urbana; Alexander Stone, University of Illinois, Chicago; John Ulrich, University of Massachusetts.

**Modern and Classical Languages**--Guillermo Ara, Visiting Professor from the University of Buenos Aires; Gary Drower, Associate Professor from the University of Kansas.

**Political Science**--Michael Gehlen, appointed as Chairman of the Department, from Purdue University; Jay B. Sorenson, Professor, from Smith College.

**Termination of Visiting Appointments**

Raymond Castle, Chairman of the Chemistry Department, resigned to accept a position as Professor of Chemistry, Brigham Young University.

Lawrence Frakes, Associate Professor, Geology, resigned to accept a position at Florida State University.

Llzo Marchi, Associate Professor of Mathematics and Statistics, resigned to accept a similar position at the University of Toronto.

S. Zacks, Professor of Mathematics and Statistics, resigned to accept a similar position at Case-Western Reserve.
Ned Davison, Professor of ISCI, resigned to accept a similar position at the University of Utah.
T. Phillip Wolf, Associate Professor of Political Science, resigned to accept a similar position at Indiana University, Southeast at Jeffersonville.
Wayne Bundy, Professor of Speech, resigned to accept a position with the U.S. Government.
Samuel Fletcher, Professor of Speech, resigned to accept a position at the University of Alabama.
It is clear from examining this list that we have lost some of our best faculty. We wish them well in their new positions.

DEPARTMENTAL AND FACULTY ITEMS OF SPECIAL NOTE FOR 1969-70

Harry Basehart is now editor of the Southwestern Journal of Anthropology with Stanley Newman and Bruce Rigsby as co-editors. This change is made in expectation of Professor Newman's retirement next year.

A UNM-U.S. Department of the Interior contract has been signed to support research on the culture, history, and ecology of Chaco Canyon. While the agreement is largely the work of the Chairman of the Anthropology Department, research in biology will also be undertaken.

The Chemistry Department is pleased with its new building. However funds originally allocated for equipment were largely absorbed by the building itself, leaving them with serious equipment deficiencies that they had hoped would have been remedied by now. Guido Daub became acting chairman.

Except for Purification Wednesday in the fall, Ernie Baughman's crusade against long hair and bare feet in the winter, and one dirty handbill in the spring, the English department was reasonably quiet. Joseph Zavadil, acting chairman, became regular chairman. A grant from the National Endowment for the Humanities will support a D. H. Lawrence Festival in October, 1970.
Geography began its M.A. program in Semester II and has initiated a new publication series with the UNM Press.

Klaus Keil, Director, Institute of Meteoritics, was the first recipient of a new national award, the G. P. Merrill Award of the National Academy of Science, for work in mineralogy. Sherman Wengard was elected President of the American Association of Petroleum Geologists. Vincent Kelley retired after 33 years as a member of the faculty. Lee Woodward became acting chairman.

Mathematics and Statistics, Electrical Engineering, and Business Administrative Sciences expanded the program in Computer and Information Sciences with leadership, based upon its NSF development grant as extended to 1972, assumed by Mathematics and Statistics.

The teaching of Navajo was begun, the services of Visiting Professors Michel Dutox and J. M. Martinez Cachero were enjoyed, and construction of new permanent quarters for Modern and Classical Languages was begun.

Philosophy had its first Ph. D., who left to teach at Lake Forest College. About a dozen M.A.'s were also awarded. Total course enrollments rose over the previous year by about 35-40 per cent. These are figures of special note since there were only six regular faculty in the department.

The Physics Department's research commitment, measured by sponsored research expenditures, amount of active grants at end of year, and output of publications, was apparently the greatest of all departments in the College. John Breiland retired.

Political Science began its Ph. D. program, and acquired a new chairman, Michael Gehlen, and several other new faculty. Harold Rhodes acted as chairman during the past year, a position fraught with peril but one that he successfully challenged. Dorothy Cline retired.
Psychology produced twelve Ph. D.'s and forecast a need for alternative sources of funds to support research—a gloomy prospect, indeed, in light of similar needs in all other departments and serious deficiencies in the undergraduate programs of the College.

Richard Tomasson received a Senior Fellowship of the National Endowment for the Humanities and two Fulbright awards, one of which conflicted with the NEH award and was declined. Theodore Abel, visiting professor of sociology, Semester I, received the Merit Award for Distinguished Service in Sociology of the Eastern Sociological Association. Professor Charles Woodhouse will be acting chairman of the sociology department for 1970-71.

EDUCATIONAL DEVELOPMENTS, PLANS AND PROBLEMS

The chairmen's reports indicate that all departments are engaged in evaluation and changes of departmental courses as well as undergraduate and graduate degree programs. No attempt will be made to repeat what has been said in the departmental reports.

In spite of dedication to the problems of teaching, the Arts and Sciences educational programs are seriously deficient if they are compared with a reasonable standard of what should be available to the spectrum of New Mexico students who attend the University. The major handicap is a shortage of faculty for both graduate and undergraduate studies. As a consequence the University student is deprived of what should be his as a matter of course.

There is some evidence that campus unrest is related to the size of classes and resulting anonymity of the student. Therefore, to provide the College with additional resources is not a net increase in the cost of doing business if costs of disruption are thereby reduced.
Large classes are dominantly at the 100 and 200 levels, but in some departments, e.g. History, large classes--i.e. over 100 students--are found at the 300 and 400 levels as well. Some departments have discussed with me the desirability of limiting enrollments--in upper as well as lower division courses. The effects of such limits on enrollments of courses that remain unlimited and the distortion of student programs is, of course, clearly recognized. At this moment there is no college policy on the matter; the department chairmen and teacher of each class do what seems reasonable in light of available space, manpower, and library and laboratory facilities. The problem will become more acute before long.

Certain programs are especially in need of transfusions: American Studies and Inter-American Affairs. To provide minimum needed additional support would require (1) more cooperation from participating departments and (2) an infusion of man-power: at least two more FTE's for each program. The College has considered the advisability of maintaining the M.A. in International Affairs, but has not yet reached a conclusion.

In the wings are one or more programs in environmental studies, most likely to be offered on an inter-college basis, Ph. D. programs in Sociology and Speech, and an M.A. in Journalism. We have briefly examined the merit of converting the M.A. in International Affairs into a B.A. program. American Studies is also considering an undergraduate major.

Another area that will receive attention is that of ethnic studies. Preliminary experience indicates that there may be a difference of opinion over the question of how much activism and how much academic material goes into an ethnic studies course. This question has already been raised with Chicano studies. We hope that with Professor Griego in charge of Chicano studies the issue will be satisfactorily settled.

The College has studied possibilities of overhauling the present A&S program consisting of group requirements, major, minor and electives. Two faculty groups and the Student
Advisory Committee were at work during the past year on curriculum revision. Early in the year the Faculty Advisory Committee was divided into two subcommittees. Subcommittee I was charged with considering changes in the curriculum, but within the present framework of group requirements, major and minor. This group consisted of Ulrich Hollstein and Patricia Murphy, co-chairmen, with members James Sebring, William Johnson, Donald Tailby, Ellen Spolsky, James Crow, William Zimmer, and Joe Fashing. The other group, Subcommittee II, was asked to examine more radical changes. It was composed of Peder Johnson and Marilyn Van Graber, co-chairmen, and Elinore Barrett, Albert Kudo, Donald Sullivan, Brian O'Neil, Dan Finley, and William Brisk. The Student Advisory Committee consisted of Diana Leute, chairman, and the following members: James Chatters, Albert Rizzoli, Neal Armstrong, Marcela Levine, Enrique Lamadrid, Stephen Davis, Robert Taylor, Michael Gluck, John Romero, Tom Darden, Pauline Larragoite, John Henley, Patricia Ann Baker, Rebecca Hogan, Flynn O'Malley, Edward Benavidez, Phillip Crump, and Christine Rows. The Student Advisory Committee met by itself and representatives occasionally met with subcommittees of the Faculty Advisory Committee.

Subcommittee I has considered a wide range of possible variations in group requirements along with consideration of the merits of abolishing foreign language and freshman English requirements. It recommended that the P.E. requirement be abolished, a recommendation that was approved by the A&S faculty last spring. No formal action has been taken by the committee or by the A&S faculty on other curriculum changes, except that the faculty has charged Subcommittee I with preparing a recommendation on continuation of a minor in ROTC in the College. It is likely that Subcommittee I will come to the faculty with additional proposals in 1970-71.

Subcommittee II has considered a substantially new curriculum for A&S as an alternative to the present (or as may be revised) program, with the idea that both systems would be.
maintained. We hope to proceed with plans and experimentation, subject to administration and faculty approval and availability of resources.
I. GENERAL DEPARTMENTAL INFORMATION

A. Significant achievements during the academic year, 1969-1970.

The 39th Annual Field Session in Anthropology, under the direction of Professor Florence H. Ellis, was held on the site of Sapawe near Abique, Rio Arriba County, New Mexico. This was the sixth season of excavations by the University of New Mexico at this locality. The work was directed toward examinations of a Pueblo IV settlement, the largest Southwestern Pueblo known.

In addition to the main field school at Sapawe, other sections of the Field Session in Anthropology, under the direction of Professor Frank C. Hibben, were conducted near Tome, Valencia County; and on the Rio Rancho Estates, Sandoval County, New Mexico. These two training and research excavations were aimed at further elucidating Archaic and Early Man cultures in the middle Rio Grande valley.

Graduate and undergraduate students in anthropology participated in or conducted research projects in the states of Alaska, Arizona, Arkansas, Maryland, New Mexico, Oregon, South Dakota, and Virginia; and also in the District of Columbia, and in Brazil, British Columbia, Colombia, Ecuador, Mexico, Peru, France and Yugoslavia.

During the period covered by this report, 34 graduate students of a total of 58 carried on our rolls were supported by grants-in-aid, including fellowships and assistantships, from the following organizations: Arctic Institute of North America, Canada Council, Clover Enterprises American Indian Historical Project, Ford Foundation, Fulbright Graduate Fellowship, Horizon Land Corporation, National Defense Education Act, National Science Foundation, Rio Rancho Estates, School of American Research, Southwestern Educational Cooperative Laboratory, University
of New Mexico and Wenner-Gren Foundation for Anthropological Research.

The following visiting scholars presented lectures or led seminars in the Department: Richard A. Barrett (Temple University), William J. Judge (Colorado State University), Kenneth Morgan (University of Chicago), Richard Thompson (University of Texas) and Gwynn Vivian (University of Arizona).

Numbers 2, 3, and 4 of Volume 25 and number 1 of Volume 26 of the Southwestern Journal of Anthropology were published. This publication is sponsored by the Department and during most of the period reported here was co-edited by Professor Harry W. Basehart and Professor Stanley S. Newman. Beginning with Volume 26, Number 1 (Spring 1970) Professor Basehart was named Editor, and Professor Newman and Associate Professor Bruce J. Rigsby became Co-Editors. The Southwestern Journal now has a total of 2667 subscribers, 390 of whom reside in foreign countries. Between July 1, 1969 and June 30, 1970 subscriptions increased by 200 over the same period for the preceding year.

The Maxwell Museum of Anthropology continues to grow impressively, both in its acquisitions of valuable collections, and in services offered to the University and to the community. In my report to Dean Hoyt Trowbridge of June 1, 1969 Museum attendance was reported as 61,176 for the academic year 1968-1969. Attendance during the period July 1, 1969 - May 30, 1970 was approximately 72,454; an increase of about 11,278 over the preceding reported period. Under our quite new Docent Program, guided tours included visitors from: Albuquerque Public Schools, Girl Scouts, Head-Start Program, Indian Boarding Schools (12 schools represented), Job Corps, Newcomers Club, Pueblo Indian Schools (8 schools represented), Rio Rancho Estates, Sandia Corporation, Senior Citizens, United States Department of State, United States Veterans Hospital and Public Schools from other cities (6 represented).

Museum collections - From July 1, 1969 to May 30, 1970 there were 66
accessions including several thousand objects. The approximate value of these gift accessions total $139,993.50. The most notable additions to the Maxwell Museum holdings include the Edwin L. Kennedy Collection of Navajo Rugs, the Professor Florence H. Ellis collection of Southwestern Indian Ethnic Materials and the Gilbert and Dorothy Maxwell collection of Maria Pottery (in part).

Museum exhibitions - Major new exhibitions for the period reported included a Center, Gallery Exhibit, entitled The First Capital, San Gabriel Del Yunque, which was accompanied by a printed brochure; and a center, Gallery Exhibit, entitled Beautyway, Sixteen Navajo Sandpaintings in Textiles, which was also accompanied by a printed brochure. In addition to the above, eight wall case exhibits were completed as well as a new wall case for recent acquisitions.

Museum sales desk - The Maxwell Museum of Anthropology Sales Desk, in the main gallery, grossed sales of $8,013.14 during the period covered by this report. Its continuing success has permitted both the purchase of museum specimens for the collections, and the payment of salary to the sales desk manager and gallery supervisor. The sales desk offers Navajo and Pueblo silver jewelry, Eskimo craft-arts, reproductions of pre-historic Southwestern ceramics, and popular and scientific books and pamphlets on anthropology.

As noted in my previous annual reports, in the past six years this Department has inaugurated a number of changes, some of them quite radical in the history of the Department, in both our undergraduate and graduate curricula and program requirements.

At present the undergraduate program is relatively stable. We believe that the undergraduate revisions we have made are resulting in broader, more comprehensive training which serves equally the liberal arts goal of the student who may not continue in anthropology beyond the B.A., and the student who intends to pursue graduate work in the discipline. However, it is our intention to revise
the undergraduate program of study as changing needs of the students and innovations within anthropology warrant such revisions.

At the graduate level, we continue to change our program, or programs, rather frequently. Most recently, and within the period covered by this report, we have inaugurated an M.A. core program, and we have instituted changes which permit the Ph.D. student a greater degree of specialization. The M.A. core program is in the nature of an experimental innovation, although it appears to be successful. The newly revised Ph.D. program similarly appears successful.

Referring to the sum of the changes we have made these past several years in the M.A. program, the student who succeeds in the attainment of that degree now completes all requirements and is awarded the M.A. in an actual average time of about two years from the time he enters the program. The time involved is much less than under our previous system.

In reference to the sum of the changes we have made these past several years in the Ph.D. program, it now appears quite certain that the successful Ph.D. student completes our program and attains the degree in an actual average time of about five years from the time he enters graduate school. This is well below the national average time in anthropology. At the same time, and in regard to both the M.A. and Ph.D. Programs, we believe we are providing excellent training.

During the period covered in this report, while losing two faculty members, we have added three scholars to the staff. These additions, in archaeology, human genetics and social anthropology (with an emphasis in Latin America) provide appreciably greater strength and balance to an already superior Department.

Since writing my last annual report, the University of New Mexico - United States Department of the Interior Chaco Canyon Project has been signed into existence via a document of agreement between the two organizations. This document is based on discussions, beginning in 1968, between myself, other members of the
University and officials of the United States Park Service, particularly Dr. John M. Corbett. It calls for a 10 to 20 year period of cooperation between the University and the Park Service, during which time the culture history and ecology of the Chaco Canyon region, New Mexico, will be assessed in detail.

The Park Service is to provide all direct operating funds; the University is to provide certain housing, academic resources and diverse other services.

During the past academic year Thomas R. Lyons (Ph.D., New Mexico) has been Acting Director of the Project. The Director, designate, is Robert H. Lister (Ph.D., Harvard), a senior authority on Southwestern prehistory, and former Chairman, Department of Anthropology, University of Colorado (I mention these men by name here because they are not referred to elsewhere in this report). The Chaco Canyon Project promises to further the interests and fortunes of both the University and the Federal Government.

During the period covered by this report the Department has secured the necessary funds with which to add substantially to the Department of Anthropology-Maxwell Museum of Anthropology building. The total funds, in the amount of $800,000.00 have been awarded by private donors, the National Science Foundation, and the State of New Mexico. The attainment of these monies represents the continuing efforts of several persons over a period of about three years. For extraordinary assistance, Assistant Professor J. J. Brody, Vice President Sherman E. Smith and Mr. and Mrs. Gilbert Maxwell are to be especially commended. It is intended that ground breaking for the new addition will begin before Semester I, 1970-1971.

Within the past month this Department has assumed the management of the Cline Enterprises American Indian Historical Project at the University of New Mexico. Associate Professor Lewis R. Binford has agreed to direct the Project, which for the past three years has been under the management of the Department
of History. It is anticipated that during the coming academic year Professor Binford's total operating budget will be on the order of $50,000.00. The Project, whose purpose is the recording of ethnohistorical data relative to American Indians, will provide Research Assistantships for a number of graduate students in anthropology.

B. Numbers, Achievements and Postgraduate Activities of Students.

During the 1969-1970 academic year, 23 students received the Bachelor of Arts Degree in Anthropology and an additional 15 who were awarded baccalaureate degrees minored in anthropology. Eight students received the Master of Arts Degree in Anthropology. Four students received the Ph.D. degree in Anthropology. Of those four, one is Assistant Professor of Anthropology at Colorado State University; one is Assistant Professor of Anthropology at The George Washington University; one is employed by the Navajo Tribe; and one has not presently accepted employment.

C. Significant Plans and Recommendations for the Near Future.

In this regard I wish to remind you of just two major items; both of which we have discussed in the recent past.

First, Professor Florence H. Ellis and Professor Stanley S. Newman will retire at the end of the academic year 1970-1971. It is essential, of course, that both of these professors be replaced with equally excellent scholars at the appropriate salaries, and toward this end, we intend to begin recruitment procedures in September or October 1970.

Second, our new Anthropology-Maxwell Museum building addition will require further staffing in the Museum, as I have previously noted to you. Early in the coming academic year, Professor Hibben, Assistant Professor Brody and I will review with you anticipated Museum staffing needs for the academic year 1971-72 and beyond.
D. Appointments to Staff.

Richard A. Barrett, Assistant Professor of Anthropology; Effective date, September 1, 1970.

William J. Judge, Assistant Professor of Anthropology; Effective date, September 1, 1970.

William Morgan, Assistant Professor of Anthropology; Effective date, September 1, 1970.

E. Separations from Staff.

Sally R. Binford, Associate Professor of Anthropology; Effective date, February 2, 1970 (retained as Research Associate Professor of Anthropology in non-tenure, non-voting, non-pay status).

William T. Stuart, Assistant Professor of Anthropology; Effective date, June 30, 1970.
II. COMPOSITE OF INFORMATION REQUESTED ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study:

   Brody, J. J.  -Ph.D., UNM, (Art History); Dissertation Title: Indian Painters and White Patrons.

   Stuart, W. T.  -Ph.D. expected Fall 1970, University of Oregon.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc., during the period.

   Bock, P. K.  -Sabbatical, 1969-1970, spent in Mexico City and in Tapoxtlan, Morelos (see §5); during March, April, May, 1970 offered (gratis) seminar at Univ. Ibero-Americanas.


   Ellis, F. H.  -Field school in archaeology for UNM at Sepawa, 1969.


   Newman, S.  -Sabbatical (Semester II) to continue analysis of my field data on Bella Coola, an American Indian language of British Columbia.


   Springer, G. P.  -Montserrat to discuss disposal of materials relating to Ethnomusicology Collections; Ecuador to collect samples of Indian and Black music and social background; Lake Arrowhead to teach in CGS Workshop for Graduate Dean; Yale Summer Language Institute, 7/23-8/2.

   Spuhler, J. M.  -Three weeks in Europe mainly to take part in an international conference on biological distance measures between human populations and to consult on the establishment of an international data center for the International Biological Programme (Utrecht and London, Aug.-Sept.).

3. New scholastic honors, fellowships, etc.


   Schwerin, K. H.  -Listed in Who's Who In the West.
4. Publications:

Bachert, H. W.


Bock, P. K.


Campbell, J. H.


Hibben, F. C.

- Four book reviews.

Newman, S.


Riegeby, B.


Schwarz, K. R.

- Apuntes sobre la yuca y sus orígenes. Tropical Root and Tuber Crops Newsletter, No. 3. USDA Federal Experiment Station, Mayaguez, Puerto Rico, 1970.
- Review of Pre-Columbian Literatures of Mexico, by Miguel Leon-Portilla, Ethnohistory (in press).
- Made across the Atlantic—Possible African Origins for some Pre-Columbian New World
Sebring, J. N.

- Review of "Living Poor", by Moritz Thomsen, American Anthropologist (in press).

Spolsky, B.


Spuhler, J. N.

Publications: (Cont.)


Stuart, W. T.
- Some Comparative Cases of Patron-Client Relations, UNM Press, In prep.

5. Other Research Projects or Creative Work in Progress or Completed During the Period:

Baechart, H. W.
- Revision of "Shamanism and Peyote Use Among the Apaches of the Mescalero Indian Reservation" (with L. B. and Ruth Boyce) for publication in a volume edited by Dr. M. Harper.
- Revising: "Settlement Patterns and Types of Agriculture Among the Matengo of Tanzania".

Bock, P. K.
- Research during October, November, December, 1969, at Instituto Indigenista Interamericano, Mexico City.
- During first five months of 1970, field research in Teopanas, state of Nacozari, Mexico; aided by grant from Faculty Research Committee. Expect to continue field research another three months.

Brody, J. J.
- Exhibition: Beautyway.

Campbell, J. M.
- Several in process of completion, having to do with anthropology and biology of the northern regions.
Ellis, F. H.  
- Research on calendar priests in Jemez Pueblo.  
- Research on significance of trenches in Mogollon, kiva floors, still used at Jemez as ceremonial device.

Hibben, F. C.  
- Research on Rio Rancho Site, New Mexico.  
- Research on Tome Site, New Mexico.

Rigsby, B.  
- One month's field research in the Gitksan language of northern British Columbia, August, 1969, financed by a $200 grant from the American Philosophical Society.

Schwerin, K. H.  

Spolsky, B.  
- Director, Navajo Reading Study: contract funded by the Bureau of Indian Affairs to support research entitled "A Study of the Potential and Effect of Teaching Navajo Children to Read in Their Own Language First." 6/25/69-12/31/69, $22,842; 11/14/69-6/30/70, $31,559.
- Research and development needs and priorities for the education of American Indians: evaluation of research on bilingual education. Southwestern Cooperative Educational Laboratory (in press).
Other Research Projects, etc. (Cont.)

Spuhler, J. M. - Continued work on a textbook on "Biological Anthropology" to be published by Prentice-Hall in 1971.

6. Activities in Learned and Professional Societies:

- Chairman, session on "Family, Kinship, and Marriage II." Meeting of Editorial Council, American Anthropologist.

Bock, P. K. - Attended meeting of Society for American Archaeology, Mexico City, Mexico, May, 1970.

Brody, J. J. - New Mexico Association of Museums - By-laws Committee; annual meeting; panel member (10/31/69).
- Mountain Plains Museums Conference (9/69).

- Attended annual meeting Society for American Archaeology, Mexico City, Mexico, May, 1970.
- Delivered opening address, symposium, Institute of Polar Studies, Columbus, Ohio, May, 1970.

Ellis, F. H. - Paper given at Pecos Conference, also chairman of a session; August, 1969.
- Paper given at Mexico City meeting of SAA, April, 1970.

Hibben, F. C. - Plains Anthropology Conference, read paper.
- American Museum Association, read paper.
- Society for American Archaeology, Mexico, participated in panel discussions.

Newman, S. - Guest discussant at seminar, "New Perspectives on the Pueblos," held November 12-17 at Santa Fe, under the auspices of the School of American Research.
Activities in Learned and Professional Societies: (Cont.)

Rigsby, B.
- Read paper, "Some Linguistic Insights INTO Recent Taishian Prehistory," as guest lecturer at Washington State University, March, 1970;

Schwerin, K. H.

Spolsky, B.
- New Mexico Association for TESOL and Bilingual Education meeting in Gallup, New Mexico, January, 1970. Paper: Meeting the State's Resources.
- Cultural Orientation of Foreign Students' Workshop, sponsored by the National Association for Foreign Student Affairs at New Mexico State University, Las Cruces, N.M., Feb., 1970. Paper: The Cultural Orientation of Foreign Students.
Activities in Learned and Professional Societies: (Cont.)

- New Mexico Association for TESOL and Bilingual Education, First Annual Convention in Albuquerque, New Mexico, April, 1970.

Springer, G. P.
- Council of Graduate Schools: Exec. Comm., Committee on Committees; and Committee on Plans, Policies and Resolutions.
- LASPAU, Board of Trustees; Western Assn. of Graduate Schools, President and Special Committee on Grad. Ed. of Minority Students.
- National Association State Universities and Land-grant Colleges;
- National Council of University Administrators.

Spuhler, J. N.
- Attended meetings of the American Anthropological Association,
- Attended meetings of the Princeton Conference on Genetics and Demography,
- Attended meetings of the Social Science Research Council Committee on Biology and Behavior.

Stuart, W. T.

7. Other Professional Activities:

Baschat, H. W.
- Chairman, NIMH Conference on post-graduate training in anthropology.

Berk, P. K.
- Presented public lecture and a graduate seminar at Michigan State Univ., East Lansing, March, 1970.

Brody, J. J.
## Activities in Learned and Professional Societies (Cont.)

### Other Professional Activities: (Cont.)

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<th>Name</th>
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- Lusted in anthropology, the Alaska Methodist University, March, 1970.  
- Appointed Research Scientist, Arctic Institute of North America, April, 1970. |
| **Ellis, F. H.**    | - Talk on first capital of New Mexico; excavations and history, March, 1970.                                                              |
| **Hibben, F. C.**   | - Television appearances and off-campus talks.                                                                                           |
- Reviewer of two NSF research proposals.                                                                                          |
| **Spolsky, B.**     | - Chairman of Committee of Examiners for Test of English as a Foreign Language (Educational Testing Service--College Entrance Examination Board).  
- Member of State of New Mexico Department of Education Advisory Committee on TESOL.  
- Member of the Language Arts Committee, Area South, Albuquerque Public Schools.  
- Member Planning Committee for Conference on Navajo Education.                                                                     |
| **Springer, G. P.** | - TV appearance with Harold Taylor; Social Workers Conf., Western Skies; Faculty Wives.                                                   |
| **Spuhler, J. N.**  | - Continued to serve as consultant in anthropology, National Science Foundation.  
- Served on NAC/NRC panel for NSF Fellowships in anthropology.  
- Continue as member of editorial board of *Human Biology and the American Journal of Physical Anthropology*.                          |
| **Stuart, W. T.**   | - Attended two advanced seminars at School of American Research, Santa Fe, New Mexico.                                                  |
8. Non-teaching University Service:

Beschart, H. W.
- Editor, Southwestern Journal of Anthropology.
- Graduate Advisor, Anthropology.
- University Committee on Human Subjects.
- Research Policy Committee.
- Acting Chairman, Anthropology, Summer 1969.

Brody, J. J.
- Acting Chairman, Dept. of Art, Summer 1969.
- University Committee on Rural Lands.
- University Committee on the Art Museum.
- Curator Maxwell Museum of Anthropology.
- University College Advisor.

Campbell, J. M.
- Chairman, Department of Anthropology.
- Member of Committee on the University.
- Faculty Advisor.
- Campus Veterans Organization.

Ellis, F. H.
- Advisor for University College.

Hibben, F. C.
- Faculty Advisor.
- Chairman, New Mexico Game and Fish.
- Chairman, Rio Grande Zoo Board.
- Governor's Committee on Anti-pollution.

Hernan, S.
- Co-editor, Southwestern Journal of Anthropology (Semester I).
- Chairman, Committee on Graduate Applications, Department of Anthropology (Semester I).

Scheinin, K. H.
- Director of field research of 3 graduate students and one undergraduate working in Ecuador in conjunction with us.

Speckley, B.
- Chairman, Program in Linguistics and Language Pedagogy.
- Member of the Advisory Committee for the Center for the Improvement of Communication Skills.
- Member of the Academic Policy Group for Upward Bound College Enrichment Program.
- Member of the Graduate Committee. Chairman, Subcommittee on Review of Graduate Program.
- Member of the Education Doctorate Committee, College of Education.
- Member of the ad hoc COE Research Committee.
- Member of Reading Resources Center Committee.
- Member of the Committee on Use of Computers in the Humanities and Social Sciences.

Sprague, C. P.
- NEA Title IV Selection Panel.
- Border States Consortium.
- NEA Regional Advisory Board ad hoc Committee on ROTE.
9. Public Service

Brody, J. J.

Ellis, P. H.

Springer, C. P.

- Member and Chairman, Publications Committee.

- Subcommittee of Res. Pol. Committee on budget.

- Cultural Committee, Model Cities, Albuquerque.

- One week seminar on S.W. archaeology, ethnology, for Ghost Ranch, August, 1969.


I. General Departmental Information

A. Significant Achievements During the Academic Year 1969-70:

In its third year in the new addition, the quality of laboratory instruction and research continue to improve. Lecture space has become critical and an increasing number of lower division courses must be scheduled according to the limited availability of Geology 122 and Anthropology 101. The cost of staffing multi-sections of lectures held in inadequately ventilated and poorly equipped lecture rooms is greater and less desirable than what could be done in a lecture room of some 900-seating capacity with proper visual aids equipment.

There are now about 350 biology majors including sophomores, juniors, and seniors. Of the 92 graduate students, one-third are post-master or Ph.D. candidates. Efforts continue to emphasize the biological viewpoint of the department by scheduling regular departmental seminars which include, in addition to local faculty and graduates, guest lecturers co-sponsored with Phi Sigma Honorary Biological Society. Guest lecturers of national reputation have included:
Dr. Morris Rockstein, Univ. of Miami, Heredity and Environmental Influences
Dr. Nelson Spratt, Univ. of Minnesota, Developmental Biology
Dr. John Thomas, Stanford University, Overpopulation
Dr. Carroll Williams, Harvard University, Light, Brains, and Metamorphosis
Dr. Richard Blackwelder, Univ. of S. Illinois, Problems of Invertebrate Classification
Dr. Arthur Giese, Stanford University Bioluminescence

The cooperative research program of the Association of Western Universities has resulted in the appointment of both undergraduate and graduate students to conduct summer research at Lovelace Foundation in physiology and radiation biology.

Cooperative research grants with the National Park Service have continued with a study under Dr. William Degenhardt in Big Bend National Park and a study completed under Dr. Loren D. Potter on the ecology of the Guadalupe Mountains to be added to Carlsbad National Monument.

Financial support was renewed from the Water Resources Institute to Dr. David Kidd and Dr. Gordon Johnson for a study of nutrient cycling and primary productivity in Elephant Butte Reservoir.

The National Science Foundation continued research support to Dr. James Findley for a study of the ecology of bats.
The Fourteenth Radiation Biology Institute was conducted as a research participation program for college teachers under the sponsorship of the Atomic Energy Commission and under Dr. Marvin Riedesel's direction. A similar institute was approved for the summer of 1970 under the direction of Dr. Gordon Johnson. This program brings 10 - 12 biology faculty members to the campus to cooperate with U.N.M. faculty in research projects. These instructors returning to their respective campuses provide a valuable contact for U.N.M.

The department has continued a valuable contact with various segments of the public through several extra-curricular activities. These include the Conservation Roundtable discussions under Dr. Clifford Crawford's direction, the New Mexico Herpetological Society under Dr. William Degenhardt's direction, and the New Mexico Ornithological Society under Dr. David Ligon's guidance. The departmental faculty, especially Dr. Howard Dittmer, was active in the programs of the National Environmental Teach-in.

During the 1969-70 year, about 80 B.S., 20 master's, and 2 doctoral degrees were awarded in biology.

B. Significant plans and recommendations for the future:

It is of some reassurance that initial plans are being made regarding the over-due large science lecture auditorium with a capacity of 900 - 1,000 students. This will be used principally by the departments of biology, chemistry, geology, and psychology.
During the year, the science departments made a strong plea for a laboratory fee system to provide the necessary income to support an adequate science teaching program. This was not approved for 1970-71, but a major adjustment was made in the budget.

Attention and action must be given to the responsibility of the university toward the graduate program which in the past has received inadequate support, but which is recognized to be more costly and demanding of personal attention than the undergraduate program. If the University of New Mexico is to lead the state universities in graduate education, a change in the policy of allocating support is required. The graduate program has been run on a "shoestring". When the university can scarcely afford the basic fundamental undergraduate and graduate programs, it must make a decision on its desire to maintain high quality in a limited number of fields.

C. Appointments to staff:

The equivalent of 37 graduate assistants, although only 36 were allowed in the budget, were appointed in 1969-70. Appointments were made for 2 NSF trainees, 2 NDEA trainees, 1 NASA fellow, and 1 UNM fellow.

Mrs. Dora Padilla was appointed the new Preparator in Bacteriology in May, 1970.

Mr. Joe Chavez was appointed as the new greenhouse caretaker in October, 1969.
Mrs. Julie Bustamante was appointed as departmental clerk-stenographer in February, 1970.

Mrs. Margery Harrington was appointed to a new position of Preparator in General Biology effective August, 1970.

Faculty appointments for 1970-71 include the following: Dr. Donald Duszynski, Assistant Professor with emphasis in parasitology; Dr. James Gosz, Assistant Professor with emphasis in plant ecology; and Dr. Paul Kerkof, Assistant Professor with emphasis in cellular physiology and radiation biology. The department is complimented in receiving acceptance of its first choice of top qualified candidates for each of the three faculty positions.

D. Separations from staff:

Mrs. Joann Painter left the position of clerk-stenographer for other employment in February, 1970.

Mr. William Smith was replaced as greenhouse caretaker in October, 1969.

Mrs. Ruth Jordan left the position of Preparator in Bacteriology in May, 1970.

Dr. Martin Fleck retired from the University, effective June 30, 1970.
II. Composite of Information Requested on Individual Biographical Supplements:

1. Advanced Study

Degenhardt, William G., 1) Short courses in Fortran IV programming and speed-reading.

2. Sabbaticals, leaves, etc.

Degenhardt, William G., 1) Sabbatical leave all year, 2) Ecological studies in Big Bend National Park, 3) Collecting in New Mexico and the Virgin Islands.

Findley, James S., 1) Visited London and Paris on Holiday.

Fleck, M. W., 1) Spent one week in Morocco, August, 1969, and also visited U. of Madrid and Technical Institute of Cordoba, Spain.


Traut, Gerald L., 1) Summer employment (1969) 17th summer, Philmont Scoutranch, program director. 2) Month in Mexico and 2 weeks in Hawaii.

3. New Scholastic Honors, fellowships, etc.

Ligon, J. David, 1) Elective membership of the American Ornithologist's Union.

Traut, Gerald L., 1) Professor of the Month (March), Las Campanas.

4. Publications


Fleck, M. W., 1) History and philosophy in teaching freshman biology, CUEBS, December, 1969.

Hoff, C. Clayton, 1) A laboratory guide for invertebrate zoology. Printed by the Biology Department. 66 p.


5. Other research projects in progress

Bourne, Earl W., 1) Cytological effects of certain hydrocarbons on cells in vitro.


Dittmer, Howard J., 1) Root biomass in the desert biome. Proposal for financial support to NSF through Ecology Center, Utah State now being considered.


Johnson, Gordon V., 1) Water Resources Research Institute, $9,919, July '69 - June '70, An Investigation of Primary Productivity Using the 14C Method and an Analysis of Nutrients in Elephant Butte Reservoir (with Dr. David Kidd); 2) U.S.D.A. Forest Service, $2,500, June '68 - Dec. '69, Factors influencing frost hardiness of fourwing saltbush (Atriplex canescens) and winterfat (Eurotia lanata); 3) Influence of gibberellin on iron metabolism in plants, research in progress.

Johnson, William W., 1) Viability changes in balanced second chromosomes of Drosophila melanogaster.
Kidd, David E., 1) An investigation of primary productivity using C14 method and an analysis of nutrients in Elephant Butte Reservoir, Water Resources Institute, annual budget of $9,919.40; 2) National Science Foundation, Undergraduate Equipment Grant, $19,600, NSF share $9,800 & UNM share $9,800.

Koster, William J., 1) Fish in Ganquaria Ruins, unpublished, National Park Service.

Ligon, J. David, 1) Gonadial and behavioral cycles of the Pinon Jay, in progress, supported by UNM Res. grant. 2) Papers submitted for publication: Late summer-autumnal breeding of the Pinon Jay in New Mexico; Notes on the breeding of the Sulphur-bellied Flycatcher in Arizona; Still more responses of the Poor-will to low ambient temperatures (accepted).

Martin, William C., 1) Completing the 1st draft of the Flora of New Mexico; 2) Completing the 1st draft of the Flora of Sandia Mountains.


6. Activities in learned and professional societies

Beakley, John William, 1) Paper (with Andrew Paquet) at the AAAS meeting, Las Vegas, N.M., April 1970, "Studies on the antigenic relationships of pollen extracts of Atriplex canescens, A. wrightii, and A. lentiformis as revealed by gel diffusion analysis."

Bourne, Earl W., 1) Amer. Assoc. of Med. Coll., Western Assoc. of Pre-medical advisors; 2) State Conf. of Amer. Assoc. of Univ. Prof.; 3) Treas. UNM Chapter AAUP; 4) Member of Exec. Comm. UNM Chap. AAUP.


Dittmer, Howard J., 1) Member of Executive Comm. AAAS SW Division also N.M. Acad. Scie; 2) Attended meetings in Las Vegas, N.M. and Santa Fe; 3) Paper to I.B.P. Plant Specialists meeting in Las Vegas, Nev., Dec. 30 - Jan. 2, "Root Biomass in the Desert Biome".


Hoff, C. Clayton, 1) Member of Fellowship Comm.RM&SW Div. AAAS.

Johnson, Gordon V., 1) Attended the SW Div. AAAS at Las Vegas, N.M., April 1970.

Kidd, David E., 1) Attended Las Cruces meeting on university undergraduate instruction.

Koster, William J., 1) Membership committee of Sigma Xi; 2) Associate editor of Swanaws.


Riedesel, M. L., 1) Chm. Cryobiology: Hibernation
Session of Fed. of Amer. Soc. for Exp. Biol. Meetings,
Atlantic City, April 16, 1970; 2) Paper, Crowley,
Characteristics of Laboratory Acclimated and Field
Ground Squirrels," Amer. Physiol. Soc. U. of Cal. at Davis
August. 3) Paper, Spaulding, L., G. Bryan, K. Moore
& M. L. Riedesel. 1970. "Removal of 137Cs from Rats
by Peritoneal Dialysis." Radiation Research Soc.
Mtg., Dallas, Texas Mar 3-5. 4) Paper, Riedesel, M.L.,
responses by Spermophilus lateralis to limited water
intake, Federation of American Societies for Exper.
Biology Meeting, Atlantic City, April 13-17.

7. Other professional activities

Beakley, John William, 1) Consultant to Planetary
Quarantine Dept., Sandia Corp.

Crawford, Clifford S., 1) Reviewed textbook chapters
for MacMillan Publishing Co.; 2) Talked on insecticides
Bernalillo County Medical Society, Oct. 1969; 3) 
Attended Internat. Biological Program, Desert Biome
Invertebrate Specialists' Meeting, Ariz. St. U., Jan.
1970.

Degenhardt, William G., 1) Seminar talk, Medical School,
Chihuahuan Desert and its Herpetofauna; 2) Hosted
N.M. Mountain Club seminar on physical conditioning,
Jan. 20, 1970; 3) Met Sandia School group for
"Environmental Day", April 21, 1970; 4) Research
Advisory Council, Big Bend Nat. Park.

Dittmer, Howard J., 1) Testified in Santa Fe for N.M.
State Comm. for Clean Air; 2) Reviewed Pearsons -
Botanical Research Ms. for Van Nostrand Reinhold;
3) Judge Youth for Atom Courts; 4) Judge, Science
Fair, Socorro and Chm. Plant Sci. judges; 5) Talks
to Albq. Sci. Teacher, Navajo Social Studies, Bern.
APS. Model City Facultys, 11 High Schools (6 sponsored
under visiting science program, other 5 in Albq. Fed.
Gov't. Accts. Assoc.

Findley, James S., 1) Reviewer for NSF.

Fleck, M. W., 1) Consultancies with Public Service
Co., of New Mexico; 2) Consultancies with
Nuclear Corp.; 3) Many talks.

Johnson, Gordon V., 1) TV appearance with KNME-TV on
May 4th, 6th grade science program.
Kidd, David E., 1) Talk on pollution for Sandia High School Biology Honor Society.


8. Non-teaching University service


Crawford, Clifford, S., 1) Faculty adviser for majors and two graduate students; 2) Chairman: Biology Dept. Undergraduate Curriculum Comm.; 3) Member: Campus Safety Comm.; 4) Coordinator: Conservation Roundtable.

Degenhardt, William G., 1) Graduate Advisor (10 students); 2) Advisor to Phi Sigma Soc.; 3) Curator of the herpetology division of the Museum of Southwestern Biology.


Johnson, Gordon V., 1) Judge in Regional Science Fair; 2) Local board member of United Ministries Counseling Center; 3) Board Member Sombre Del Monte Christian Church.

Koster, William J., 1) Member and counselor of Ecologic Advisors of New Mexico Health and Social Services Dept.; 2) Educational Comm. of St. Pauls Lutheran Church.

Ligon, J. David, 1) Assistant Scout Master, Troop 166.

Martin, William C., 1) Member of Official Board - Central Methodist Church.

Potter, Loren D., 1) Vice-pres. of New Mexico Zoological Society.


Traut, Gerald L., 1) State Science Fair Judge, Socorro, April, 1970.
I. General Departmental Information


Five undergraduate majors received the B.S. degree and 22 students received the B.A. degree; two students received the M.S. degree and six students received the Ph.D. degree.

The department was able to purchase a mass spectrometer from funds furnished by the University NSF equipment grant and from the departmental equipment budget. This instrument was a great step forward and allows us to be competitive with other major departments.

A sophisticated calorimeter was obtained as a result of the movable equipment grant as a part of the new building which allows sophisticated research in Thermochemistry under the direction of Professor Hansen. In addition a Wang calculating system was purchased on the building grant together with several smaller items. Unfortunately about 75 percent of the funds in the building grant originally set aside for movable equipment had to be used to build the building, therefore, our movable equipment needs are still great.

The addition to the Chemistry Building was completed in January 1970 and this is the greatest single advance made in this department in nearly two decades.

Professor Hansen's Career Development Award from the National Institute of Health was renewed and he is now beginning his second year.
The biochemistry program, jointly sponsored by the Department of Chemistry of the A & S College, and the Department of Biochemistry of the School of Medicine, began to function spring semester 1970. This program is a real advance and the student feedback has been excellent. The program is beginning to function at the graduate level as well as at the undergraduate level.

A combined wood and metal shop stockroom man was added in February 1970; this has eased the stockroom burden and, at long last, given us a man who can build and design items needed in the department for both teaching and research from wood and metal.

Furthermore, funds have been granted to Biology, Chemistry, and Geology, for an electronics expert who can repair and maintain most of the expensive instruments in these three departments in addition to the design and construction of other instruments. This will fill a very great need.

B. Significant Plans and Recommendations for the Near Future.

The old building is being renovated and a glass working shop is being constructed. One of the major needs of the department is a glassblower, particularly one who has a college degree, who can not only take care of the glass blowing needs of the department, but one who is qualified to offer technical courses in glass blowing, glass to metal seals, glass to ceramic seals, etc. Hopefully such a person can be added to this staff no later than July 1, 1972.

With the new addition to the building we are now in a good position to put into effect more of the recommendations of the Danforth Committee on upgrading the graduate program and every effort will be made in this direction by the departmental faculty.
Integration of the undergraduate program will be studied during the coming year with a view toward possible adoption.

C. Appointments to the Staff.

Dr. Fritz S. Allen has been appointed as Assistant Professor of Chemistry. Dr. Allen will conduct research on electric dichroism of high molecular weight polymers of biological origin. He is a physical chemist and the appointment of an individual with his background was specifically recommended by the Danforth Committee.

D. Separations from the Staff.

Dr. Raymond N. Castle, Professor of Chemistry and Chairman of the Department during the period 1963-1970, has resigned to accept a professorship in Chemistry at Brigham Young University, Provo, Utah.
II. Composite of Information Requested on Individual Biographical Supplements.

1. Advanced Study:

(a) WILLIAM M. LITCHMAN: Summer faculty traineeship awarded by AWU from June 1 to September 1, 1969 at Los Alamos Scientific Labs, New Mexico.

(b) NICHOLAS E. VANDERBORGH: Summer 1969: Staff Member, Sandia Laboratories, Organization 2343.


2. Sabbaticals, Leaves of Absence, Summer Teaching Elsewhere, Travel, etc.

(a) RAYMOND N. CASTLE: (1) Traveled to Europe July 1969 to attend the Second International Congress of Heterocyclic Chemistry, Montpellier, France, July 7 to 11, 1969 and also traveled in Spain and Switzerland. (2) Traveled to Far East and Middle East, December 1969 to January 1970, to set-up the Third International Congress of Heterocyclic Chemistry. Examined sites in Sendai, Tokyo, and Osaka, Japan; Hyderabad and Bombay, India; Karachi, Pakistan and Tehran, Iran. Congress will be held August 23-27, 1971 in Sendai, Japan. (3) Lectured in Hyderabad, India, at the Regional Research Laboratory; in Bombay, India at Ciba; in Karachi, Pakistan at the Pakistani Government Research Laboratories and at the University of Tehran, Iran. (4) I shall serve the Third International Congress of Heterocyclic Chemistry as one of three Vice Presidents. I also serve as Chairman of the Executives Committee of the International Society of Heterocyclic Chemistry and a co-sponsor of the Third Congress in Japan and the sponsor of the Second International Congress of Heterocyclic Chemistry.
(b) EDWARD A. WALTERS: Visited National Science Foundation, New York City Crime Laboratory, Department of Agriculture, and Research Center at Beltsville, Maryland.

(c) DONALD R. McLAUGHLIN: Spent Summer of 1969 at Lawrence Radiation Laboratory, Livermore, California.


3. New Scholastic Honors, Fellowships, etc.

(a) LEE DUANE HANSEN: Career Development Award from National Institutes of Health (approx. $75,000).

4. Publications:

(a) RAYMOND N. CASTLE:


(5) "Synthesis of Pyridazine Derivatives with Sulfur-containing Substituents. II. A Novel Cyclization Furnishing the Concurrent Formation of 2,7-Dibenzyldipyridazo[4,5-b:4',5'-e]-1,4-dithiin-1,6(2H,7H)-dione and 2,8-Dibenzyldipyridado[4,5-b:4',5'-e]-1,4-dithiin-1,9(2H,8H)-dione," by K. Kaji, M. Kuzuya and R. N. Castle, Chemical and Pharmaceutical Bulletin, Vol. 18, pp. 147-156 (1970).


(b) ROBERT E. TAPSCOTT:


(c) LEE DUANE HANSEN:


(2) "The Heat of Solution of Sm° in Aqueous HCl," a report to CMF-2, Los Alamos Scientific Labs, March 1970

(d) EDWARD A. WALTERS:


(2) "Proton Transfer from Cyanocarbon Acids. I. General Base Catalyzed Detritiation of 1,4-Dicyano-2-butene-1-t in Aqueous Solution," Journal American Chemical Society, 91, 3733 (1969).
(e) WILLIAM M. LITCHMAN:


(5) "Nitrogen-15 Nuclear Magnetic Resonance Shifts in Me3 15 N-Solvent Systems," Accepted for publication J. Am. Chem. Soc. (Sept.)

(f) NICHOLAS E. VANDERBORGH:


(g) DAVID L. VANDERJAGT:


(h) MILTON KAHN:


(2) Three quarterly progress reports for Sandia Corporation Contract No. 16-9187 (with N. Stalnaker), report No. 1, 2 pages; report No. 2, 2 pages; report No. 3, 3 pages.

(3) A final report for Sandia Corporation Contract No. 16-7857, 16 pages with N. Stalnaker.
5. Other Research Projects or Creative Work in Progress or Completed during the Period.

(a) RAYMOND N. CASTLE:

(1) Synthesis of Condensed Pyridazines Containing Sulfur with Dean Wise.

(2) Synthesis of Pyridazinotriazines with Dennis Chesney.

(3) Synthesis of Imidazo[4,5-d]pyridazines with Don Pickler.

(4) Synthesis of Pyridazinopyridazines with Dan Cook.

(5) Synthesis of Pyridopyridazines with Dianne Dottavio.

(6) Walter Reed Army Institute Contract No. DA-49-183-MD-3013, 3 years, $81,158.00.

(7) Sandia Corporation Contract No. 58-3749, 2 years, $53,270.00.

(b) ROBERT E. TAPSCOTT:


(2) Stereospecific Reactions of Oxovanadium-Hydroxycarboxylates.

(c) LEE DUANE HANSEN:

(1) American Chemical Society, Petroleum Research Fund, $24,000, August 1, 1968 to August 31, 1971.

(2) Thermodynamics of Proton Ionization from some Substituted, Unsaturated, Five Membered Nitrogen Heterocycles, submitted for publication.

(3) Thermodynamics of Proton Ionization from some B-Diketones, submitted for publication.

(4) Thermodynamics of Proton Ionization from some Arsonic Acids, submitted for publication.


(6) In progress - chain-lengthening effects on the thermodynamics of formation of Ag⁺-n-alkylamine complexes, electrostatic and resonance energy effects on proton ionization from pyridine carboxylic, anilinesulfonic, and piperidine carboxylic acids, the analysis of binary mixtures by thermometric titration, and a study of mathematical biases in the calculation of pK values from pH titration data.
(d) EDWARD A. WALTERS:

(1) "Activated Proton Transfer," National Science Foundation, sponsored research, $22,000; June 1, 1969 to May 31, 1971.

(2) Isotope Effects on Hydroxide Ion.

(3) Exchange of Deuterium Gas with Polymers.

(e) WILLIAM M. LITCHMAN:

(1) Nitrogen-15 studies of solvent-induced chemical shifts.

(2) PMR studies of solvent-induced chemical shifts.

(3) Matrix-isolation EPR studies of microwave produced free radicals (sponsored by Sandia Corp. $20,959, September 1, 1969 to July 1, 1970).

(4) Alkyl chain configuration studies.

(5) Preparation of a manuscript for a freshman text.

(6) Preparation of a review manuscript on 15-Nitrogen NMR commissioned by the Chemical Society of London for their Quarterly Reviews publication.

(f) DONALD R. McLAUGHLIN:

(1) A student, Merle Benson, is in progress towards a PhD degree in Chemistry as a NASA fellow.

(g) NICHOLAS E. VANDERBORCH:


(2) Electrochemical Studies in Sulfolane.

(3) Evaluation of the acidity of HF in water/ethanol mixtures.

(4) Laser and thermally induced degregation of polymeric materials.

(h) DAVID L. VANDERJAGT:

(1) Mechanism of the Glyoxalase Reaction supported by UNM Research Allocations Committee.

(i) MILTON KAHN:

(1) Determination of Nitrogen in Organometallic Compounds Via Activation Analysis, with N. Stalnaker and B. T. Kenna, work in progress.

(2) A sample preparation method for fast neutron activation
utilizing graphite as a diluent with N. Stalnaker and B. T. Kenna, manuscript in preparation.

(3) Some aspects of the kinetics of carrier-free tracers, with D. D. Jackson, manuscript in preparation.


(j) ULRICH HOLLSTEIN:

(1) Interaction of phenazines with polynucleotides, UNM Research grant $500.00.

(2) Alkaloids from New Mexico Plants, NIH grant 1968-1970, $18,000.00.

(3) Biosynthesis of Phenazines, NIH grant 1970-1972 $40,000.00.

(k) GUIDO H. DAUB:

(1) Liquid scintillators. Steric effects; transtilbenes; photo-oxidation of PPO, POPOP and others; self-quenching studies.

(2) Synthesis of azabenzo[a]pyrenes and the study of their effects as carcinogens and anticarcinogens.

(l) E. PAUL PAPADOPOULOS:

(1) Research Corporation, $4,000.00, Reactions of Pyrrole with Activated Isocyanates and Isothiocyanates.

(m) ROY D. CATON, Jr.:

(1) Effect of Na2O/P2O5 ration on diffusion transport of electro-active ions in molten metaphosphate glasses, with John Miglio.

(2) Ion exchange of metal ions in non-aqueous solvents using macro-reticular resins, with Howard Shafer.

(3) Electro-oxidation of substituted nitro-anilines, with Newton Fawcett.

6. Activities in Learned and Professional Societies.

(a) RAYMOND N. CASTLE:

(1) Member Long Range Planning Committee, Division of Medicinal Chemistry, American Chemical Society — second year of three year term.
Second International Congress of Heterocyclic Chemistry. Secretary of the Organizing Committee, Montpellier, France, July 7-11, 1969. Presented an introductory address at the opening session and a short address at the Banquet.

Presented two papers at this Congress entitled:
(a) "The Synthesis of Benzo[c]cinnoline 5,6-Dioxides and Related Compounds," and
(b) "Synthesis of 2,7-Disubstituted-4,5,9,10-tetraazapyrenes."

(b) ROBERT E. TAPSCOTT:
(1) Attended 25th Southwest Regional Meeting of the American Chemical Society, Tulsa, Oklahoma December 4-6, 1969. Society of the Sigma Xi Membership Committee.

(c) LEE DUANE HANSEN:
(1) Attended Southwest Regional ACS Meeting, Tulsa, Oklahoma.
(2) Member of Awards Committee of the American Chemical Society.

(d) EDWARD A. WALTERS:
(1) 158th National Meeting American Chemical Society, New York City, September 1969.
(2) Elected Advisor of Central New Mexico section of American Chemical Society.
(3) Attended sectional meetings in Santa Fe, Los Alamos, and Albuquerque, New Mexico.
(4) Responsible for organization of a short course on campus.

(e) WILLIAM M. LITCHMAN:
(1) Attended the Southwest Regional Meeting of the American Chemical Society at Tulsa, Oklahoma.
(2) Attended the National Meeting of the American Chemical Society at Toronto, Canada. Submitted a paper.
(3) Attended the National Meeting of the American Society of Mass Spectrometry in San Francisco, California.

(f) NICHOLAS E. VANDERBORGH:
(1) National Spring ACS Meeting (159th), Houston, Texas, February 1970, paper read "Cryoscopic Evaluation of Association Behavior in Non-aqueous Solvents."

(3) NASA Conference on High-Temperature Polymers, Manned Spacecraft Center, Houston, Texas May 6-7, 1970.

(g) DAVID L. VANDERJAGT:

(1) ACS Regional Meeting, Tulsa, Oklahoma.

(h) MILTON KAHN:

(1) Member of Sigma Xi, Phi Kappa Phi, American Chemical Society, Inorganic Physical Sections, AAAS (fellow).

(i) ULRICH HOLLSTEIN:

(1) CIC/ACS Meeting, Toronto, Canada, May 1970.

(j) GUIDO H. DAUB:

(1) Member: Sigma Xi, Phi Kappa Phi, Phi Lambda Upsilon, ACS, AAAS (fellow), Blue Key, Alpha Chi Sigma.

(2) Chairman: Sigma Xi Nominating Committee.

(3) Sigma Xi Advisory Board.

(k) ROY D. CATON, Jr.:

(1) Central New Mexico Section of American Chemical Society, Councilor.

(2) Chairman of Committee on Education.

7. Other Professional Activities.

(a) RAYMOND N. CASTLE:

(1) January 30-31 gave three seminars on Drug Abuse, cooperating with Superior Court Judge of Orange County, California, Judge Scoville at Palomar, Lemon Grove and San Diego, California, under the auspices of Brigham Young University, Southern California Center, West Covina, California.

(2) Presented the same lecture to the Heights Christian Church and several L.D.S. Church groups in Albuquerque and at Sandia High School and Valley High School during this academic year.

(3) Editor, Journal of Heterocyclic Chemistry.

(4) Member Editorial Advisory Board, Current Abstract of Chemistry and Index Chemicus, Institute for Scientific Information, Philadelphia.

(b) LEE DUANE HANSEN:

(1) Seminar entitled "Thermometric Titrimetry," was given to the Chemistry Department at UNM and NMIMT.

(c) WILLIAM M. LITCHMAN:

(1) Prepared and presented a short course on the analysis of NMR spectra for the American Chemical Society, Central New Mexico Section.

(2) Reviewed several papers for the Journal of Heterocyclic Chemistry.

(d) NICHOLAS E. VANDERBORGH:

(1) Consultant, Sandia Laboratories (Albuquerque, and Livermore).

(2) Consultant for J. Toulouse, Atty.

(e) MILTON KAHN:

(1) Served as a referee for a grant proposal submitted to the Atomic Energy Commission.

(f) GUIDO H. DAUB:


(g) ROY D. CATON, Jr.:

(1) Consultant: Sandia Laboratories, FMC Corporation.


(a) RAYMOND N. CASTLE:

(1) Member of the Research Policy Committee.

(2) Member of the Patent sub-committee of Research Policy Committee.

(3) Member of the Arts and Sciences Departmental Chairman Committee.

(4) Chairman of Chemistry Department Stockroom Committee.

(5) Member - Chemistry Department: Graduate Study Program Committee; Member of Chemistry Department Undergraduate Curriculum Committee; and Member Chemistry Department Seminar Committee.

(6) Arts and Sciences and Graduate School Student Advisor.
(b) ROBERT E. TAPSCOTT:

(1) General Chemistry Committee, Chairman.
(2) Graduate Curriculum Committee.
(3) Undergraduate Curriculum Committee.
(4) Graduate Recruitment Committee.
(5) Stockroom Committee.
(6) University College Advisor.

(c) LEE DUANE HANSEN:

(1) Chairman of Research Allocations Committee.
(2) Member of Research Policy Committee.
(3) Chemistry Department Advisor.

(d) EDWARD A. WALTERS:

(1) Undergraduate Curriculum Committee.
(2) Radiological Safety Committee.
(3) Graduate Study Program Committee.

(e) WILLIAM M. LITCHMAN:

(1) Member of the seminar and stockroom committees.
(2) Arts and Sciences Advisor.
(3) Advisor and caller for the Wagonwheels square dance club and exhibition team.
(4) Suggested, organized and ran the Shaw Dance Institute, a course in the fundamentals of the American Folk Dance presented in conjunction with the Department of Health, Physical Education and Recreation. June 8-12, 1970.

(f) DONALD R. McLAUGHLIN:

(1) Chairman of University Computer Use Committee.
(2) Faculty Advisor for University College.

(g) NICHOLAS E. VANDERBORGH:

(1) Departmental Committees: Graduate Student Recruitment Committee, Safety Committee, Chairman.
(2) University Committees: University Library Committee, Chairman; Policy Committee, subcommittee on Libraries.

(h) MILTON KAHN:
(1) Member of Several Departmental Committees.
(2) Member of Woodrow Wilson National Fellowship Foundation Committee.
(3) Member of General Honors Council.

(i) ULRICH HOLLSTEIN:
(1) Radiological Control Committee.
(2) A & S Faculty Advisory.
(3) Various Departmental Committees.

(j) GUIDO H. DAUB:
(1) Chairman of Athletic Council.
(2) Faculty representative to WAC and NCAA.
(3) Advisor to Freshmen in University College.

(k) E. PAUL PAPADOPOULOS:
(1) Advisor to University College Students.

(l) ROY D. CATON, Jr.:
(1) University College Advisor.
(2) BUS Advisor.
(3) Member of Committee on Psychological Services.
(4) Member of Registration Committee.
(5) Departmental Committees: Chairman of the Undergraduate Curriculum Committee.
(6) Member of Graduate School Fellowship Selection Committee.
(7) Faculty sponsor of the UNM section of Student Affiliates of the American Chemical Society.
(8) Faculty sponsor and coach of the UNM Men's Ski Team.

(a) RAYMOND N. CASTLE:
   (1) High Councilman in the Albuquerque Stake of the Church of Latter Day Saints.
   (2) Chairman, Albuquerque Stake Scout Committee of the Church of Latter Day Saints.

(b) ROBERT E. TAPSCOTT:

(c) LEE DUANE HANSEN:
   (1) Active in church.

(d) EDWARD A. WALTERS:
   (1) Treasurer of Lutheran Campus Council; taught adult church school; participated in prayer group; on youth board of Faith American Lutheran Church.

(e) WILLIAM M. LITCHMAN:
   (1) Professional square dance caller and member of the Central New Mexico Caller's Association.

(f) DONALD R. MC LAUGHLIN:
   (1) Active church member.

(g) GUIDO H. DAUB:
   (1) Member of Governor's Scientific Advisory Committee, State of New Mexico.
   (2) Quartermaster Troop 9, BSA.

10. Personal Information.

(a) ROBERT E. TAPSCOTT:
   (1) One child born, boy, June 16, 1969.

(b) LEE DUANE HANSEN:
   (1) A son born October 1, 1969.
(c) EDWARD A. WALTERS:
   (1) A son born April 5, 1970

(d) DONALD R. McLAUGHLIN:

(e) NICHOLAS E. VANDERBORGH:
   (1) Birthday (31th) on June 24; don't feel much older.

(f) DAVID L. VANDERJAGT:
   (1) Married 1967 to Dorothy J. Kulicfikowska.

(g) E. PAUL PAPADOPOULOS:
I. General Departmental Information

A. One of the significant achievements during the 1969-70 academic year was a substantial departmental strengthening in the area of quantitative economics. Through the hiring of Professors F.L. Brown and S. Ben-David an area of weakness was transformed, almost overnight, into an area of considerable strength. This development was particularly important in the graduate program. The appointment of Professor A. Church, effective September 1970, will further strengthen the quantitative area and will provide an additional man to share teaching duties in economic theory.

Another noteworthy development has been the flowering of the public finance research program under the direction of Prof. G. Boyle. In a period of two years, he has built up a staff of about ten research persons and has produced a preliminary two volume report on planning, programming and budgeting in New Mexico.

Several important program changes were initiated to become effective September, 1970. While the Department of Mathematics has serviced this Department satisfactorily by way of providing general background courses, we have not been able to rely upon
Mathematics for a specific course relevant to economic analysis. A new course, Economics 407, will be offered next fall and will be taught by Prof. L. Brown of the Economics Department. This course will deal with specific applications of mathematics to the field of economics. Another program change will provide a special terminal course in economic theory for master's degree candidates.

B. In the present academic year, the Department has 86 undergraduate majors and 33 undergraduate minors. Eleven majors will graduate this year, a total that is down somewhat from the totals of the past two years. One of the undergraduate majors, Miss Marcella Levine, is a Woodrow Wilson Fellow and will pursue graduate work in economics at the University of Michigan. Two graduating seniors were elected to Phi Beta Kappa.

More than 40 students are now enrolled in the graduate program. Of these, approximately 26 are candidates for the M.A. degree and the others for the Ph.D. The number of M.A.'s awarded this year will approximate the totals of the past two years. In 1968, the Department awarded 7 master's degrees and in 1969, awarded 8. The Department hopes to award its first doctorates at the end of the 1970-71 academic year.

C. The Department has hoped, for some time, to build up strength in the Latin American area. For one reason or another it has failed to do so. Hiring plans for the coming year will place a high priority on this area of specialization. The appointment of
Prof. S. Cohen to the department chairmanship has had the effect of limiting the program in Labor Economics and attention will be paid to the problem of adding strength in this area.

D. Associate Professor Shaul Ben-David and Assistant Professor F. Lee Brown joined the Department in September, 1969. Assistant Professor Albert Church will join the Department in September, 1970.

E. Professor Wolfram Liepe will leave the Department at the end of the 1970-71 academic year.

II. Summary of Staff Record

1. Assistant Professor Norman Van Cott received his Ph.D. degree from the University of Washington.

   Assistant Professor F. Lee Brown received his Ph.D. from Purdue University.

2. Professor Sanford Cohen was on sabbatical leave during Semester I. His leave was spent in Puerto Rico.

   Associate Professor Gary Hufbauer returned to the Department after two years with a Harvard Advisory Group in Pakistan.

   Associate Professor Paul Jonas spent the year in India as an economist for the Agency for International Development. He will continue in India for one additional year.

3. No new scholastic honors.

4. Publications:

   S. Cohen

P. Chung


M. Gisser


Basic Economics, International Textbook Co. 455 pp. (co-author)


D. Hamilton


G. Hufbauer


A. Parker


C. Roberts


5. Research Projects:

G. Boyle:

U. S. Department of Housing and Urban Development Grant (75,000$) to initiate and implement a PPB system in New Mexico.
New Mexico Bureau of Revenue grant ($25,000) to develop method of estimating tax revenues and tax burdens for State of New Mexico.
New Mexico Commission on Aging Grant ($10,000) to study economic and social characteristics of aged in New Mexico.

F. L. Brown:
Elasticities of Substitution, Project B-017 New Mexico (water resources)

M. Gisser:
A Study of Water Problems in the Pecos River Basin

D. Hamilton:
Barriers to Economic Development on Navajo Reservation. ISRAD and Four Corners Commission. ($1000).

D. Tailby:
Barriers to Economic Development in New Mexico. Research Project for Four Corners Commission through Battelle Memorial Institute and UNM Bureau of Business Research.

S. Ben-David:
Continued grant ($28,800) from O.W.R.R. to investigate economic opportunities in Rio Grande River Basin

6. Activities in Learned and Professional Societies:
D. Hamilton read a paper on "Reciprocity, Productivity and Poverty" at the Allied Social Science Meetings, December, 1969.
D. Hamilton is a member of the Nominating Committee of the Southwestern Social Science Association.
W. Liepe gave a paper entitled "Optimal and Improved Trade Policies of Less Developed Countries," at the meetings of the Western Economic Association, August, 1969.

A. Parker read "The Identification and Measurement of Shifting Transactions" at the meetings of the Western Economic Association, August, 1969.

7. Other Professional Activities:

S. Cohen, Faculty Director, International Manpower Institute, Summer, 1969, Labor arbitration

G. Boyle, New Mexico State Advisory Committee on Medicaid


A. Parker, Consultant to Friedman, Koven, Shapiro and to Rodey, Dickason and Sloan, anti-trust cases.

D. Tailby, Consultant to Packard Bell on research project dealing with development in northern New Mexico.
THE REPORT OF THE DEPARTMENT OF ENGLISH  
July 1, 1969 - June 30, 1970  
Joseph Zavadil, Acting Chairman

I. GENERAL INFORMATION
   A. SIGNIFICANT ACHIEVEMENTS DURING THE ACADEMIC YEAR 1969-70.

   The year 1969-70 has been a year for self-examination and re-grouping. Some clear objectives and directions seem to have emerged, but progress is not yet substantial. The graduate program, for example, seems much more firmly in hand than it was a year ago. The Ph.D. handbook was issued in January. The Ph.D. comprehensive examination has assumed more confident shape, and the oral examination has been replaced (effective next fall) by a new special written examination in a selected field. In addition, new admissions to the Ph.D. program have been restricted for 1970-71 so that total graduate enrollment can be cut back to a figure within the department's capability for advisement, teaching, and direction of dissertation research.

   Although action on the undergraduate program has been concentrated at the sophomore level, a need for extensive revision of the entire curriculum has become apparent and will receive top priority for immediate study during the summer and early fall. The report of the special committee on sophomore literature, which worked extensively during 1969-70, has already recommended important changes in 200-level courses; but these recommendations must be paralleled by changes in
I. A. General Information (continued)

upper-division courses before their logic becomes fully meaningful. At least the impetus has been provided. Hopefully the consequence will be greater openness and adjustability throughout the undergraduate curriculum -- and ultimately sharper individuality in the undergraduate program itself.

The freshman program has operated successfully throughout 1970-71. In each semester at least three different approaches have been used, with teachers being given increasing opportunity for coordinated experiment and independence. The old 010 course has been discontinued with satisfactory effect. The GA's who formerly taught 010 are now enrolling in a special workshop for credit and for practice in the regular 101 program. We expect the workshop to provide them better training than they formerly received, and the additional manpower for 101 is certain to be most important for 1970-71, when freshman enrollment will surely increase but the number of TA's will not. Some of the work formerly attempted in 010 next year will be done by a new experimental program for linguistically disadvantaged students coordinated by the department and University College. The program will be based upon more extensive student-teacher contact and much lower student-teacher ratio.
I. A. General Information, Significant Achievements (continued)

1. Enrollment Trends

<table>
<thead>
<tr>
<th></th>
<th>Semester I</th>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Writing</td>
<td>2916 2427</td>
<td>2916 2397</td>
</tr>
<tr>
<td>LD Wr. &amp; Ling.</td>
<td>363 202</td>
<td>246 146</td>
</tr>
<tr>
<td>LD Lit.</td>
<td>1480 1653</td>
<td>1486 1589</td>
</tr>
<tr>
<td>UD &amp; Grad.</td>
<td>1079 1274</td>
<td>1003 1166</td>
</tr>
<tr>
<td>General Studies</td>
<td>42 58</td>
<td>67 38</td>
</tr>
<tr>
<td>English 010</td>
<td>291 188</td>
<td>435 166</td>
</tr>
</tbody>
</table>
Enrollment statistics reveal an astounding increase in freshman students for both semesters of 1969-70. We offer no proposed explanation; but we are concerned about the possibility of a similar increase in 1970-71 because we do not have staff for any increase. The figures for lower division writing courses reflect at least in part the growing demand for courses in creative writing. Lower division literature courses continue to attract students, with modest increases in total enrollment in each semester. Upper division and graduate enrollment decreased, but the reasons probably can be traced to the loss of two full-time staff members (both full professors) from 1968-69.

<table>
<thead>
<tr>
<th>TABLE III</th>
<th>Semesters I &amp; II, 1969-70</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDERGRADUATE</td>
<td></td>
</tr>
<tr>
<td>Majors</td>
<td>280</td>
</tr>
<tr>
<td>Minors</td>
<td>130</td>
</tr>
<tr>
<td>Majors graduated June, 1970</td>
<td>54</td>
</tr>
<tr>
<td>Minors graduated June, 1970</td>
<td>53</td>
</tr>
<tr>
<td>GRADUATE</td>
<td></td>
</tr>
<tr>
<td>Ph.D. students</td>
<td>92</td>
</tr>
<tr>
<td>M.A. students</td>
<td>81</td>
</tr>
<tr>
<td>M.A. in the Teaching of English</td>
<td>15</td>
</tr>
<tr>
<td>Ph.D. degrees awarded August, Jan., June</td>
<td>11</td>
</tr>
<tr>
<td>M.A. degrees awarded August, Jan., June</td>
<td>6</td>
</tr>
<tr>
<td>M.A. degrees awarded June, 1970</td>
<td>4</td>
</tr>
</tbody>
</table>
2. **D. H. Lawrence Fellowship for the Summer of 1970**

The D. H. Lawrence Summer Fellowship for summer 1970 was awarded to English novelist Sean Hignett. Mr. Hignett is the author of the most successful *A Picture to Hang on the Wall* (1966), which was enthusiastically reviewed in London and later received very favorably on the continent after being translated into five languages. He has also written a musical play (*Jack of Spades*, which was presented at the Everyman Theater of Liverpool for the Commonwealth Arts Festival in 1965), several radio and TV scripts, a film script, and a variety of stories and essays. Mr. Hignett expects to complete the manuscript for his second novel while in residence at the Lawrence Ranch this summer.

In addition, David Till, a graduate student in English, has been granted a stipend for summer residence in the Lawrence Cottage itself. Mr. Till, the third UNM student to receive this summer grant, will serve as guide for visitors to the cottage while he studies for the Ph.D. comprehensive examination in the fall.

3. **D. H. Lawrence Festival**

In a most significant achievement, the department has received from the National Endowment for the Humanities a grant of $15,600 to support a D. H. Lawrence festival planned for Taos in October 1970. The festival, which originated in a cooperative effort by people from Taos and the University, will bring together between October 1 and 13 some twelve to fifteen distinguished writers and scholars for discussions of Lawrence's relevance and reputation today. The NEH grant was secured through the hard work of Dudley Wynn and E. W. Tedlock, Jr.
I. A. General information, significant achievements (continued)

4. NDEA Funds and Summer Dissertation Fellowships

For the first time the department has been able to grant support from its NDEA funds to graduate students engaged in dissertation research for the summer. For 1970 stipends of $400 have been granted to Eric Berryman, Ron Gower, Yuki Hijiya, Carl Kremer and Ann Slanina. In addition, NDEA funds have been assigned to faculty and graduate students for travel to the MLA meeting at Denver in December and other professional conferences, for microfilming and photocopying necessary to research, and various special projects.

5. Departmental Colloquia

In the second semester, the department began a series of informal colloquia to discuss our teaching and our curriculum. These colloquia were intended as much to provide occasion for exchange of ideas on professional questions as they were to solve difficulties. The most important result probably has been new awareness of how we think and work as individuals. In some instances astonishing agreement also appeared on such large fundamental topics as what we teach when we teach English and how we teach what we teach. The colloquia seem a pleasant, useful means for sharing attitudes, defining problems, and moving cooperatively toward important departmental goals.
B. SIGNIFICANT PLANS

Rather than outline plans I will list here the topics which will need the department's attention in 1970-71: (1) curriculum -- primarily the undergraduate course pattern and the philosophy of undergraduate education as distinct from graduate education; (2) teaching -- serious discussion of ways of improving the department's general job of teaching at all levels in all kinds of course; (3) staff strengthening -- particularly through appointment of accomplished senior people; (4) staff evaluation -- especially of the teaching function but also research and service as well, and all this in relation to permanence and reward. Admittedly these topics sound like ordinary business. Yet nothing seems really ordinary, and continuing business continues to demand our continuing attention.
C. APPOINTMENTS


2. Lee M. Johnson. B.A., Tulane University, 1965 (with Jr. year abroad at Sorbonne); M.A., Stanford University, 1967; Ph.D. (with Fulbright year in Paris), Stanford University, June, 1970. English and French literature of the latter 19th and early 20th century; relationships between literature and the visual arts. Assistant Professor, starting September, 1970.


D. SEPARATIONS FROM STAFF

1. Jane Baltzell Kopp, Assistant Professor from September, 1964 to September, 1969; Associate Professor from September, 1969 to June, 1970.

2. John S. Martin, Assistant Professor from September, 1965 to June, 1970. (On leave for the last two years.)

II. COMPOSITE OF INFORMATION REQUESTED ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

Scott Catlett
Ph.D. thesis completed; title: *An Odde Promiscuous Tone*.

Marcia Tillotson
Ph.D. thesis completed; title: *Byron's Tragedies*.

Both Mr. Catlett and Miss Tillotson expect to receive the Ph.D. in August, 1970; Mr. Catlett will receive his from the University of Wisconsin, and Miss Tillotson will receive hers from the University of Chicago.

2. Sabbaticals, Leaves, Travel

George Arms

Ernest W. Baughman
Sabbatical, Semester I. Travel; literary-historical centers in New England. Research: colony and church law and justice--Bowdoin College Library, Essex Institute (Salem, Mass.), Yale University. Travel and study were during September and October. English Department research grant of $500.00.

Joanne Field Holland
Attended International Spenser Colloquium, Fredericton, N. B., October 22-24; and meeting of the Bryn Mawr Alumnae Council, Bryn Mawr, Pa., November 6-8.

David M. Johnson
Leave: 1968-69, Tlaquepaque, Mexico

John S. Martin
Guest Lecturer (Reader/Associate Professor), Free University of Amsterdam, 1969-70.

David A. Remley

Hoyt Trowbridge
3. New Scholarly Honors, Fellowships

Ernest W. Baughman
An article (1967) "Public Confession and The Scarlet Letter" reviewed in American Literary Scholarship, 1967 by H. H. Waggoner. One comment: "The article makes the strongest case for the novel's artistic validity I have seen in a long time." (p. 25)

John S. Martin

David A. Remley
RAC research grant for summer, 1970. NDEA research grant for summer, 1969.

Dudley Wynn
Phi Beta Kappa, Honorary

4. Publications

George Arms

Ernest W. Baughman
Two book reviews that have not yet appeared.

Robert E. Fleming

Gene Franklin

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4. Publications (continued)

Joanne Field Holland

Joel H. Jones
"To Feel the Heartland's Pulse: The Writing of Walter Havighurst," Kansas Quarterly, II (Spring, '70), 88-96. "The Trip to the Center of Nowhere," Changing Education, IV (Fall '69), Contributing bibliographer to "Edgar W. Howe and Joseph Kirkland," American Literary Realism, 1870-1910, II ('69), and S. O. Jewett, III ('70).

Willis Dana Jacobs

Ivan Molada
To be published in the fall, by the University of New Mexico Press, and Routledge and Kegan Paul, London, a book-length study entitled The Captain of Industry in British Fiction, 1821-1871."

John S. Martin
Two articles pending publication (reported under #5 in last year's annual report).

David A. Remley

Royst Trowbridge

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4. Publications (continued)

Hoyt Trowbridge (continued)

Fred B. Warner

Dudley Wynn

5. Work in Progress

George Arms
Continuing work on Howells letters (first volume to be submitted, July, 1970).

Ernest W. Baughman

Susan V. Dewitt

Robert E. Fleming

Gene Frumkin
[Handwritten note: possibly with possible publishers -- also a chapbook called 20 Poems of Friendship is expected to be published shortly.]

Joanne Field Holland
In progress -- a book on history and poetry in The Faerie Queene.
5. Work in Progress (continued)

Joel M. Jones
Permanent member of bibliographic staff for American Literary Realism. Permanent member of "Advisors on Book Selection" for the American Quarterly "Annual Review of Books."

Willis Dana Jacobs
Work continuing on the poetry of William Carlos Williams and the dramaturgy of Eugene Ionesco.

Joseph M. Kuntz

Dorothy M. Logan
Completed textbook to be published by Holt, Rinehart and Winston, Inc., titled Writing Essays About Literature, written in collaboration with Joanne Cockerillera). Working now on an article on Thomas Mann's "Gladius Dei."

Ivan Melada
Work toward library acquisition of 19th century English and American materials: over 500 items collected, 316 items ordered, 70 items received as of May 15, 1970.

Roy Pickett
Some research on computer-use and stylistics.

David A. Remley

Ellen Spolsky
Research under way in computer-assisted research in semantic component analysis.

Katherine Simons
Background research for new course in General Honors Program, General Studies 401.

Hoyt Trombridge
5. Work in Progress (continued)

Fred B. Warner, Jr.

Dudley Wynn
Continuing work on Joseph Conrad, novelist.

6. Activities in Learned and Professional Societies

George Arms

Ernest W. Baughman

Edith Buchanan
Member of Membership Committee, Phi Beta Kappa.

Susan V. Dewitt

Paul Davis
Attended MLA and CCCC meetings; Attended Conference on the Improvement of Instruction, discussion leader.

Robert E. Fleming
Attended MLA convention in Denver, Dec. 1969. Member MLA, RMMLA, AAUP.

Gene Frumkin

Joanne Field Holland
Attended meeting of the Philological Society of the Pacific Coast, Davis, California, November 28-29, and read a paper (see 4, above) at the General Literature Section; attended meeting of Modern Language Association, Denver, Dec. 27-30.
Activities (continued)

David M. Johnson
Several talks.

Joel M. Jones
Keynote address, "If the Teacher Were a Freemen" delivered April 3, 1970 to state convention of National Council of Teachers of English in Las Cruces. Paper: "From One Hundred Visions: A Key to American Studies" accepted for Annual ASA convention (due to accident, I was unable to go).

Willis Dana Jacobs
Member: Modern Language Association, American Association of University Professors, Phi Kappa Phi.

Dorothy M. Logan
Member, MLA and RMMLA.

Roy Pickett
College English Ass'n Representative to National Commission on Teacher Education and Professional Standards, Jan. 26-27 Denver; Executive Committee of the College Conference on Composition and Communication, attended CCCC meeting March 16-21 in Seattle, and was a panel member of one of the sessions.

David A. Remley
Member, RMMLA; MLA; American Studies Association; Southwestern American Literature Association. Member, Nominating Committee and Bibliography Committee, S.A.L.A.

Ellen Spolsky

James L. Thorson
Finished two-year term as president of UNM Chapter of AAUP; elected president of New Mexico State Conference of AAUP; attended MLA in Denver, December, 1969; AAUP convention, Los Angeles, April, 1970; State AAUP conferences in November, 1969 and April, 1970.

Hoyt Trowbridge
Attended meeting of Mississippi Valley Dean's Association, Laramie, Wyoming, July, 1969; attended meeting of Committee on Multi-Purpose Institutions, National Council for Accred. of Teacher Ed., Kansas City, July, 1969 (member of the committee); attended meeting of American Society for Eighteenth-Century Studies, Cleveland, April 18-19, 1970 (member, Committee on Publications).
6. Activities (continued)

Dudley Wynn

Joseph B. Zavadil
Attended MLA meeting in Denver in December and Annual meeting of Medieval Association of the Pacific in Berkeley in February.

7. Other Professional Activities

George Arms

Ernest W. Baughman
Two Ph.D. dissertations under my direction, which took a great deal of my sabbatical time, were completed.

Paul Davis

Robert E. Fleming
Lecture on contemporary black novel in "Art Today" series at First Unitarian Church, April 1970.

Gene Frumkin

Willis Dana Jacobs

Roy Pickett
7. **Other Professional Activities** (continued)

James L. Thorson  
Interview on KWMN on several occasions. Participant in Educational Reform conference of United States Student Press Association. Member of President's Advisory Council.

Hoyt Trowbridge  

Dudley Wynn  

Joseph B. Zavadil  
Symposium on "Technology and the Humanities" at Del Norte High School, May 7, 1970.

8. **Non-teaching University Service**

George Arms  
Member of Graduate Committee. Member of Committee on American Studies. Elected member of English P&P Committee. Member of English Graduate Committee.

Edith Buchanan  
Graduate Advisor; Member, Graduate Committee; Member, Ph.D. Examination Committee.

Scott Catlett  
Undergraduate Advisor; Sophomore Literature Committee; Research Policy Committee.

Susan V. Dewitt  
Alternate and regular member, Student Standards Committee; Department Majors Advisor; Freshman English Committee.

Paul Davis  
Academic Freedom and Tenure Committee; Research Allocations Committee; Departmental Personnel and Policy Committee; Freshman English Committee (chairman); Grants in Aid Committee; Honors Committee; Masters Examination Committee.
S. Non-teaching university service (continued)

Robert Fleming
  Supervising registration (English); Freshman English Committee; MA Exam Committee; Student Gov't Scholarship Committee; Registration Committee (University); represented department at High School Senior Day, April, 1970.

Gene Frumkin
  Chairman, Master's Program in Creative Writing; Member, Poetry Series Committee; undergraduate advisor.

Joanne Field Holland
  University Speakers' Committee; departmental committee on advising undergraduate majors; undergraduate advisor.

David M. Johnson
  5 department committees; 1 university committee; advisor for English-Philosophy.

Joel M. Jones

Willis Dana Jacobs

Joseph M. Kuntz
  Committees: Continuing Education; A&S Scholarship; English Survey courses; Policy and Personnel, expanded, Department of English; advisor, English Majors.

Dorothy M. Logan
  Advisor to University College.

Ivan Melada
  Graduate Advisor; MA Exam Committee; Freshman English Committee.

Roy Pickett
  University Curricula Committee, Alternate on the Departmental Personnel and Policy Committee, Linguistics and Language Pedagogy Committee, Departmental Ph.D. Exam Committee, Departmental Advisor for the MAT English Program.

David A. Remley
  Undergraduate advisor; "Grants-in-Aid Committee," English Department; Nominating Committee, N. M. Alpha Chapter; Phi Beta Kappa.
8. **Non-teaching university service (continued)**

**Ellen Spolsky**
Member of Computer Use Committee, of departmental Ph.D. exam committee, of Dean Wallman’s Faculty Advisory Council, participant in panel discussion "What Should Be Taught and Why?"

**Katherine Simons**
Chairman, Departmental Committee for English majors. Advisor to English majors, 23-30 students. Member, special committee on honorary members, Phi Beta Kappa.

**Marcia Tillotson**
Sophomore Literature Committee -- Revision of English Department Sophomore Lit. Curriculum.

**James L. Thorson**
Secretary of Faculty Policy Committee; chairman of Ad Hoc Library Study Committee; Member of English Department Policy and Personnel Committee; Chairman of English Department Graduate Committee; Member of All-University Fellowship Committee.

**Hoyt Trowbridge**
Dean, College of Arts & Sciences, until August 30, 1969; Publications Committee, Sem. II, 1969-70; Chmn., Committee to select Popejoy Visiting Professor for 1970-71.

**Fred B. Warner, Jr.**
Policy and Personnel Committee (English), Graduate Committee (English), Undergraduate Curriculum Committee (English), MAT Committee (Education and English), Graduate Advisor, BUS Advisor, Ph.D. and M.A. Examination Committees (English).

**Dudley Wynn**
Chairman, Honors Council; Faculty Sponsor, Seminar Students Activity Group; member, Policy & Personnel Committee, Dept. of English; Member, planning committee, D. H. Lawrence Festival, Oct., 1970.

**Joseph B. Zavadil**
Acting Chairman of Department

9. **Public Service**

**Ernest W. Baughman**
Chairman Precinct 251 (Democratic Party).
9. Public Service (continued)

Scott Catlett

Joanne Field Holland
Bryn Mawr information chairman for New Mexico.

Dorothy M. Logan
Volunteer worker for Cystic Fibrosis Drive.

David A. Remley
Member, Izaak Walton League of America.

Fred B. Warner, Jr.
A&S coordinator United Fund drive.

Dudley Wynn
Member, Board of Trustees, Albuquerque Academy.

10. Personal Information

Ivan Maleda
Sam Maleda, born Dec. 9, 1969.

David A. Remley
Change of home address to: 2904 Blake Road, SW.

Joseph B. Zavadil
Elizabeth Anne, born April 10, 1970.
The Report of the Department of Geography
July 1, 1969 - June 30, 1970
Richard E. Murphy, Chairman

I. General Department Information.

In mid-year the department inaugurated its master's program in geography. Five graduate students are participating, and a group of ten or fifteen is expected for 1970-71, the first full year of the program. A grant of $1,610.00 from the National Science Foundation Institutional Grant is enabling the department to purchase materials for the field course to be taught for the first time next fall.

Two new courses designed solely for elementary and secondary school teachers have been added to the departmental offerings. These courses are workshops in the principles of physical and human geography respectively and will be offered during summer sessions only. One of the workshops was offered on a trial basis in the summer of 1968, and the response was very enthusiastic.

Currently there are 26 undergraduate majors in geography. In addition, a number of students in the Bachelor of University Studies program are taking virtual geography majors.

A number of our undergraduate majors continue into graduate degree programs in geography both here and elsewhere. Four of our five current graduate students received their bachelor degrees from UNM with majors in geography. Also, we have sent undergraduate majors from this department to graduate degree programs at the University of Nebraska, the University of Oklahoma, and the University of Arizona.

Although the number of undergraduate degree recipients who were geography majors has risen over the last several years, it has averaged only about five to ten a year, yet these persons are represented in a variety of pursuits besides graduate degree work. One major is an
analyst with the Weather Bureau, one is a cartographer for the U. S. Geological Survey, one received a position with the Los Angeles Regional County Planning Commission, and two are teachers of geography in high schools in Albuquerque. Two received graduate assistantships at other universities. Several former geography majors are commissioned officers in the U. S. armed forces, one of whom will be returning to this department as a graduate student in the fall. Some, of course, have entered occupations having little relation to their undergraduate training. Nevertheless, it would seem to be true that a considerable portion of our majors and minors apply the training they received here directly in their work.

We are pleased with a growing involvement with students in other disciplines in graduate work. Currently there are three Ph.D. candidates in history, each of whom has geography as one of his fields of concentration. This is a continuation of a seemingly growing and welcome trend. In other cases there are geology graduate students with programs embracing aspects of geography.

We are looking forward to further developments of an interdisciplinary sort, particularly in the realm of man's relations to environment, or what might be called human ecology. The Department of Geography is participating with other interested departments in preliminary investigations for a program of this sort. In part with this in view, the Geography Department has recruited a new staff member, Dr. Robert D. Campbell, starting September, 1970. Dr. Campbell has a strong background and an established reputation in this realm. For a number of years he was Chairman of the Geography Department at George Washington University and has headed several research projects
investigating aspects of the impact of environment on man. Dr. Campbell is leaving the Vice Presidency of the Matrix Corporation, where he has been a principal investigator, in order to accept a position here. He expects to introduce courses in environmental systems analysis and to work cooperatively with persons in other disciplines, such as architecture and biology, which also are involved in this general field.

There is an increasing need for clarification of geography offerings in relation to other programs and general requirements in the College and the University. Conversations with members of the Geology Department prompt us to recommend that climatology be available for science credit in the general requirements. Indeed, some consideration should be given to the possibility of making Geography 101, 351, 352, 405, and 473 available for science credit as well as 380L, 479, and 481 which are presently so listed.

Another recommendation is to have all meteorology and climatology included within this department, since the bulk of the work therein is concentrated here already.

In this same vein, a reexamination of the Earth Science Curriculum in the College of Education is in order, since only a portion of the applicable geography courses are included. Basic physical geography certainly should be a requisite for any earth science program.

In another vein, the Geography Department is participating with other disciplines, particularly Political Science and History, in a reexamination of the International Affairs program. The possibility of an undergraduate program therein is being considered as well as the possible strengthening of the current master's program.
This past year has seen the inauguration of a series by the UNM Press entitled PUBLICATIONS IN GEOGRAPHY. The series, edited by Professor Richard E. Murphy, is designed to provide an outlet for monographs in geography in general and on the New Mexico area in particular. The first publication of the series appeared in 1969 and was entitled PHYSICAL GEOGRAPHY RECONNAISSANCE: WEST PAKISTAN COASTAL ZONE by Professor Rodman E. Snead of this department. The second number of the series has been recommended by Professor Murphy and is a study of SPANISH LOG CONSTRUCTION IN NEW MEXICO by Dr. Charles F. Gritzner of Louisiana State University.

The department has been host during the year to a Visiting Scholar, Dr. Dietrich Fliedner of the University of Göttingen, West Germany. Dr. Fliedner was the recipient of an International American Studies fellowship from the American Council of Learned Societies for a study of the pre-Spanish cultural landscape in the Jemez area. On March 24 Dr. Fliedner presented his findings to a group of interested persons in an address sponsored by the UNM Geography Club.
II. Composite of Information Requested on Individual Biographical Supplements.

The members of the department continued a rather high level of productive research and related activity. We look forward also to the contributions of Dr. Robert D. Campbell, who will join the staff in the fall.

Advanced study.

Assistant Professor Elinore M. Barrett continued work on her doctoral dissertation LAND TENURE AND SETTLEMENT IN THE TIERRA CALIENTE OF THE TEPALCATEPEC BASIN, MICHOACÁN, MEXICO. She completed her field research in Mexico last summer, and she has written the bulk of the manuscript during the subsequent year. She has been in frequent contact with her committee at the University of California, Berkeley, and she expects to complete all requirements for the Ph.D. degree before the end of the current calendar year.

Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc.

Two department members traveled to various areas of Latin America for field work and research. Assistant Professor Barrett completed the research for her doctoral dissertation in the state of Michoacán, Mexico, during the summer of 1969. Professor Snead, accompanied by two geography students, took an extensive field excursion to South America during August, 1969. They concentrated particularly on the coasts of Peru and Chile, but also they crossed into the Bolivian Yungas. During the Christmas holiday, Professor Snead, again accompanied by two students in geography, investigated coastal areas of Mexico along the Gulf of California with particular regard to beach rock formations and the northern limits of mangrove growth.
Professor Richard E. Murphy was on a leave of absence from July, 1968 through June of 1969. He had been invited as a visiting lecturer to the Institute of Geography of Tohoku University in Sendai, Japan, and he had received a Fulbright award for this purpose. He taught at the Institute through the first part of July, 1969, visited a few places in the Tokyo-Kamakura area he had missed before, and then took a Russian ship to Siberia. He crossed Siberia travelling part of the way on the Trans-Siberian Railway and part of the way via air. He went by train from Moscow to Leningrad to Helsinki and Turku and then by ship to Stockholm and by air to Copenhagen, Paris, and London. After an extensive automobile trip through Cornwall and Wales, he returned to the United States in late August.

**New scholastic honors, fellowships, etc.**

Professor Murphy has received additional recognition for his work in the classification of landforms, and he is being listed in the 1970 edition of WHO'S WHO IN AMERICA.

Professor Snead has been awarded a fellowship to the National Science Foundation's "1970 Short Course on the Geographic Applications of Remote Sensing for College Teachers" which will be held at the University of California, Riverside, from July 6 to August 1, 1970.

**Publications.**

Professor Murphy's map and classification system of world landforms, which was published in 1968, has now appeared in four basic texts published in the United States and Japan in 1969 and 1970. The map is also included in the new 13th edition of GOODE'S WORLD ATLAS published by Rand McNally in 1970. Professor Murphy is listed as one of the cooperating experts for this edition.
Professor Murphy is the Geographic Consultant for the four volume OUR WORLD TODAY SERIES published in 1969 by Allyn and Bacon. This series is authored by Professor Harold D. Drummond of the College of Education of the University of New Mexico.

While Professor Murphy was in Japan, an article appeared in HOKKAIDO KANKO HYAKKEI (Sapporo. Vol. 8, No. 3, pp. 16-18 and 50) which dealt with his views on the problems of equating preservation of the natural scene with accessibility for tourism. He compared the problems in Hokkaido with those in Hawaii and the western mainland of the United States. The article was entitled (in translation) "Hokkaido in Relation to World Tourist Areas."

Professor Snead inaugurated our new UNM Press series, PUBLICATIONS IN GEOGRAPHY, with his PHYSICAL GEOGRAPHY RECONNAISSANCE: WEST PAKISTAN COASTAL ZONE (No. 1, 55 pp.). This publication grew out of his work along the Iranian and West Pakistan coasts sponsored by the U.S. Office of Naval Research.

With Ian Burton and Robert Kates, Professor Snead authored THE HUMAN ECOLOGY OF COASTAL FLOOD HAZARD IN MEGALOPOLIS. This work appeared as Research Paper No. 115 of the Department of Geography of the University of Chicago and is published by the University of Chicago Press, 1969, 196 pp.

Other research projects or creative works in progress or completed.

Associate Professor Bennett received a grant of $1400.00 from the University Research Allocations Committee for support of his study of hourly and daily insolation of the middle Rio Grande Valley. In connection with his over-all study of insolation in North America, Dr. Bennett has begun the preparation of a series of maps of the continent showing the percentage frequency at various levels of daily
insolation in June and December. Furthermore, Dr. Bennett is continuing his tabulations, as data arrives monthly from the National Weather Records Center, of the occurrence of sleet, freezing rain, and hail in the United States.

Professor Murphy is engaged in an investigation into two aspects of political geography involving the concept of the *raison d'être* of states and the idea of psychological location. This work is a continuation of preliminary studies he made prior to his departure for Japan.

Professor Snead is far along in the preparation of two major publications. One is an *ATLAS OF EARTH FEATURES* under contract for John Wiley and Sons. The other is a *PHYSICAL GEOGRAPHY REPORT ON THE MAKRAN COAST OF IRAN* to be published by the University of New Mexico Press. The research for the latter project was sponsored by the U.S. Office of Naval Research under Grant ONR NR 388-082.

Professor Snead also is starting a new research project on special coastal geomorphic features of the Gulf of California. He engaged in some preliminary field investigation over the Christmas and spring holidays, and he expects to do additional field work on the project during the summer of 1970.

**Activities in learned and professional societies.**

In January, 1970, Associate Professor Bennett was elected as a United States representative to the Board of Directors of the Solar Energy Society, an international organization for the advancement of the science and technology of solar energy. Dr. Bennett also continues his work as a member of the Editorial Board of the journal *SOLAR ENERGY*. During the year, Dr. Bennett served on a committee of the American Meteorological Society to choose eight New Mexicans who
have made outstanding contributions to meteorology. The eight chosen are to receive citations and medallions celebrating the 100th anniversary of weather service in the United States.

Professor Murphy was invited by the Association of American Geographers to visit two institutions in Texas under the "Visiting Geographical Scientist Program" sponsored by the Association in cooperation with the National Science Foundation. During the first week of March, he visited Angelo State College in San Angelo and Sul Ross State College in Alpine. At both institutions he talked with students, faculty, and administrators about the role of geography in higher education, and he gave both public and classroom lectures on several topics including the classification of landforms and the problems of equating population and resources.

Professor Murphy attended the joint meeting in Dallas, Texas, of the Southwestern Social Science Association and the Southwest Division of the Association of American Geographers. The meetings were held March 26-28. Dr. Murphy delivered a paper on "Regions of Erosional and Depositional Landforms" at one of the sessions on the 28th.

Other Professional Activities.

Associate Professor Bennett, Professor Murphy, and Professor Snead all served briefly in November as consultants for the Antoine Predock architectural firm on the design of a residential community in the vicinity of Cochiti Dam. The firm was seeking advice on the impact of various aspects of the environment on the proposed community.

On three occasions, Professor Murphy presented a talk entitled "The Soviet Union as it Looks Today" based on his travels during the summer of 1969. On October 16 he addressed the UNM Geography Club, on November 20 he talked to the Lions Club, and again in November he
gave the talk for a class at Manzano High School.

On April 22, Professor Murphy was a member of a discussion panel session sponsored by the Medical School for "Earth Day." He presented a brief talk on "Variations in the Global Distribution of Population, 'Overpopulation,' and Resources."

Non-teaching University Service.

Assistant Professor Barrett served as the departmental representative on the newly created Advisory Committee to the Dean of the College of Arts and Sciences, Dean Wollman. This committee is composed of faculty having the rank of instructor or assistant professor.

Professor Snead served throughout the year as a member of the University Research Policy Committee. He also serves as faculty advisor to the UNM Geography Club and to the local chapter of Gamma Theta Upsilon, national honorary geography fraternity.

Professor Murphy is a member of the International Affairs Committee, the Committee on Russian Studies, and the Committee on Western European Studies. The Committee on International Affairs is undertaking a reexamination of the entire program. Professor Murphy is also serving as the departmental representative to a group composed of representatives from various interested disciplines who are considering an interdisciplinary program in environmental or ecological studies and problems. Professor Murphy resumed his duties as departmental chairman after his return from Japan. Associate Professor Bennett had served as acting chairman during his absence.

Department advisors are Associate Professor Bennett, Professor Murphy, and Professor Snead.
The Report of the Department of Geology
July 1, 1969—June 30, 1970
Vincent C. Kelley, Chairman

I. GENERAL DEPARTMENT INFORMATION

A. Significant Achievements

The Department of Geology granted 9 bachelor's degrees, 9 master's degrees, and 4 doctor of philosophy degrees. This compared with 8, 10 and 2 degrees respectively for the previous academic year. About 61 undergraduates were enrolled for bachelor's degrees in geology. Forty-Six students were enrolled for graduate work of which about 26 were working toward a doctorate. Enrollment was up about 8 per cent for the year compared to about 4 per cent for the University as a whole.

The Department received the following financial support for 39 of its majors. This is an average annual stipend of about $1,575. per student. In addition the University supported 13 graduate students at about $2,400. per year.

Phillip F. Hock, Jr. NSF Fellowship 2,500.
David W. Love NSF Fellowship 2,500.
William M. McAnulty NASA Predoc Trainee 2,400.
Bruce E. Miller NDEA Fellowship 2,400.
Rodney C. Rhodas NASA Res. Assoc. 6,000.
A. William Laughlin NASA Res. Assoc. 12,000.
Peter J. Coney NASA Faculty Assoc. 500.
Rodney C. Rhodas NASA Res. Assist. 1,000.
<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>James D. Causey</td>
<td>NASA Res. Assist.</td>
<td>3,000.</td>
</tr>
<tr>
<td>Ronald V. Fodor</td>
<td>NASA Res. Assist.</td>
<td>900.</td>
</tr>
<tr>
<td>Six Field Assist.</td>
<td>NASA Undergraduates</td>
<td>3,600.</td>
</tr>
<tr>
<td>S. Robert Skaggs</td>
<td>Sandia Corp Res. Assist.</td>
<td>3,150.</td>
</tr>
<tr>
<td>Fred. D. Busche</td>
<td>Meteoritics Res. Assist.</td>
<td>3,000.</td>
</tr>
<tr>
<td>James M. Placek</td>
<td>Harry Leonard Schol.</td>
<td>250.</td>
</tr>
<tr>
<td>Gary L. Purdue</td>
<td>Aztec Oil &amp; Gas Schol.</td>
<td>400.</td>
</tr>
<tr>
<td>John B. Anderson</td>
<td>C. L. Herrick Schol.</td>
<td>400.</td>
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<tr>
<td>L. Gifford Kessler</td>
<td>Chevron Scholarship</td>
<td>2,000.</td>
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<tr>
<td>Charles L. Weaver</td>
<td>N.M. Bur. Mines Field Gt</td>
<td>500.</td>
</tr>
<tr>
<td>Richard K. Reed</td>
<td>N.M. Bur. Mines Field Gt</td>
<td>500.</td>
</tr>
<tr>
<td>William N. Kaufman</td>
<td>Earth Resources Field Gt</td>
<td>625.</td>
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<tr>
<td>William N. McAnulty</td>
<td>Bear Creek Field Grant</td>
<td>750.</td>
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<td>William L. Shaffer</td>
<td>NSF Summer Traineeship</td>
<td>750.</td>
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<tr>
<td>Bruce A. Black</td>
<td>Geol. Best Paper Award</td>
<td>100.</td>
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<td>Ward W. Arendt</td>
<td>N. M. Geol. Soc. Grant</td>
<td>125.</td>
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<tr>
<td>Martin L. Bregman</td>
<td>N. M. Geol. Soc. Grant</td>
<td>105.</td>
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<tr>
<td>Don O. Snyder</td>
<td>N. M. Geol. Soc. Grant</td>
<td>120.</td>
</tr>
<tr>
<td>Anmisar Keharoaddin</td>
<td>N. M. Geol. Soc. Grant</td>
<td>100.</td>
</tr>
<tr>
<td>Robert L. Taylor</td>
<td>NASA Undergrad. Assist.</td>
<td>1,000.</td>
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<tr>
<td><strong>Total:</strong></td>
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<td><strong>$79,428.</strong></td>
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The following staff research grants were in effect.

R. Y. Anderson  NSF Research Grant  48,500.
G. R. Clark  NSF Research Grant  31,400.
E. F. Cruft  Amer. Chem. Soc.  13,000.
E. F. Cruft  Sandia Corp.  2,500.
W. E. Elston  NASA Research Grant  176,000.
W. E. Elston  NASA Research Grant  5,400.
L. A. Frakes  NSF Res. Grant  42,000.
Klaus Keil  NASA-MSC  88,490.
Klaus Keil  NASA-Ames  2,420.
Klaus Keil  NASA-Hdqtrs-UCLA  3,000.
Klaus Keil  Sandia Corp.  14,632.
A. M. Kudo  NSF Res. Grant  29,800.
L. A. Woodward  N.M. Bureau of Mines  3,000.

Total:  $503,581.

The following industrial grants were made to the department.

Mobile Oil Company  800.
Chevron Oil Company  2,000.
Bear Creek Mining Company  750.

Total:  $3,550.
Many scientific, industrial, and other people come to the campus during the year for consultation with staff members, to inspect the department, for job interviews and recruiting of students. About 15 major petroleum and mining companies interviewed students as prospective employees. All degree recipients had been employed by the end of the year.

The following thirteen speakers visited and delivered talks before staff and students during the year.

T. E. Bunch  Ames Research Laboratory
H. W. Menard  Scripps Inst. Oceanography
K. R. Clark  Cornell University
D. C. Noble  Harvard University
J. B. Combs  Mass. Institute of Technology
Jergen Kienle  Columbia University - Lamont
Harry Mutvei  Natural History Mus. Stockholm
Mort D. Turner  NSF Polar Programs
Paul R. Kintzinger  Gulf Oil Company
Francis G. Stehli  Case-Western Reserve
J. Wm. Schopf  Univ California, Los Angeles
Neville Stevens  Univ. Queensland
Ralph Langenheim  Univ. of Illinois

The New Mexico Geological Society held its Twenty-Fourth Annual Meeting on campus April 17-18. Several members of the department delivered papers.

The department was disappointed to learn midway in the year that its NSF Institutional Facilities Proposal submitted late in 1968-1969 was not granted owing to exhaustion of Foundation funds and the closing out of the program.
architects to proceed with final plans to construct the facilities with State funds. The final plans were well along by the end of the year.

In April the department asked the Administration permission to submit a Departmental Science Development proposal to the National Science Foundation. After being first denied, the administration finally gave approval when it was shown that the proposal as conceived would not require undue financial outlay by the University. At the close of the year the proposal was in preparation under L. A. Woodward's direction.

The following new equipment was purchased during the year:

- Wang Electronic Calculator with input paper and tape reader and electric type out: $8,000.
- Copper X-ray tube and camera: $2,000.
- 10 Olympic Binocular Microscopes: $2,030.
- 5 Olympic Binocular Microscopes Zoom: $1,975.
- Walk-In Refrigerator: $1,300.
- Cahn Electrobalance: $2,725.
- 2 Map Cases: $600.

Total: $20,470.

Much of the effort of the staff during the year was directed toward finding a new chairman from outside, but the efforts were unsuccessful, principally because the administration refused to meet what were reasonable requests by a top applicant for the position. Failure of the administration to rise to the opportunity of
getting a top man at this most important change of leadership was a severe blow to the development of the department.

The department was authorized to add a staff member in the area of geophysics. Although two candidates were interviewed during the spring, no one had been secured by the end of the fiscal year.

Dr. Wengerd and Dr. Keil brought special recognition to the department during the year. Dr. Wengerd was elected president of the American Association of Petroleum Geologists, the largest of American scientific and professional organizations in geology. This was clearly a signal accomplishment for Dr. Wengerd. Dr. Keil was awarded the G. P. Merrill Award by the National Academy of Science for outstanding work in the field of Mineralogy. He was the first recipient of this new national award.

Five new courses were added to the curriculum during the year. They are:

- Geology 209 The Earth Environment 3 credits
- Geology 429 Paleontological Techniques 3 credits
- Geology 490 Geologic Presentation 1 credit
- Geology 520 Selected Topics in Geobiology 3 credits
- Geology 539 Environmental Reconstruction 3 credits

Under the Undergraduate Seminar Program Dr. Clark instituted a special 1-hour seminar course "The Geobiology of the Seashore" to be taught August 30-September 6 at the Cal. Tech. Kerckhoff Marine Laboratory, Corona del Mar, California.
B. Plans and Recommendations

1. Plans are being formulated for setting up a rock and mineral preparation laboratory in our basement. Saws, crushers, polarizers, grinding laps, mounting equipment, polishing apparatus, etc. would be assembled in one large shop and a skilled technician would be hired.

2. The meteoritics collections must be moved to Geology from Physics. The best material will be exhibited in our present museum and a secure storage and curating room will be built in the basement for the working part of the collection.

3. We hope to obtain a skilled lab technician to man our Mass Spectrometer Lab under the direction of one of our staff.

4. Many in the geology staff hope that the next large item of equipment to be secured in the department will be a skimming electron microscope, and space is planned for such equipment in our forthcoming new space.

5. The National Science Foundation proposal for upgrading the quality of instruction, research, and equipment is being dovetailed where possible with the new state facilities on the third floor.
6. In order to support our efforts in geochemistry and materials analysis, we applied for an NSF Seminar Foreign Scientist. Late in the year we got Dr. Keuichiro Aoki from Tohoku University, Sendai, Japan, to join us for 1970-71. He is the foremost rock analyst in the world. After his visit we would wish to replace him with a permanent man.

C. Dr. Vincent C. Kelley (1937-1970) retired after 33 years in the Department, the last eight years as Chairman.

Dr. L. A. Frakes resigned as Associate Professor to take a position on the geology staff at Florida State University.

During the year we had unusual problems with turnover of our Departmental Secretary. Mary Adwell, who had been secretary for five years left in August, 1969. She was replaced by Martha Craig who only stayed to June 1, 1970. Our new secretary starting mid-June is Alice Halterman.
II. COMPOSITE OF INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

**Lawrence A. Frakes.** AGI Short Course on Geologic Models Philadelphia November 6-10, 1969.

**Sherman A. Wengerd.** Registered Geologist #872 in State of California, April 16, 1970.

2. Sabbaticals


Albert M. Rude. Travel to Atlantic City to attend Annual meeting of Geological Society of America. Attended Symposium in Boston, Massachusetts. Traveled to Washington, D. C. to attend and read paper at Annual American Geophysical Union meeting.
Abraham Rosenzweig. Sabbatical leave Sem. II, 1968-69. Visiting Professor of Geology, National Taiwan University, Taipei, Taiwan. June 16, 1969 to August 18, 1969 traveled to the following areas: Hong Kong & Macau, Cambodia (Phnom Pehn and the archeological sites in the Angkor Wat area), Bangkok, Nepal (tours through the Kathmandu Valley), India (Delhi & Agra), Kashmir, Iran (Teheran, and Alborz Mountains), Israel (extensive travel throughout the country), Cyprus and Istanbul.


3. New Scholastic Honors, etc.


Vincent C. Kelley. AIME 25-year award.

4. Publications


Elston, Wolfgang E., Overplating: The role of mantle-derived juvenile volcanism in thickening the Earth's continental crust and in the evolution of small planetary bodies (abs.); Geol. Soc. America Abs. w. Programs for 1969, pt. 7, 1969, p. 55-56.

(Complete paper in preparation for Nov. issue of Jour. Geophys. Research)


Frakes, Lawrence A., Glaciation and associated circulation effects resulting from drift of


Kudo, Albert M., Sr. Isotopic and chemical analyses of lherzolite inclusions and Basalts, Bandera Crater, New Mexico; Transaction American Geophysical Union Vol. 51, No. 4, p. 449, 1979.


Wengerd, Sherman, A., "Annual Meeting Rundown 1969" (news article) as above, v. 4, no. 1, p. 3;

Wengerd, Sherman A., "Western Paradox Basin is a Potential Oil Giant in Pennsylvania Rocks:" Oil and Gas Journal (quarto) part 1, p. 172-184, vol. 68, no. 4 (Jan. 26, 1970), part 2, p. 142-147, vol. 68, no. 5 (Feb. 2) part 3, p. 96-102, vol. 68, no. 6 (Feb. 9).


5. Other Research Projects, etc.

Roger Y. Anderson. National Science Foundation research grant GA 13573 (Climatic cycles and patterns in varved sediments—Castile Project). Two years, $48,500.


Edgar F. Cruft. American Chem. Soc. final reports and project completed on nucleation in CaSO₄ – H₂O system, grant extension on original grant, $13,000. Research on geochemistry of one metals in magmatic and sedimentary processes and also geochemistry and geology of high-level granitic intrusions and associated Sn–W–Bi mineralization, Greisen phenomena. Sandia Corp. grant on "materials" research $2,500.

agreement with Geochronology Laboratory, University of Arizona, K-Ar dating of volcanic rocks from New Mexico. Prof. P. E. Damon, co-investigator, AEC-funded. No UNM funds involved. Approx. value to UNM $9,000. Negotiated cooperative agreement similar to above, with University of Pittsburg, Prof. Michael Bikerman, co-investigator, NSF-funded (both Prof. Bikerman and I are Research Associates of Geochronology Lab., U. Of Arizona). No UNM funds involved. Approx. value to UNM $15,000.

Negotiated cooperative agreement with Kansas State Univ. for Sr$^{87}$/Sr$^{86}$ determinations of volcanic rocks. Prof. R. Brookins, co-investigator, NSF-funded. No UNM funds involved. Approx. value to UNM $1,000. Negotiated cooperative agreement with Univ. of Toronto, Remanent magnetism of volcanic rocks from southwestern New Mexico. Prof. David Strongway, co-investigator, NSF-and Canadian Nat. Research Council-funded. No UNM funds involved. Approx. value to UNM $5,000. Negotiated cooperative agreement with U. S. Geological Survey-Dr. Harold James, Chief Geologist- for geophysical studies in Gila Wilderness and Primitive Areas and Black Range Primitive Areas, 1 UNM student to be employed by USGS, no UNM funds involved. Approx. value to UNM $5,000+. Continued cooperation with U.S. Geological Survey, Branch of Astrogeologic Studies. 2 UNM students employed (w.a.e.) by U.S.G.S. No UNM funds involved, approx. value to UNM $6,000. Aided 1 UNM graduate student in obtaining $800 research grant from Geological Society of America. NASA- Ames Research Center has solicited cooperation in Earth Resources and Technology Satellite Program. In negotiation stage.

Lawrence A. Frakes. Antarctic marine geology. (NSF, $42,000, 1 year) Sedimentology on alluvial fans in New Mexico, Continental drift in the southern hemisphere, Airborne magnetometer survey of the Weddell Sea.


Albert M. Kudo. Research on Grant (NSF GA-4428) $29,800 for two years, Nov. 1968-1970. Research continuing on ultramatic inclusion - papers have been submitted to journals for publication.
Albert M. Kudo (cont'd) Research on melting of sediments and gravitic rocks under \( \text{PH}_2\text{O} \). Received $1,200.00 from Research Allocations Committee - July 1, 1970 - June 30, 1971.

Abraham Rosenzweig. completed: "The crystal structure of \( \text{CsU}_2\text{F}_9 \)" - "The crystal structure of spangolite, \( \text{Cu}_6\text{Al(SO}_4\text{Cl(OH)}_1\text{}_2\text{3H}_2\text{O} \). In progress:
Colloidal sulfide deposition at Chinkua shih, Taiwan
Luzonite-enargite relationships at Chinkuashih, Taiwan.

Sherman A. Wengerd. "Chronostratigraphic Analysis and the Time Surface" 16 typescript, 6 fig., Boletin de la Sociedad Geologica Mexicana (in press, submitted by invitation April 1970); "Geology of the Western Paradox Basin"; "Coastal Geomorphology, Bahia San Carlos Area, Western Sonora, Mexico"; "Petroleum Prospects of Southwesternmost New Mexico" (in press) for 21st Annual Field Trip Guidebook of the New Mexico Geological Society, 18 typescript, 4 tables, 8 figures.

6. Activities in Learned and Professional Societies


**Edgar F. Cruft.** Attended AIME annual meeting, Denver, Colorado, January 1970.


**J. Paul Fitzsimmons.** President of UNM Chapter of Sigma Xi.


Abraham Rosenzweig. Reviewer for papers for Heterocyclic Chemistry. Reviewer for American Mineralogist.


7. Other Professional Activities


Lawrence A. Frakes. TV news program on continental drift. Newspaper interviews on continental drift. Talks to local Gem and Mineral Club.

Klaus Keil. Reviewed three proposals submitted to NASA for funding. Reviewed twelve papers for the American Mineralogist, Geochimica et Cosmochimica Acta; Meteoritics; and Science. Consultant, Sandia Lab. Exhibition of Moon rocks for New Mexico Stage Legislators and public. Talk on "Apollo Program". Television appearances dealing with work on the returned lunar samples.


3. Non-teaching University Service

Roger Y. Anderson. Chairman, University Comm. on Paleocology. Draft counseling. Faculty Sponsor of Student Organizing committee, Member, Committee on University.

George R. Clark, II. Chairman of 2 master's theses. Chairman of 2 doctoral dissertations.


Wolfgang B. Biston. Chairman, UMM-Sandi Colloquium Comm.; Chairman, UMM Science Colloquium Comm.

J. Paul Fitzsimmons. Advisor for University College.

Klaus Seil. Administration of Institute of Meteoritics, including the Meteorite collection.

Vincent C. Lolley. Chairman, Geology Dept., Member, Checo Canyon Park Service Comm. Led three departmental special field trips. Chairman of 2 master's theses.

Chairman of a Faculty Senate.
Albert M. Kudo. Faculty Advisory Comm.; assistant to V. C. Kelley in handling potential graduate students. Member and Chairman of about fifteen thesis and dissertation committees.

Sherman A. Wengerd. Ad Hoc Comm. on choice of Geophysicist for Dept. of Geology.

Lee A. Woodward. Member of Young Ranch Develop. Comm, advisor for 30 Univ. College students. Member of Ad Hoc Comm. on Political Activities of UNM Faculty. Chairman of 12 thesis and dissertation committees and member of 8 other committees.

9. Public Service

Klaus Keil. Organized three public exhibitions of moon rocks, slides, films, etc., concerning moon program. These exhibitions were seen by approximately 18,000 New Mexicans.

Vincent C. Kelley. Member, Albuquerque Rotary Club.

Sherman A. Wengerd. Appointed to West Mesa Airport Evaluation Comm.

Lee A. Woodward. Lectures and field trips for scouts and school groups.

10. Personal Information.


General Department Information

A. Significant achievements.

Work in the Institute of Meteoritics during the report period was highlighted by the arrival of approximately 30 grams of rock and surface fines from the Apollo 11 and 12 missions. These materials provided members of the Institute with a unique research opportunity and, accordingly, the entire staff including graduate and undergraduate students became involved in the study of these materials. In addition, three outside co-investigators (Drs. T. E. Bunch, K. G. Snetsinger, and I. Harding-Barlow) spent a considerable part of their time at the Institute and with work on the returned lunar samples. Although sampling of the Moon so far is limited to two locations, significant conclusions concerning the origin and history of the Moon have been derived, namely that the Moon originated by condensation from the primordial sun 4.7 billion years ago, that the crust of the Moon was molten to perhaps 50 km depth by an external heat source which prompted large scale igneous differentiation and resulted in the formation of geologically differentiated anorthositic Highlands early in the history of the Moon, and that the Mare regions of the Moon have been without water at least since 3.6 billion years ago. Work on Apollo 11 and 12 samples has resulted so far in the publication of eleven (11) articles in major scientific journals.

Total outside contracts and grants in effect amounted to $136,781.00.
The following prominent scientists visited the Institute of Meteoritics, most of which presented talks before staff and students of the Department of Geology and Institute of Meteoritics.

Dr. Milton Blander  
North American Rockwell Science Center  
Thousand Oaks, California

Dr. Theodore E. Bunch and Dr. Kenneth G. Snetsinger  
Space Sciences Division  
NASA Ames Research Center  
Moffett Field, California

Professor Truman P. Kohman  
Department of Chemistry  
Carnegie Mellon University  
Pittsburgh, Pennsylvania

During the report period, twenty (20) publications were published by members of the Institute of Meteoritics in major scientific journals.

Three (3) public exhibitions of the Moon rocks supplemented by slide shows and movies were organized. These exhibitions were attended by approximately 18,000 New Mexicans.

Klaus Keil was presented with the first George P. Merrill award of the National Academy of Sciences.

Approximately forty (40) talks were presented by members of the Institute to scientific societies as well as civic groups. Most of these lectures dealt with aspects of the Apollo program.

The Institute received the following financial support for students.

Ronald V. Fodor  
NASA Research Assistant  
$2,925.00

Ronald P. Geitgey  
Sandia Corporation Research Assistant  
$1,350.00

S. Robert Skaggs  
Sandia Corporation Research Assistant  
$3,150.00
Fred D. Busche     Meteoritics Research Assistant      $3,000.00
John L. Rasho      NASA Houston Research Assistant     $2,500.00
Robert L. Taylor   NASA Undergraduate Research Assistant     $1,800.00
Sarah C. Taylor    NASA Undergraduate Research Assistant         $1,260.00
Marjorie T. Busch  NASA Undergraduate Research Assistant         $1,260.00

Total Support      $17,245.00

The following new equipment was purchased during the year.
Wang Electronic Calculator, with paper input and electric printout $8,000.00
Copper x-ray tube and x-ray camera                  $2,000.00
Objectives for Zeiss microscope                    $1,800.00
Oscilloscope                                         $1,000.00
Miscellaneous equipment                             $2,500.00

Total Equipment Purchased $15,300.00

The Institute was authorized to add a Senior Research Associate to its staff. This position is a rotating one, with a new Ph.D. coming in every two to three years, depending upon the nature of the research projects.

B. Plans and recommendations

1. Every effort must be made to provide a full-time secretary instead of the present half-time secretary for the Institute of Meteoritics.
The present half-time allotment is inadequate in view of the increasing number of associates and research assistants in the Institute (three Ph.D. level co-investigators, one Ph.D. level research associate, eight research assistants).

2. The meteorite collection of the Institute of Meteoritics is presently located in the old Institute building and is not open to the public.
Every effort must be made to provide space for public exhibition of the collection in the Geology Building. Because of the uniqueness of this collection it is recommended that a separate room adjacent to the present geology museum is provided for the meteorite museum. It is further recommended that a curator is provided jointly for the Geology museum and the meteorite collection. This curatorship should be a full-time position of a person holding a bachelors degree, who would work closely with the staff of the Department. The curator should take care of the collections and provide expert guidance for the many visitors that the museum has.

Staff of the Institute

Dr. Klaus Keil, Director (since July 1, 1968)
Dr. Martin Prinz, Research Associate
Dr. Theodore E. Bunch, Co-investigator
Dr. Kenneth G. Snetsinger, Co-investigator
Dr. I. Harding-Barlow, Co-investigator
Mrs. Hope Kendall, Secretary (1/2 time)
Mr. George Conrad, Microprobe Specialist
Mr. Fred Busche, Research Assistant (1/2 time)
Mr. R. V. Fodor, Research Assistant (1/2 time)
Mr. R. P. Geitgey, Research Assistant (1/2 time)
Mr. S. R. Skaggs, Research Assistant (1/2 time)
Mr. J. L. Rasho, Research Assistant (1/2 time)
Mr. R. L. Taylor, Undergraduate Res. Asst. (1/2 time) (since August 1, 1969)
Mrs. S. C. Taylor, Undergraduate Res. Asst. (1/2 time) (since June 1, 1969)
Miss M. T. Busch, Undergraduate Res. Asst. (1/2 time) (since November 1, 1969)

II Composite of individual biographical supplements

1. Advanced study
   a) F. Busche, R. Fodor, R. Geitgey, and S. R. Skaggs, Graduate Students-Research Assistants; work toward Ph.D. degrees at UNM.

2. Sabbaticals, etc.

Klaus Keil


La Jolla, California; University of California, July 19-22, 1969.

Moffett Field, California; NASA Ames Research Center, August 4-8, 1969.

Houston, Texas; Manned Spacecraft Center, September 16-17, 1969.


Houston, Texas; Manned Spacecraft Center, Apollo 11 Conference, January 4-8, 1970.


Las Vegas, New Mexico, New Mexico Highlands University, Sigma Xi Speaker, March 5-6, 1970.

Tucson, Arizona; University of Arizona, March 16-17, 1970.

Grants, New Mexico; Mining Engineers, March 21, 1970.


Switzerland (Zurich, Berne) and West-Germany (Augsburg, Hannover, Mainz, Bonn, Cologne); lecture tour, April 9-25, 1970.


Los Alamos, New Mexico; American Chemical Society, May 15, 1970.

Salt Lake City, Utah; Intermountain Association of Geologists and Utah Geological Society Meeting, May 7-8, 1970.

Martin Prinz

Atlantic City, New Jersey; Geological Society of America, November 10-12, 1969.

Houston, Texas; Apollo 11 Lunar Science Conference, January 4-8, 1970.

Flagstaff, Arizona; International Symposium on Mechanical Properties and Processes in the Mantle (with 4 day field trip to diatremes and kimberlite pipes of northern Arizona), June 24-July 3, 1970.
Fred Busche


Santa Fe, New Mexico; Gem and Mineral Club, March 25, 1970.

Los Alamos, New Mexico, Gem and Mineral Club, May 19, 1970.

Jacksonville, Illinois; Rotary Club, June 12, 1970.

Ronald Fodor


George Conrad


3. New scholastic honors, etc.

Klaus Keil

Elected Fellow of the American Association for the Advancement of Science (1969).

Listed in National Social Directory, New York, N. Y.

Apollo Achievement Award, National Aeronautics and Space Administration, Washington, D. C. (1970).


Fred Busche

Elected Associate Member of Sigma XI, Science Honorary, May 1970.

4. Publications

Listed are only scientific articles and books published in major journals. Not listed are some 15 abstracts published in proceedings of meetings, etc.

Klaus Keil

The Leoville, Kansas, meteorite: a polymict breccia of carbonaceous


Electron microprobe analyses of pyroxenes, plagioclases, and ilmenites from Apollo 11 samples. Special Publ. No. 1, Institute of Meteoritics, University of New Mexico, Albuquerque, New Mexico 19 p., 1970 (with T. E. Bunch and M. Prinz).
Houston, Texas, published in three (3) volumes of 2,800 pages by Geochimica et Cosmochimica Acta.


Meetings and professional papers:


New Mexico Highlands University, Las Vegas, New Mexico. Two talks as Sigma Xi lecturer on "Scientific results of the Apollo program", and "Geology of the Moon", March 5, 1970.


Sigma Xi lecturer, University of New Mexico, Albuquerque, New Mexico. Talk on "Apollo 11 and 12 rocks: Origin and history of the Moon", March 22, 1970.


Series of three (3) lectures at Sandia Laboratories, Albuquerque, New Mexico, on "Minerals and rocks", March 23-25, 1970.

Series of three (3) lectures at Sandia Laboratories, Albuquerque, New Mexico, on "Meteorites and the Moon", March 30-April 1, 1970.


Eleven (11) lectures given as part of lecture tour in Europe ("Scientific results of the Apollo program"), England, Switzerland, and West Germany, April 6-26, 1970.


Martin Prinz


Keynote speaker, Top Teen Conference, Boy Scouts and Girl Scouts of New Mexico, Albuquerque, New Mexico, April 18, 1970.
Martin Prinz


S. Robert Skaggs

5. Other Research Projects, etc.

Klaus Keil

The following contracts and grants were in effect.

Grant from UNM Research Allocations Committee entitled "Mineralogy, petrology, and chemistry of the Burdett, Kansas, stone meteorite".

Total grant $1,000.00

Research Contract with NASA Manned Spacecraft Center, Houston, Texas, entitled "Electron microprobe and laser microprobe study of the returned lunar samples".

Total grant $88,490.00

Cooperative working agreement with NASA Ames Research Center, Moffett Field, California, entitled "Mineralogy and petrology of Hawaiian basalts".

Total grant $15,243.00

Grant from NASA Headquarters via University of California, Los Angeles, entitled "Mineralogy and petrology of Type II and III carbonaceous chondrites".

Total grant $3,000.00

Cooperative working agreement with NASA Ames Research Center, Moffett Field, California, entitled "Study of the Crab Nebula".

Total grant $4,800.00

Research contract with Sandia Corporation, Albuquerque, New Mexico, entitled "Study of microparticles by electron microprobe and x-ray techniques".

Total grant $14,632.00

Cooperative working agreement with NASA Ames Research Center, Moffett Field, California, entitled "Study of collisionless damping".

Total grant $5,200.00

Research contract with NASA Goddard Space Flight Center, Greenbelt, Maryland, entitled "Preparation of standards for electron microprobe analysis".

Total grant $4,416.00

Total grants and contracts in effect $136,781.00

6. Activities in learned and professional societies

Klaus Keil

Offices:

Associate Editor, Proceedings of the Apollo 11 Lunar Science Conference,
First United Presbyterian Church, Adult Study Group, Albuquerque, New Mexico. Talk on "Study of lunar samples", April 19, 1970.

F. Busche


R. Skaggs


R. Fodor


7. Other professional activities

Klaus Keil

Reviewed three (3) proposals submitted to NASA for funding.

Reviewed approximately twelve (12) papers for publication in the following journals: American Mineralogist, Geochimica et Cosmochimica Acta, Meteoritics, and Science.

Consultant, Sandia Laboratories, Albuquerque, New Mexico.

Organized exhibition and presentation of results of Moon rocks for New Mexico State Legislators and public. Gave talk on "Apollo program".

Organized exhibition of Moon rocks for Engineering Open House, UNM College of Engineering.

Several live and taped TV and radio appearances dealing with work on the returned lunar samples.

Martin Prinz

Reviewed several proposals and articles submitted to the National
Science Foundation, American Journal of Science, Geochimica et Cosmochimica Acta, and Journal of Geology.

TV appearance with K. Keil on "Project 7 Documentary" (Ken Dunnagan, host), dealing with results of Moon rock studies (August 1969).

Became a member of the Meteoritical Society and the American Geophysical Union.

F. Busche

Judge of Gem and Mineral display at New Mexico State Fair, September 1969.

8. Non-teaching University service

Klaus Keil

Administration of the Institute of Meteoritics, including the Meteorite collection and museum.

Chairman and member of several internal committees in the Department of Geology.

9. Public service

Klaus Keil

Many private showings of Moon rocks to interested citizens, school classes, etc.

Many private showings of meteorite collection to interested citizens, school classes, etc.

Organized three (3) public exhibitions of Moon rocks, slides, films, etc., concerning the Apollo program. These exhibitions were seen by approximately 18,000 New Mexicans.

Examined some fifteen (15) rocks of suspected meteoritic nature donated by citizens.

Martin Prinz

Many private showings of Moon rocks to interested citizens and school classes.
THE REPORT OF THE DEPARTMENT OF HISTORY

July 1, 1969 - June 30, 1970

Frank W. Iklé, Chairman

I. General Departmental Information

A. Significant Achievements

1. The following courses were added to the curriculum effective Semester I, 1970-71:

   History 100 The Making of the Modern World
   History 369 American Indian History (also Anthro. 369)
   History 376 Economic History of the United States
   History 405 Social History of Science & Technology
   History 549 History Education (effective Summer '70)

2. Activities beyond the formal curriculum:

   a. Co-sponsored with Political Science Department a public lecture on February 11 by Professor Francis MacGinnis of the British Information Service.
   b. Sponsored a public lecture on March 3 by Professor Joe Franz of the University of Texas.
   c. Sponsored a lecture by Professor Leon Levy of Brandeis University on March 12.
   d. Phi Alpha Theta sponsored a talk by Professor William
Taylor of the State University of New York at Stony Brook on April 15.

- Participated in College of Santa Fe Summer Session.
- Participated in Andean Center, Quito, Ecuador.
- Participated in Gallup Branch College.
- Participated in courses offered at Los Alamos.
- Participated in course offered at Zuni.

3. Honors:

- Administration Building of the University of New Mexico renamed "Scholes Hall" in honor of France V. Scholes, Emeritus Professor of History.
- Professor Gerald Nash named Annual Faculty Research Lecturer, 1969-70. Lecture postponed until 1970-71.
- Professor Ferenc Szasz named "Professor of the Month" for February as well as "Professor of the Year."
- Mrs. M. Chambers, Ph.D. Candidate, awarded Mount Holyoke College $3000 Mary E. Woolley Fellowship.
- Dale Miyagi, Ph.D. Candidate, awarded Fulbright-Hays fellowship for study in Spain.
- One new NDEA Title IV Fellowship and one UNM Fellowship awarded to the department.

B. Significant Plans and Recommendations for the near future

1. Addition of staff member in U. S. history.
C. Appointments to Staff


2. Jake W. Spidle, Jr. appointed Visiting Assistant Professor of European Diplomatic History, effective September 1, 1970.

D. Promotions

1. W. Warren Wagar promoted to Professor of History, effective July 1, 1970.

Staff: Olive Knox named Office Manager, effective July 1, 1970.

II. Composite of information requested on individual biographical supplements:

1. Advanced Study


   b. ROBBINS, R. Ph.D. degree awarded by Columbia University.

   c. STEEN, C. Ph.D. dissertation, University of California, Los Angeles, completed.

   d. WAGAR, W. Post-doctoral fellowship for research in history education, Indiana University, June-August, 1969 (jointly sponsored by Indiana University and American Historical Association)
2. **Sabbatical, Summer Teaching, Travel, etc.**

   a. **ELLIS, R.** Summer teaching, UNM Graduate Summer Program in Santa Fe.

   b. **IKLÉ, F.** Summer 1969 Travel and Research in Japan.

   c. **KERN, R.** Travel in Europe, June-September, 1969.

   d. **LIEUWEN, E.** Summer Research at Hoover Library (Stanford); Univ. of California (Berkeley); Library of Congress.

   e. **ROTHENBERG, G.** Sabbatical Leave Sem. I. Research in State Archives, Vienna.


   g. **TULGA, L.** Travel & Research in Italy and Greece, Summer '69.

3. **New Scholastic Honors, Fellowships, etc.**

   a. **ELLIS, R.** UNM Faculty Research Grant, 1969.

   b. **KERN, R.** Secretary-Spanish History Assn. Fellow, International Institute of Social History (June-Sept. 1969), Amsterdam, The Netherlands. Faculty Growth Fellowship, UNM; Summer Research Grant, UNM.


4. **Publications**

   A. **Books and Monographs**


   B. **Articles**

      1. **ELLIS, R.** Introduction to new printing of Lawrie Tatum, *Our Red Brothers and the Peace*
Policy of Ulysses S. Grant, Univ. of Nebraska Press, 1970.


C. Book Reviews


8. ELLIS, R. Nye, *Plains Indian Raiders* in *Military Affairs*, XXXVII.
9. ELLIS, R. Castel, General Sterling Price in *Montana*, XIX.


24. ELLIS, R. Clark, These Were the Valiant in *Journal of the West*, April 1970.


30. NASH, G. Eleven book reviews.


5. Research

A. Completed

1. DOLKART, R. Article (with G. Merkx) on "Argentine Industrialization in the 1930's."

2. KERN, R. Caciquismo & Oligarchy in the Luso-Hispanic World (co-editor), accepted for publication by UNM Press.

3. KERN, R. Liberalism in an Underdeveloped Nation: Spain and the Problem of Caciquismo 1833-1936, accepted for tentative publication by Stanford University Press.
4. NASH, G. *A Short History of Twentieth Century America*

5. NASH, G. *Herbert Hoover: Scientist and Quaker*


9. WAGAR, W. Chapter for *The Unity of Mankind*; editorship of book assumed upon resignation of former editor; to be published by UNM Press.


**Research in Progress**

1. DABNEY, W. Guide to materials in American biography for the UNM Press.

2. DOLKART, R. Editing with R. Kern volume of articles on "Caciquismo in the Hispanic World."


4. ELLIS, R. *New Mexico: A History of Four Centuries,* being revised with W. Beck for Univ. of Oklahoma Press.

5. ELLIS, R. Editing, "A Campaign Against the Sioux: The Diary of Charles Springer."

6. ELLIS, R. "Generals on the Frontier" Book MS. of original essays by a variety of leading historians. For Yale Univ. Press.
7. ELLIS, R. Articles in progress on New Mexico's reaction to Black soldiers and public opinion and the Indian problem.

8. ELLIS, R. Book MS. "Modern American Indian Policy."


10. IKLÉ, F. *A History of Asia,* work in progress on revision.


12. LIEUWEN, E. Book: *Social Revolutions in Latin America.*

13. LIEUWEN, E. Book: *Bibliography of the Cuban Revolution.*

14. PUGACH, N. Biography of Paul S. Reinsch.


17. ROTHENBERG, G. *The Army of Francis Joseph,* Vol. II.

18. SKABELUND, D. "The Structure of Physical Theory," (in two parts)

19. SMITH, G. *Diary of John Langdon Sibley, 1846-1876.*

20. SMITH, G. *Diary of Daniel Harvey Hill, 1846-1848* (Mexican War).

21. SMITH, G. *Education in the North, 1821-1825.*

22. STEEN, C. Research on features of diplomatic activity in Europe during the sixteenth century.


24. TULGA, L. Article: "In Defense of the mos maiorum: Regulation of Cults in the Early Principate"

25. TULGA, L. Article: "The Roman Theater and State in the Late Republic: A Symbiotic Relationship"

26. WAGAR, W. Book: *World Integration: Building the City of*
-11- a.


6. Activities in Learned and Professional Societies

a. DABNEY, W. Campus Representative, Woodrow Wilson National Fellowship Foundation. Member, Region 13 Selection Committee, Woodrow Wilson Foundation. Attended various meetings in December and January connected with this.

b. ELLIS, R. Read paper, Western History Association, Oct. 1969; Read paper, Missouri Valley History Conf., March, 1970; Attended Organization of American Historians and New Mexico Historical Association Meetings. Member, Board of Editors, NMHR; Member, Board of Directors, Advisory Committee on Archival Affairs, Federal Records Center, Denver. Colo. Chairman, Microfilm Acquisition Committee, Advisory Committee on Archival Affairs, Federal Records Center. Committee on local arrangements for Western History Assoc. meeting in Albuquerque in 1971.


f. NASH, G. Program Chairman, Western History Association, Omaha, 1970. Chairman, Nominating Committee and Membership Committee, Organization of American Historians, Los Angeles.

g. PORTER, J. Attended Association for Asian Studies Conference, San Francisco.

h. PUGACH, N. Treasurer, UNM Chapter of Phi Beta Kappa.


7. Other Professional Activities

a. DABNEY, W. Talks to various civic groups.

c. IKLÉ, F. Talk on KOAT-TV, Channel 7, Albuquerque on U.S. Foreign Policy toward Asia, November, 1969.

d. NASH, G. Board of Editors, Western Historical Quarterly.

e. ROTHENBERG, G. Member, editorial board Military Affairs. U.S. rep. to the Commission d'Histoire Militaire Internationale.

f. SHUGG, R. Attended annual meetings of Pacific Coast Branch, AHA, San Diego, August 1969; Western University Presses, Berkeley, November, 1969; Organization of American Historians, Los Angeles, April, 1970.

g. SKABELUND, D. Lecture before the Institute for Public Science Policy (Political Science Dept.); Lecture at Chemistry Department seminar.


8. Non-teaching University Service


b. ELLIS, R. Director, American Indian Historical Research Project, funded by Doris Duke. Member, Speakers Committee.

c. IKLÉ, F. Member, Committee on College and University Relationships; Research Policy Committee and Research Policy Budget Subcommittee; Ad Hoc Committee on Educational Policy.

d. KERN, N. Faculty advisor, Phi Alpha Theta, UNM Chapter, 69-70.

e. NASH, G. Graduate Student Advisor; Chairman, UNM Phi Beta Kappa Nominating Committee.
f. PORTER, J. University College advisor.
g. PUGACH, N. Member, Department of History Library Committee.
h. SKABELUND, D. Participant in colloquium, "How to Save the University."
i. STEEN, F. University College advisor.
j. SULLIVAN, D. Faculty advisor. Departmental representative to Arts & Sciences Committee.
k. TULGA, L. Secretary, Curricula Committee.
l. WABAR, W. Speaker, Phi Alpha Theta, Oct. 16, 1969. Service on National and International Affairs Committee, faculty consultant for its program of foreign documentary films. In charge of arrangements for visits to campus of three speakers, Prof. Robert F. Byrnes (Phi Beta Kappa Visiting Scholar), Oct. 30, 1969; Prof. Leonard W. Levy (School of Law speaker), March 12, 1970; and Prof. William R. Taylor (History Education Project and Phi Alpha Theta), April 15, 1970. Chairman, Phi Beta Kappa Visiting Scholar Selection Committee; elected Vice-President of Phi Beta Kappa for 1970-71. Speaker, Seminar Students Activity Group Forum on "How to Save the University," March 5, 1970.

9. Public Service

a. DABNEY, W. Various church talks and activities. Member, advisory board, Canterbury Assoc. Member Eagle Scout Committee.
b. IKLÉ, F. Member, Governor's Committee on American Revolution Bicentennial.
c. ROTHENBERG, G. Talks to Optimists, Philosophers Anonymous.
d. SKABELUND, D. Talk before Philosophers Anonymous.
e. TULGA, L. Spoke to AM Worship service of Hoffmantown Baptist Church, Faith Baptist Church, and Albuquerque Christian Women's Club.

10. Personal Information

a. KERN, R. New son, Joshua Karl Dylan Kern.


c. PUGACH, N. Son, Michael L. Pugach.

d. ROTHENBERG, G. Married.

e. SULLIVAN, D. Son born June 1969.

f. SZASZ, F. Married Margaret Garretson.
Contributors to the NEW MEXICO HISTORICAL REVIEW during 1969-1970 included five professional historians, one non-academic historian, three graduate students in history, one specialist in American literature, and two librarians. Most of the material concerned the Territorial period, including a valuable checklist of documents relating to New Mexico and Arizona in the "Serial Set," 1846-1861, which has been reprinted and published by Dawson's Book Shop, Overland Book Shop, and J. E. Reynolds. An article on German involvement in Pancho Villa's raid on Columbus, N. M. aroused interest south of the border; another concerned border and Indian problems in Sonora in the mid-nineteenth century. Book reviews and notes and Historical Society of New Mexico items were also published.


In January 1970 Miss Katherine McMahon started work on a fifteen-year index of NMHR to cover volumes 31-45 (1956-1970).
Dr. Gerald Nash resigned from the Board of Editors in March 1970. President Heady appointed Professors Edwin Lieuwen and William N. Dabney to the Board, effective July 1, 1970, replacing Professors Donald C. Cutter and Richard N. Ellis. Dr. John L. Kessell was appointed Assistant Editor effective July 1, 1970.

The Editor was a delegate to the Primer Congreso de Historia del Estado de Chihuahua, held under the auspices of the Sociedad Chihuahuense de Estudios Históricos, September 19-21, 1969. She presented a paper, "Historia de Chihuahua en la New Mexico Historical Review," to be published in the Memoria of the Congreso. She also attended the Third Meeting of United States and Mexican Historians at Oaxtepec, Mexico, November 4-7, 1969. While in Mexico she spent a couple of weeks working and photographing in the National Archive, Mexico City, and archives in Guadalajara. At the evening banquet of the Southwestern History Day conference, sponsored by the Historical Society of New Mexico, May 23, 1970, she delivered the citation for the presentation of the Society's Honor Award to Dr. France Vinton Scholes.
The Report of the Department of Journalism
July 1, 1969 - June 30, 1970
Anthony G. Hillerman, Chairman

1. General Departmental information.

A. Negotiations with the School of Business and Administrative Sciences led to establishment of an Advertising-Management Sequence. By coordinating this program with the SBAS curriculum, a student may attain a BA in journalism in eight semesters and a MBA degree in two additional semesters. It makes use of two new courses added by the department during the year (Advertising and Media Management) and of courses in the College of Fine Arts, Department of Speech and the SBAS.

Student interest continued to increase in the Television-Radio sequence but successful development of this increasingly crucial field of mass communications will depend upon securing equipment for the old KNME-TV studios. The program is operated in close coordination with the speech department and the equipment would be jointly used and operated.

B. Enrollment in departmental courses continued its rapid growth. Student load data of March 17, 1970, showed a 15.11 per cent gain in student enrollment from the same date the previous year. Student credit hours taught were up 18.03 per cent for the same period. To put this growth in better perspective, enrollment in journalism classes has jumped more than four-fold in the decade and credit hours taught have jumped more than 37 per cent in the past three years--a period in which the size of the faculty had remained static.

C. The department feels increasing demand for a masters program in journalism. Our plan is to initiate such a program as soon as possible. A detailed
plan involving substantial use of courses now offered in other departments and colleges is now being drafted.

We also plan to continue development and enrichment of current undergraduate programs through cooperation and coordination with Fine Arts, the Department of Speech, and other departments.

The department is embarrassed by its inability to cooperate more fully than it has with the College of Education program in Communication Arts and with the Department of Health, Recreation and Physical Education. Hopefully we will be able to add a modified section of Journalism 251 as asked by H,R&PE in 1971-72 and provide more service for Education majors.

This department feels very strongly that all educated men and women in the 1970s have a critical need for a understanding of the effects of the mass media upon their society and themselves, a knowledge of why American mass communications behaves as it does, and of the laws, traditions, economic forces and ethical philosophies which govern its conduct. While we have modified the courses we teach in this area to eliminate all prerequisites and to make it relevant to non-majors, our faculty load is such that we can offer it only on alternate semesters.

D. Mr. Millard Hunsley, who has taught news-writing sections for the department for several years, was appointed Visiting Professor to teach full-time for the 1970-71 academic year.

Mr. Robert Lawrence, a veteran and highly-regarded photo-journalist now employed by the University News Bureau, was appointed instructor to teach news photography for the 1969-70 year and has been re-appointed for 1970-71

E. Mrs. Emma MacLeod resigned as assistant professor at the end of the 1969-70 year. Her resignation was prompted by personal reasons and was
accepted with an understanding that—if practical—he will return to the faculty in 1971-72.

II.

1. Assistant Professor James P. Crow completed classwork and examinations for his Ph.D at the University of Iowa and his dissertation proposal was accepted. The dissertation is now in progress.

2. Professor Crow spent the summer studying at the University of Iowa. Professor MacLeod toured Europe. Professor Hillerman attended the annual meetings of the American Newspaper Publishers Assn. and the American Association of Schools and Departments of Journalism in New York, and the Association for Education in Journalism convention in Berkeley, California.

3. None.

4. Professor Hillerman authored the following publications: THE BLESSING WAY, Harper & Row, 201 pages. (The same novel is being prepared for British Empire publication by Macmillan, Ltd, London; and for Japanese language publication by Kado Kawa Shoten, Tokyo; and for soft-cover publication in U.S. and Canada by Dell Publications, Inc.)


5. Hillerman has second novel in editing stage. Crow's dissertation in progress.

6. Jermain and Hillerman have been active in the professional chapter of Sigma Delta Chi, Hillerman elected vice-president. Hillerman also served on the Board of Directors of the Albuquerque Press Club, as a writer for the annual Gridiron show, as a member of the New Mexico Press Assn. rules committee and

7. Crow served as a consultant for the Donrey Media Group, conducting the media chain's editorial conference. Jermain spoke at Matrix Table, at the fall clinic of Theta Sigma Phi and at the N.M.PPress Association seminar on crime and court reporting. Hillerman organized the seminar, and was speaker at the First Annual Albuquerque Book Fair, the Santa Fe Books & Authors Luncheon, and at Madison Junior High English classes. He helped organize and conduct the week-long New Mexico Interscholastic Press Association workshop attended by 160 high school students at the UNM campus in August.

8. Jermain served as advisor to student chapters of SDX and Theta Sigma Phi, handled production of the department's newsletter for alumni, and alumni relations in general., and worked as departmental and University College advisor. Crow served as chairman of Radio Board, member of A&S Advisory Committee, and University College Advisor. Hillerman was chairman of the Board of Student Publications, member of the Sherman Smith ad hoc committee concerned with University political problems and departmental and University College advisor.

9. Crow was faculty advisor of Kappa Sigma fraternity and committee member for Boy Scout troop 444.
During the academic year 1969-70 the Department provided instruction to 7,257 students totaling 24,640 credit hours. This is an increase of 312 students and 1,229 credit hours compared to the academic year 1968-69.

I. GENERAL DEPARTMENTAL INFORMATION.

A. SIGNIFICANT ACHIEVEMENTS.

Perhaps the most significant achievement of the year was the addition of several outstanding faculty members to the Department. Most of the additions were provided through the National Science Foundation Departmental Development Grant. The new people along with some of the present faculty guarantee the Department outstanding research and teaching capabilities in Differential Equations, (both Ordinary and Partial), Numerical Mathematics, Computing Science, Applied Statistics as well as other areas of Applied Mathematics to complement existing programs in Pure Mathematics. The Pure Mathematics effort gained in breadth through the addition of a Differential Geometer (Alexander Stone). Our research effort will be further enhanced by the appointment of four Post Doctoral Fellows for next year.

Another significant event in which this Department took part was the establishment of a formal effort in Computing Science at the University of New Mexico. The Department of Mathematics and Statistics is charged with the responsibility of developing
a faculty and an instructional program for what will eventually become the Division of Computing and Information Sciences. Two excellent faculty members were acquired for the Division this year (E. Gilbert and J. Ulrich). They are already hard at work formulating courses of instruction for the Fall semester in collaboration with D. Morrison and S. Bell, who are part time appointments in Mathematics and Computing Science.

The Departmental Development Grant was renegotiated and will now run until October 1972. This will make it possible for the new people hired for next Fall to take full advantage of the computing, travel and publication privileges of the grant. The funds allocated for the library are already being used to good advantage by the Departmental Librarian, Roger Entringer. It is estimated that our Department now has one of the finest journal collections in the Western United States.

As a concomitant of the buildup in the Statistics faculty an excellent program at both the undergraduate and graduate levels has been developed and is listed in the 1970-71 catalog. This curriculum was designed both for majors in Statistics and for use by other departments and is oriented more toward applications and computation than was the former program. The College of Business and Administrative Sciences will use this course sequence for a major in their M.B.A. program.

The computer assisted calculus program was extended to all calculus students this year and a three year program of evaluation was begun. Approximately 1000 students per week make use of the Computer Lab. 'Scopes' and receive instruction from well qualified
undergraduates recruited principally from the Department's honors program. The high standards and efficiency of the Computer Lab. operation are due principally to its director, Richard Allen.

The Honors Program faculty was expanded this year by the addition of Richard Grassl on a half-time basis. Also, a senior graduate problems course was taught by E. Hille and will become a continuing part of the program. The Annual High School Mathematics Contest, which is directed jointly by faculty in the Honors Program and the New Mexico Council of Mathematics Teachers, was expanded to two centers (at Albuquerque and Artesia) this year and an executive committee of mathematicians from local industry and schools undertook the planning and financing of this venture for the future. It is anticipated that the contest will be given in several centers throughout the state in the near future making it possible for all interested students in New Mexico to participate at a center near them. Results of this search for mathematical talent are already being felt. The University of New Mexico has been able to recruit a number of the state's talented young people discovered by the contest into the Mathematics Department Honors Program.

The Mathematics Education Program, under the direction of Merle Mitchell, has been expanded by one position, presently being filled by Visiting Professor Richard Hildner, and some new courses have been added. The sequential summer institute
for high school teachers has again been funded by the National Science Foundation for this coming summer and an in-service institute has been funded for next Fall. Further expansions of this program are planned in the near future to train teachers for two year and four year colleges. The use of trainees from these programs to teach, under supervision, some of the lower division courses in the Department will greatly alleviate our existing problem with large classes at this level.

Marron Hall will be turned over to the exclusive use of the Department of Mathematics and Statistics as of Summer, 1970. This will provide adequate space for the new and existing faculty on the same basis as is currently in practice, namely private offices for full and associate professors and double offices for assistant professors and instructors. Since we expect the kind of work from assistant professors that is best accomplished in an atmosphere of solitude and concentration this is not the optimal arrangement. Consequently, beginning in the Fall a building committee will initiate plans for a new mathematics building in which all faculty members will have private offices. This building, which will most likely replace the older portion of Marron Hall, will also be planned to contain expanded library and conference room space along with improved office and colloquium facilities.

B. STUDENTS, ACHIEVEMENTS, etc.

The Departmental Honors program, under the direction of Abraham Hillman, continued to bring national recognition to the
Department. Our Putnam team finished 33rd out of 225 teams in the United States and Canada. The University of New Mexico was one of only thirteen universities having at least seven students in the top 513 contestants. The other twelve universities were M.I.T., Harvard, Cal. Tech., Toronto, Michigan, Chicago, Michigan State, Yale, Case-Western, Princeton, Brown and Waterloo. Our group of graduating seniors was especially distinguished this year. Of eight National NSF Scholarships awarded to the state of New Mexico (six of which went to UNM graduates) two were awarded to seniors in the Department of Mathematics - Thomas Darden and Cary Huffman.

Enrollment figures for Graduate Students.

<table>
<thead>
<tr>
<th>Year</th>
<th>Full Time Students</th>
<th>Part Time Students</th>
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<tbody>
<tr>
<td>1969-70</td>
<td>57</td>
<td>46</td>
</tr>
<tr>
<td>1968-69</td>
<td>55</td>
<td>37</td>
</tr>
<tr>
<td>1967-68</td>
<td>59</td>
<td>27</td>
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</tbody>
</table>

1969-70 110 Undergraduate mathematics majors.

<table>
<thead>
<tr>
<th>Degree</th>
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<th>1968-69</th>
<th>1967-68</th>
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<td>Ph.D.</td>
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<tr>
<td>Masters</td>
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</tr>
<tr>
<td>B.S.</td>
<td>22</td>
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</tr>
</tbody>
</table>

C. RECOMMENDATIONS.

The salary structure of the Department remains barely adequate for newly hired faculty and definitely inadequate for most existing faculty members based on average salary figures for other universities with whom we compete for people. A real effort must be made, in particular, to upgrade the salaries of the more senior Assistant Professors and virtually all current Associate Professors to national norms. Although
staff salaries enjoyed a generous increase this year it will be several years before they are adequate even at the current rate. Special efforts are needed to bring them in line with, at least, local norms.

For the first time this year salary increases were used to reward good teaching and University service along with research. Further balancing of the reward structure should continue to be University policy to encourage more faculty members to participate in planning and experimenting with new educational programs.

A statistical Institute which would provide the technical competence to design and carry out important sampling experiments within the city of Albuquerque and throughout the state can and should be formed from faculty in the Department of Mathematics and Statistics and other departments having statisticians on the faculty. This institute could also handle the increasing volume of statistical consulting which is being referred to this Department from both inside and outside of the University. It is recommended that this institute be initiated as a new division of ISRAD.

Finally, now that the beginnings of a first rate effort in Computing Science have been made, this effort must not be allowed to 'die on the vine.' Administrative support in the form of new positions when needed and funds for academic and service programs as they are created is essential. The Computing Science program could be one of the most important contributions the University makes to the technical and economic development of Albuquerque and New Mexico.
D. APPOINTMENTS TO STAFF

In the Fall of 1969 seven appointments were made; They were Associate Professors E. Marchi and W. Zimmer (visiting); Assistant Professors A. Carasso, G. Efroymonson, I Hsu (1 year only) and C. Onneweer; Instructor R. Grassl. Assistant Professor H. T. Davis was appointed in Spring 1970 on visiting basis.

Effective September 1970 we made thirteen appointments as follows: Professor W. T. Kyner; Visiting Professor R. C. Hildner, Associate Professors R. Cogburn (visiting), J. Donaldson, E. Gilbert, P. K. Pathak, A. Stone, J. Ulrich, W. Zimmer; Assistant Professors H. T. Davis, J. Ellison, B. Jones, S. Pruess. At the time of this writing we have an assistant professorship offer out to D. Watanabe.

E. SEPARATIONS FROM STAFF

The following people have resigned effective June 30, 1970: Professor S. Zacks, to Case Western Reserve Institute; Assistant Professor James Derr, to West Virginia University; Assistant Professor Julian Gevirtz to University of Puerto Rico; Assistant Professor J. Loustaunau to New Mexico State University; Associate Professor E. Marchi to University of Toronto. Professor D. Basu resigned effective February 1, 1970 to return to Indian Statistical Institute, Calcutta, India.
II. INFORMATION FROM BIOGRAPHICAL SUPPLEMENTS.

1. ADVANCED STUDY.

None.

2. SABBATICALS, LEAVES OF ABSENCE, Etc.

Professor J. R. Blum was on sabbatical in Haifa, Israel.

Professor Ralph DeMarr has a leave of absence and spent the first semester in Russia, the second semester in the University of South Carolina. He has been granted a Fellowship to return to Russia for the first semester of 1970-71.

James Derr - Taught at Michigan State University during the summer, 1969.


Reuben Hersh - Visited Haifa, Jerusalem, Geneva and New York, June 1969.

G. Milton Wing - Leave of absence Fall 1969.

3. NEW SCHOLASTIC HONORS FELLOWSHIPS, etc.


L. H. Koopmans - Elected to Kappa Mu Epsilon.

4. PUBLICATIONS.

Alfred S. Carasso: 'Long-range solution of parabolic equations', (accepted for publication in Numer. Math.); 'A posteriori bounds in parabolic problems', (accepted for publication in Math. Comp.)


Donald W. Dubois: 'Infinite Primes in ordered fields,' a monograph published by Polish Academy of Sciences - Diss. Math. 1969, 40 pp (No. LXIX)

'A Nullstellensatz for Ordered fields - Arkiv for Mat. 8 (1969)


'Block Implicit One-Step Methods,' Mathematics of Computation
'Boundary Value Problems for Ordinary Differential Equations - II
Patch Bases and Monotone Methods' SIAM Jnl. on Numerical Anal.
'Existence and Uniqueness of Solutions of a Class of Nonlinear
Elliptic Boundary Value Problems,' with M. Wing, accepted for
publication in Jnl. of Math. and Mechanics.
'Difference Methods for Nonlinear First Order Hyperbolic Systems
of Equations', with R. J. Thompson to appear in Math. of
Computation.
'Efficiency of a procedure for near-minimax approximation',
to appear Jnl. A.C.M.

of Transport in Periodic Media' Jnl. of Math. Anal. and
'Invariant Imbedding and the Calculation of Eigenvalues for
Sturm-Liouville Systems', publ. in Computing 4, 10-23(1969)
'Solution of a Certain Class of Nonlinear Two-point Boundary

S. Zacks: 'Analytic Characterization of the optimal control
of a queuing system, (with M. Yadin), Tech. Report No. 176
'Optimal design of sampling from finite populations: A Critical
review and indication of new research areas,' (with H. Solomon)
Accepted for publication in Jour. Amer. Statistician Assoc.
(June 1970)
'Mean square errors of the best unbiased and the maximum
likelihood estimators of tail probabilities in normal distri-

William J. Zimmer: 'Partial Prior Information and Shorter
Confidence Intervals' (w/J. Deely). Annals of Assurance
Sciences 1969, pp 488-496, July.
'Continuous Acceptance Sampling Procedure for Attributes
Based on Cumulative Sums' (w/R. Prairie), Sandia Corporation

5. OTHER RESEARCH PROJECTS IN PROGRESS OR COMPLETED.

Richard C. Allen: 'A Numerical Study of Transport Phenomena
in Spherical Geometry by the Method of Invariant Imbedding;
DASA; 6-7-69 to 9-7-69, $18409.
Project Themis; UNM Bureau of Engineering Research; 6-7-69
to 9-7-69

Alfred S. Carasso: 'The Abstract Backward Beam Equation'
Two-point boundary value problems in Hilbert Space in
preparation. Research on NSF Grant GP 13024 - Numerical
Solution of Parabolic Equations - $5000.
Herbert T. Davis: Adaptive prediction - NSF Grant.


D. W. Dubois: Research, partially sponsored by NSF continues in ordered fields and real varieties, now in collaboration with Prof. G. Efroymson.

G. Efroymson: 'The cohomology Ring of a Finite Group Scheme' a paper accepted by Proceedings of AMS. Two papers on Real Varieties have been completed in joint work with Dr. Dubois of this department.


Bernard Epstein: Principal investigator, NSF Grant GP-12365, June 1, 1969 to June 1, 1970 ($41,200)'Research in Analysis'


Einar Hille: Manuscript on 'Methods of Classical and Functional Analysis'. Studies 'On a class of non-linear second order differential equations.'

A. P. Hillman: Preparation of manuscript for the 3rd Edition of 'Functional Trigonometry', a text with G. L. Alexanderson as co-author. Text is published by Allyn and Bacon, Inc.

Simon T. Kao: Continue the research on my own since the fund from NSF was discontinued in 1968.

L. H. Koopmans: 1. Fixed length Confidence Intervals for Parameters of the Normal Distribution based on Two-state Sampling Procedures (w/C. Qualls. Accepted for publication in Rocky Mountain Math. Journal.
3. Research on prediction theory with C. Qualls and H. Davis in progress.
NSF contract for summer 1970 has been funded.
James V. Lewis: Research in gravitational potential methods of urban planning.


Richard C. Metzler: Extension of positive linear functions.


Lawrence F. Shampine: Research activities on NSF Group Analysis grant and DASA grant with Allen and Wing.


6. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES.

a) Meetings attended:

The following people attended the American Mathematical Society Meeting in San Antonio, Texas, Jan. 1970.

b) Professional papers read:


A. P. Hillman - presented paper at AMS, August 1969 Eugene, Oregon.


W. Zimmer - Read a paper and served on a panel at Annual Meeting of AIAA/SEA/ASME, Denver, Colo.

c) Offices held:

B. Epstein - Vice President, UNM Chapter Phi Beta Kappa

S. Kao - Vice chairman of MAS, Southwestern section.

L. H. Koopmans - Member of Visiting Lecturer Committee of Committee of Presidents of Stat. Societies.

7. OTHER PROFESSIONAL ACTIVITIES.

R. C. Entringer: Reviewer for Zentralblatt fur Mathematik; Invited speaker for NCTM, Albuquerque regional meeting.

B. Epstein: Associate Editor, Rocky Mountain Journal of Mathematics.


E. Hille: Gave three John Barrett Memorial Lectures at the Univ. of Tennessee. Gave one lecture at Purdue Univ., and two lectures at Univ. of Texas.


Simon T. Kao: Talk to Manzano high school honor students about non-Euclidean geometry.

L. H. Koopmans: Gave graduation address to graduates from UNM summer institute for high school math. teachers. Appeared on the KUNM TV series program The Educational Process to describe mathematics computer lab.

M. Mitchell: Coordinated Curriculum Committee of State Dept. of Education; Panel discussion on KNME March 19, 1970 on modern mathematics in the APS.
Lawrence Shampine: Referring for several journals. Permanent reviewer for Zentralblatt for Mathematik, reviewer for Computing Reviews.


W. Zimmer: Spoke on research at Mathematics Colloquium at New Mexico State Univ.

8. NON-TEACHING UNIVERSITY SERVICE.

A. Carasso: Chairman, Committee on Master's exam in Applied Mathematics.

J. Davis: Student Affairs Committee, Departmental Graduate Committee.

J. Derr: Chairman, Master's Examination Committee, Cultural Committee.

D. Dubois: Member, Academic Freedom and Tenure Committee.

G. Efroymson: Graduate Committee of Math. Dept., Undergraduate Advisor.

R. Entringer: Dissertation committee chairman and University College Advisor.

B. Epstein: Graduate advisor; Director of Graduate Students in Mathematics, Retirement and Insurance Committee, Chairman of Science Division of Promotions Committee.

J. Gevirtz: Student Radio Board.

A. Gibson: Member Masters Committee (Math.), Member of committee to select U.S.P. courses in Science, and Univ. College Advisor.

T. Guinn: Faculty advisor for Student ACLU, Folklore Society.

L. Hahn: Master's Committee.


A. Hillman: Director of Mathematics Honors Program.

S. Kao: Assistant Chairman, member of Graduate Committee (Math.) Sub-committee of review graduate program, undergraduate committee of Math. Dept., sub-committee on Math majors, committee to appoint scholarships and assistantships in Math. Dept., supervision of lower division courses for social sciences.

L. H. Koopmans: Chairman, Dept. of Math., dissertation advisor for four Ph.D. candidates.

J. Loustaunau: University College advisor - Graduate Committee.

R. Metzler: Chairman, Undergraduate Committee; Chairman, Committee on Advanced Calculus.

M. Mitchell: University United Fund; Undergraduate Committee of Math. Dept.; Continuing Ed. Committee; NSF Institute Director; Sponsor Kappa Mu Epsilon.

C. Qualls: Member: Univ. Registration Comm., Math. Dept. Undergrad. Comm; Univ. College advisor; faculty advisor to Chi Alpha and Inter Varsity (student groups).


A. Steger: Curricula: Committee, chairman committee to select assistantship and scholarship nominees.

G. M. Wing: Member, examining committee for Master's degree in Applied Math.

S. Zacks: Member of Research Policy Committee; Grad. Committee, Math. Dept.; Executive Committee, Math. Dept; appointed to Ad-hoc committee on tenure problem by Dean Wollman.


9. PUBLIC SERVICE

R. Hersh: Albuquerque Friends Meeting

A. Hillman: Research advisor for independent studies of Albq. Academy senior, Michael Yoder.

S. Kao: School board member of Archdioceses of Santa Fe, school board of Holy Rosary School and counsel member of Holy Rosary Church.


C. Qualls: Member of board for First Assembly of God.

S. Zacks: Board member of B'hai B'rith organization.

W. Zimmer: Member of and Advisor to Catholic Peace Fellowship (mainly a student group), Chairman of the Alianza Film Seminar (mainly a faculty group).
10. PERSONAL INFORMATION.

I. General departmental information.

A. Significant achievements.

1. The first task confronting the new Chairman was the complete overhaul of the departmental committee structure, since the former advisory body, the Administrative Committee, had disbanded the previous spring. After a series of meetings through the fall, a new administrative organization of the department was approved on November 21. Under this new plan two committees were substituted for the old Administrative Committee, as follows:

a. Committee on Promotion and Tenure, composed of all tenured members of the rank of professor and associate professor, and with at least one year's service at UNM. Main responsibilities of this committee are to advise the Chairman on promotions, tenures, leaves and like confidential matters.

b. Advisory Committee, composed of seven members, three elected by the Department, three appointed by the Chairman and one Teaching Fellow elected by his peers. All ranks and programs in the Department are to be represented on the Committee, insofar as possible. Instituted in order to democratize the administration of the Department, this committee advises the Chairman on all matters not specified as responsibilities of the Committee on Promotion and Tenure, and especially on new staff and new programs.
2. New programs.

a. The Ph. D. in Romance Languages was instituted in effect in September with the first doctoral students in French. The Chairman met several times during the fall with the members of the French staff in order to work out the final details of the French program. Planned under the imaginative and precise direction of Professor Kolbert, this program appears to be well designed to train sound scholars and good teachers. Professor Claude Book has worked especially hard to improve the library's holdings in French and with good results, considering the meagre funds available.

b. A beginning was made in the study of Indian languages at UNM, with the introduction into the undergraduate curriculum of a course in elementary Navajo beginning in the fall semester and continuing into the spring, under the joint auspices of this department and the Program in Linguistics. The addition to the staff of Professor Garland Bills makes it feasible to continue and possibly to extend departmental cooperation in that direction. The Assistant Chairman was instrumental in securing for 1970-71 a UNM fellowship for the disadvantaged for Robert Norris, an intelligent young Navajo working at UNM toward a doctorate in Education. Mr. Norris will serve as a native informant in the Navajo course when it is offered both on the undergraduate and graduate levels next fall.
c. A new Spanish book prize was established through the interest of the family of Juan Ramón Jiménez (Nobel Prize for Literature, 1956). First awards were made in May, 1970 to two outstanding senior Spanish majors.

d. Extensive discussions of possible changes in the language requirement of the College of Arts and Sciences were held in a series of special departmental meetings in the winter. It is planned to resume departmental discussion of this topic in the fall of '71, with the hope of presenting a valid and interesting proposal to the College. Meanwhile the Chairman is continuing his investigation of the modifications in the requirement that have been adopted at other institutions.

3. Cultural activities.

a. For the special benefit of the graduate students in Spanish and with the support of NDEA Title IV funds, the lecture series "Aspectos de la cultura hispánica", was continued, with the following lectures:

(1) Professor Arthur L. Camps of the University of Denver: "Folklore de Nuevo México", November 12, 1969.

(2) Professor Enrique Moreno Baez, Professor of Spanish Literature at the University of Santiago de Compostela: "Arquitectura del Quijote", December 10, 1969.


(4) Professor Sabine R. Ulibarri of The University of New Mexico: "El amor y el profesor o los hijos de la flor", March 11, 1970.

-3-
b. Two French lectures, as follows:


(2) Professor Ronald Tobin of the University of California at Santa Barbara: "La seconde réalité du 17e siècle", public lecture for the entire university, April 27, 1970. Professor Tobin also spoke on "Alienation in Racine's Dramas" before the department on the following day.

c. In addition to the above, the following spoke more informally:


(2) D. Fernando Sartorius, Vizconde de Priego, Cultural Counsellor at the Spanish Embassy in Washington: "The Role of Spain in Helping the American Colonies at the Time of the Revolution".

(3) Michel Butor, distinguished French novelist: a series of three open lecture-and-discussion sessions, "Conversations with Michel Butor", held during April and May.

-4-
(4) Professor Robert Smith, Director of the Queens College Program in Granada: "Roberto Payró and Pago Chico" and "The Landscape of Andalusia", with slides, January 6, 1970.


d. The Department also sponsored the following programs:

(1) A French cultural week in early November which brought to campus, besides the distinguished violinist Robert Söetens (see 3, b, (1) above), M. Jean Langlais the organist of the Church of Ste. Clotilde, Paris, for a concert on November 14.

(2) Ruy Affonso Machado, in a reading of selections from Portuguese and Brazilian poetry, December 2, 1969.


4. New Joaquín Ortega Hall.

Associate Professor Robert Holzapfel, the Assistant Chairman, continued to work with the planning committee on plans for the new language building, for which the contract was let on May 20, 1970.
B. Number of majors over the past two years:

1. Undergraduate level

<table>
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<th>Language</th>
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2. Graduate level

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<tbody>
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<tr>
<td>French</td>
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<td>25</td>
</tr>
<tr>
<td>Portuguese</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

3. Postgraduate activities.

a. Significant reflection from the Spanish doctoral program has been provided by the recent publication of two dissertations, as follows:


(2) Gary Lewis Haws, *El Prometeo Urugayo: Carlos Sabat Ercazy*. Montevideo: Instituto Nacional del Libro, 1968. Doctoral advisor, Professor Marshall Nason. This volume has the additional distinction of being the first work by a non-Uruguayan to be published in this prestigious series, which appears under the sponsorship of the Uruguayan Ministerio de Cultura.
b. Without extensive investigation, the following UNM Ph. D.'s in Spanish can be mentioned as holding posts of importance in the academic world:

Julian Palley, Chairman of the Spanish Department, University of California at Irvine.

Mary Elizabeth Brooks, Associate Professor of Spanish and Portuguese, University of Wisconsin (Miss Brook's doctoral thesis was published several years ago by the Wisconsin Press under the title of A King for Portugal. Doctoral advisor, Professor Raymond R. MacCurdy).

Cleon Capsas, Chairman of Modern Languages at the University of South Florida.

C. Significant plans for the future.

1. Ph. D. in Romance Languages, with a major in Portuguese.

The Chairman has been involved in discussion with Professors Tomlins and Herron all year long on various phases of the new doctoral program in Portuguese, to be formally instituted in the fall of 1970. A carefully planned sequence of courses has been set up. With a nucleus of good students already on hand and several good prospects for next fall, this program is expected to make a modest but highly respectable beginning. The Chairman sponsored a request to the Gulbenkian Foundation in April for funds for the retrospective purchase of Portuguese books and journals for the Zimmerman Library, though in the main the library collections, both in the Brazilian and the Lusitanian fields, are excellent.
D. Appointments to staff.

1. José María Martínez Cachero, Professor of Spanish Literature at the University of Oviedo, as Visiting Lecturer, Semester II, 1969-70, and as Visiting Professor, Summer School, 1970.

2. Gary Brower, as Associate Professor (Spanish American Literature), effective September, 1970.

3. Guillermo Ara, Professor of Spanish American Literature, University of Buenos Aires, as Visiting Professor, Semester I, 1970-71.

4. Stanislas Guillaume, as Visiting Lecturer (French), for 1970-71.

5. George Peters, as Assistant Professor (German), effective September 1970.

E. Separations from staff.

1. Professor Ned Davison (Spanish), effective July 1, 1970.

2. Assistant Professor David Thompson (Classics), effective July 1, 1970.

3. Instructor Irene Nelson (Russian), effective July 1, 1970.

II. Composite information on individual biographical supplements.

A. Advanced study.

1. John J. Bergen. Writing of Ph. D. dissertation Set Theory Applied to Spanish Entity Labels; submitted to and approved by doctoral committee at UCLA.

3. Rosemarie Welsh. German Summer School (2nd summer); Middlebury College; Middlebury, Vermont (towards M.A. degree).

B. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc.


3. Ned J. Davison. Taught course in Spanish American fiction and criticism for UNM summer program, 1969, in Guadalajara, Mexico in conjunction with the Universidad Autónoma Nacional de Guadalajara.


7. Jack Kolbert. Summer teaching at University of Kansas, Lawrence. Leave of absence to start July 1, 1970 for special chair he will hold at Pomona College.


C. New scholastic honors, fellowships, etc.

1. Jack Colbert. Appointed by French government "Honorary Consul for New Mexico". Professor of the month (May) - Las Campanas.


D. Publications.


Contemporary Literature in Translation (Fall, 1969). Edition and placement of m.s. translation of El concepto del Modernismo en la crítica hispanica, tr. Joel Hancock (to be pub. by Editorial Nova in Buenos Aires, fall 1970; finished proofs on Eduardo Barrios for Twayne Publishing Co., fall 1970; continued work on formulation of a rhetoric of sound configurations in Hispanic poetry; consultant on development of new university course on Hispanic culture.


9. William H. Roberts. "El Rey Sebastián en Antonio Nobre", -11-


E. Other research projects or creative work in progress or completed during period.


3. Truett Book. Now in hands of publisher (Scott-Foresman), Paris Flash, French reader.

4. Rubén Cobos. Prepared Highlights of Spanish Culture, Spanish 296 for Area Center, UNM.


F. Activities in learned and professional societies.

MLA, Denver, December 26-30, 1969--Professors Truett Book, Robert Holzapfel, Tamara Holzapfel, Raymond MacCurdy (member Program Committee), William Roberts (member Nominating and Research Committees, Portuguese).


Rubén Cobos--Attended New Mexico Folklore Conference.

Alice V. Gilbert--President of New Mexico Chapter of AATG.

Robert D. Herron--Chairman, Luso-Brazilian section of MMLA--meeting in St. Louis, attended October 18-19, 1969.

Robert Holzapfel--Attended ACTFL meeting at New Orleans. and DAVI at Detroit.

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Jack Kolbert--National Executive Council, American Association of Teachers of French. AATF National Convention, Detroit.

Appeared at Symposium at National Language Conference, Univ. of Kentucky. Read papers at Univ. of Maryland, Univ. of Denver, S.M.U., No. Texas State Univ., Univ. of Miami, Florida; Univ. of Southern California.

Raymond MacCurdy--Symposium on Spanish Drama, Univ. of North Carolina, April 29-May 2: "Lope de Vega and the Alleged Spanish Incapacity for Tragedy: a Critical Résumé."


William H. Roberts--S. Atlantic MLA, Atlanta, November, 1969; Secretary, Spanish II Section.

G. Other professional activities.

1. John J. Bergen--Panelist on The Educational Process, presented by KNME-TV, Channel 5, Albuquerque, on April 2, 1970.

2. Truett Book--Talk to Great Issues Group in Santa Fe, "The French Patrimony".


5. Jack Kolbert--Addressed university student bodies and faculties in public lectures. Also addressed B'nai Brith of Albuquerque


H. Non-teaching University service.

1. John J. Bergen--Chairman of Spanish elementary and intermediate courses; faculty advisor for MATS degree candidates.

2. Garland D. Bills--University College Advisor. Member of Linguistics and Language Program Coordinating Committee.

3. Claude-Marie Book--Faculty advisor for foreign students; Library Committee; co-sponsor Alliance Française; sponsor of French for Children Program.

4. Truett Book--Advisor undergraduate French; chairman, Coronado Credit Union; Committee on Awards and Scholarships; Advisor Phi Sigma Iota; President, Alliance Française.

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5. Rubén Cobos--Faculty advisor, University College.


8. Robert Holzapfel--Assistant Chairman for Department; Planning Committee.

9. Tamara Holzapfel--Faculty advisor to undergraduate Spanish majors and committee on studies for doctoral candidates.

10. Robert C. Jespersen--Assistant Dean, College of Arts and Sciences; Advisor to German program; Departmental Building Committee.

11. Jack Kolbert--Member (A and S representative) Policy Committee; member, Cultural Affairs Committee; member, Special President's Advisory Committee. President of UNM chapter, Phi Beta Kappa; Graduate advisor in French.

12. Raymond MacCurdy--Graduate student advisor; member of the Publications Committee; member, Academic Freedom and Tenure Committee (alternate).

13. León J. Márquez--Advisor to Approximately 50 University College students.

14. Patricia Murphy--Dean's Advisory Committee; Secretary-Treasurer, UNM chapter, Beta Kappa; coordinator 2nd-year French; Freshman advisor.
15. Marshall Nason--Director, Language and Area Center for Latin America; Director, Ibero-American Ph. D. Program; Director, Title VI fellowship program; Academic Freedom and Tenure Committee; Research Policy Committee; Planning Committee; Seminars on Higher Education in the Americas.

16. William Roberts--Department Chairman; Phi Beta Kappa Committee on Honorary and Alumni Members.

17. Jack E. Tomlins--Scholarship Committee; advisor to graduate and undergraduate students in Portuguese; Faculty advisor to Phi Lambda Beta, Portuguese honorary.

18. Sabine R. Ulibarri--Major and minor advisor, Scholarship and Student Aid Committee; coordinator, departmental lecture series, "Aspectos de la Cultura Hispánica."

19. Rosemarie Welsh--University College advisor.

20. Julian E. White--Graduate Committee, Departmental Committees; Committees on Studies for graduate students; chairman, Comparative Literature.

I. Public Service.

1. Truett Book--Collections Heart Fund, Muscular Distrophy; Committee man Democratic party.

2. Rubén Cobos--Translator Saturday evening mass, Queen of Heaven Parish.


4. Jack Kolbert--Executive Secretary, Columbia University Club of New Mexico; Director of Columbia University National Drive
for New Mexico; member, Board of Albuquerque Jewish Welfare Association; Board of Experiment in Jewish Learning.


7. Julian E. White—President and Show Manager, Enchanted Cat Club; Assistant Secretary-Recorder, Crown Cat Fanciers Federation.
The Report of the Department of Philosophy  
July 1, 1969 - June 30, 1970  
Paul F. Schmidt, Chairman

I. General Departmental Information

A. Significant Achievements.

This year marked the granting of the first doctoral degree in our new doctoral program that began in the Fall of 1967. We believe that this achievement shows the results of efforts by everyone, from initial planning, to the screening of candidates, to effective teaching, to careful supervision of his dissertation. Dr. Ramesh Patel's dissertation is a worthy first in our program. He has been appointed Assistant Professor of Philosophy at Lake Forest College, Evanston, Illinois; a good position.

In June, 1971 we expect to have three or four more Ph. D. degrees. These candidates have passed the majority of their comprehensives and are working on their dissertations. One already has a position as Assistant Professor of Philosophy at Highlands University, Las Vegas, New Mexico. Three others will continue as Teaching Assistants in our department.

As a part of our developing graduate program we granted about a dozen M.A. degrees in the year 1969-1970 indicating that we have a solid group moving along in our graduate program toward the doctorate.
Despite gloomy predictions about the flooded market of Ph.D's in many fields including Philosophy, we have not encountered serious placement problems. My personal judgment is that this problem has been inflated in the Press and that many universities are over-reacting.

No changes were made in any of our programs. The department is concerned with a possible erosion of standards in Philosophy programs in other graduate schools. We believe that comprehensives and a dissertation are essential and effective educational procedures.

During the year Philosophy Club met regularly with papers alternately by staff and graduate students. Responsibility for the Club program is one of the activities of the local chapter of Phi Sigma Tau, National Philosophy Honorary Society. New members joining Phi Sigma Tau number sixteen for this year.

Assistant Professor Brian O'Neil received his tenure officially on July, 1970.

Professor Paul Schmidt returned from a sabbatical year in 1968-69 resuming the chairmanship on July 1, 1969.

B. Number of Students.

In both semesters of 1969-70, enrollments in Philosophy courses increased 35 to 40 percent over the corresponding semester of the previous year. This increase in enrollments might seem to clash with a slight decrease in majors in the second semester but the explanation is that some majors switched to the Bachelor of University
Studies program where they could design their own program. I encouraged them to make such a switch when such individual design meets their own individual needs.

Statistics: majors twenty-three; minors twenty-four; English-Philosophy sixteen; Economic-Philosophy three; Graduate Students twenty-four; and American Studies concentrating in Philosophy three.

C. Significant Plans.

During the summer of 1970 I plan to draw up a five year plan in order to carefully prepare for the staff replacements that will come with the retirement of Professor Bahm in June, 1973 and Professor Alexander in June, 1975. This transition period is very important for the continued improvement of the Philosophy program.

D. New Appointments to the Staff.

Associate Professor Charlene McDermott will join the department in the Fall of 1970 coming from an Assistant Professorship at the University of Wisconsin at Milwaukee. Her special interests include Indian Philosophy, Medieval Philosophy, Comparative Logic and Philosophy of Language. This appointment is a partial adjustment to the loss last year, 1968-69, of Professors Hassett and Sanborn.

E. Separations from the Staff.

Assistant Professor Hanna Zacks resigned her part-
time position. She was on a one-third time appointment. She accompanies her husband to Case-Western Reserve University in Cleveland, Ohio. Her appointment had been increased to two-thirds for 1970-71 and we shall miss her important contribution. Her replacement by a full time addition is imperative.

II. Composit of Information on Individual Biographical Supplements

1. Advanced Study.

None

2. Sabbaticals, Leaves, Travel, etc.

None

3. New Scholastic Honors, Fellowships, etc.

Bahm: Who's Who in American; Royal Blue Book, London; Wisdom Hall of Fame; Directory of British and American Writers; Personalities of West and Midwest.

4. Publications.

(A) Books:


(B) Articles:


O'Neil: "Descartes' Simple Natures;" accepted by Journal of the History of Philosophy, (circa 30 pp.).


5. Other Research Projects, in Progress or Completed.

(A) Books:


Schmidt: Final revision of M.S., The Metaphysics of the Concrete.

Tuttle: Translation of Wilhelm Dilthey's Der Jugenggeschichte Hegels.
(B) Articles:


"The American Cultural Predicament Today," The Journal of Thought, accepted for publication.


Invited review article, "Cosmic Humanism versus Organicism," a review of Oliver Reiser's Cosmic Humanism, accepted for publication in The Philosophy Forum.


"Our Unfinished Revolutions," submitted to publishers.

"The Crisis in Western Religions," submitted to publishers.

"How can Buddhism Become a Universal Religion?" The Eastern Buddhist. Invited article, submitted to publishers.

Schmidt: Editorial work on Keitoku Dento Roku for the "Project for Asian Cultural Studies."

6. Activities in Learned and Professional Societies.

Alexander: Invitation talk at 6th Annual Symposium on Science, Philosophy, & Religion given

Invitation comment on paper by Prof. Feibleman at Southwest Phil. Soc. meeting, Nov., 1969.

Continued as Sec.-Treas. of New Mex. & West Texas Phil. Soc. (Annual meeting at UTEP, May, 1970.)

Bahm: Reappointed, for a three-year period, as Secretary for Asian Affairs of the American Philosophical Association (standing) Committee on International Cooperation (after A.P.A. reorganization), administering an Asia Foundation grant for sending subscriptions of American Philosophical Journals to Asian university libraries.


Society for Asian and Comparative Philosophy, Sheraton-Jefferson Hotel, St. Louis, May 7, 1970. Chairman of a Panel Discussion on "Confucianism and Moral Philosophy," with five papers presented.


Member of the new Society for Asian and Comparative Philosophy, and member of its A.P.A. Liason Committee (arranged for the joint session with the A.P.A. Western Division meeting), May, 1970.
Member of the new Society for Philosophy and Public Policy.

Member of the Southern Society for Philosophy of Religion.

Invited to become an Adjunct Professor of the Union for Experimenting Colleges and Universities on March 25, 1970, as an occasional consultant. Invitation accepted.


7. Other Professional Activities.

None

8. Non-Teaching University Service.

Alexander: Concluded service as chairman of the Faculty Policy Committee in Sept., 1969.

Chairman of the Curricula Committee 1969-70.

Member of Ad Hoc Com. on Student and Faculty Rights and Responsibilities, 1969-70.

Continued to serve as Faculty Advisor for Phi Sigma Tau, Philosophical Honorary Society.

Also continued as member of the National Executive Council of Phi Sigma Tau.

Evans: Member of Registration Committee.

O'Neil: University College advisor; Advisory committee to Arts and Sciences.

Dean Wollman; Departmental subcommittee.

Schmidt: Chairman, Department of Philosophy American Studies Committee
Tuttle: Library Committee, 1969-present. Sub-committee on buildings and expansion.

Dean's promotion Advisory Committee, 1969-


None
The Report of the Department of Physics and Astronomy
July 1, 1969 - June 30, 1970
Victor H. Regener, Chairman

I. General Departmental Information
   A. Significant Achievements During the Academic Year 1969-70
      1. Departmental Operation
         The following table shows student credit hours (averages for Semester I and Semester II) for this department over the last three years, the number of graduate students in the department, and the number of degrees granted. Campus faculty of this department contributed to the teaching at the Los Alamos Graduate Center, with three faculty members commuting in Semester I, and three in Semester II.

         Student Credit Hours, Physics and Astronomy
            (Average, Semester I-II)

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<tbody>
<tr>
<td>Hours</td>
<td>3,796</td>
<td>4,046</td>
<td>4,378</td>
<td>4,419</td>
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<tr>
<td>Increase</td>
<td>6.6%</td>
<td>8.2%</td>
<td>1%</td>
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</table>
## Number of Graduate Students Enrolled

(Semester I figures)

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</tr>
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<tbody>
<tr>
<td>B.S.</td>
<td>68</td>
<td>68</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>M.S.</td>
<td>10</td>
<td>6</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
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</table>

## Number of Degrees Granted

<table>
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<tr>
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<tbody>
<tr>
<td>B.S.</td>
<td>8</td>
<td>10</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>M.S.</td>
<td>10</td>
<td>6</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
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</table>

The heavy involvement of the department in research, and the growth of this involvement, is shown in the following table for 1966-67 through 1969-70. Starred figures for 1969-70 include extrapolations for the last few months, for which final data are not yet available.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Departmental budget, original figures</td>
<td>$233,000</td>
<td>$263,400</td>
<td>$280,000</td>
<td>$305,367</td>
</tr>
<tr>
<td>2. Departmental budget, actual expenditures</td>
<td>233,000</td>
<td>267,000</td>
<td>280,000</td>
<td>305,367*</td>
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<tr>
<td>3. Sponsored research expenditures</td>
<td>965,415</td>
<td>669,133</td>
<td>563,036</td>
<td>420,000*</td>
</tr>
<tr>
<td>4. Overhead to University from grants and contracts</td>
<td>93,071</td>
<td>113,603</td>
<td>99,108</td>
<td>79,250*</td>
</tr>
<tr>
<td>5. Money for grants and contracts received during the year from outside sources</td>
<td>190,168</td>
<td>536,855</td>
<td>365,300</td>
<td>456,245</td>
</tr>
<tr>
<td>6. Active grants and contracts at end of year</td>
<td>2,192,770</td>
<td>1,849,017</td>
<td>2,020,621</td>
<td>1,979,581</td>
</tr>
</tbody>
</table>
2. Reorganization of course offerings

Courses at all levels were scrutinized in the fall of 1969. Two new courses were added:

- Physics 272L-273L  General Astronomy Laboratory
  (King, Peterson)
- Physics 435  Introduction to Plasma Physics
  (Ahluwalia)

B. Significant Plans and Recommendations for the Near Future

The most urgent need for our physical plant remains a building for physics instruction. New instructional laboratories for the department were recommended by the Building Committee in April, 1968. Vice President Sherman Smith, in a memorandum dated December 6, 1968, described construction of this project beginning in the spring of 1970 as a real possibility.

C. Appointments to Staff for 1969-70

Philip Cooper, Lecturer

D. Separations from Staff at the end of 1969-70

John G. Breiland, Professor of Physics, to retire
David N. Glidden, Lecturer
Stuart Hayes, Lecturer
Alan H. Paxton, Lecturer

E. Sabbaticals during 1969-70

John G. Breiland, Semester II
Victor H. Regener, Semester II
II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study

Philip J. Cooper
M. S. in Physics, August, 1970, UNM.

Stuart F. Hayes
Progress on dissertation.

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc., during the period

Harjit S. Ahluwalia
Traveled to: 1. Budapest (Hungary) in August 1969 to participate in XI International Conference on Cosmic Rays. 2. Washington in April 1970 to participate in the meetings of the professional societies listed under item 6 below.

John G. Breiland
Sabbatical Leave Semester II.

Alan W. Peterson

Christopher P. Leavitt
Traveled to Cape Kennedy for launch of orbiting solar observatory (OSG-G).

Victor H. Regener
Sabbatical leave, Semester II; travel to east and west coasts, Europe, Australia.

Derek B. Swinson
Travel to Hungary, Ireland.

3. New scholastic honors, fellowships, etc.

Seymour S. Alpert
AWU Summer Fellow at Lawrence Radiation Laboratory, Livermore, California.

Stuart F. Hayes
Sigma Xi (promotion to Full Member).
4. 

**Publications**

**Harjit S. Ahluwalia**


**Seymour S. Alpert**

"Thermal Interaction of Laser Light with Energy Absorbing Liquid" (submitted to Electro-optic Device Conf.).

"A Simple Explanation of the Depth of Field Properties of an Ideal Lens" (submitted to Am. J. Phys.).


**Charles L. Beckel**

"Report on the All-University Dialogue on Teaching and Learning held on April 15, 1969 by the University of New Mexico," June, 1969 (co-editor).


**John G. Breiland**


"Vertical Distributions of Ozone over Albuquerque, New Mexico," 75pp., Department of Physics and Astronomy, the University of New Mexico, Albuquerque, September 15, 1969. Co-author: H. Thomas May.

"Short-Term Variations in the Vertical Distribution of Atmospheric Ozone at Albuquerque, New Mexico," Accepted for publication in the Journal of Applied Meteorology.

Howard C. Bryant


James D. Finley, III


John R. Green


Derek B. Swinson


Victor H. Regener

5. Other research projects or creative work in progress or completed during period

Harjit S. Ahluwalia
Sandia Corporation Contract #53-0519, Task I, $17,588, "Solar Energetic Particles," 1969-1970. (This contract is expected to be renewed for 70/71 for an amount of $21,928.)

Seymour S. Alpert
Laser scattering spectroscopy of biological macromolecules.

Charles L. Beckel

John G. Breiland
National Science Foundation Grant GA-426; $51,000; "The Vertical Distribution of Atmospheric Ozone in Various Weather Systems," 24-month project (plus 15-month extension).
University Allocations Research Committee, $165, Vertical Distribution of Atmospheric Ozone over Albuquerque, New Mexico, one year, 1969-70.

John R. Green
Continued research on organic plastic crystals under NSF Grant GP-5089, $43,400, September 15, 1965 to December 15, 1969.

Stuart F. Hayes
Writing project (for Physics 102).

John L. Howarth
NIH Grant; "Application of digital computing techniques in radiological problems, $19,858 for year ending March 1970.
NIH Grant; "The pathology of accelerated aging in germ free mice" (with R. E. Anderson and R. S. Stone), $75,312 for July 1966-June 1970.

David S. King
NSF, "Pulsating Variable Star" Research, $18,000/2 years, paper in progress.
Observations of Crab Nebula Pulsar at Capilla Peak Observatory, funding proposal submitted to NSF.

Alan W. Peterson

Christopher P. Leavitt
Preliminary study and calculations on experiment on Pi Meson production near threshold to be done at Los Alamos Meson Physics Facility.

Victor H. Regener
AF project on atmospheric ozone, $25,000 in 1970.
NSF project (with Derek B. Swinson) on cosmic rays, $30,000 in 1970.

Derek B. Swinson
NSF Grant GA-1513, Cosmic Ray Variations Underground, Co-principal Investigators D. B. Swinson and V. H. Regener, 7/1/68 - 6/30/71, $120,000.

6. Activities in learned and professional societies

Harjit S. Ahluwalia
Participated in Eleventh International Conference on Cosmic Rays held at Budapest in August, 1969.
Participated in Fiftyfirst Annual Meeting of the American Geophysical Union held at Washington in April, 1970.
Participated in Spring Meeting of the American Physical Society held at Washington in April, 1970.
Participated in Joint Symposium of the Divisions on Cosmic Physics (APS) and High Energy Astrophysics held at Washington in May, 1970.

Charles L. Beckel
American Physical Society Meeting March 1970, Dallas, Texas; Presented three Papers: (1) Spectroscopic Properties on the $3\sigma_g$ State of $H_2^+$; (2) Spectroscopic Properties of the $2\pi_u$ State of $H_2^+$; (3) Energy Calculations for Isomeric Structure of DNA Nucleotides.
Howard C. Bryant

John R. Green

John L. Howarth
Attended and participated in planning sessions of Los Alamos Meson Physics Facility Users Group.

Victor H. Regener
Papers Read: Two papers on cosmic radiation read in Budapest, August 27, 1969, international meeting. Four Talks, two on cosmic radiation, two on ozone, in Zurich, Switzerland; Melbourne, Australia; Turin, Italy; Hobart, Tasmania; on sabbatical leave.

Derek B. Swinson

7. Other professional activities

Harjit S. Ahluwalia

Seymour S. Alpert
State Science Fair Judge, Socorro, New Mexico.
Charles L. Beckel  
Consultant to Dikewood Corporation and Albuquerque Urban Observatory.

John L. Howarth  
Consultant: Veterans Administration Hospital, Lovelace Foundation.  
Participated in New Mexico Academy of Sciences Visiting Scientist Program (High School)

Alan W. Peterson  
Answering questions for Action Line and Mr. Fixit. Answering telescope inquiries.

Christopher P. Leavitt  
Member of nucleon physics working group at Los Alamos Meson Physics Facility.  
Served on technical advisory panel, Users Group Los Alamos Meson Physics Facility.

Victor H. Regener  
Three papers additional to (4) accepted for publication.

Derek B. Swinson  
Legal consulting on Automobile Accident Reconstruction.

8. Non-teaching University service

Harjit S. Ahluwalia  
Participated in the two meeting of the International Cosmic Ray Commission of IUPAP at Budapest in August-September, 1969.  
Participated in the business meetings of the AGU and the Divisions of Cosmic Physics (APS) and High Energy Astrophysics (AAS) at Washington in April-May, 1970.  
Attended the Seventy-Seventh Commencement of UNM.

Seymour S. Alpert  
Phi Beta Committee on Members in course.  
Student Radio Board.

Charles L. Beckel  
Discussion leader - General Honors Program November 21, 1969.  
Ad hoc Committee on Advisement.
John G. Breiland
Retirement and Insurance Committee.

James D. Finley, III
Advisor to undergraduate majors in department.
Dean's Advisory Council on Restructuring the
College of Arts and Sciences.

John R. Green
Member, Committee on Academic Freedom and Tenure.
Member, Committee on Rights and Responsibilities of
Students and Faculty.

John L. Howarth
Member: Committee on the Enhancement of the Edu-
cational Process (Chairman).
Member: Committee on University Governance (elec-
ted Faculty representative).
Member: General Honors Council.
Member: Radioisotope Committee (School of Medicine).
Member: Radioisotope Committee (Veterans Hospital).
Faculty Advisor.

David S. King
In charge of observatory public night.
Advisor in University College.

Christopher P. Leavitt
Los Alamos Advisor.
Computer Use Committee.
Research Policy Committee.
Acting Chairman, Semester II.

Victor H. Regener
Member, Research Policy Committee.
Chairman, subcommittee of above.

Derek B. Swinson
Faculty Advisor to UNM Ski Club.

9. Public Service

Charles L. Beckel
President, Kidney Foundation of New Mexico, Inc.

Howard C. Bryant
Precinct 382 Democrat Chairman.
New Mexico Society for Autistic Children.
Stuart F. Hayes
Occasional preaching in local church.
Committeeman (Troop 6 Boy Scouts).

David S. King
Several talks to elementary school children.

Christopher P. Leavitt
President, United World Federalists, Albuquerque chapter.

10. Personal information

Seymour S. Alpert
Third child, a daughter.

Stuart F. Hayes
Fifth child (David Andrew Hayes).
I. General Departmental Information

A. The period covered in this report was a time of transition and planning for the Department of Political Science. This being the inaugural year of the Department's Ph.D. program, the following program of graduate studies was formally embodied in the 1969-70 UNM Graduate Bulletin:

Political Science 510 .......... Pro-Seminar-American Government and Politics (3)
Political Science 511 .......... Research Seminar-American Government and Politics (3)
Political Science 520 .......... Pro-Seminar Comparative Government and Politics (3)
Political Science 521 .......... Research Seminar-Comparative Government and Politics (3)
Political Science 530 .......... Pro-Seminar-International Relations (3)
Political Science 531 .......... Research Seminar-International Relations (3)
Political Science 540 .......... Pro-Seminar-Political Theory (3)
Political Science 541 .......... Research Seminar-Political Theory (3)
Political Science 551-552 ...... Problems (1-3 per semester)
Political Science 553 .......... Methodology (3)
Political Science 554 .......... Research Techniques (3)
Political Science 599 .......... Master's Thesis (1-6 per semester)
Political Science 699 .......... Dissertation (3-9 per semester)
At the present time five post-MA students (Morris, Garcia, Gurbaxani, Vigil and Walker) are enrolled in a program of studies leading to the Ph.D. in Political Science.

During the past academic year, in recognition of greater student interest and involvement in University affairs, the Department of Political Science adopted the following provisions governing graduate student participation in Departmental meetings:

"That two graduate student representatives shall normally be admitted to Department Faculty Meetings and shall be entitled to cast one vote each except when the Chairman or a majority of the Department Faculty decides that matters under consideration are such that students should be excluded.

The Chairman and the Department Faculty shall be guided in deciding whether to exclude graduate student participation by the following: Graduate student representation shall apply in the following areas:

1. All curriculum changes and adjustments, both on the graduate and undergraduate levels.
2. Areas of departmental administration, including the interviewing and choosing of new faculty members and department chairman.
3. The area of graduate assistant duties.
4. General department matters, with the exception of the following:
   a. Matters of tenure.
   b. Promotion of faculty members within the department.
   c. The awarding of degrees to candidates in degree-granting graduate-level programs."

Semester I and II of the 1969-70 academic year, the Department of Political Science began an experiment in the teaching of its lower-division courses. Whereas in the past a number of medium sized (40-75 students) lower-division classes have been offered through the department, this past year Political Science 100 and 203 classes were consolidated
into larger (150-250 student) sections. These large classes were instructed by members of the senior departmental faculty two times a week. Once a week the larger group was divided into small discussion sections under the supervision of Departmental Graduate Assistants. The results of this experiment were sufficiently encouraging to warrant extension of this approach to the third and remaining lower-division Political Science course, Political Science 102, beginning Semester I of the coming academic year.

B. A general statement of Departmental plans will not be forthcoming until the new Department Chairman, Professor Gehlen, has arrived and assumed his responsibilities.
C. The greatest Departmental effort in Political Science this year was associated with 1970-71 staffing decisions. Seven regular appointments were made in the course of the past year.

Cruikshanks, Randal, Assistant Professor. Dr. Cruikshanks, Ph.D. Oregon, joined the faculty of Political Science Semester II, 1969-70, as a Visiting Assistant Professor. He was subsequently recommended for a regular appointment. Professor Cruikshanks field of special interest is West European Politics.

Garcia, Chris, Assistant Professor. Mr. Garcia is presently completing his Ph.D. dissertation at the University of California, Davis. Mr. Garcia is a specialist in American politics.

Gehlen, Michael, Professor. Dr. Gehlen will assume the Chairmanship of this Department, effective July 1, 1970. He is presently with the political science faculty of Purdue University. He holds the Ph.D. from the University of Texas, Austin. Dr. Gehlen is a specialist in Soviet politics.

Holt, Harley, Assistant Professor. Mr. Holt, a University of North Carolina Ph.D. candidate, associated with our faculty Semester I of 1969-70 as a Visiting Assistant Professor. Subsequently he was offered a regular appointment for the coming academic year. Professor Holt specializes in political theory.

Saalfeld, Bernard, Assistant Professor. Mr. Saalfeld is a Ph.D. candidate at the University of Oregon. Mr. Saalfeld concentrates his interest in American politics, specializing in public policy.

Sorenson, Jay B., Professor. Dr. Sorenson is presently a member of the Smith College faculty. Sorenson specializes in Sino-Soviet politics. He holds the Ph.D. from Columbia University.
Wrinkle, Robert, Assistant Professor. Dr. Wrinkle, Ph.D. University of Arizona, joined our faculty in the Fall, 1969-70, as a Visiting Assistant Professor (1/3). Additionally he was given a 2/3 time appointment as Assistant Director, Division of Government Research. In the course of the year Dr. Wrinkle was offered and accepted a regular appointment for 1970-71. Dr. Wrinkle is an American politics specialist with particular interest in urban affairs.

D. Separations from staff:

Dorothy I. Cline, retirement, June 30, 1970.

Mark Neuweld, denied tenure. Dr. Neuweld, however, may be offered a contract for the coming academic year, provided such an arrangement does not lead to a reversal of the department's original no-tenure decision. This matter is being explored with National AAUP Headquarters, the University's attorneys and the UNM Academic Freedom and Tenure Committee.

T. Phillip Wolf, June 30, 1970. Dr. Wolf will join the faculty of Indiana University, Southeast, 1970-71.

Norma Gilbert, ending a one-year contract, June 30, 1970.

II. Composite of Information requested on individual biographical supplements:

1. Advanced study:


HOLT, Harley. University of North Carolina, all work completed except dissertation for Ph.D.

2. Sabbaticals, etc.:

CLINE, Dorothy I. Leave of absence Semester I, 1969-70.

NEEDLER, Martin. Sabbatical leave Semester II, 1969-70. Traveled to Spain, Portugal, Mexico, and Haiti.

3. New Scholastic Honors:

BRISK, William. Inducted into Johns Hopkins Chapter, Phi Beta Kappa May 8.

CLINE, Dorothy I. Recognition Award for significant contributions to Intergovernmental Relations in New Mexico by FEA, UNM, ASPA; 1970 Headliner, selected by Theta Sigma Phi, named at Matrix luncheon; awarded The Famous Woman's Badge for active citizenship, G.S. Troop 183, Albuquerque.

4. Publications:


CLINE, Dorothy I. An article in forthcoming July issue of The American County on the New Mexico Con Con.


5. Other research projects:


CRUIKSHANK, Randal. Paper to be read at the Annual Meeting of the American Political Science Association in Los Angeles, September 8-12, 1970.

HOLT, Harley. Ph.D. dissertation to be completed from University of North Carolina.

NEEDLER, Martin. Completed manuscripts, "Studies in Mexican Society and Politics!" and "The United States and the Latin American Revolution" (Ford Foundation sponsorship); Survey of Latin American Studies Programs for the Consortium of Latin American Studies Programs (CLASP).

NEUWELD, Mark. A study of organizational-political development in the Soviet Union under Khruschev and Brezhnev.

RHODES, Harold V. Recent American Political Thought, under contract to Wadsworth Publishing Co.

SICKELS, Robert. New Mexico Pueblo Politics Study in progress.

STUMPF, Harry. Research Associate (with Professor D. I. Cline) on Science Advice in State Government, NSF Grant, summer 1969. Three other research projects underway as previously reported (two articles in galley proof).


WRINKLE, Robert. $5000 grant to Division of Government Research from Albuquerque Model Cities Agency to develop a series of training seminars for area board members.
6. Activities in learned and professional societies:


CLINE, Dorothy I. Presented a paper on New Mexico Con Con at Southwestern Political Science Association.


NEEDLER, Martin. Chairman, steering committee, CLASP for 1970; read paper at Latin American Studies Association meeting, Washington, attended LASA committee and Executive Council meetings, the National Strategy Conference, and National Archives Conference.

RHODES, Harold V. American Political Science Convention and Western Political Science Association Convention.

WOLF, T. Phillip. President-elect, Rocky Mountain Social Science Association; Associate editor, SOCIAL SCIENCE QUARTERLY; Executive Council, Western Political Science Association; read manuscript for St. Martin's and UNM presses; member of American Society for Public Administration and Hansard Society for Parliamentary Government.

WRINKLE, Robert. Attended March, 1970 meeting of Southwestern Social Science Association in Dallas, Texas.

7. Other professional activities:


CLINE, Dorothy I. Member ACIR through December 1969; Intergovernmental Seminar Committee; numerous speeches on the 1969 Con Con, Intergovernmental Relations.

NEEDLER, Martin. Consultant, President's Commission on an All-Volunteer Armed Force, and the Yale Political Data Program; gave lectures and/or faculty seminars at Syracuse University, Universities of Miami and Puerto Rico (in Spanish), Inter-American University.
NEUWELD, Mark. Several lectures to local civic and religious groups and high schools.


8. Non-teaching University service:


CRUIKSHANKS, Randal. Appointed to Advisory Board for the Office of International Program.

HOYT, Edwin C., Committee on Academic Freedom and Tenure; Chairman, Committee on University Governance.

NEUWELD, Mark. Faculty advisor to students specializing in Soviet affairs.

RHODES, Harold V. Acting Chairman, Department of Political Science; Acting Director, Division of Government Research; member, special committee appointed by Policy Committee to study University publications policy; American Studies Committee; UNM Publications Committee.

SICKELS, Robert. Vice-president UNM AAUP; Indian Community Action Program, consulting.

STUMPF, Harry. Chairman, Departmental chairmanship search committee.

WRINKLE, Robert. Assistant Director, Division of Government Research--administering the Title VIII grant.

9. Public Service:


STUMPF, Harry. Board of Directors, Albuquerque Legal Aid Society.
10. Personal information:

CRUIKSHANKS, Randal. Awarded Army Commendation Medal for service while on active duty with the Army (1968-1969).

WRINKLE, Robert. Son (Sean Christopher Wrinkle), born May 7, 1970.
The Report of the Department of Psychology
July 1, 1969 - June 30, 1970
Frank A. Logan, Chairman

I. General Departmental Information

A. Undergraduate education. At the undergraduate level, the department handled a total enrollment of 2850 in introductory lectures (of whom over 1150 participated in the optional additional laboratory hour), and 2050 in advanced courses (of whom 110 participated in the advanced laboratory courses). The graduating classes of 1969-70 included 49 psychology majors, and 48 psychology minors. Departmental honors were awarded to 2 graduates: Benjamin W. Bowles and Reid R. Vandell. Based on a FTE staff of 13, the above figures represent approximately a 41:1 student-faculty ratio.

A new laboratory course in Child Research was instituted during the year, and provision was made for Special Topics courses to be offered on demand. Our departmental honors program continued to receive support from an N.S.F. Undergraduate Research Participation Grant to Professor Ellis. A committee was appointed to undertake a complete review of our undergraduate curriculum and has already held several meetings with interested faculty and students. Major problems concern the enormous enrollment in our introductory courses and the generally exorbitant student-faculty ratio.

B. Graduate education. At the exclusively graduate level, the department handled a total enrollment of over 243, distributed among 46 registered students. The doctoral degree was conferred upon 12 candidates:
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<tr>
<th>Name</th>
<th>Title of Dissertation</th>
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<tr>
<td>Vicory, Arthur Charles</td>
<td>Empirical comparisons of selected procedures for aircraft identification training</td>
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<td>Advisor: David W. Bessemer</td>
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<tr>
<td>Semester I, 1969-1970</td>
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<tr>
<td>Keilman, Peggy Ann</td>
<td>A methodological approach to shifts in drive stimuli</td>
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<td>Advisor: Frank A. Logan</td>
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<tr>
<td>Lee, Andrew E.</td>
<td>Probability of reinforcement and rate of reinforcement in a response duration bandwidth</td>
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<td>differentiation schedule</td>
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<td>Advisor: Douglas P. Ferraro</td>
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<tr>
<td>Long, Karl Kilby</td>
<td>The transfer from teaching to learning</td>
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<tr>
<td></td>
<td>Advisor: Henry C. Ellis</td>
</tr>
<tr>
<td>Perkins, David</td>
<td>Relevancy of exteroceptive and response produced cues as a determinant of mixed mixed</td>
</tr>
<tr>
<td></td>
<td>delayed matching to sample performance</td>
</tr>
<tr>
<td></td>
<td>Advisor: Douglas P. Ferraro</td>
</tr>
<tr>
<td>Rahman, Mohammed Mujeeb-Ur</td>
<td>Effects of pre-exposure on perceptual curiosity for stimulus similarity and novelty</td>
</tr>
<tr>
<td></td>
<td>Advisor: Frank A. Logan</td>
</tr>
<tr>
<td>Wolach, Allen Harvey</td>
<td>Intertrial interval as a determinant of the overtraining extinction effect</td>
</tr>
<tr>
<td></td>
<td>Advisor: Douglas P. Ferraro</td>
</tr>
<tr>
<td>Semester II, 1969-1970</td>
<td></td>
</tr>
<tr>
<td>Bixler, Edward Oren Jr.</td>
<td>The visual evoked potential and reaction time in the retardate</td>
</tr>
<tr>
<td></td>
<td>Advisor: John M. Rhodes</td>
</tr>
<tr>
<td>del Castillo, David M.</td>
<td>Interference effects in recognition memory for visual forms</td>
</tr>
<tr>
<td></td>
<td>Advisor: Henry C. Ellis</td>
</tr>
<tr>
<td>Feldman, Jerome Maurice</td>
<td>Added cue control as a function of reinforcement predictability</td>
</tr>
<tr>
<td></td>
<td>Advisor: Frank A. Logan</td>
</tr>
<tr>
<td>Orem, John Marshall</td>
<td>Two systems of efference from visual cortex to anterior middle suprasylvian gyrus</td>
</tr>
<tr>
<td></td>
<td>Advisor: John M. Rhodes</td>
</tr>
<tr>
<td>Warner, Mary Spencer</td>
<td>The effects of temporal variables on concept formation in children</td>
</tr>
<tr>
<td></td>
<td>Advisor: Peder J. Johnson</td>
</tr>
</tbody>
</table>
Master's degrees were conferred upon 5 candidates: Martin J. Cassano (Plan II), Lawrence L. Dickerson (Plan II), Lily Chu Huang (Plan II), Jannine Anne Perkins (Plan II), and Alan Jan Swatek (Plan II). Based on a FTE staff of 13, the above figures represent approximately a 2.3:1 student-faculty ratio.

New seminars were introduced to broaden our graduate curriculum: Stimulus Control in Operant Conditioning (Ferraro) and Sensory Neuropsychology (Feeney), and provision was made for Special Topics courses at the graduate level to be offered on demand. Our doctoral program in General Experimental Psychology continued to receive support from a training grant from N.I.M.H. Not only was a committee appointed to conduct an overall review of our graduate curriculum, but special attention was given to improving our training opportunities for students interested in concentrating in Clinical Psychology. This latter objective involves collaboration with the relevant departments in the Medical School and will require additional support if it is to be adequately realized.

The number of graduate teaching assistants was 10, the number of research assistants supported by extramural funds was 13, and the number of fellowships and traineeships was 12. Thus, the majority of qualified applicants for financial aid were supported.

C. Staff. The full-time staff during the 1969-70 academic year was composed of Professors Ellis, Grice, Logan, Norman and Rhodes; Associate Professors Ferraro, Koenig, and Price; and Assistant Professors Bessemer, Feeney, Harris, and Johnson. Professor Benedetti served part-time as Associate Dean of the Graduate School and Professor Rosenblum was on part-time leave as Director of the Diagnostic Learning
and Achievement Center. Our FTE staff was thus 13, in addition to which Associate Professor Ruebush continued to be active in departmental affairs. There were no losses to the staff during the year.

Dennis Feeney (Ph.D., 1969, University of California at Los Angeles) assumed his position as Assistant Professor in September, 1969. Two new appointments were made for the 1970-71 academic year: Thomas Friden (Ph.D., 1970, University of Illinois) and Samuel Roll (Ph.D., 1968, Pennsylvania State University, currently a post-doctoral fellow at Yale University). Friden will augment our resources in measurement and perception and Roll will strengthen our clinical area.

Drs. Don Worden, Larry Miller, Robert Webster and Mujeeb Rahman taught on a part-time basis.

Peder Johnson was promoted to the rank of Associate Professor on the basis of his excellent teaching and research record during his four years at the University.

Our faculty recorded attendance at 30 regional or national conventions, workshops and conferences and 3 international meetings. Associate Professor Price directing a conference on psychological research with young Indian children held in Albuquerque and Professor Rhodes serving as program director of the meeting of the Association for the Psychophysiological Study of Sleep held in Santa Fe. Professor Ellis served as past president of the Rocky Mountain Psychological Association and was elected a fellow of the American Psychological Association. Professor Norman served as a member of the Commission on Colleges and Universities of the North Central Association. Professor Rosenblum served as past-president of the New Mexico Psychological Association. Professor Logan was elected Secretary of the Division of Experimental
Psychology of the American Psychological Association, as well as a member of its Executive Committee and its representation to the Council of Representatives of the Association; he also served on the Psychological Sciences Fellowship Review Committee of the National Institute of Mental Health.

D. Colloquia. The colloquium series during the year included several informal talks by candidates being interviewed for positions: Thomas P. Friden (University of Illinois), and Samuel Rolli (Yale University). Distinguished visitors were: William F. Battig (University of Colorado), Selby H. Evans (Texas Christian University), Edwin Martin (University of Michigan), Raymond Miles (University of Colorado), and Janet T. Spence (University of Texas).

E. Research. The department faculty published one book, one contribution to a book, 20 articles or monographs and 7 technical reports. They delivered 18 convention papers and 10 invited colloquia at other institutions. Extramural research support totalled over $310,000 (direct costs), primarily from the National Science Foundation, the National Institutes of Health, and the Air Force Office of Scientific Research. These funds, when added to over $54,000 in undergraduate and graduate training grants comprise over 60% of our total operating expenses when compared with the departmental budget. With the indicated curtailment of such monies during the coming years, a substantial increase in local support must be provided if we are to continue at even our current level of research and research training.

F. Space. The firm of Flatow, Moore, Bryan and Fairburn made progress during the year on the initial plans for a new building to house the Psychology Department, and most of the layout of the interior
rooms has been completed. Anticipated support from the National Institute of Mental Health and the Office of Education will not be available because of the cutback of federal funding for construction, but the earliest possible completion of this building is essential. Meanwhile, no new space has been made available to the department and both our research and training activities are severely hampered by being spread into a variety of temporary locations not designed for the purposes.

G. Administration and Support. During the year, Eleanor Orth continued as Departmental Executive Secretary. Elina Parks doubled as Graduate Secretary and secretary to Professor Grice. Ilene Bradley and Mary Fuller each served part of the year as Research Secretary. Jan Hilber served part of the year as secretary to Professors Ferraro and Rosenblum. Herbert Briggs and Paul Zimmerman continued as shop technicians.

H. Summary and Conclusions. The following table summarizes the most relevant statistical facts about the Department of Psychology over the past six years:

<table>
<thead>
<tr>
<th>FTE Faculty</th>
<th>9</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>13</th>
</tr>
</thead>
</table>

#### Undergraduate

<table>
<thead>
<tr>
<th>Introductory enrollment</th>
<th>1900</th>
<th>2200</th>
<th>2300</th>
<th>2450</th>
<th>2650</th>
<th>2850</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced enrollment</td>
<td>1500</td>
<td>1500</td>
<td>1750</td>
<td>1600</td>
<td>1800</td>
<td>2050</td>
</tr>
<tr>
<td>Majors</td>
<td>34</td>
<td>(52</td>
<td>40</td>
<td>44</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>Minors</td>
<td>48</td>
<td>49</td>
<td>54</td>
<td>42</td>
<td>49</td>
<td>48</td>
</tr>
</tbody>
</table>

#### Graduate

<table>
<thead>
<tr>
<th>Graduate enrollment</th>
<th>160</th>
<th>200</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>250</th>
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</thead>
<tbody>
<tr>
<td>Teaching assistants</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Research assistants</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>14</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Fellows and Trainees</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>14</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Master's Degrees</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Doctoral Degrees</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>12</td>
</tr>
</tbody>
</table>

#### Research

<table>
<thead>
<tr>
<th>Books and articles</th>
<th>18</th>
<th>15</th>
<th>19</th>
<th>21</th>
<th>23</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures and reports</td>
<td>17</td>
<td>16</td>
<td>11</td>
<td>16</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>Extramural support (000)</td>
<td>$68</td>
<td>$110</td>
<td>$153</td>
<td>$170</td>
<td>$218</td>
<td>$310</td>
</tr>
</tbody>
</table>

These statistics might suggest that the department is flourishing. Our undergraduate enrollment continues to grow faster than the university as a whole. Our graduate program, while tapering off in response to the contemporary scene, is producing more doctorates. And our research and research training programs have enjoyed very substantial support. But this last figure is destined to decline over the coming years and detract from the quality of our programs unless alternative sources of support are developed. Our staff is much too small, inadequately housed, and substantially underpaid. In sum, it is certainly a pleasure to paint a picture of continued progress toward a well-rounded and respected department as befits a major institution, but it will require even stronger future support from the University if this momentum is to be maintained in both the size and quality of our training and research endeavors.
II. Composite of information requested on individual biographical supplements.

1. Advanced study.

None

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel.

Ellis, Henry C.--International Conference on Human Learning, Prague, Czechoslovakia.

Ferraro, Douglas P.--Workshop in Programmed Instruction taught at the Bilingual Educational Institute.

Harris, Richard J.--Combined attendance at International Congress of Psychology, London, with visits with colleagues in Paris, Lyngby (Denmark), and Prague, summer of 1969.

Johnson, Peder J.--Attended 5-week NSF computing science seminar at University of Colorado during summer of 1969.


Rosenblum, Sidney--Visiting Professor of Psychology, California State College at Long Beach, Summer Session 1969.

3. New scholastic honors, fellowships, etc.

Ellis, Henry C.--Elected Fellow, American Association for the Advancement of Science.

4. Publications

Ellis, Henry C.


Chap. 18. Transfer: Empirical findings and theoretical interpretations.
Publications (continued)

Chap. 20. Retention: Empirical findings and theoretical interpretations.

Feeney, Dennis M.

Ferraro, Douglas P.

Harris, Richard J.
Comments on Dr. Rapoport's comments. *Psychological Reports*, 1969, 25, 825.

Koenig, Karl P.
Habit modification through threatened loss of money. *Behavior Research and Therapy, Spring*, 1969.

Logan, Frank A.

Norman, Ralph D.
4. **Publications (continued)**

Price, Louis E.

Rhodes, John M.
Primate electrophysiology, particularly related to sleep. 1969

5. **Other research projects or creative work in progress or completed during period.**

Bessemer, David W.

Ellis, Henry C.
Coding processes in the transfer of stimulus discrimination (with Shaffer).
Stimulus complexity and the transfer of stimulus learning (with Shaffer).
Continued research on theoretical interpretations of perceptual learning, transfer, memory, mediation, and visual form perception.
5. Other research projects (continued)

Feeney, Dennis M.
In progress: Reticular effects on visual cortex.

Ferraro, Douglas P.
Behavioral Assessment of Psychotropic Drugs, Bureau of Narcotics and Dangerous Drugs (Sponsor), $50,509, one year.
Response Subclass Variability, National Science Foundation (Sponsor), $35,800, two years.
Delayed Match to Sample in Children, University of New Mexico (Sponsor), $775, one year.
Modification of Nasality Through Instrumental Conditioning with Tonar, Easter Seal Research Foundation (Sponsor), $15,626, two years.
(This project has been awarded to the Department of Speech for which I serve as resident psychologist).
Several papers emanating from the above projects are in various stages of preparation at this time.

Grice, G. Robert
Other research in progress is supported by a 5-year grant from Nat. Inst. of Mental Health titled "Conditioning and Response Organization", now beginning second year. Current level of support: $29,057 per year.

Harris, Richard J.
Research on experimental games supported by UNM Grant-in-Aid and grant of computer time from Computing Center, through 6/30/70.
Research on experimental games and post-decision attitude change supported by NIH Small Grant for purchase of on-line computing equipment ("Choice, Games, and the On-line Computer"), 1/70 through 12/70.

Johnson, Peder J.

Koenig, Karl P.

Logan, Frank A.
Conditions of Reinforcement, N.S.F. grant, $30,000 (d.c.)
Free Behavior Situation, N.E.R.F. grant, $24,000 (d.c.)
Laws of Learning, O.E. subcontract U. Tennessee, $12,000 (d.c.)
5. Other research projects (continued)

Norman, Ralph D.
Devised questionnaire for Dean George Springer for Analysis of Doctoral Study at UNR which was used by Asst. Dean Moellenberg and referred to as Norman-Moellenberg Study of Doctoral Degree Recipients (10/1/69)

Price, Louis E.
NIR Conference Director—Psychological Research with young Indian children, $5,000, Albuquerque, N.M., July 1969.

Rhodes, John M.

Rosenblum, Sidney
Sensation-seeking in children.

Ruebush, Britton K.
Learning disabilities in children: Studies of basic learning processes. (Data collected; analysis and writing in progress.)

6. Activities in learned and professional societies

Benedetti, David T.
Attended annual convention of Rocky Mountain Psychological Association, May 1970, Salt Lake City, Utah.

Bessemer, Eduard W.
Attended Western Psychological Association meeting, April 1970, Los Angeles, Calif.
6. Activities in learned and professional societies (continued)

Ellis, Henry C.
Past-President, Rocky Mountain Psychological Association.
Attended meetings and/or presented papers at:
- International Conference of Human Learning, Prague, Czechoslovakia, July, 1969.
  - Read paper: Verbal processes in perceptual learning, transfer and mediated generalization.
  - Psychonomic Society, November, 1969, St. Louis, Mo.
  - Rocky Mountain Psychological Association, May 1970, Salt Lake City, Utah.
    - Chaired session on Perception and Information Processing.
    - Participant: Session on Human Learning and Thinking.
    - Paper with Smith: The transfer of discrimination and encoding variability.

Feeney, Dennis M.

Ferraro, Douglas P.
National Institute of Mental Health Committee on Drug Dependency, Washington, D. C.
Rocky Mountain Psychological Association, Salt Lake City, Utah.
  - Chairman of two sessions in animal learning.
RMPS papers read: (1) Successive acquisitions and extinctions in discrete trial and free-operant runway situations, (2) Delay of reinforcement in a response differentiation paradigm, (3) Titrating delayed match to sample in children.
Papers emanating from my research, but read by graduate students:
(1) Effect of reward amount and reward exposure interval on response duration differentiation, (2) Transfer of response differentiation: A quantitative analysis, (3) Differential reinforcement of topographical response subclasses.

Grice, G. Robert
Attended Psychonomic Society, St. Louis, Nov. 1969.

Harris, Richard J.
Member, American Psychological Association. Reviewed papers submitted for inclusion in Division 8 program at 1969 APA convention.
Progress on experimental games project was reported in part in three papers presented at Rocky Mountain Psychological Association meetings, May, 1970, Salt Lake City, Utah: (1) Flint, R. A., & Harris, R. J. "Archetypes: A study in human interaction;" (2) Flint, R. A., Harris, R. J., & Rector, L. "A failure of communication;" (3) Harris, R. J., Flint, R. A., & Everett, G. "Directive vs. non-directive motivating instructions in the Prisoner's Dilemma."
6. Activities in learned and professional societies (continued)

Johnson, Peder J.
Papers read: (1) "Short-term kinesthetic recall," Psychonomic Society meeting, St. Louis, Mo., November, 1969; (2) "Factors determining solution difficulty with non-preferred dimension." Western Psychological Assoc., Los Angeles, Calif., April, 1970.

Koenig, Karl P.
Paper read at Western Psychological Association, Los Angeles, Calif., May, 1970.

Logan, Frank A.
American Psychological Association
Elected by Division 3 to Council of Representatives.
Member, Executive Committee, Division 3.
Elected Secretary of Division 3.
Psychonomic Society
Meeting, St. Louis, October 1969.
Elected to Board of Governors.

Norman, Ralph D.
Attended Consultant-Examiner Conference, NCA, 9/30 and 10/1/69.
Member, Commission on Coils, and Univs., North Central Association.
Attended Commission meetings, 7/22,23/69 and 4/5,6,7/70, Chicago.

Rhodes, John M.
Association for the Psychophysiological Study of Sleep, Santa Fe, March, 1970 (Program Director).

Rosenblum, Sidney
Delegate, White House Conference on Children and Youth, Tulsa, Oklahoma, Nov. 11-12, 1969.
Advisory Council, New Mexico Committee for 1970 White House Conference on Children and Youth, 1969 to present.
6. Activities in learned and professional societies (continued)

Ruebush, Britton K.
Member, Professional Standards Committee, New Mexico Psychological Association
Member at Large, Board of Directors, New Mexico Psychological Assn.

7. Other professional activities

Benedetti, David T.
Served as editorial consultant for article on interpersonal impression formation, Canadian Journal of Behavioral Science.

Bessemer, David W.
Consultant to Annapolis Project, Westinghouse Learning Corp.

Ellis, Henry C.
Invited Colloquium Talks at following universities: (1) University of Michigan; (2) Ohio State University; (3) University of Toledo; (4) University of Colorado; (5) University of Denver; (6) Hollins College; (7) University of Virginia
Editing and Reviewing:
Member, Editorial Board, (1) Journal of Experimental Psychology, 1967-; (2) Psychological Reports, 1963-; (3) Perceptual and Motor Skills, 1963-
Review proposals for NSF and Canadian Research Council.

Ferraro, Douglas P.
Colloquium Talks: Research colloquium talk at University of Montana, and Utah State University. Consultancies: Westinghouse Learning Corporation, Albuquerque Public Schools, Bilingual Education Institute, Florida State University and Holloman Aeromedical Laboratory.

Grice, G. Robert
Schlasberg Memorial Colloquium, Brown University, May 6, 1970.

Harris, Richard J.
Consulted with Westinghouse Learning Corporation on statistical problems involved in study of instructional techniques in leadership course at US Naval Academy.
Refereed papers submitted for publication in Psychological Review, Behavioral Science.

Koenig, Karl P.
Psychological Consultant for Good Will Industries of New Mexico. Member, Advisory Committee for Behavior Research Institute of California.
7. Other professional activities (continued)

Logan, Frank A.
NIMH Psychological Sciences Fellowship Review Committee.
Site Visit Team (Chairman), proposed doctoral program in Experimental Psychology at University of Texas (Arlington).

Norman, Ralph D.
Consultant, Personnel Dept., Sandia Laboratories.

Price, Louis E.
Consultant to Albuquerque Public Schools, June-Nov. 1969; To Westinghouse Learning Corp., Dec. 1969; To Bacone College, Oklahoma, for Academic Vice-President, Aug. 1969.
Speech to New Mexico State Teachers Assoc. Convention, October, 1969.

Rhodes, John M.
Consultant: Holloman Air Force Base; Wright-Patterson Air Force Base; UCLA Space Biology Laboratory.

Rosenblum, Sidney
Project Director, Diagnostic, Learning and Achievement Center, 1969-present (funded by grant of $25,000 from Model Cities Agency of Albuquerque).
Group therapist, for parents of children in motor skills retraining program, UNM, 1969-present.
Public Lectures and Seminars:
New Mexico Conference on Children, Jan. 10, 1970, "Research on Adolescents and Youth."
Department of Health and Social Services, Public Health Section, April 3 & 10, 1970, "Signs, Symptoms and Signals of Emotionally Disturbed Preschool Children."
Job Corps for Women, Albuquerque, April 7-23, 1970, "Motivating Academic Performance in Disadvantaged Adolescents."
Future Homemakers of America, April 18, 1970, "A Psychologist Looks at Women."
New Mexico Institute of Mining and Technology, April 21, 1970, "Educating the Emotionally Disturbed Child."
Hodgin Elementary School, April 24 & May 1, 1970, "Some Aspects of Pre-Adolescence."
University of Albuquerque, College of Nursing, May 30, 1970, Commencement Address.
7. **Other professional activities (continued)**

Ruebush, Britton K.
Numerous talks to P.T.A. and other groups—not listed.
"Recognizing Psychopathology in Children," A.P.S. Nurses, 1/8/70.
"Behavior Modification in the Classroom," Comanche Elem. School, 1/26/70.
"Learning in Children," Socorro Mental Health Assn. & N.M.I.T., 4/7/70, 5/12/70.

8. **Non-teaching University service**

Benedetti, David T.
Serving 2/3 time as Associate Dean, Graduate School.
Graduate advisor.
Member: Graduate Committee; Fellowship Committee; Department Clinical Psychology Committee.

Bessemer, David W.
University College advisor.

Ellis, Henry C.
Faculty Advisor, Student-Faculty Association.
UNM-Sandia Colloquium Committee.
UNM-Science Colloquium Committee.
Arts and Sciences Advisor.
Director, Departmental Honors.
Director, NSF Undergraduate Research Participation Program in Psychology.
Departmental Committees: Colloquium; Building.

Feeney, Dennis M.--Advisor, Arts and Sciences.

Ferraro, Douglas P.
Research Policy Committee, Department Building Committee, Department Curriculum Committee.
Advisor, University College.

Grice, G. Robert--Graduate advisor.

Harris, Richard J.
Chairman, Curriculum Review Committee, Psychology Department.
Advisor, University College.

Johnson, Peder J.
Computing Science course.
Co-chairman, Dean's Faculty Advisory Committee.
Advisor, Arts and Sciences.
8. **Non-teaching University service (continued)**

Koenig, Karl P.
Faculty Policy Committee.
President's "Special Advisory Council".
Advisor, Arts and Sciences.

Logan, Frank A.
Chairman, Graduate advisor.
UNM Committee on Human Subjects (Chairman).

Norman, Ralph D.
Acting Chairman, Dept. of Psychology, Summer, 1969.
Chairman, A & S Coll. Comm. on Human Subject Research.
Member, Research Allocations Committee.
Member, Comm. on University Governance.
Member, Clin. Training Comm., Department of Psychology.
Member, Ad Hoc Comm. to Settle Student Strike, May 10, 1970.

Price, Louis E.
Human Subjects Research Review Committee.
Manzanita Center Policy Committee.
Graduate Committee.
Advisor, University College.

Rhodes, John M.--Graduate advisor.

Rosenblum, Sidney
Student Affairs Committee, 1969 to present.
Clinical Program Committee, Department of Psychology.
Graduate advisor.
Advisory Council, Continuing Education Committee, Medical School.
Strategy Board, Day Care Center for Model Cities, ISRAD.

Ruebush, Britton K.
Director, Albuquerque Child Guidance Center, Dept. of Psychiatry.
Member, Growth and Development Vertical Committee, School of Medicine.
Chairman, Clinical Psychology Training Committee, Dept. of Psychology.
Member, Research Committee, Psychiatry.
Child Committee, Department of Psychiatry.

9. **Public service**

Ellis, Henry C.
Sponsor, Heights YMCA Swimming Team

Ferraro, Douglas P.
Addresses to several organizations on the topic of drug abuse,
including Valley High School and Methodist Church Indian Guides.

Norman, Ralph D.
Member, New Mexico Citizens' Comm. on Human Rights.

10. **Personal information**

The Rapod' of ths Dapartmant
July 1, 1969 - June 30, 1970
Richard F. Tomasson, Chairman

I. General Departmental Information

A., B. The enrollment in sociology courses, the number of majors, and the number of graduate students have increased in 1969-70 over the previous year, though not as much as in 1968-69. Student enrollment in all courses increased by 4 1/2% in the first semester of this year compared with first semester 1968-69. The number of majors increased from 103 to 114 in the past year, and the number of graduate students from 26 to 34. During this academic year we have graduated 33 undergraduate majors and have granted 3 M.A.'s. We continue to be, relatively speaking, the cheapest operating department in the university and probably the most understaffed.

Three new courses were offered by the department during the year:
The City (161) taught by Robert Riley (Architecture) and crosslisted in Architecture, Mexican-American Society (485) taught by Gilbert W. Markx in Spanish, and a seminar (507) on mathematical applications in sociology taught by Theodore Guinn (Mathematics).

The department recruited a number of people this year: Regan Smith (Illinois), Jack Hedblom (SUNY at Buffalo), David Stratman (visitor here from Boston), Patrick McNamara (U TEPI Harold G. McCann, Ill (Princeton), John Sonquist (Michigan), and Lincoln Day (Yale). Regular offers were made to Stratman, McNamara, McCann, and Sonquist. All except Sonquist accepted. George Huaco (SUNY at Buffalo) was recruited for 1971.

During the troubled month of May members of the sociology department have probably been closer to the activist students than the members of any
other department. We were constantly in the Union and wherever the action
was. Several members of the department were active in the leadership that
led the students out of the Union on Friday morning, May 8.

C. The first draft of our Ph.D. proposal has been written and is now
in the process of discussion. We hope to present a revised version to
the relevant committees and to the faculty in the early fall of 1970.

D. Appointments to staff for 1970-71 (all effective September 1970):

  Harold G. McCann, III as Assistant Professor (B.A., Allegheny College,
  Ph.D., Princeton University, 1970). Specialties: sociology of science,
  mathematical applications, population.

  Patrick H. McNamara as Assistant Professor (B.A., St. Louis University,
  Ph.D., UCLA, 1968). Specialties: Chicano studies, religion, political
  sociology.

  David Stratman as Assistant Professor (LL.B., Cuza University,
  Romania, Ph.D., Boston University, 1970). Specialties: criminology,
  deviance, sociology of science.

  E. Separation from staff:

  Morris Forslund, Assistant Professor (B.A., Ph.D., Yale University)
to University of Wyoming as Associate Professor effective September 1970.

II. Composite of information requested on Individual biographical supplements.

1. Joseph Fashing was awarded the Ph.D. degree from the University of
  Oregon in December 1969. David Stratman was awarded the Ph.D. degree from
  Boston University in June 1970.

2. Morris Forslund was on sabbatical for the fall semester in Switzerland.
  Gilbert Marx was a visiting researcher at the Instituto Di Tella, Buenos
  Aires, Summer 1969. Richard Tomasson was in Iceland during August 1969.
Antonio Ugalde was on leave for Semester II in Colombia. Charles Woodhouse was on sabbatical during the month of June 1969.

3. Theodore Abel received the Merit Award for Distinguished Service in Sociology by the Eastern Sociological Association, April 1970. Richard Tomasson received a short-term Fulbright Award for August 1969; also the Senior Fulbright Award for Iceland for 1970-71 which was declined; and the Senior Fellowship of The National Endowment for the Humanities for 1970-71 (accepted). Antonio Ugalde received a grant from the World Health Organization to study the organization of health services in Colombia.

4. Publications:


Antonio Ugalde: Conflict and Consensus In a Mexican City: A Study of Political integration, University of New Mexico Press, 1970.

5. Other research projects completed during period:

Fashing has begun revision of his dissertation for publication and plans a follow-up to dissertation study on the politics of change in higher education.

Forslund, reader in deviant behavior, Explanations of Deviance (in progress).

Maier is continuing his student life survey with focus on attitudes toward student activism, development of measurement scales for student activism legitimacy and tolerance of student protest.

Stratman: *The French Student Revolt*, Ph.D. dissertation submitted to the University of New Mexico Press.

Tomasson is beginning work on a book tentatively entitled *The Icelanders: Culture, Social Structure, and Modernization of an Egalitarian People*; "The Modernization of Sweden" accepted for publication by *The Shakti Quarterly* (India).

Woodhouse: research on Negro politics in New Orleans (in progress).

6. Activities In Learned and Professional Societies:

Forslund's paper, "The Situs Dimension in the Career Patterns of University Presidents," with James Stimson was presented at the meetings of the National Educational Research Association in Minneapolis in March.

Maler presented a paper at American Sociological Association meetings in San Francisco in August entitled "Instrumentally and Non-Instrumentally Oriented College Aims of Undergraduates and Their Parents."

Markx read a paper at the American Sociological Association meetings in San Francisco in August; he read a paper at the American Historical association meetings in Washington, D.C. in December entitled "Brickbats or Badfellows."

Tomasson presented a paper at the American Sociological Association meetings in San Francisco in August entitled "The Value System of the Most Developed Society: Sweden."

Woodhouse attended conference on Advocacy Planning programs of OEO in San Francisco in November.

7. Other Professional Activities:

Abel gave a lecture at the University of Pennsylvania in June 1970.

Fashing gave a lecture at the University of Oregon Conference on The Future of the University entitled, "The Politics of Educational Change;"

Tomasson's Sociology 101 lectures were on Channel 5 throughout the year; interviewed by Behavior Today on what happened at UNM in May.

Woodhouse was a consultant for Kirschner Associates, Inc., in evaluation of Irish Channel Action Foundation Advocacy Planning Program in New Orleans; he was also consultant for the U.S. Department of Health, Education and Welfare (evaluation of research studies).

8. Non-teaching University service:

Fashing was a member of the Committee for the Enhancement of the Educational Process, Arts and Sciences Advisory Committee, and was faculty advisor for Students for a Democratic Society, Mobilization to End the War in Vietnam; University College Advisor.

Moler was faculty advisor for Arts and Sciences sophomores.

Markx was a member of the Curriculum Committee and was faculty advisor for Arts and Sciences juniors and seniors.

Tomasson was a member of the Student and Faculty Rights and Responsibilities Committee; Speakers Committee; Graduate School Speakers Committee; Advisor to Graduate Students in sociology; chairman of department.

Woodhouse was chairman, committee on Members-in-Course for Alpha Chapter, Phi Beta Kappa, advisor for undergraduate majors in sociology; member of one and chairman of another MA thesis committee.
9. Public Service:

Fashing served on the Review Committee for Operation Turnkey Public Housing Project, Albuquerque Housing and Development Offices; Citizens Advisory Committee on News Coverage and Programming, KGGM Radio.

Stratman defended hippies in a court case.

Tomasson was UNM coordinator of the Academic and Professional Lobby for a Responsible Congress.
I. General Departmental Information

A. Significant Achievements during the Academic Year, 1969-70

1. Enrollment

   Enrollment in the Department of Speech for 1969-70 increased overall about 24% over 1968-69--up 22% the first semester and up 2.23% the second semester. Graduate enrollment in the department again broke all previous records--38 students the first semester and 37 during the second semester. These figures represent an increase of eight graduate students over the 1968-69 total.

2. Number of Students Choosing Speech as Major and Minor

   Undergraduate major enrollment in the Department of Speech for the first semester 1969-70 was 81--for the second semester 71.

   Ten students who received their Master's degrees from the Department of Speech over the past three years are now working on their doctorates. Seventeen students who graduated with Bachelor's degrees in Speech since 1968 are now working on their Master's degrees.

3. New Courses

   Nine new courses were added to the curriculum of the Department of Speech during the year, three in public address, rhetoric and communication theory, two in television, and four in speech pathology and audiology. The Speech faculty believes that we have an outstanding curriculum at the undergraduate and Master's
degree levels and the minimum curriculum necessary for the initiation of a doctoral program.

4. Radio-Television

This academic year, while Dr. Wayne Bundy was on leave of absence, arrangements were made with Dr. Claude Hempen, Director of KNME-TV, to teach the television-radio courses. During the year Dr. Bundy worked with the Rocky Mountain Corporation and also investigated the proposed new Division of Communications to be established in the Department of Health, Education and Welfare.

At contract time Dr. Bundy decided to leave the University in order to pursue his desire to join the Rocky Mountain Corporation or locate in the proposed new Division of Communications.

For several years the production classes in television have utilized the facilities of KNME-TV for training. Student interest in these classes has increased to the extent that this arrangement will no longer be possible. Therefore, with the moving of the station to new quarters during the current summer, the Department of Speech will have to conduct its own training program separate from KNME-TV.

5. Forensic Program

Increased activity characterized the 1969-70 forensic squad. Student participation in tournaments increased--more debate teams participated in more tournaments and the total number of students involved in forensics increased.
<table>
<thead>
<tr>
<th>Date</th>
<th>Tournament</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 9-12</td>
<td>University of Wyoming</td>
<td>11</td>
</tr>
<tr>
<td>Oct. 17-20</td>
<td>Texas Technological</td>
<td>12</td>
</tr>
<tr>
<td>Oct. 30-Nov. 1</td>
<td>TCU</td>
<td>4</td>
</tr>
<tr>
<td>Nov. 6-9</td>
<td>University of Colorado</td>
<td>10</td>
</tr>
<tr>
<td>Nov. 20-22</td>
<td>Wichita State University</td>
<td>6</td>
</tr>
<tr>
<td>Nov. 25-30</td>
<td>Western Speech Association</td>
<td>10</td>
</tr>
<tr>
<td>Dec. 12-13</td>
<td>University of Texas</td>
<td>4</td>
</tr>
<tr>
<td>Jan. 7-10</td>
<td>Colorado College</td>
<td>10</td>
</tr>
<tr>
<td>Jan. 29-30</td>
<td>University of Denver</td>
<td>12</td>
</tr>
<tr>
<td>Feb. 19-22</td>
<td>Oklahoma State University</td>
<td>6</td>
</tr>
<tr>
<td>Feb. 25-28</td>
<td>University of Arizona</td>
<td>8</td>
</tr>
<tr>
<td>Mar. 13-14</td>
<td>Northern Arizona University</td>
<td>4</td>
</tr>
<tr>
<td>Mar. 18-21</td>
<td>Weber State University</td>
<td>4</td>
</tr>
<tr>
<td>Mar. 25-28</td>
<td>DSR-TKA Convention</td>
<td>3</td>
</tr>
<tr>
<td>1969-1970</td>
<td>14 trips</td>
<td>104</td>
</tr>
<tr>
<td>1968-1969</td>
<td>13 trips</td>
<td>71</td>
</tr>
</tbody>
</table>

Of the 30 students on the squad during the year, 21 participated in tournament activity. Debate teams participated in final rounds at Texas Technological University (two teams), Texas Christian University, Wichita State University (two teams), University of Texas, University of Arizona, and Weber State College. Students reached the final rounds in Extemporaneous Speaking, Oral Interpretation and Impromptu Speaking on eight occasions.

In addition to the tournament activity, two debate teams from UNM debated teams in the State Penitentiary at Santa Fe.

The UNM forensic staff and students hosted the Ninth Annual Duke City Forensic Tournament on campus. Some 25 colleges and universities participated. The tournament opened with a public debate between Stanford University and Kansas State Teachers College at Pittsburg.

The forensic staff and students also hosted the New Mexico High School State Speech Championships and provided judging services for several high school and professional groups in Albuquerque.
6. Communication Area

Since the establishment of the communication area four years ago, more than 350 students have enrolled in communication courses. A total of seven courses are now offered in the area.

This year several projects were undertaken to explore the nature and importance of communication sensitivity. Without exception, the projects have indicated the potential this construct has for explaining many questions in interpersonal communication.

Together with the Division of Public Administration, an interdisciplinary course having a portion devoted to communication was developed and taught. In conjunction with the program offered by the College of Business and Administrative Sciences, the faculty served as consultants in several instances.

The faculty also served as a consultant for a BIA funded project. A paper entitled "Credibility and Behavioral Commitment" was read before the Behavioral Sciences Interest Group at the Western Speech Convention. The faculty also attended the national speech convention in New York.

Professor Jim D. Hughey resigned his position to accept a position at Oklahoma State University as an associate professor of interpersonal communication. However, two new members of the communication faculty were added. They are:

   John A. Kline of the University of Iowa, and
   Gerald M. Goldhaber of Purdue University.

In summary, the communication area has continued to expand and adapt to the needs of students.
7. Speech Pathology and Audiology

a. Accomplishments to Date

1. Changes in Faculty and Staff. Dr. Lloyd Lamb has replaced Dr. Samuel Fletcher as Director, Speech Pathology and Audiology and Director, Speech and Hearing Center. Dr. Fletcher asked to be relieved of this position to devote more of his time to research activities. In the training program he will function as Coordinator of Speech and Hearing Sciences.

Dr. Richard Hood has replaced Dr. Lamb as Coordinator of Audiology. Dr. Hood, who joined the faculty in January, 1969, has been instrumental in developing aural rehabilitation as part of the academic and clinical programs.

David Draper will join the faculty as Assistant Professor, Speech Pathology, upon completion of his Ph.D. at the University of Kansas. He will serve as Coordinator of Clinical Services in Speech Pathology. His primary responsibilities will be to coordinate all clinical speech activities in the Speech and Hearing Center and to maintain effective training relationships with outside programs. He also will supervise clinical practicum and teach one to two formal courses per year. This position is new in that it represents an upgrading of one of the M.A. supervisory positions to the Ph.D. level. Dr. Dolores Butt will serve as coordinator of the academic program in speech pathology.

Dr. Fred Chreist will coordinate clinical activities with foreign dialect students and will provide liaison with the interdepartmental program in linguistics and language pedagogy.
2) **Curriculum Modifications**

   a) A number of new courses have been added to the speech pathology-audiology curriculum, further strengthening the training program in these areas (see page 1).

   b) The laboratory course concept, first introduced last year, has proved quite successful. Having formal laboratory courses taught concurrently with lecture courses has allowed an integration of theory and application that seldom is achieved using the more traditional approaches to training in speech pathology. That the laboratory concept is applicable in clinical as well as basic science courses was borne out in the *Processes of Phonation* sequence. In the lecture course, physiological and acoustical parameters of phonation were presented on a continuum from normal to abnormal and pathologic conditions were discussed in terms of their effects on speech. Methods of assessing and treating voice disorders were considered. In the laboratory course students obtained practical experience in the use of acoustical measurement equipment such as the sound spectograph, sound level meter and level recorder and participated in laryngeal examinations under the supervision of consulting physicians. Voice clinics were conducted periodically as part of the laboratory course, providing students an opportunity to assist in evaluation and therapy planning for a variety of voice disorders. Other areas in which laboratory courses proved successful were physiologic phonetics and anatomy. In the future laboratory courses will be requested to accompany Speech 325, *Processes of Speech Articulation*, and Speech 504, *Acoustic Phonetics*. 
3. Training Facilities and Equipment

a) A large portion of the training involved use of facilities of cooperating programs. Examples of cooperative efforts are given below:

1) Dr. Fletcher used anatomy laboratories at the Medical School in teaching Speech 451L, Anatomy of Speech and Hearing Laboratory.

2) Clinical facilities at the V.A. Hospital were used by Dr. Bruce Porch in teaching the aphasia sequence. This arrangement made available an excellent closed circuit T.V. system as well as V.A. patient material.

3) Dr. Richard Hood and graduate students conducted aural rehabilitation classes in the Speech Pathology Clinic at the V.A. Hospital, providing services for V.A. patients and for hearing impaired adults from the community.

4) Practicum training was carried out in a number of facilities including the V.A. Hospital, the Albuquerque Public Schools, the Albuquerque Hearing and Speech Center, the Bernalillo County Medical Center, and the Lovelace Clinic.

b) Space was made available on a limited basis for hearing testing in the Outpatient Department at Bernalillo County Medical Center. A decision on a request for permanent clinical space for audiology and speech pathology is expected soon.

c) A closed circuit T.V. system has been installed in the Speech and Hearing Center. The system, consisting of a General
Electric 500 camera with zoom lens, an Ampex VR 5100 video-recorder, a Packard-Bell monitor, and a Zoomar remote control unit, will be used to monitor and record evaluations and therapy for study by students and staff. A tape library is being established. The system was provided through support from the New Mexico Elks Cerebral Palsy Commission and the University.

d) A Grason-Stadler 1201 modular system, consisting of a Universal feeder, a recorder, programming apparatus, and other instrumentation, has been obtained for behavioral modification and control in speech and language therapy. This system makes possible a highly systematized operant approach to therapy and will be both for training clinicians and for research.

e) Other acquisitions include a Sony TC 630 stereo tape-deck which will be used for special audiometric tests, and a hearing aid cabinet and other furniture for the hearing test suite. In addition, the hearing suite has been carpeted to provide a more suitable test environment for children.


Diagnostic speech, hearing, and language evaluations and therapy were conducted by professional staff and by graduate students in a number of settings with a variety of patients during the period covered by this report. These activities are detailed below according to types of problems, ages of patients, referral sources, and facilities at which the services were offered.
a) University Speech and Hearing Center. The number and types of speech and language evaluations performed in the Speech and Hearing Center as part of the regular training clinics are listed by age groupings in the following table:

<table>
<thead>
<tr>
<th>Type of disorder</th>
<th>Preschoo</th>
<th>6-14</th>
<th>15-18</th>
<th>Adult</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stuttering</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Foreign Dialect</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Articulation</td>
<td>10</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Dysarthria</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Delayed Speech and Language</td>
<td>3</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Voice</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Cleft Palate</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Tongue Thrust</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td>16</td>
<td>40</td>
<td>8</td>
<td>39</td>
<td>103</td>
</tr>
</tbody>
</table>

Referral sources for the above evaluations were as follows:

- Medical (Private physicians and Medical School) ....... 40
- Speech pathologists ................... 6
- Lay persons (Self, family, friends) .... 25
- Agency and other .................... 32
  Total 103

In addition to the above, evaluations were conducted in the Speech and Hearing Center on a regularly scheduled basis for children referred through the New Mexico Elks Cerebral Palsy Commission and the Mental Retardation Division of the Community-Medical School Mental Development Center. A total of 55 cerebral palsied children have received comprehensive evaluations this year. Thirty mentally retarded children have been evaluated. The
mentally retarded patients were referred directly by James A. Browder, M.D., head of the mental retardation program. The cerebral palsied children were referred indirectly by various medical sources through the Elks Commission.

Taking into account the regular out-patient clinics and the evaluations for cerebral palsied and mentally retarded children, a total of 188 persons received speech and/or language evaluations in the Speech and Hearing Center during this report period.

Therapy services in the clinic were provided primarily by graduate students; however, limited treatment was provided by professional staff members on a demonstration basis. Types of problems and numbers of patients seen for therapy are detailed by age groupings in the following table.

<table>
<thead>
<tr>
<th>Type of Disorder</th>
<th>Pre-School</th>
<th>6-14</th>
<th>15-18</th>
<th>Adult</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stuttering</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Foreign Dialect</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Articulation</td>
<td>4</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Delayed Speech and Language</td>
<td>12</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Cerebral Palsy</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Voice</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Cleft Palate</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tongue Thrust</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Aphasia</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Alaryngeal Speech</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>GRAND TOTALS</strong></td>
<td><strong>16</strong></td>
<td><strong>34</strong></td>
<td><strong>9</strong></td>
<td><strong>41</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

An on-going program of diagnosis and treatment for persons with voice disorders was introduced in March, 1969.
Evaluation clinics are conducted once a month with four local E.N.T. specialists participating on a rotating basis. Patients in these clinics receive comprehensive evaluations, including laryngoscopic examinations, measurement of vocal frequency and intensity, analysis of breathing patterns, and spectographic analysis of speech samples. Recommendations for rehabilitative procedures are made jointly by the medical and speech pathology personnel. Where therapy is recommended, this is provided by graduate students under direct supervision of Kerstin Engstrom, M.A. Miss Engstrom has had extensive training in evaluation and treatment of phonatory problems. The majority of patients seen have been adults who find their voice problems to be handicapping in their work. For example, three are school teachers with various kinds and stages of polypoid generation of the vocal folds, for whom therapy already has proved highly beneficial.

Experience in rehabilitation of laryngectomized persons is obtained in the Speech and Hearing Center and through monthly meetings with the New Mexico "Lost Chord Club." Six students have attended these meetings and have provided informal group speech instruction. This activity is also under supervision of Miss Engstrom.

Clinical audiology services offered as part of the training program were provided at the Speech and Hearing Center and at Bernalillo County Medical Center. Activities at the Speech and Hearing Center are detailed in the following table:
<table>
<thead>
<tr>
<th>Type of Disorder</th>
<th>Pre-School</th>
<th>6-12</th>
<th>13-18</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing Evaluations</td>
<td>60</td>
<td>38</td>
<td>19</td>
<td>55</td>
<td>172</td>
</tr>
<tr>
<td>Hearing Aid Evaluations</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>Hearing Aid Rechecks</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Totals</td>
<td>69</td>
<td>50</td>
<td>28</td>
<td>83</td>
<td>230</td>
</tr>
</tbody>
</table>

Referral sources for the audiology patients were as follows:

- Medical
  - Private Physicians: 61
  - Medical School: 16
  - Mental Retardation Program (Med. School): 32
  - University Health Service: 5
- Speech and Hearing Center
  - Evaluation Clinics: 10
  - Cerebral Palsy Clinics: 22
  - Agencies: 39
  - Other: 45
  - Total: 230

The aural rehabilitation program was continued under the direction of Dr. Richard Hood. Fifteen students have been involved in this program since September. Services have been provided for eight hearing impaired pre-school children, eight school age children, and eight adults. Therapy is conducted individually and in groups.

b) Bernalillo County Medical Center. Testing at Bernalillo County Medical Center was continued as part of the E.N.T. Out-patient Service. Routine pure tone tests were done in that setting, with patients requiring more comprehensive evaluations being referred to the Speech and Hearing Center. Approximately 60 patients have been tested.
at the Bernalillo County Medical Center this year. This setting provides excellent training in that students work in close contact with E.N.T. specialists and other medical personnel.

c) Veterans Administration Hospital. Five graduate students in speech pathology have participated in diagnostics and therapy at the V.A. Hospital this year. Approximately 100 patients were available for observation or practicum. The majority were patients with aphasia, but other disorders such as dysarthria and alaryngeal speech were represented. Several students also attended workshops at the V.A. on administration and interpretation of the Porch Index of Communicative Ability, a diagnostic test for aphasia authored by Dr. Bruce Porch.

Dr. Hood, V.A. audiology consultant, conducts a limited hearing testing program and also supervises aural rehabilitation activities for an adult group which meets at the V.A. Hospital weekly. Six graduate students participated in the rehabilitation program, which emphasizes speech reading, hearing aid orientation, speech conservation, and counseling. Eight adults currently are enrolled in the program.

d) Lovelace Clinic. Three audiology students have participated in the hearing testing program at Lovelace Clinic, under the supervision of Thomas Norris, Ph.D., and Allan Stalcup, M.A. At Lovelace students are exposed to a diversified patient population and obtain broad experience
in audiometric evaluations and hearing aid evaluations.

e) Other Programs. Other facilities and programs utilized for training are the Albuquerque Hearing and Speech Center, the New México School for the Deaf Preschool, and the Albuquerque Public Schools. Training opportunities included therapy with hearing impaired children and evaluation and therapy with speech impaired school children.

All students are encouraged to participate in as wide a variety of clinical activities as possible including work with children and adults, to develop themselves as well rounded clinicians. R.S.A. trainees are expected to concentrate a large part of their effort on work with adults.

5. Inter-Departmental Cooperation in Planning and Providing Training

a) A program designed to orient first year medical students from the School of Medicine to communication disorders is conducted each May by Speech and Hearing Center personnel. This program consists of lectures on audiology and speech pathology, a tour of the Speech and Hearing Center, and laboratory demonstrations of diagnostic techniques. Enthusiastic response has been given the program since its inception in 1965.

b) Resident physicians in pediatrics are now receiving experience with speech, hearing, and language disordered persons as part of their training. Each physician spends
one-half day a week in the Speech and Hearing Center during his three-month neurology rotation. Since September, four residents have rotated through the Speech and Hearing Center.

c) Reciprocal teaching arrangements have been made with several individuals and programs within the University of New Mexico School of Medicine. James Browder, M.D., Assistant Professor of Pediatrics, provides medical consultation relative to communication disorders in mentally retarded pediatric patients. His participation in the speech pathology program affords students an opportunity to observe comprehensive diagnostic evaluation of mentally retarded children and to participate in the speech, language and hearing aspects of the program. Mentally retarded patients from Dr. Browder's program at the Mental Development Center are referred to the Speech and Hearing Center for these latter services. Russell Snyder, M.D., Assistant Professor of Pediatrics and Neurology, also has taken an active part in the speech pathology training program. Dr. Snyder has attended Cerebral Palsy Evaluation Clinics in the Speech and Hearing Center to examine neurologically impaired children and to discuss implications of neurological deficiencies for speech pathologists. In addition, graduate students in speech pathology have observed examinations performed by Dr. Snyder at the Medical School, and patients referred by Dr. Snyder have received diagnostic evaluations at the Speech and Hearing Center.
d) A formal proposal has been submitted to the University and Medical School administration for development of a Communication Disorders Unit at the Medical School. A request for space is being considered by Medical School personnel and the University architects.

e) By agreement with Dr. John Ladman, Chairman, Department of Anatomy, Speech 451L, Anatomy of Speech and Hearing Laboratory, is taught at the Medical School using the human anatomy laboratories.

6. **Collaboration with State Rehabilitation Agencies and Other Community Rehabilitation Programs**

   a) Procedures for establishing closer working relationships with state rehabilitation counselors have been discussed with Dr. Robert Swanson, Director, State Division of Vocational Rehabilitation. Attempts will be made to inform D.V.R. personnel throughout the state of services available at the Speech and Hearing Center and to facilitate their use of our programs. Referrals from rehabilitation counselors already have increased through our expanded clinical relationships with the Bernalillo County Medical Center and the Regional Medical Program.

   b) Dr. Samuel Fletcher was appointed to represent speech pathology and audiology on the University of New Mexico Subcommittee on Rehabilitation Planning. This is a broad based committee consisting of persons from within and from outside the University who have an interest in rehabilitation. The charge of the committee is to evaluate
rehabilitation activities at or connected with the University, to assess resources, to coordinate existing programs, and to develop plans leading to comprehensive rehabilitation in the areas of teaching, patient service, and research. Dr. Fletcher's participation on this committee has effectively placed the speech pathology and audiology program in the midst of all rehabilitation planning and activities at the University.

c) Dr. Lloyd Lamb is coordinator of the New Mexico Communication Disorders Study Project, a joint effort of the New Mexico Speech and Hearing Association and the State Department of Education. The goal of this project is to determine incidence of speech, language and hearing disorders in the state, assess existing and projected programs and facilities for the communicatively impaired, and make recommendations as to how these individuals might best be served.

d) University speech pathology and audiology personnel have served in key positions for a number of rehabilitation oriented organizations and committees. These appointments include the following:

   i. Dr. Dolores Butt - President and member, professional advisory board, United Cerebral Palsy; state delegate, Council for Exceptional Children; member, professional advisory board, New Mexico Society for Crippled Children and Adults.
ii. Dr. Samuel Fletcher, member, UNM Subcommittee on Rehabilitation Planning; member, Albuquerque Children's Coordinating Council.

iii. Dr. Bruce Porch - member, advisory board, Albuquerque Council on Learning Disabilities.

iv. Dr. Lloyd Lamb - member, professional advisory board, United Cerebral Palsy; coordinator, New Mexico Communication Disorders Study Project.

7. Guest Lecturers and Consultants. The Speech Pathology-Audiology Colloquium Series was continued, with speakers covering a broad range of topics.

In September, a team representing the University of Kansas Bureau of Child Research visited the University for two days as lecturers and consultants. The speakers were Dr. Robert Fulton, Dr. James McClean and Dr. Joe Spradlin. Each spoke on a different aspect of "Operant Strategies in Speech and Hearing." Drs. McClean and Spradlin consulted with Dr. Porch and one of the graduate students regarding operant research being conducted at the V.A. Hospital with aphasic patients.

Dr. John Gaeth, Chairman, Audiology Department, Wayne State University, spoke in October as part of a program sponsored jointly by the University and Lovelace Clinic. His topics were "An Alternative Approach in Deaf Education" and "Recent Developments in Hearing Aids."

Dr. John Peterson, Director, Audiology and Speech Pathology, L.S.U. Medical Center, was the colloquium series
lecturer in February. His topics were "Tympanometry" and "Diagnostic Applications of Speech Audiometry."

Dr. William Proffitt, University of Kentucky Dental School, was the colloquium speaker for the March meeting. The topic of his talk was "Relationships between Speech Pathology and Orthodontia." In addition to his talk he consulted with Dr. Fletcher on one of Dr. Fletcher's research projects.

Dr. Bruce Ryan, Speech Pathologist, Monterrey Institute for Hearing and Speech, visited the University in April. His colloquium talk was titled "Behavioral Modification of Stuttering." He also spent a considerable amount of time talking with the students informally about application of operant procedures in treatment of stutterers and with other types of communicative disorders.

The final colloquium speaker for the 1969-70 academic year was Dr. E. James Kruell, Senior Research Audiologist, Stanford Research Institute. Dr. Kruell talked with the audiology students and staff on the topic "Recent Developments in Speech Audiometry" and in addition presented a formal lecture on "Acoustic Parameters of Laryngeal Dysfunction."

The Speech Pathology-Audiology Colloquium Series proved to be a continuing success this year. Plans are to continue this program in the future.
B. Significant Plans and Recommendations for the Near Future

1. Ph.D. Program

The annual report of the Department of Speech for 1968-69 included a copy of an informal request to the UNM administration regarding a tentative date for the initiation of a doctoral program in Speech. The administration pointed out that the BEF moratorium on new Ph.D. programs would probably be in effect for 12-18 months. Vice President Travelstead suggested that the Department might want to start preparation of a final prospectus to be submitted following the lifting of the moratorium. During the current year a committee was appointed to begin work on the preparation of a formal prospectus. This document should be completed during the coming academic year 1970-71.

2. Space

After many years of planning and hoping, the new building for Station KNME-TV is a reality. Dr. Hempen has informed us that the station will be moved during the coming summer and early fall. The Department of Speech is now formalizing plans to occupy the space formerly occupied by the Station. Since the building will have to be completely renovated, we do not expect to occupy the space before the beginning of the second semester 1970-71. The departmental office will move into the new quarters along with several members of the faculty. The space vacated in the back of the building will be utilized by speech pathology and audiology.

3. Radio-Television

In order to maintain high standards of training for students enrolling for production courses in television, the Department will henceforth maintain its own training facilities, utilizing the control
room and studio vacated by KNME-TV. The most modern equipment, including two video cameras, film chain, control room equipment and audio system, will be installed during the late summer and early fall 1970.

The Journalism Department has expressed a desire to utilize the new facility in teaching journalism courses in the area of newscasting.


At the December, 1969 meeting of the National Council of Delta Sigma Rho-Tau Kappa Alpha (national forensic society), the Department of Speech tendered an invitation for the Society to hold its annual speech conference at the University of New Mexico in 1972. During the spring conference held at the University of Alabama in April, 1970, the National Council accepted the invitation tendered by the Department of Speech of UNM. The conference will be held on our campus during the Easter vacation 1972. This activity will bring to our campus several hundred students and faculty members from some 70-80 colleges and universities throughout the United States.

5. Speech Pathology and Audiology

The speech pathology and audiology program has experienced steady growth over the past five years. This may be evidenced in the increase in size of the teaching faculty from three Ph.D.'s in 1967 to the present staff of seven, by a substantial increase and improvement in course offerings, and by an overall upgrading of the clinical and research programs. With these improvements the program shows every
indication of reaching a level of excellence attained by few Master's degree programs in the country. However, to realize their full potential, speech pathology and audiology will have to be granted University support far in excess of what now is provided. The primary areas in which additional University support are needed are clinical and laboratory space and clinical and research equipment. In regard to space needs, the University Speech and Hearing Center is housed in essentially the same facilities now as twelve years ago; yet the total staff has grown from two in 1958 to ten at present and the graduate student enrollment has increased from five to more than twenty students. This growth in numbers has greatly increased the demand for services and has been accompanied by a growth in the overall scope of programs in terms of types of services provided, e.g., specialized training programs leading to M.A. degrees in speech and hearing science and in audiology.

Equipment needs are as pressing as space needs when viewing the future of the program. Before audiology, speech pathology and speech and hearing science can develop to their full potential, clinical and research laboratories will have to be developed. Some equipment support undoubtedly can be obtained through grants but development of the basic laboratories will have to be undertaken by the University.

We will continue to seek training and research grant support for these programs. In addition, an application will be made for accreditation by the Education and Training Board of the American Board of Examiners in Speech Pathology and Audiology (ABESPA). Accreditation by the official accrediting agency of the Speech and Hearing Association
will increase the status of the program and will keep us in a position for federal funding at least at the present level. Dr. Lamb is presently working toward more efficient organization of the academic, clinical and research programs.

Summary

In summary, from the standpoint of faculty and curriculum the Department of Speech is in excellent condition. We are sorely in need of additional graduate assistants. Unfortunately, our total number of graduate assistants (five) has not been increased in several years. The need for additional space and equipment for speech pathology and audiology has been stressed in the body of this report. Some additional space, which will be utilized primarily for clinical services, will be available when the departmental office moves to the front of the building. However, the need for laboratory and research space and equipment will continue to be critical. With several additions to our staff, we are beginning the 1970-71 academic year with an excellent faculty. If the talents of our faculty are to be utilized fully and meaningfully, we must begin a doctoral program in the very near future.
D. Appointments to Staff

Faculty

David J. Draper
University of Kansas
Assistant Professor and Coordinator of Clinical Services, Speech Pathology
July 1, 1970

Gerald M. Goldhaber
Purdue University
Assistant Professor (Communication)
September 1, 1970

John A. Kline
University of Iowa
Assistant Professor (Communication)
September 1, 1970

Ronald D. Snell
University of Indiana
Assistant Professor (Speech Education)
September 1, 1970

Non-faculty

John B. Grainger
South Dakota School for the Deaf
Clinical Supervisor, Audiology
September 1, 1970

E. Separations from Staff

Faculty

E. Wayne Bundy
Professor (Radio-Television)
June 30, 1970

Marilyn Gemberling
Temporary Instructor in Speech
June 30, 1970

Brenda J. Hancock
Instructor in Speech
Jan. 31, 1970

Jim D. Hughey
Assistant Professor (Communication)
June 30, 1970
D. Separations from Staff

Non-faculty

Michael Crum
Clinical Supervisor, Audiology
September 1, 1970

David Peterson
Clinical Supervisor, Speech Pathology
September 1, 1970
II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study

   a. Judith W. Carey
      Ph.D. degree awarded June 1969. Title of dissertation:
      "Measurement of Audience Response to Persuasive Speeches
      with an Audience Response Recorder."

2. Sabbaticals, leaves of absence, travel, etc.

   a. E. Wayne Bundy
      Leave of absence without pay, academic year 1969-70.

   b. Wayne C. Eubank
      Six weeks travel through Europe, the Mediterranean, Near
      East, and Afghanistan--Summer 1969.

3. New scholastic honors, fellowships, etc.

   None

4. Publications

   a. Fred M. Chreist
      "Notes on a Philosophy of Disordered Communication:
      Language Aspects," in The First Lincolnland Conference on
      Dialectology. (Eds.) Jerry Griffith and L. E. Miner,
      "Defining the Polyglot" in The Second Lincolnland
      Conference on Dialectology, (in press) The University of
      Alabama Press.

   b. Robert C. Dick
      Writing a test entitled Argumentation and Rational
      Debating for the Wm. C. Brown Speech Communication Series.
      Manuscript scheduled for submission in August, 1970.

   c. Wayne C. Eubank
      "Palmer's Century Sermon, New Orleans, January 1, 1901,"
      The Southern Speech Journal, Fall, 1969, Vol. XXXV, No. 1,
      pp. 28-39.
      "The Nixon Presidential Campaign--1968," The Speaker

   d. Samuel G. Fletcher
      Berg, F. S. and Fletcher, S. G., ed. The Hard of Hearing
      Child: Clinical and Educational Management. Grune &
      Stratton, 1970.
4. Publications

d. Samuel G. Fletcher (continued)

Fletcher, S. G. The Hearing Mechanism, Chapter in The Hard of Hearing Child. Ibid.
Fletcher, S. G. Levels of Communication, Chapter in The Hard of Hearing Child. Ibid.

e. Lloyd E. Lamb


f. Marilyn J. VanGraber


5. Other Research Projects or Creative Work in Progress or Completed

a. Dolores S. Butt

Department of Development UNM Research Grant, Summer 1969.

b. Judith W. Carey

Research project in progress: A Case Study of Freedom of Speech--Strom Thurmond on the UNM Campus.


c. Fred M. Chreist

Foreign Accent: Spanish (In progress). A second book in the series Foreign Accent; the first was published by Prentice-Hall, ILc., 1964.

d. Robert C. Dick


e. Wayne C. Eubank

Continued work on Palmer biography.
5. Other Research Projects of Creative Work in Progress or Completed

f. Samuel G. Fletcher  
   Basic studies on developing an electronic system for palatometry and gnathometry during continuous speech are in progress. An initial project in a proposed series is: Fletcher, S. G., Novitski, M. A. and Greer, W. H. Speech Articulation Accuracy as a Function of Pseudopalate Thickness and Oral Adaptation. (Study in progress).

g. Richard B. Hood  
   Tympanometry (middle-ear impedance and acoustic reflex thresholds) on normal-hearing adults. Completed, not yet published.  
   Summer Program in Aural Rehabilitation for Hearing-Impaired Junior High School Students. Grant of $5,000 from Albuquerque Public Schools, Summer 1969.

h. Jim D. Hughey  
   Correlates of Communication Sensitivity.

i. Lloyd E. Lamb  

j. Cullen B. Owens  
   Continuing research in British and American Public Address and in Persuasion.

k. Marilyn J. VanGraber  
   Co-author text on 1969 New Mexico State Constitutional Convention--proposed publication date, Fall 1970.

6. Activities in Learned and Professional Societies

a. Dolores S. Butt  
   Participant Arizona Conference on Operant Conditioning in Speech Therapy.  
   Attended Symposium at Callier Speech and Hearing Center, Dallas, Texas.  
   Program chairman for speech pathology and audiology section at AAMD Convention.  
   Delegate to State Council for Exceptional Children.

b. Judith W. Carey  
   New Mexico representative to Speech Association of America "Committee of Fifty."

c. Fred M. Chreist  
   Member - History Committee, American Speech & Hearing Assn.
6. Activities in Learned and Professional Societies

d. Robert C. Dick
   On Membership Committee of the American Forensic Association.
   Attended Annual Convention of the Western Speech Association in San Diego.

e. Wayne C. Eubank
   Attended Western Speech Association Conference, San Diego--addressed NSA Executive Association.
   Attended Speech Association of America convention, New York; member of Legislative Assembly.
   Attended National Council of Delta Sigma Rho-Tau Kappa Alpha as trustee.

f. Samuel G. Fletcher
   Instructor at three-day conferences: Patterns of oral-facial growth and development, joint committee of the American Speech and Hearing Association and the American Dental Association, Ann Arbor, Michigan, March, 1970.
   Sub-Committee Chairman for Speech Science, 1970 American Speech and Hearing Association Convention, New York City.
   Member, ASHA Committee on Scientific Affairs, 1969-1972.

g. Richard B. Hood
   Professional papers Read:
   Other meetings attended: Demonstration Conference, selected clinical procedures in speech pathology and audiology with mentally retarded children. Parsons, Kansas State Hospital and Training Center, May 5-6, 1970.

h. Jim D. Hughey
   Read paper to Western Speech Association entitled "Credibility and Behavioral Commitment."
   Attended the Speech Association of America convention, New York City.
6. Activities in Learned and Professional Societies

i. Lloyd E. Lamb
   Papers presented:
   "Hearing disorders in the mentally retarded," read to the American Association on Mental Deficiency regional meeting, Albuquerque, November, 1969.
   "Hearing assessment of the special child," read to the American Association of Mental Deficiency regional meeting, Albuquerque, November, 1969.

j. Cullen B. Owens
   Attended Western Speech Association convention, San Diego, California, November, 1969.
   Research and Publications Committee, Delta Sigma Rho-Tau Kappa Alpha.
   Delegate-at-Large, Legislative Assembly, Western Speech Association.

k. Marilyn J. VanGraber
   Attended Speech Association of America Convention, New York City, December 1969.
   Attended Western Speech Association Convention, San Diego, California, November 1969.
   Interest group officer, program chairman, WSA.

7. Other Professional Activities

a. Dolores S. Butt
   Consultant to Albuquerque Public School class for physically handicapped.
   In-service training to Laguna-Acoma School District
   Consultant to U.S. Public Health Service, Laguna, N.M.
   Consultant to UNM Department of Guidance and Special Education.

b. Judith W. Carey
   Parliamentarian for the 1969 New Mexico State Constitutional Convention.
   Directed the 1970 New Mexico State High School Speech Championships.
   Guest judge at the 1970 National Debate Tournament held in Houston.
7. Other Professional Activities

c. Fred M. Chreist
   Member, Rehabilitation Center, Inc. Cleft Palate Team.

d. Wayne C. Eubank
   Five addresses to church organizations; three addresses to service organizations, four addresses to professional groups.

e. Samuel G. Fletcher
   Consultant, Veterans Administration Hospital, Albuquerque, New Mexico.
   Professional Advisory Committee, Easter Seal Society for Crippled Children and Adults of New Mexico, Inc.
   Advisory Board, Model Cities Diagnostic and Learning Center.

f. Richard B. Hood
   Consultant in Audiology, Veterans Administration Hospital, Albuquerque.

g. Jim D. Hughey
   Consultant for a BIA funded project in conjunction with Creative Consultants, Inc.
   Lecturer in a graduate course sponsored by the division of Public Administration.
   Consultant for programs developed by the College of Business and Administrative Sciences.

h. Marilyn J. VanGraber
   Professional Consultant, Parliamentary Procedure, New Mexico Constitutional Convention.
   Moderator-Constitutional Convention program, KNME-TV.
   Moderator-International programs, KNME-TV.
   University College Advisor.

8. Non-teaching University Service

a. Dolores S. Butt
   TV appearance for KNME series on the University, topic "Community Service.
   Faculty Advisor.
   Director Elks Cerebral Palsy Evaluation Program.
   Director, Speech Evaluation Program for Mental Development Center.

b. Judith M. Carey
   Director of Forensics
   Member, Student Standards Committee
   Ad Hoc Committee on Student Faculty Rights and Responsibilities.
   Faculty Advisor to the Debate Council.
8. Non-teaching University Service

c. Fred M. Chreist
   Member representing the Speech Department on the Linguistic
   and Language Pedagogy Department Committee.
   Special Advisor, University College.
   Ph.D. Committee, Department of Speech
   Chairman, Advancement Committee, A & S College
   Graduate Advisor.

d. Robert C. Dick
   Faculty advisor, University College

e. Wayne C. Eubank
   Chairman, Department of Speech
   Advisor, Speech Majors.

f. Samuel G. Fletcher
   Member, University Subcommittee on Rehabilitation Planning.
   Director, Laboratory for Biocommunication Studies.

g. Jim D. Hughey
   Four dissertation committees and three master's committees.

h. Lloyd E. Lamb
   Director, Speech Pathology and Audiology, and Director of
   University Speech and Hearing Center.

i. Cullen B. Owens
   Graduate Committee, Department of Speech
   Ph.D. Committee, Department of Speech

j. Marilyn J. VanGraber
   A & S Faculty Advisory Committee
   Department Curriculum Planning Committee
   Chairman, 255-56 Committee

9. Public Service

a. Dolores S. Butt
   President, United Cerebral Palsy of Albuquerque

b. Judith W. Carey
   Provided speech contest judges for: two American Legion
   contests; two Menaui H.S. contests; an Optimists Club con­
   test; a Future Business Leaders of America parliamentary
   procedure contest; and the N.M. State National Forensic League
   championships.

c. Fred M. Chreist
   Assistant to the Episcopal Chaplain, Canterbury Chapel,
   Episcopal, campus.
9. **Public Service**

d. Wayne C. Eubank  
   Member First Methodist Church.  
   Work with Kiwanis Key Clubs.  
   Member, Program Committee of Downtown Kiwanis.

e. Samuel G. Fletcher  
   Church of Jesus Christ of Latter-Day-Saints,  
   Albuquerque Sixth Ward, First Counselor in Bishopric.  
   Institutional Representative, Troop #206, Sandia District Boy Scouts.

f. Lloyd E. Lamb  
   Member of the Professional Services Advisory Board  
   of United Cerebral Palsy of New Mexico, 1969-

10. **Personal Information**

Early in the Fall of 1969 the School of Business and Administrative Sciences at the University of New Mexico undertook the development of a comprehensive strategic plan which began with the following statement of the School's fundamental objective: "to contribute to the development of creative and responsive management leadership necessary to meet the complex social-economic problems confronting our state, nation, and world."

New Program Plans

Following lengthy debate and consideration of alternative strategies to achieve this goal, it was concluded that a combination of a preprofessional program in the arts and sciences and a creative, student-centered graduate program of two years duration leading to the professional Master's of Business Administration (M.B.A.) degree would contribute most to meeting the management development goals of tomorrow's managers. An integrated series of Continuing Management Development Programs were considered an equally essential responsibility of the School for today's managers.

At this point the Faculty was reorganized into program teams, rather than the traditional departments, one of which was designated the Graduate Program Team. This Team then began the further development of the M.B.A. degree program and a new "Three-Two" Program option to broaden the M.B.A.'s availability and attractiveness to a maximum number of undergraduate students. This program facilitates the undergraduates' achievement of both a Bachelor's degree and a Master's of Business Administration degree during a five-year course of study.1

1A detailed description of the new M.B.A. Program and its "Three-Two" option, as well as a complete review of the educational and resource considerations supporting these new directions, are contained in the School's Strategic Plan attached.
It should be recognized that this substantial revision of the M.B.A. program and its new "Three-Two" option did involve a major effort on the part of the Graduate Program Team and the Faculty. This is well reflected in the joint program planning that has taken place with Economics, Sociology, Mathematics, Engineering (Nuclear, Mechanical, Electrical), Pharmacy, Journalism, Law, Architecture, as well as special meetings to review these new program plans with a large number of University Committees, Departments, Schools, and Administrative officers. In addition a series of meetings were held throughout the year with members of business organizations and several other state universities to discuss these plans and receive their suggestions. The University and community support has been most helpful and very much appreciated.

Professional Community Relationships and Needs

The meetings with the business community provided excellent ideas and insights concerning how we, as a professional School of Management, might better respond to the special needs of New Mexico and strongly supported our growing recognition of the vital relationship of the School with the Business and Public sector communities. For example, these meetings helped us recognize the state's special small business enterprise and entrepreneurial development needs. We have, therefore, developed a new course in Small Business Management and it will be offered next year. In addition the policy course, once focusing on large national corporations, was broadened to include small business operations in disadvantaged areas. These case studies jointly developed by faculty-student teams have since resulted in a broadened community action program. It was again the business community that increased the School's awareness of its need for increased management talent from the State's ethnic minorities. While the School traditionally enrolls many Spanish surname students, it has had few students from the many regional Indian communities. A comprehensive program, therefore, has been developed for Indian M.B.A. students and submitted to the United States Office of Education. While its prospectus looks promising, new Indian
scholarships are being sought locally, and this Fall through such a scholarship, the first Indian student has been admitted into our M.B.A. program.

The Advisory Council

President Heady's further recognition of this important private and public sector role in the School's development was evidenced by his appointment, with the Dean, of a School of Business and Administrative Sciences' Advisory Council recognizing outstanding State and National management leadership. Through their diverse membership, recommendations of new ideas and a broad, balanced view of the School's plans and programs are being formulated. The mission of the Advisory Council has, from the outset, been perceived by the members as going beyond counsel and advice. Following several Council meetings and many subcommittee meetings the Council with the School's Faculty have planned and are now helping mount several new action programs. A new School Internship Program is now being developed for this Fall which will provide insights for the M.B.A. Intern concerning interrelationships between his academic program and its applicability to current management problems and practice. It also provides him with excellent experience and information concerning existing professional career opportunities in a wide variety of New Mexican private and public enterprises. The program provides, in addition, supplementary financial support as well as up to nine hours of academic credit upon satisfactory completion of the one-year program and a related research project.

New Management Development Programs

Later in the 1969-70 academic year the Faculty undertook an extensive re-evaluation of its Management Development Program goals in relation to New Mexico and the Southwest's growing needs for high talent management manpower. As a result of this study and the Advisory Council's joint efforts with a newly formed faculty program team concerned with extended management education, the following series of new programs are being developed to establish a closer working relationship with the private and public sector
management communities. These programs reflect our clear recognition that management education is now a career-long process and an essential responsibility of both the Professional Graduate School and the management community which it serves.

The Executive Program

The Executive Program is now being designed to provide New Mexican management with the opportunity to participate in a mid-career educational program of the highest quality specifically adapted to their needs. The program now under consideration is of nine months duration with class meetings held one full day a week—alternately Friday and Saturday. In this way the company and the manager can better share the financial and time costs involved. At the end of this period those satisfactorily completing the course will receive a certificate. In addition, an extension of this program is being planned where the graduate of the nine-month executive program would receive academic credit for this completed work and continue his studies toward a Master's degree. This program has received enthusiastic and broad support from the management community and the School's Advisory Council which is currently working with the Faculty on its development.

Top Management Briefings

The objective of this Program is to further the human and economic development of the State of New Mexico through the mutual learning experience of the State's top management leadership with the most highly qualified academic resources of the School and the nation. The experience and proven capabilities of the state's and nation's finest minds ensures a searching and relevant dialogue seeking to identify goals and strategies for the mutual benefit and development of their organizations and the region. The program will consist of intensive monthly seminars held at the School with participants invited by and including the School's Advisory Council,
The Business and Professional Association
Development Program

The School with the advice and counsel of its Advisory Council has established a program to assist in the planning and enactment of educational development programs with the region's many business and public sector professional associations. The content of the seminar and the faculty will be jointly agreed upon by the School and the Association concerned. The seminars, normally running from one day to two weeks, will be held at the School of Business and Administrative Sciences.

The Alumni Association

The School of Business and Administrative Sciences' first Alumni Association was founded last Spring and, like the School's Advisory Council, has already been of invaluable assistance. A complete list of the School's several thousand alumni has now been recorded on magnetic tape for computer sorting and printing for mailings. The new Alumni officers and board of directors are now planning a detailed Alumni questionnaire and Fall Homecoming activities.

A most important joint undertaking of the School's Advisory Council and the Alumni Association has been the development of a School of Business and Administrative Sciences' Foundation through which these organizations are already assisting the School in acquiring the financial resources necessary for its continued advancement of professionalism in the State's management community.

The New Building and Parish Memorial Library

The 1969-70 academic year was also marked by the School's second year in its new, design award winning building complex and the dedication of the William J. Parish Memorial Library contained within it. This Library provides, for the first time within the State, a specially designed Library center for professional study and research in management and the administrative sciences. The School owes a great debt of gratitude to Dean Parish and his family for their major role in the development of the School and the Parish Memorial Library.
The new School of Business and Administrative Sciences building also contains specially designed case-study classrooms, behavioral science and computer laboratories. The latter now has a direct linkage with the University's new IBM 360/67 via its IBM 1050 console.

The Faculty of the School continues to develop with the addition of three new faculty for 1970-71 from UCIA, Yale University, and Pennsylvania State University in the areas of Operation Management, Organizational Behavior, and Finance, respectively. It would be difficult to imagine a more highly qualified group of young scholars. They understandably represent a great point of pride on the part of our Faculty whose high expectations and creative new program developments have attracted them to us.

Plans for Continued Development

In 1969-70 the School established an ambitious and integrated set of objectives within a Five-Year Strategic Plan. In addition it has developed new internal structure, academic programs, and community professional organizations necessary to achieve these goals. The School's future is indeed bright, however, the next several years will remain a critical period in its development. Of particular importance during this period will be the School's new Continuing Management Development Programs and Internship Program through which mutually beneficial relationships essential to a professional school are established with the State's management practitioners. The role of the School's Advisory Council and Alumni Association in building these relationships is of the highest importance. Finally, the continued strong support of the University Administration remains essential to our development as a truly outstanding Professional, Graduate School of Business and Administrative Sciences.

\[2^{nd} \text{See list of new Faculty attached.}\]
Enrollment and Degree Statistics

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Appointments to Staff

Mr. James A. Fitzsimmons was appointed Assistant Professor in the Quantitative area from the University of California, Los Angeles, Ph.D. expected 1970.

Mr. Roger H. Jehenson was appointed Associate Professor in the Organizational Behavior area from Yale University, Ph.D. expected 1970.

Mr. Walton R. L. Taylor was appointed Assistant Professor in the Finance area from Pennsylvania State University, Ph.D. expected 1970.

Separations from Staff

Professor Charles S. Telly resigned in order to accept an appointment at another institution.
Composite of Biographical Supplements

Advanced study

Lenberg, Robert A.: Post-Doctoral studies at the University of New Mexico, Summer 1969.

Yeakel, John A.: Completing doctoral studies at the University of Florida during the 1969-70 academic year.

Sabbaticals, leaves of absence, etc.

Winter, Lothar G.: Consultant, United Nations, India and Visiting Professor at the University of Mannheim, Germany.

Yeakel, John A.: Completing doctoral studies at the University of Florida during the 1969-70 academic year.

New scholastic honors, fellowships, etc.

Lenberg, Robert A.: Received Delta Sigma Pi (Professional Business Fraternity) Outstanding Service Award, May 1970.

Publications


Other Research Projects or creative work in progress or completed

working with the New York office of Peat, Marwick & Mitchell on a research project involving the measurement of behavioral affects of management accounting systems.


Edgel, Ralph L.: Continued work on banking competition in New Mexico

Finston, Howard V.: Editorial consultant to Prentice-Hall and to Wadsworth publishing companies in the area of organizational behavior. Text on organizational behavior in progress.


Activities in learned and professional societies


Christman, Karl: New Mexico Society CPA Practice Review Committee. National Association of Accountants served as Treasurer, arrangements, and summarized the five annual Accounting Seminars at UNM. Attended Annual Meeting of American Accounting Association at Notre Dame University.


Möri, Perry T.: New Mexico State Society of CPA; American Institute of CPA; Accounting Association—University of New Mexico; American Bar Association; Member, By-Law Committee New Mexico State Society of CPA; Phi Kappa Phi.


Winter, Lothar G.: Delta Sigma Pi conference, chairman of the session on marketing.

Other Professional Activities

Christman, Karl: Consulting on limited basis on accounting systems; moderate tax practice as CPA; served as faculty advisory for Alpha Kappa Psi; participated in student accounting association activities; member of Supervisory (Audit) Committee of Coronado Credit Union.


Mori, Perry T.: Consulting - Accounting, Income Taxes, Estate Taxes, Trust and Law. Member of Board of Directors, two private corporations.


Winter, Lothar G.: International business consultant to U.S. company operating in Europe. Consultant to Indian Institute of Foreign Trade, New Delhi, India. Consultant to the University of Mannheim, Germany. Member of the Board of Directors of Southwest Computer College. Have given various talks before business and government groups in India, Switzerland, Germany, and Albuquerque.

Non-teaching University Service

Caplan, Edwin H.: Chairman, School of Business and Administrative Sciences Graduate Program Team; member, University
Curricula Committee; Member, ISRAD Advisory Committee; Director, ISRAD Bureau of Revenue Training Program; Coordinator of Workshop on State Taxes sponsored by the University and the Department of Revenue, July 1969; Member, School of Business and Administrative Sciences Promotion and Tenure Committee; Consultant at University Administration meeting on Academic Planning, April 1970.

Christman, Karl: Member, University Faculty Policy Committee, Continuing Education Committee, Faculty Budget Review Committee; Chairman, Library Study Committee, Scholarship and Educational Aids Review Committee. Member, School-Management Development Team, Chairman, Faculty-Public Accounting Advisory Committee.

Edgel, Ralph L.: Academic Freedom and Tenure Committee; School Policy Committee and Graduate Program Team; Graduate Coordinator, School of Business and Administrative Sciences; Member on five thesis committees; faculty advisor for finance majors.

Finston, Howard V.: University Committees: Summer Session Committee; President's Advisory Committee on Fair Employment. School of Business and Administrative Sciences: Chairman, Library Committee; Member, Graduate Program Team, and Organizational Development Team. Consultant to the President and Director of Personnel in the area of Collective Bargaining policy for University staff employees.

Lenberg, Robert A.: University committees: Library Committee (until March 1970). School Committees: Policy Committee, Graduate Program Team, Organizational Development Team, and MBA Examination Committee. Faculty advisor to: Business Administration Students Assn.; Delta Sigma Pi; and Albuquerque Institute of Religion (L.D.S. Church). Advisor to 42 University College students, three Master's Theses Committees, Doctoral dissertation reading committee and final oral examination for two students.


Peters, William S.: University Research Allocations Committee; School Policy Committee, Promotion and Tenure Committee, Research Program Team, and Graduate Program Team.

Slate, Daniel M.: Supervised graduate theses, chairman of three and reader of two. University committees: Public Administration Committee and Graduate School Committee.
School: Graduate Program Team, Organizational Development Team, Research Team, and Chairman of Promotion and Tenure Committee. Various presentations or attendance before special or ad hoc committees of the University.

Winter, Lothar G.: University Committee on International Affairs. School committees: Promotion and Tenure, Organizational Development Team, and Graduate Program Team.

Public Service

Caplan, Edwin H.: Member, Board of Trustees, Temple Albert, Men's Club.

Christman, Karl: Church Budget Committee.

Finston, Howard V.: Vice-Chairman, City Personnel Board; Member, Board of Directors, Blue Cross-Blue Shield; Member, Board of Trustees, Manzano Day School; Member, Board of Directors, Campfire Girls; President, Board of Directors, First Unitarian Church of Albuquerque.

Lenberg, Robert A.: Supervised Small Business Projects conducted with senior business administration students; assisted Professor Robert Oseasohn of the Medical School in preparation of a Research Proposal; Executive Secretary to Stake President who presides over the Albuquerque East Stake of the Church of Jesus Christ of LDS.

Mori, Perry T.: Board of Directors, The Rehabilitation Center, Inc.

Slate, Daniel M.: Board of Directors of the Southwest Computer College and Browning Commercial School.
A STRATEGIC PLAN FOR

THE SCHOOL OF BUSINESS AND ADMINISTRATIVE SCIENCES

THE UNIVERSITY OF NEW MEXICO
THE SCHOOL OF BUSINESS AND ADMINISTRATIVE SCIENCES  
THE UNIVERSITY OF NEW MEXICO  

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I. The Objectives of the School of Business and Administrative Sciences

The School of Business and Administrative Sciences at the University of New Mexico has as its fundamental objective to contribute to the development of effective and responsible organizational leadership which is necessary to meet the complex social-economic problems confronting our state, nation, and the world.

Ours is the unprepared society. Faced with unprecedented social and technical change, we are inadequately equipped emotionally and intellectually. Despite the great advances of the biological, physical, social, and management sciences, we currently lack the knowledge and the leadership to anticipate and to adapt to the rate and magnitude of changes we meet. While American management might well congratulate itself for its key role in winning the technological development race with Western and Eastern Europe, it may well be losing the human race if our nation's leadership is unable and/or unwilling to confront the world's mounting social-economic problems. Herein lies a major challenge to today's managers and management educators charged with the development of tomorrow's leadership. The scope of the local, national, and international social problems we face clearly demands unique combinations of organized high-talent human resources. A manager's responsibility to affect these problems lies in its concepts, skills, and creative leadership of organizations whose power and resources go far beyond his or any single individual's capability.

American management's recognition of these responsibilities and its new and broader perception of the interrelationships between both
social and economic development is already evident. With the stimulus of new levels of public concern and government regulatory activity, we already find private sector management deeply involved in and with the public sector.

Urban development, with its problems of pollution, transportation, and under-employment are being viewed as opportunities for both profit and social contribution. Joint ventures of corporations with international, national, state, and local governments involving every aspect of our most difficult unsolved social problems are now almost commonplace. More and more business managers are examining the nature of their cooperative role in society's progress.

The implications for schools of business administration of this new and greatly broadened role of management in meeting society's formidable social-economic development problems are very great. With the exception of several professional graduate schools, few, if any, of the nation's hundreds of programs in business administration have risen or even recognized the incredible responsibility with which they are best equipped to cope. As Professor Nevitt Sanford of Stanford University concluded after several major studies of American Higher Education:

"We are not proceeding in a way that will give us excellence in performance on the job or in life. Our student-slaves might be suitable technicians in the future, but it is a little hard to imagine their becoming leaders of society... or well-developed individuals."

The University of New Mexico's School of Business and Administrative Sciences fully believes that the achievement of its goal, and the fulfillment of its responsibility, the development of effective and responsible organizational leadership, necessitates bold new concepts and creative programs of professional management education.
II. The Need For Creative Professional Management Education

In considering the gravity of the social-economic problems previously mentioned, and the resultant changing intellectual and value needs of management, there are certain basic premises which we believe provide direction and substantial support for implementing in the School of Business and Administrative Sciences a new course of professional management education.

A. "Excellence" in professional management education is abetting individual intellectual and moral self-fulfillment. The pursuit of "excellence" in higher education is too often subject-matter centered with rigid standards of performance which foster conformity and feelings of inadequacy within the vast majority of students. Seldom has the student's individual fulfillment been a central measure of a university's achievement of "excellence."

Professional management education must pioneer student-centered programs designed to establish "life styles" of balanced individual growth and self-fulfillment within an intellectual framework which uniquely characterizes man at his best, creatively equipped to respond to the challenges of modern life, and morally able to recognize his human responsibilities.

While graduate schools of business and the learning industry have long led in new applications of learning theory and educational technology with the case method, computer assisted instruction, simulation and gaming and laboratory training,
there is a need to integrate these concepts and tools through the design of student-centered management education systems relating multi-media inputs to achieve more carefully defined behavioral goals. The strategies we propose involve the selection or design of modular instructional activities which include whichever method/media are established through experimentation to be most effective in the attainment of specific behavioral objectives. The method/media mix for any given sequence of objectives may include programmed instruction, laboratory experimentation, single concept films, tutorials, field research, learning cells, computer gaming, and simulations. Team teaching is particularly relevant to curriculum such as ours which is based upon a systems conceptual framework to foster the integration of subdisciplines, professional skills and values.

This student-centered curriculum is specifically designed to accommodate to individual differences in learning experiences, capabilities, and areas of interest. It is, therefore, self-directed and self-paced to insure the student's interest and facilitate his self-development essential to launch a lifetime of balanced growth. The key to such a program is a dynamic curriculum which responds to the direction of the student by being a flexible and relevant learning experience.
II. The Need For Creative Professional Management Education

B. Foundations For A Lifetime of Balanced Growth

1. Preprofessional Education in the Arts and Sciences

A well-integrated knowledge of the Humanities, Physical, Biological, and Social Sciences provides an intellectual and moral foundation which is essential to the balanced development of individual and professional values, concepts, and skills. A preprofessional liberal education in the Arts and Sciences is essential for several reasons. First, it insures the student adequate time to explore the vast range of human knowledge, experience, and values and relate his personal preferences and talents to the constantly expanding life-roles open to him. Second, and of equal importance, a preprofessional liberal education fosters a balanced growth of individuality—often defined as "wisdom."

Crawford H. Greenewalt, while president of the DuPont Corporation, pointed out the inadequacies of his own highly specialized science curriculum when he remarked:

"The basic requirement of executive capacity is the ability to create a harmonious whole out of what the academic world calls dissimilar disciplines."

The humanities, which provide comparative human values and historical perspectives on the sciences and social sciences are essential to a future manager's balanced growth. The humanities deal with the whole; intellect, emotions and values are inseparable. Without adequate time for the study of
self, historical and contemporary society, and their inter-
relationship; future management's judgment will be locked in
the same technical-professional mental groove which has recently
been the subject of rising national criticism and genuine con-
cern. This compartmentalized approach, exemplified by Dr.
Grenewalt's University experience, has long influenced the
physical, biological, and social sciences which themselves are
now undergoing a growing wholestic and interdisciplinary move-
ment well evidenced by Systems theory, Cybernetics, and Ecology.

While it is no longer feasible for a scholar to master all
of the concepts and analytical techniques composing the basic and
social sciences, it is all the more important that he gain an
understanding of the basic interrelationships and scientific
methods of analysis underlying these ever-expanding disciplines.
The precise, mathematical language of science provides a way of
communicating and reasoning essential for the basic social and
administrative sciences and those future managers who must
intelligently assess the new technologies and evaluate proposals
such changes will precipitate.

While the study of the well-established basic sciences
needs little justification for future American managers who
must continue to make possible their nation's unprecedented
technological progress, the relevancy of the social sciences
has been less understood. Recently, however, man is beginning
to comprehend how his technological innovations are producing
social repercussions which spread wave-like throughout his environment. The increasing influence of the social sciences evidenced within the public and private sector during the last twenty years parallels the development of empirical, scientific procedures in the social sciences which have produced replicable findings that both command respect and have pragmatic applications. The well-established government economic controls developed from Keynesian-type theory are now being joined by more comprehensive efforts based on behavioral science findings and recognizing both social and economic change. Again the quantitative, systems and information sciences have made possible linking in complex computer models the many important new findings from the social and basic sciences which facilitate the simulation of actual social-economic systems. In addition, the social scientist can now for the first time test these models in the real world because of the computer's enormous capacity for collecting and processing data.

Thus, an understanding of the theory and scientific methods employed by the social sciences is essential to a future manager's ability to understand, predict, and hence coordinate the development of complex social-technical systems be it a corporation, state, or international organization.
II. The Need For Professional Management Education

B. Foundations For A Lifetime Of Balanced Growth

2. Professional Education: Accelerating Changes and Responsibilities

Management, according to A. Lawrence Lowell, is the oldest of the arts and the youngest of the professions. In many ways this is indeed fortunate as a young, unstructured profession may hopefully more easily adapt to the accelerating changes in intellectual content, societal role and challenges that have already taken place during its short lifetime and will undoubtedly continue. Management which evolved as an art over centuries, is rich in history, description, and normative content, but its development of an empirical body of knowledge, essential to a profession, has taken place mainly during the last half century. Therefore, there has been a parallel development of two programs of instruction, practitioner-oriented professional schools emphasizing skills and attitudes, and the research-oriented graduate schools stressing the scientific, analytic mode. Even within those schools stressing the latter mode there has been little integration between the quantitative management sciences and the behavioral sciences. There have been few empirical studies and as yet little understanding of the effects of such widely used management science tools as P.E.R.T. and P.P.B.S. on organization structure and directly related human performance, satisfaction and development.
As the name of the new School was intended to define, the School of Business and Administrative Sciences at the University of New Mexico is committed to both an effective integration between the administrative sciences and management sciences, with the professional skills and attitudes essential for future management's effective and responsible leadership. We will, therefore, emphasize and develop in our curricula integrating conceptual frameworks such as general systems theory which facilitates the linking of both normative objective functions with interdisciplinary contributions from the physical, biological, and social sciences. Team teaching, computer simulations, in-depth tutorials, field research and clinical programs may emerge as representative means to achieve more effective two-way theoretical and professional skill integration for the management scholar and practitioner throughout his professional career.

Professional management education can no longer fail to recognize and convey how an executive's decisions reach beyond his particular organization and effect socially as well as economically his state, nation, and world. There is not only a need to establish a professional code of ethics, but also a clear understanding of how the well-being of an organization is dependent upon the health and effectiveness of all social institutions. Here again, management's increasing involvements within health, education, and government organizations are demanding new and broader goals and measures. How do you
measure the effectiveness of a public health system, a university, a corporation's contribution to the development of its employees and community? While economic measures have long been relied on as our major indicators of public and private organization value and effectiveness, contemporary society is increasingly concerned with the quality of human lives. The mere quantification of value functions such as profit and loss bookkeeping can lead management to overlook morale, loyalty, morality, and the critical but unmeasured human assets simply because of the clarity and apparent objectivity of quantitatively measurable goals. Neither the nation nor its public and private institutions have adequate definitions of social health, without which it is most difficult to develop measures of social progress or retrogression.

Few managers today can long remain unaware of the millions of underprivileged in our own country and the challenge and opportunity this presents to them. Fewer still, as managers, are aware of a growing tidal wave of hungry and starving people rising within the underdeveloped countries of the world. What are the needs of today's management scholars who will assume in the 1980's positions of organizational leadership? They will cope with the problems and obligations of unprecedented affluence in the post-industrial underdeveloped world. These are the urgent problems and questions which graduate management education must now recognize as relevant and confront with research and study.
While the above, in total, represents a formidable challenge to professional management education, the School fully intends to join those schools which are making meaningful contributions to the development of effective and responsible organizational leadership, necessary to meet the complex social-economic problems confronting our state, nation, and world.
III. The Graduate Program

A. The "three-two" Masters of Business Administration Program

Following lengthy consideration of the previously cited special needs and goals of professional management education, the faculty of the new School of Business and Administrative Sciences studied and discussed alternate strategies by which these needs could best be achieved. The faculty concluded that a combination of a preprofessional program in the Arts and Sciences and a professional graduate program of two years duration leading to the Masters of Business Administration degree was essential to the achievement of its management development goals.

The subsequent question was then, of course, how to further develop our "two-year" MBA degree program and broaden its availability to a maximum number of students now enrolled in the Bachelor of Business Administration degree program.

In the process of answering this question, institutional precedents were sought and Dartmouth's Amos Tuck School of Business, founded in 1900, and the first professional graduate school of business presented a most attractive solution. Its "three-two" MBA program remains highly regarded and was most recently adopted by the new Graduate School of Administration at the Irvine campus of the University of California. This program facilitates the undergraduate's achievement of both a Bachelor of Arts or Science degree and a professional MBA degree during a five-year course of study.
As envisioned, the two-year MBA program may be entered by those seniors who have satisfactorily completed the preprofessional courses during their first three years at the University of New Mexico. At the completion of their first year in the MBA program, they could receive a wide variety of undergraduate degrees such as a B.A. in Economics or a Bachelor of University Science degree depending upon their preferences, capabilities, and curriculum planning. Other University of New Mexico students and transfer students would be required, as currently, to have satisfactorily completed their Bachelor's degree prior to being eligible for admission to the regular two-year Masters of Business Administration Degree Program.

There are many additional factors which lend support to the proposed "three-two" MBA program. The Bachelor's of Business Administration degree has not significantly improved its image nationally since its negative sanction by the Carnegie and Ford Foundation Studies ten years ago, where the MBA degree has developed international recognition and emulation. This degree gap is further reflected in the significant and widening salary differential between and demand for the BBA and MBA degree holders. Recognizing the limits of the BBA, the nation's major graduate schools of business openly discriminate against those applicants holding a BBA relative to other arts and sciences degrees.

The School fully recognizes that several transition years will be involved in the upgrading of its current BBA program to the MBA level, as well as a need to continue to provide, at the
undergraduate level, several basic service courses such as accounting, for other college programs. This obligation it willingly accepts. In addition, the faculty recognizes that a raising of expectations and commitments on the part of students will require both active faculty recruiting of students and continuing development of program quality to justify this added effort and investment. The faculty is fully committed to this program and accepts the challenges and added effort it personally means to them. The opportunities the "three-two" MBA curriculum provides for joint degree programs has been mentioned at the undergraduate level; however, joint professional programs with medicine, law, education, architecture, and engineering have already been discussed and several have operating prototypes at other universities.

Finally, the leadership role of the University of New Mexico School of Business and Administrative Sciences vis-a-vis the proliferation of undergraduate programs in the state deserves mention and will take us full circle to our opening statement of needs and goals. There is not, at present, one school of business administration in New Mexico accredited by the American Association of Collegiate Schools of Business. The state very much needs a high quality standard-setting school and program to provide the leadership for the state's development of higher education in Business and the Administrative Sciences—without which, in turn, it cannot hope to meet its high needs for creative development leadership. The School of Business and Administrative Sciences at the University of New Mexico believes it is well equipped to accept this leadership responsibility.
B. The Doctoral Program

A doctoral program is an essential part of a Professional School of Business in that it recruits and develops the future scholars of the profession and further fosters enrichment of the teaching programs and professional practice through faculty research, executive programs, and consultation. In light of the new complex problems man faces which require organized human and technical resources and the potential contribution of management scientists to their solution, graduate schools of administration may well in the future be valued as much for their research as the professional M.B.A.'s they develop.

The School of Business and Administrative Sciences has already received approval of its Ph.D. program from the University faculty and administration. The proposed Doctoral Program is intended to provide an opportunity for students to acquire the necessary qualifications for teaching and research in the field of Administration. Therefore, by furnishing a pool of qualified faculty for other institutions in the State of New Mexico, this program should be a major factor in the further development of management education throughout the state. In addition, it is anticipated that the Doctoral Program will substantially strengthen the research capabilities of the School of Business and Administrative Sciences, and thereby enable it to contribute even more significantly to the social-economic development of state and nation. In our future post-industrial society the production of things will no longer
remain a primary problem, whereas the production of thoughts, new concepts, insights and innovations will be the main focus of higher education for management.

The proposed Doctoral Program calls for instruction in the following areas:

1. Economic Theory

   A fundamental grasp of economic theory, both macro and micro, as it relates to the internal operations of the organization; and also relation of the organization to the external economic environment, both national and international.

2. Organization Theory

   An analysis of the human variables or factors influencing the administrative process at all levels including the individual, intro-group, inter-group, and total organization. Includes a thorough grasp of the research methods employed in studying such levels as well as the significant research findings to date.

3. Managerial Controls

   The controls essential to and operating within the organization. The accounting, financial and legal constraints operating within the organization and having impact upon the administrative enterprise.

4. Quantitative Methods

   A solid grasp of the scope and usefulness of mathematical models and techniques and statistical tools in the solution of administrative problems, including the use of simulation techniques to foster such understanding.
5. Operations, Control and Environment

The Ecology of Operations essentially designed as an integrative approach to understanding how the various variables included under 1, 2, 3, and 4 interact—the economic, legal, human resources, etc.—in decision-making processes involved in the various functional areas. Although the student may have a firm grasp of the variables subsumed under 1, 2, 3, and 4, the administrative process most often requires the evaluation of their interrelationship in a given situation and judgments of the appropriate weights to be attached to each of the several components involved.

In addition to the general areas required for all students listed above, each candidate will be required to offer a major field and a minor field of specialized study.

The intent of the faculty is to incrementally develop the Doctoral Program in order to develop the highest levels of scholarship and research talent. A very small number of carefully selected candidates on a one-to-one ratio with senior faculty engaged in significant research is planned as a pilot development program. By providing each doctoral candidate with an opportunity for in-depth work with several senior professors of immediate interest to both alike, the integrity of human and academic values, methods, and rewards of scholarly inquiry can best be shared. We believe that the development of our "three-two" Masters of Business Administration Program will permit us to utilize our scarce resources most effectively and will provide the essential graduate level orientation upon which to develop a truly distinguished Doctoral Program.
SCHOOL OF BUSINESS AND ADMINISTRATIVE SCIENCES
THE UNIVERSITY OF NEW MEXICO

THE THREE-TWO PROGRAM
LEADING TO THE DEGREE
OF
MASTER OF BUSINESS ADMINISTRATION

February, 1970
The fundamental objective of the School of Business and Administrative Sciences is the development of the effective and responsible professional management talent which is necessary to meet the complex social-economic problems confronting our state, nation, and world.

Preprofessional liberal education in the Arts and Sciences is a vital prerequisite to effective management education for several reasons. A well-integrated knowledge of the Humanities, Physical, Biological, and Social Sciences provides an essential intellectual and ethical foundation for a lifetime balance of growth. Furthermore, it insures the student adequate time to explore the vast range of human knowledge, experience, and values whereby he can relate his personal talents and preferences to the constantly expanding life-roles open to him.

As the name of the School is intended to stress, the School of Business and Administrative Sciences at the University of New Mexico is committed to an effective integration between both the administrative sciences and the professional skills and values essential for future management's effective and responsible leadership. The School's programs, therefore, emphasize integrating conceptual frameworks such as general systems theory which facilitates the linking of both normative, objective functions with interdisciplinary contributions from the physical, biological, and social sciences. Team teaching, computer simulations, in-depth tutorials, field research and internship programs are representative means utilized to achieve more effective two-way theoretical and professional skill integration for the management scholar and practitioner throughout his professional career. The key to such a program is a student-centered curriculum which responds to individual differences, capabilities, and areas of interest. This is the very basis of responsive and relevant learning experiences essential to the development of life styles of balanced individual growth and self-fulfillment.

Robert R. Rehder
Dean
THE THREE-TWO PROGRAM*

In keeping with the School's previously stated philosophy emphasizing the importance of graduate level, professional preparation for careers in management, the School of Business and Administrative Sciences offers a curriculum leading to the degree of Master of Business Administration. Ordinarily, the minimum time required to earn an M.B.A. is 6 years--4 years of undergraduate preprofessional study leading to a bachelor's degree plus 2 years of graduate study in the M.B.A. program. However, the School of Business and Administrative Sciences offers a special program for University of New Mexico undergraduates which reduces the time required to earn the two degrees by as much as one year. This is known as the Three-Two Program.

Completion of the Three-Two Program is accomplished in the following manner:

1. For the first three years of his university studies, the student pursues a program of preprofessional undergraduate work in either (a) the College of Arts and Sciences, (b) one of the other Colleges in the University, or (c) the Bachelor of University Studies program. During this period he will follow the normal course of study for meeting the requirements for a bachelor's degree. However, a student intending to follow the Three-Two Program should consult his advisor early in his academic career in order to: (1) secure departmental approval for taking the required B&AS courses during his senior year (either as electives

*Students who will have earned a bachelor's degree prior to entering the M.B.A. program should refer to the Bulletin of the School of Business and Administrative Sciences for details concerning admission, curriculum and degree requirements. Copies of this Bulletin may be obtained from the Coordinator of Graduate Studies, School of Business and Administrative Sciences, The University of New Mexico, Albuquerque, New Mexico, 87106.
or as a minor), and (2) be able to plan his program to meet the requirements for both the bachelor's degree and entry into the Three-Two Program in his senior year. An example of a typical program for Economics majors is appended on page 9. It is also strongly recommended that interested students consult an advisor in the School of Business and Administrative Sciences to obtain program planning guidelines.

2. During the third year of academic work, application is made for admission to the M.B.A. program of the School of Business and Administrative Sciences. (The requirements for admission are set forth on page 4.)

3. In his fourth year of academic work, the student begins the first year of the professional M.B.A. program. During this year he will enroll in selected graduate level courses in the School of Business and Administrative Sciences while completing the requirements for his bachelor's degree in the College in which he is taking the degree.

4. During the fourth year of academic work, application is made for admission to the Graduate School. In order to continue in the M.B.A. program, the student is expected to meet the following requirements: (a) complete the bachelor's degree requirements with an overall grade point average of 2.5; (b) maintain a 3.0 average in Business and Administrative Sciences courses; and (c) be accepted for admission by the Graduate School.

5. In his fifth year of study, the student will complete the second-year requirements and electives of the M.B.A. program.
Admission to the Three-Two Program

As indicated above, students electing the Three-Two Program must apply for admission to it during the third year of their undergraduate program. Application should be made to the Coordinator of Graduate Studies, Room 290, School of Business and Administrative Sciences in the semester preceding the beginning of the fourth year. The deadline for application is July 1st for the Fall semester and December 1st for the Spring semester. No undergraduate student will be permitted to enroll in any 500-level course offered by the School unless he has been officially admitted for study.

Requirements for admission are:

1. Completion, by the end of the semester in which application is made, of at least 90 hours of course work acceptable towards a bachelor's degree. Not less than 30 of these hours must have been taken at the University of New Mexico.

2. A minimum scholarship index of 2.5 on all semester hours attempted at the University of New Mexico.

3. Completion by the end of the semester in which application is made of the following breadth requirements:

   a. Humanities -- 15 semester hours selected from two or more of the following areas: History, Literature, Philosophy, Fine Arts, and Speech.

   b. Social Sciences -- 15 semester hours selected from two or more of the following areas: Anthropology, Economics (excluding Economics 201, 300, and 303), Geography, Political Science, and Sociology.

   c. Natural Sciences -- 8 semester hours of laboratory science selected from the following areas: Astronomy, Biology, Chemistry, Geology, Physics, and Psychology.
4. **Specific Requirements**

Completion of the following courses, or the equivalent, with a grade of "C" or better.

Mathematics 162 and 163; or 180 and 181
Economics 201, 300, and 303

These courses cannot be used in fulfillment of the breadth requirements set forth in Item 3 above. A student who has not met the Mathematics or Economics prerequisites may still be admitted to the program. He will, however, be required to take one or two additional courses offered by the School during his fourth year. These additional courses may increase the length of his program by a semester or summer session.

5. **Submission of results of the Admission Test for Graduate Study in Business.** This examination is administered by the Educational Testing Service. There is a fee of $10.00. Detailed information about the test and application forms may be obtained from the Counselling and Testing Center at the University of New Mexico or by writing directly to: Educational Testing Service, Box 966, Princeton, New Jersey, 08540. Since an application cannot be considered without the results of this test, students are urged to make arrangements to take it early in the semester preceding admission to the School.

**Recommended Programs**

The objective of the School of Business and Administrative Sciences is to offer graduate professional education within an intellectual framework provided by a broad liberal arts preprofessional program. The minimum liberal arts requirements for admission are set forth above. For students who seek additional guidance in planning their preprofessional program, the faculty of the School has identified a set of recommended courses which it believes provides the kind of undergraduate preparation that is appropriate as a basis for
study in business and administrative science. This set of courses is listed below. Most of these courses can also be used in partial fulfillment of degree requirements in the various undergraduate programs throughout the University. Many other possible combinations of course work can provide equally acceptable preparation. It should be emphasized, therefore, that the only specific requirements for admission to the School are those indicated in the preceding section. Students considering the Three-Two Program are encouraged to consult with an advisor in the School of Business and Administrative Sciences at the earliest possible time in their academic career. Cooperative planning between the student, his advisor in his undergraduate degree area, and an advisor from this School should enable the development of an undergraduate program which meets the needs and interest of the student and, at the same time, provides adequate preparation for the M.B.A. program.

Recommended Courses for the First Three Years of the Three-Two Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English and Literature</td>
<td>9</td>
</tr>
<tr>
<td>Economics 201, 300, and 303</td>
<td>9</td>
</tr>
<tr>
<td>Behavioral Sciences (Recommended courses: Psychology, Sociology, Social Psychology, and Anthropology)</td>
<td>12</td>
</tr>
<tr>
<td>Political Science</td>
<td>3</td>
</tr>
<tr>
<td>History and Philosophy</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics 162 and 163; or 180 and 181</td>
<td>6-8</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>8</td>
</tr>
</tbody>
</table>
# THE M.B.A. PROGRAM

## Fourth Year (First Year of MBA Program)

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*B&amp;AS 500</td>
<td>Quantitative Analysis I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B&amp;AS 502</td>
<td>Accounting and Management Information Systems I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>*B&amp;AS 504</td>
<td>Organizational Economics I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B&amp;AS 506</td>
<td>Organizational Behavior I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B&amp;AS 508</td>
<td>Organizational Ecology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Students who enter the fourth year with the Mathematics and Economics prerequisites described earlier may waive these courses and take work in the major or electives toward their bachelor's degree.*

## Second Semester

| B&AS 501 | Quantitative Analysis II | 3 |
| B&AS 503 | Accounting and Management Information Systems II | 3 |
| B&AS 505 | Organizational Economics II | 3 |
| B&AS 507 | Organizational Behavior II | 3 |
| B&AS 509 | Organizational Intelligence Systems | 3 |
|          | **Total**                  | **15**|

(One of the second semester courses listed above may be deferred until the fifth year.)

## Fifth Year (Second Year of MBA Program)

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;AS 520</td>
<td>Operations Research and Production Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B&amp;AS 522</td>
<td>Marketing Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B&amp;AS 526</td>
<td>Financial Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>
Second Semester  B&AS 598  Seminar in Integrative Management  3
Electives*  12

*Students are required to take at least one advanced course in one of the underlying disciplines introduced in the first year of the MBA program.

A reasonable degree of specialization is possible in such areas as Accounting, Finance, International Business, Management Information Systems, Organizational Behavior, Organizational Ecology, Quantitative Analysis, Operations Management, and Marketing. Please see the Bulletin of the School of Business and Administrative Sciences for details. Statements of specific course requirements, specialization options including cooperative graduate professional degrees and detailed information on course sequencing involving the Three-Two Program may be obtained from the Coordinator of Graduate Studies, Room 290, School of Business and Administrative Sciences. Phone: 277-4305.
MBA CORE COURSES

FIRST YEAR

B&AS 500 Quantitative Analysis I
Mathematical foundations of the quantitative analysis of administrative problems. Linear systems and matrix algebra, introduction to differential and integral calculus, set theory, and probability. Applications to business and administrative situations.

B&AS 501 Quantitative Analysis II
Statistical methods for decision making and analysis of administrative problems. Significance tests and decision procedures, Bayesian decision theory, and multi-variate statistical methods. Applications to business and administrative situations. Prerequisite B&AS 500 or equivalent.

B&AS 502 Accounting and Management Information Systems I
An examination of the basic concepts, principles and postulates of financial accounting theory and their relation to the objectives of income determination and asset valuation. Emphasis is on financial statements as a source of economic data and investor information. Topics include the financial accounting model, theories of valuation, data accumulation and analyses, and funds flow.

B&AS 503 Accounting and Management Information Systems II
The study of management information systems as collectors, generators, and processors of data. Particular emphasis on the role of accounting in management decision-making and control. Topics include budgeting, incremental analysis, planning capital expenditures, standard costs and analyses of variances, responsibility accounting, and computer-based management information systems.

B&AS 504 Organizational Economics I
Theory of buyer behavior; theory of the firm; market structures and output and price determination; value and distribution theory; capital theory; theory of income, employment, money and interest; partial and general equilibrium theory; welfare economics.

B&AS 505 Organizational Economics II
Concepts, methods, and techniques of applied economic analysis to a wide range of problems and decisions of the organization; product/service competition, profits, cost, demand, price, promotion, and capital formation; benefit maximization under least cost constraints; planning, programming, and budgeting.
MBA CORE COURSES

FIRST YEAR

B&AS 500  Quantitative Analysis I

Mathematical foundations of the quantitative analysis of administrative problems. Linear systems and matrix algebra, introduction to differential and integral calculus, set theory, and probability. Applications to business and administrative situations.

B&AS 501  Quantitative Analysis II

Statistical methods for decision making and analysis of administrative problems. Significance tests and decision procedures, Bayesian decision theory, and multi-variate statistical methods. Applications to business and administrative situations. Prerequisite B&AS 500 or equivalent.

B&AS 502  Accounting and Management Information Systems I

An examination of the basic concepts, principles and postulates of financial accounting theory and their relation to the objectives of income determination and asset valuation. Emphasis is on financial statements as a source of economic data and investor information. Topics include the financial accounting model, theories of valuation, data accumulation and analyses, and funds flow.

B&AS 503  Accounting and Management Information Systems II

The study of management information systems as collectors, generators, and processors of data. Particular emphasis on the role of accounting in management decision-making and control. Topics include budgeting, incremental analysis, planning capital expenditures, standard costs and analyses of variances, responsibility accounting, and computer-based management information systems.

B&AS 504  Organizational Economics I

Theory of buyer behavior; theory of the firm; market structures and output and price determination; value and distribution theory; capital theory; theory of income, employment, money and interest; partial and general equilibrium theory; welfare economics.

B&AS 505  Organizational Economics II

Concepts, methods, and techniques of applied economic analysis to a wide range of problems and decisions of the organization; product/service competition, profits, cost, demand, price, promotion, and capital formation; benefit maximization under least cost constraints; planning, programming, and budgeting.
Organizational Behavior I and II

Intensive examination of behavioral science research and theory, as well as contemporary organizational and decision theory, as a basis for understanding, managing, and changing organizations. Relevant concepts drawn from humanistic psychology, industrial sociology, cultural anthropology, and political science are employed as analytical tools which help explain individual behavior, small-group behavior, and behavior of the total organization as a large-scale system. Emphasis is upon a comparative organizational approach which views every organization, public or private, as a socio-technical system.

Organizational Ecology

The nature of environmental change on the structure and operation of the organization; social, political, legal, ethical and technological systems are examined as they relate to each other and to the management of small and large scale organizations.

Organizational Intelligence Systems

An investigation of the development and applicability of intelligence system measuring and gathering techniques to organizational problems and decision-making; organizational and administrative processes of adaptation to the external environment are analyzed in terms of information needs; underlying concepts and techniques related to information requirements of the external environment of the organization are explored and analyzed under situations of change, risk, and uncertainty.

SECOND YEAR

Operations Research and Production Management

This course builds on the mathematical and statistical foundations of B&AS 500-501 to offer a survey of the use of quantitative methods and models in the design and control of operating systems. Emphasis is on comprehension of operation problems and quantitative models in order to build a capability for intelligent management use of operations research. Prerequisite B&AS 501.
B&AS 522 Marketing Management

Provides an understanding of the marketing decision-making process. Surveys normative models for decision-making in different marketing situations. Various analytical tools available to the marketing executive for appraising, diagnosing, organizing, planning and formulating of marketing programs are discussed. Directed towards an understanding of the economic, social and political forces leading to change in the market place and the development of concepts that are useful in evaluating marketing situations, including the international setting.

B&AS 526 Financial Management

The finance function and its relation to other functions and to general policy of the firm. Topics include: the finance function, analysis and budgeting of funds, management of current assets, financing short- and intermediate-term needs, planning long-term debt policy and capital structure, capital costs and capital budgeting, dividend policy, valuation, mergers, and acquisition. Prerequisites: 503 and 505.

B&AS 598 Seminar in Integrative Management

Emphasizes system-oriented, inter-functional planning and administration with an inter-disciplinary approach. Applications of Information and Intelligence Systems as the basis for management action. A variety of case studies and projects are used to develop a capacity for administrative decision-making employing strategic and operational planning, and other integrative devices.
M.B.A.

ELECTIVES AND CONCENTRATION OPTIONS

MANAGEMENT SCIENCE

Concentration Requirements

Students desiring to equip themselves with special competence in the quantitative management sciences should obtain approval of a fifteen-hour course of study beyond the MBA core requirements. This course of study must include EE 336, Introduction to Digital Computer Programming (unless the student can demonstrate equivalent prior training), and two courses from B&AS 530, 531, 532, 533, or 534. In completing the planned program of study, students may elect up to nine semester hours of work in related courses available for graduate credit in other departments of the University.

Courses

B&AS 530 Systems Theory and Information Science

Formal aspects of systems theory in relation to the information needs of the organization. Quantification of information value through formal frameworks, including Bayesian decision theory. Prerequisite: B&AS 501 or the equivalent.

B&AS 531 Multivariate Analysis for Administrative Science

Mathematical models and statistical methods appropriate to the analysis of behavioral data in business and administration. Emphasis on interpretation of applied project data involving measurement of abilities, preferences, judgments, and values in a multivariate framework. Prerequisite: B&AS 501 or the equivalent.

B&AS 532 Simulation in Management Science

Study of a variety of simulation methods as an aid to managerial decisions involving both micro- and macro- systems. Problems and projects involve active programming of simulations in at least one simulation language. Prerequisite: B&AS 501, EE 336 or the equivalent.

B&AS 533 Quantitative Analysis for System Planning

Quantitative methods for system planning, including population and manpower projections, industrial location analysis, regional economic analysis, and design of information systems. Examination and evaluation of projects from such fields as health and social services, transportation planning, state economic development, and environmental control. Prerequisite: B&AS 501, B&AS 505 or the equivalent.

B&AS 534 Computerized Administrative Information Systems

Design of information systems for complex organizations. Data base organization, file organization and processing, on-line systems, and computer software related to system design. Prerequisite: B&AS 530, EE 336 L or the equivalent.
ACCOUNTING

Concentration Requirements

Students interested in preparing for careers in public, industrial or governmental accounting should elect the following courses in addition to the MBA core requirements: B&AS 540 and 541, Financial Accounting I and II and three of the following five courses: B&AS 542, Income Tax Accounting; B&AS 543, Auditing Information Systems; B&AS 544, Advanced Accounting Theory and Practice; B&AS 546, Seminar in Accounting Theory and Its Development; B&AS 547, Seminar in Controllership.

Courses

B&AS 540 Financial Accounting I

Intensive study of the related problems of income determination and asset valuation for a going concern. Different theories expressed in the literature of economics and accounting are studied to arrive at workable solutions. Prerequisite: B&AS 503 (may be taken concurrently).

B&AS 541 Financial Accounting II

Continuation of B&AS 540.

B&AS 542 Income Tax Accounting

Federal and state income tax laws and regulations including history, background, economic considerations, sources of tax law, and analysis of data for tax planning and reporting. Prerequisite: B&AS 541 or permission of the instructor.

B&AS 543 Auditing Information Systems

An examination of the structure of accounting system and techniques for establishing information reliability for public and internal reporting purposes. Includes statistical sampling and electronic data processing concepts. Prerequisite: B&AS 541.

B&AS 544 Advanced Accounting Theory and Practice

The application of advanced accounting principles to practical cases and accounting problems. Prerequisite: B&AS 541.

B&AS 545 Seminar in Accounting Theory and Its Development (replaces B&AS 525)

The study of accounting literature with emphasis on the development and current state of accounting theory. Topics include early history, formal statements of principles, relation of economics and accounting and current controversial issues. Prerequisite: B&AS 541.
B&AS 546 Seminar in Controllership (replaces B&AS 384)

Study of advanced theory and practice of cost analysis, cost control and cost determination; concepts of accounting systems design and control. Includes the application of mathematical and statistical techniques. Prerequisite: B&AS 541.

B&AS 547 Seminar in Advanced Tax Accounting (replaces B&AS 555)

Case studies in advanced federal income tax problems; federal estate and gift taxes; a study of those New Mexico State taxes which concern the public accountant. Prerequisite: Permission of the instructor.

B&AS 548 Legal Concepts for Accountants

An intensive examination of the legal concepts underlying accounting theory and practice. Specific topics, contracts, agency, sales, and legal liability of accountants.

B&AS 549 Seminar in Managerial Control

The nature of management control: characteristics of management control systems; implications of traditional and modern organization theories for control; uses and limitations of accounting systems and reports in the control process. Cases, readings, and student papers related to major fields where possible. Open to all students in the second year of the MBA program. Prerequisites: B&AS 503 and B&AS 507.
ORGANIZATIONAL ECONOMICS AND ECOLOGY

Concentration Requirements

A concentration in the areas of organizational economics and ecology consists of any three of the courses listed below.

Courses

B&AS 550 Economic and Behavioral Theories of the Organization

An integration of economic and behavioral theories of the organization; problem solving activities of the organization under varying environmental structures and relationships; formulating organizational objectives, acquiring and processing of information, use of plans, budgets and other integrative control techniques. Prerequisite B&AS 505.

B&AS 553 Industrial Organization Economics

Advanced analysis of market structures, conduct, and performance; empirical case studies of selected industries; issues in public policy. Prerequisite B&AS 505.

B&AS 554 Public Control of Business


B&AS 555 Urban Economics and Social Welfare

Studies in urban economics and the quality of urban life; urban economic theory; urban transportation, housing, zoning and lands use problems; health economics; water and air pollution; problems and policies of federal, state, and local finance and urban economics. Prerequisite B&AS 505.

B&AS 556 Experimental Economics

The theory and use of the experimental method in economics. Special emphasis is given to value formation, market power, market forms, and bargaining. Prerequisite B&AS 505.
**B&AS 557 Seminar in Organizational Economics**

Selected topics in advanced economic theory. Utility theory, theory of games, social welfare functions, Pareto optimality and competitive equilibrium, capital and interest theory. Prerequisite B&AS 505.

**B&AS 558 Man and His Environment**

Selected topics on man and his environments. Problems of man and his relationship to groups, organizations, and society. Emphasis is given to problems of organizational adaptations resulting from personal and group alienation, stress, and dislocation. Problems of population growth, pollution, and the quality of life will also be examined. Prerequisite B&AS 505.

**B&AS 559 Seminar in Organizational Ecology**

Analysis and interpretation of the various interrelationships among the development of social, political, economic, and technological ideologies and the corresponding changes in the structure and behavior of organizations and society. Prerequisite B&AS 505.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>B&amp;AS 560</td>
<td>Psychobiological Approaches to Organizational Behavior</td>
</tr>
<tr>
<td></td>
<td>Investigation of the interrelationship between social-psychological and biological factors in understanding social behavior. Social-biological experimental research findings are related to such areas as social learning, physiological and psychological development, and group processes.</td>
</tr>
<tr>
<td>B&amp;AS 561</td>
<td>Interpersonal Dynamics</td>
</tr>
<tr>
<td></td>
<td>Exploration of the boundaries, strategic variables, and substance of interpersonal relations. Application of relevant behavioral science research and theory concerning human interaction with special emphasis upon industrial sociology, humanistic psychology and psychoanalytic thought.</td>
</tr>
<tr>
<td>B&amp;AS 562</td>
<td>Organizational Design &amp; Development</td>
</tr>
<tr>
<td></td>
<td>Application of advanced behavioral science and organizational theory and research to the problems of organizational change and development. Focus is upon establishing systems-level criteria for organizational health and ways of enhancing an organization's ability to survive, adapt, solve problems, and increase its effectiveness.</td>
</tr>
<tr>
<td>B&amp;AS 563</td>
<td>Human Resources Management: Theory and Applications I</td>
</tr>
<tr>
<td></td>
<td>Application of behavioral science research and information-decision systems theory to the problems of personnel management. Implications for skills inventories, manpower planning models, recruitment and selection, performance appraisal, and training and development.</td>
</tr>
<tr>
<td>B&amp;AS 564</td>
<td>Human Resources Management: Theory and Applications II</td>
</tr>
<tr>
<td></td>
<td>Application of behavioral science research and systems theory to the problems of union-management relationships. Intensive analysis of representation, negotiation, and arbitration cases, and the development of effectiveness criteria for assessing union-management relationships.</td>
</tr>
<tr>
<td>B&amp;AS 565</td>
<td>Seminar in Administrative Theory and Decision Making</td>
</tr>
<tr>
<td></td>
<td>A critical evaluation is made of the modern systems approach to organizational decision-making. An appraisal of traditional theory followed by an examination of current theory and its relationships to policy, planning and control in light of the environmental factors of power, authority, leadership and communications within the organization.</td>
</tr>
</tbody>
</table>
B&AS 566 Human Relations Laboratory

A series of intensive experiences devoted to developing self-awareness and diagnostic ability in interpersonal, group, organizational and community behavior. Experiential learning activities involving work in t-groups, integration of basic theory and research, and personal confrontations with interpersonal and group issues.

B&AS 567 Advanced Seminar in Planning Theory and Practice

Intensive analysis of theory and practice of the top management function of formal planning. Emphasizes role of the Audit of firm's resources and environment as a recurring diagnostic and prognostic phase in planning. Focuses on formulation and evaluation of Strategic, Administrative, and Operations (Tactical) Plans as they relate to problems of programming. Prerequisite: 598 concurrently; or instructor's permission.
FINANCE

Concentration Requirements

Students electing a concentration in Finance should take as a minimum B&AS 526; two additional courses in the Finance area; and one of the following: Economics 500, 505, or 515.

Courses

B&AS 570 Money, Financial Institutions, and Capital Markets

Analysis of the financial system - capital markets, financial instruments and institutions, and regulatory agencies - in which both financial and non-financial firms operate. The demand for and supply of credit and capital. Study of the mechanisms of monetary adjustment and interest rate determination. The role of liquidity in risk management.

B&AS 571 Security Analysis and Investment Management

The theory and techniques of optimization of investment return subject to control of investment risk. Topics include: development of valuation models, analysis of securities and security market operation, survey of information availabilities and requirements, the role of participants in trading activities, theories of market behavior and price movements, portfolio programming and the implications of diversification for risk and return.

B&AS 572 Financial Planning and Capital Budgeting

Analysis of policies and procedures designed to identify and satisfy the short- and long-term financial requirements of the firm within the framework of its over-all objectives and the constraints under which it operates.

B&AS 575 Seminar in Finance

Supervised reading and discussion in areas of recent theoretical interest. Emphasis on the structural development of models used to characterize the financial environment and financial behavior of individuals and firms and the implications of such models for either decision-making and/or their relevance in providing insight into behavioral processes.
MARKETING AND INTERNATIONAL BUSINESS

Concentration Requirements

The following courses constitute the area of concentration in Marketing and International Business Administration. They are available for students desiring a special competence in one of these two fields.

Courses

B&AS 580 Research for Marketing Management

Study of the management of marketing information as an integral part of the decision-making process. Emphasis on conceptual understanding, skills and knowledge needed by the marketing executive for evaluating information, specifying information requirements, interpreting research findings, evaluating alternative research proposals and using research findings in developing marketing plans and programs. Prerequisite: B&AS 509, 522.

B&AS 581 Seminar in Marketing Strategy

This course focuses on the design and evaluation of strategic plans as applied to marketing systems and organizations. The role of product, pricing, promotion, channels and physical distribution in the development of a firm's integrated marketing program is studied. The point of view is that of the marketing executive engaged in problem-solving and decision-making in formulating an effective marketing strategy. Prerequisite: B&AS 509 and 522.

B&AS 582 Seminar in Marketing Models

An examination of the state of the art in quantitative and behavioral marketing models with emphasis on recent advances. The use and limitations of models in the solution of marketing problems and evaluation of alternative courses of action will be examined. Underlying forces which influence marketing decisions are studied. Prerequisite: B&AS 509 and 522.

B&AS 583 Seminar in Comparative Marketing Systems

Marketing is viewed as a system designed to plan, price, promote and distribute goods and services in different societies. Problems of how analytical tools derived from economics, psychology, sociology and management science can be applied in the conduct of the marketing function and in appraising markets in different cultures. Potential areas of study range from a comparative analysis of consumer behavior to the different aspects of the decision-making processes in the management of marketing organizations. Prerequisite: B&AS 509 and 522.
B&AS 584 Advanced Seminar in Marketing Theory

An investigation of the historical development of marketing thought. Students survey the contributions of economics, behavioral science and mathematics to a better understanding of the marketing process. Synthesis of these contributions by the marketing analyst is stressed. Prerequisite: B&AS 522; consent of instructor.

B&AS 585 Fundamentals of International Business

This introductory course is designed to provide the theoretical foundation and a conceptual framework for analyzing international business situations and the foreign environment within which the multinational organization must operate. The course will provide a survey of the various dimensions of international business operations. Of ultimate concern is a desire to sensitize the students to the differences in management practices which exist around the world. Prerequisite: B&AS 504.

B&AS 586 Seminar in the Management of International Business Operations

An investigation of the specific strategic, administrative and operating problems facing the multinational business enterprise. Emphasis is placed on the decisions and decision-processes in regard to the various management functions that characterize international business management. Prerequisite: B&AS 585.

B&AS 587 Seminar in Management of World Markets

This course deals with problems of intense and sophisticated competition in various world markets. An integration of economics, political science, behavioral science and the functional areas of business focused upon the problems of managing international business operations in advanced industrial nations, the less developed countries and the centrally planned economies. Prerequisite: B&AS 585.

B&AS 588 Advanced Seminar in International Business Administration

This colloquium focuses on the organization in a multinational environment. Topics are determined by the instructor, depending on his and the student’s research interest. Prerequisite: B&AS 585; consent of instructor.
OTHER COURSES

B&AS 551-552 Problems

Special permission of the Adviser and of the Dean of the School of Business and Administrative Sciences required.

B&AS 595 Seminar in Corporation and Society

A conceptual study of the business organization and its relationship to the environment in which it adapts, accommodates, and reacts. Selected topics will be discussed and written upon pertaining to the corporation vis-a-vis society, government, economics, foreign governments, values, unions, the individual, freedom, progress, stability, power and ownership.

B&AS 596 Seminar in Applied Organizational Intelligence

Intensive application of research methodology to organizational and business situations and problems. Prerequisite: 509

B&AS 599 Thesis
I. Introduction

"The cumulative growth of the College of Education over the past few years, changes in personnel therein, and societal changes in the State and Nation have resulted in conditions which call for extensive changes in practices for getting the work done and the hard decisions made in the College of Education." This quote from the Faculty Committee's Report of the College's conference at the D. H. Lawrence Ranch (see Appendix A for complete report) in September, 1969, has served as a keynote for developments in the College of Education during the year 1969-70. The priority needs which were identified by the large part of the faculty which participated in the conference will serve as the major framework for this report on important developments in the College during the past year (Sections IV-VI). Although no attempt will be made to compile or summarize the many developments which are detailed in the attached departmental and other College of Education unit reports (Appendices B-M), special developments which are pertinent to the priority needs of the College will be noted.

Section II of this report summarizes information regarding "the cumulative growth of the College of Education over the
past few years. Section III deals with "changes in personnel therein." The final section of this report (Section VIII) attempts to summarize the present situation in the College and presents plans and recommendations for the year ahead.

II. The Student Body: Enrollments, Credit Hours Offered and Degrees Awarded

1. Table 1 presents data on student enrollment in the College of Education for the past six years. Table 2 presents data on course enrollments in the College of Education for the same period. Table 3 shows student credit hours offered by the College during the same period. Included with each table is a summary of the percentage increases (or decreases) in each category for the past three years.

An inspection of these data indicate that while summer session activity in the College has tended to plateau during the past three years, instructional activity during the academic year has continued to grow at the rate of about 8% (based on credit hours offered). On the basis of an FTE base of 12 credit hours per semester for both undergraduate and graduate students, the FTE student load in the College of Education has increased as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>FTE Students</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966-67</td>
<td>1699</td>
<td></td>
</tr>
<tr>
<td>1967-68</td>
<td>1911</td>
<td>12.5%</td>
</tr>
<tr>
<td>1968-69</td>
<td>2064</td>
<td>8.0%</td>
</tr>
<tr>
<td>1969-70</td>
<td>2235</td>
<td>8.2%</td>
</tr>
</tbody>
</table>
Table 1

College Student Enrollment
Graduate, Undergraduate, and Totals

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1964-65</td>
<td>551</td>
<td>403</td>
<td>954</td>
<td>1965-66</td>
<td>596</td>
<td>442</td>
<td>1038</td>
<td>1966-67</td>
<td>644</td>
<td>540</td>
<td>1184</td>
</tr>
<tr>
<td>1965-66</td>
<td>596</td>
<td>442</td>
<td>1038</td>
<td>1966-67</td>
<td>644</td>
<td>540</td>
<td>1184</td>
<td>1967-68</td>
<td>668</td>
<td>515</td>
<td>1183</td>
</tr>
<tr>
<td>1968-69</td>
<td>638</td>
<td>522</td>
<td>1160</td>
<td>1969-70</td>
<td>658*</td>
<td>579</td>
<td>1237</td>
<td></td>
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Increases

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Summer Session</td>
<td>0.0%</td>
<td>-2.0%</td>
<td>6.6%*</td>
</tr>
<tr>
<td>Semester I and II</td>
<td>14.7%</td>
<td>1.7%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

*Preliminary
<table>
<thead>
<tr>
<th>Year</th>
<th>Summer</th>
<th>Semester I</th>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-66</td>
<td>3,107$^#$</td>
<td>8,418</td>
<td>8,354</td>
</tr>
<tr>
<td>1966-67</td>
<td>2,776$^#$</td>
<td>9,614</td>
<td>9,582</td>
</tr>
<tr>
<td>1967-68</td>
<td>3,367$^#$</td>
<td>10,581</td>
<td>10,499</td>
</tr>
<tr>
<td>1968-69</td>
<td>3,172$^#$</td>
<td>10,816</td>
<td>11,155</td>
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<tr>
<td>1969-70</td>
<td>3,045$^{*}$</td>
<td>11,358</td>
<td>11,738</td>
</tr>
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</table>

**Increases**

<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>21.3%</td>
<td>-5.7%</td>
<td>-4.0%$^*$</td>
</tr>
<tr>
<td>Semester I and II</td>
<td></td>
<td>9.8%</td>
<td>4.2%</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

$^\#$ Final  
$^{*}$ Initial
### Table 3

<table>
<thead>
<tr>
<th></th>
<th>Summer Session</th>
<th>Semester I</th>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-66</td>
<td>7,727*</td>
<td>16,932</td>
<td>17,757</td>
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<tr>
<td>1966-67</td>
<td>7,220*</td>
<td>19,833</td>
<td>20,958</td>
</tr>
<tr>
<td>1967-68</td>
<td>8,589*</td>
<td>22,524</td>
<td>23,339</td>
</tr>
<tr>
<td>1968-69</td>
<td>8,332*</td>
<td>23,739</td>
<td>25,793</td>
</tr>
<tr>
<td>1969-70</td>
<td>8,341*</td>
<td>25,277</td>
<td>28,367</td>
</tr>
</tbody>
</table>

### Increases

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Summer Session</td>
<td>18.9%</td>
<td>-2.9%</td>
<td>0.0%*</td>
</tr>
<tr>
<td>Semester I and II</td>
<td>12.4%</td>
<td>7.9%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

*Final
*Initial
2. Table 4 shows the number of degrees awarded by or through the College of Education during the last five years. Percentage increases within the College for the past three years are shown also. These data indicate that the rate of growth at the graduate level continues to exceed that of the ungraduate. It is evident also that the College of Education continues to offer a substantial portion of the graduate work in the University.

In view of the New Mexico Board of Educational Finance's practice of not providing differential support for graduate level work, it is clear that the College of Education will continue to feel an increasing pressure on its limited resources. This problem will be a matter of continuing concern and consideration in the College in the year ahead. The College is aware that demands for expanding graduate programs, and even efforts to maintain the present level of graduate study in the College, will have to be reviewed carefully if the qualitative standards to which the College aspires are to be achieved.

3. The instructions for the 1969-70 Annual Report call upon departments to supply data regarding numbers of majors and minors as well as some additional information regarding students in each department. Department chairmen in the College of Education (two exceptions), being human and creatures of habit, failed to note this change in the
Table 4

DEGREES CONFERRED*

<table>
<thead>
<tr>
<th>Bachelor's Degrees</th>
<th>Master's Degrees</th>
<th>Doctor's Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Univ.</td>
<td>COE</td>
</tr>
<tr>
<td>1965-66</td>
<td>976</td>
<td>252</td>
</tr>
<tr>
<td>1966-67</td>
<td>1055</td>
<td>286</td>
</tr>
<tr>
<td>1967-68</td>
<td>1285</td>
<td>397</td>
</tr>
<tr>
<td>1968-69</td>
<td>1422</td>
<td>421</td>
</tr>
<tr>
<td>1969-70*</td>
<td>1783</td>
<td>483</td>
</tr>
</tbody>
</table>

Increases

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>38.8%</td>
<td>6.0%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Master's</td>
<td>19.0%</td>
<td>4.5%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Doctor's</td>
<td>35.7%</td>
<td>84.2%</td>
<td>45.7%</td>
</tr>
</tbody>
</table>

*Figures do not include six (6) Education Specialist Certificates
proposed format. Table 5 presents the data in this respect which is available for the total College. These data will be enlarged in a separate supplementary report during the fall semester.

4. In a specific effort to deal with the problem of limited resources and expanding demands, the Department of Elementary Education reached a decision during the past year to limit enrollment in its undergraduate teacher education program. (See Departmental Report, Appendix E, for details.) In spite of the fact that any decision to limit enrollments in the College will have a depressing effect on the support for which the College would be eligible under the present funding formula, it is likely that other departments and programs in the College will be forced to move in this direction. Undergraduate programs in a professional school like the College of Education have the same kinds of limits in their size elasticity as do graduate programs. There is a point beyond which they can be enlarged only by setting up a duplicate program and facilities. Increasing class sizes or adding additional sections will not do the job in a good professional program such as we have in elementary education.

III. Personnel

1. The College of Education was allocated two new faculty
Table 5

Undergraduate Majors by Department

Semester I, 1969-70

<table>
<thead>
<tr>
<th>Department</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education</td>
<td>37</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>390</td>
</tr>
<tr>
<td>Health, Physical Education and Recreation</td>
<td>144</td>
</tr>
<tr>
<td>Home Economics</td>
<td>64</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>544</td>
</tr>
<tr>
<td>Undecided</td>
<td>12</td>
</tr>
</tbody>
</table>
positions for 1969-70. These were assigned as follows:

Assistant Dean for Student Affairs 1
Assistant to the Dean 1

It should be noted that both of these positions, as well as a third administrative position, Assistant Dean for Special Projects, which remains unbudgeted, were established by the College before the present Dean assumed his responsibilities. In each case, the incumbent continues to teach part-time in the College.

2. During the year the College of Education voted to reestablish the position, Associate Dean for Curriculum and Instruction. This position had been created several years ago but was never filled because of budget limitations. A faculty search committee was formed during the spring, and as a result of its efforts, Dr. Richard Holemon, Chairman, Department of Educational Administration, was appointed Associate Dean, effective September 1, 1970. Further information regarding the responsibilities of this new position is contained in Section IV of this report.

3. Dr. George Prigmore, Assistant Professor of Secondary Education, succeeded Dr. Alvin Howard as Assistant to the Dean on February 1, 1970. Dr. Howard returned to the Department of Secondary Education to direct the APSCOE Middle School Project.
4. The following new department heads were designated:

Dr. L. C. Bernardoni, Department of Guidance and Special Education, to replace Dr. George Keppers who took over full-time responsibilities as Assistant Dean for Student Affairs.

Dr. Donald McIntosh, Department of Art Education, to replace Dr. Alex Masley, who retired.

Dr. Ronald Blood, Department of Educational Administration, to replace Dr. Richard Holeman.

5. Dr. Robert Kline was named Director of the Learning Materials Center to succeed Dr. Margaret Chisholm who left the University for a position at the University of Maryland.

6. During the period of this report, the following regular faculty members were separated from the College staff:

Masley, Alexander - Art Education
Steiner, Frank - Art Education
Petty, Paul (leave to Colombia) - Educational Administration
Wiley, Tom - Educational Administration
Muller, Douglas - Educational Foundations
Chisholm, Margaret - Elementary Education
Craker, Hazel - Elementary Education
Howell, Mary Ann - Elementary Education
Maggart, Zelda - Elementary Education
Christiansen, Theodore - Guidance and Special Education
Kelly, Edward James - Guidance and Special Education
Rice, Don M. - Guidance and Special Education
Williams, Luella - Home Economics
7. The following faculty members were appointed:

- McIntosh, Donald (Art Education)
- Waldie, James (Art Education)
- Blood, Ronald (Educational Administration)
- Richard, C. W. (Educational Foundations)
- Merz, William (Elementary Education)
- Gonzales, Dolores (Elementary Education)
- Smith, Sara Dawn (Elementary Education)
- Smith, William (Elementary Education)
- Van Dongen, Richard (Elementary Education)
- Wolfe, Lenore (Elementary Education)
- Fishburn, William R. (Guidance and Special Education)
- Heisey, Marion (Guidance and Special Education)
- Micali, Robert (Guidance and Special Education)
- Munoz, Leo (Health, Phys. Educ. & Recrea.)
- Atterbom, Hemming (Health, Phys. Educ. & Recrea.)
- Boaz, Jacquelyn (Health, Phys. Educ. & Recrea.)
- Bond, Beverly (Health, Phys. Educ. & Recrea.)
- Douglass, Phyllis (Health, Phys. Educ. & Recrea.)
- Estes, Linda (Health, Phys. Educ. & Recrea.)
- Hunt, David (Health, Phys. Educ. & Recrea.)
- Mecham, John (Home Economics)
- Smith, M. M. (Secondary Education)
- Cunico, Jerry (Secondary Education)
- Engman, William (Secondary Education)
- Kline, Robert (Secondary Education)
- Prigmore, George (Secondary Education)
- Stoubis, George (Secondary Education)
- Tweeden, Paul (Secondary Education)

8. The following faculty members were awarded promotions:

Promoted to Professor:

- Condie, Le Roy (Elementary Education)
- Darling, David (Elementary Education)
- Reva, Virginia (Secondary Education)
- Snell, Ednell M. (Home Economics)
- Tonigan, Richard F. (Educational Administration)
- Zepper, John Thomas (Educational Foundations)
Promoted to Associate Professor:

Aragon, John A.  Educational Administration
Dahmen, Lewis A.  Educational Foundations
Gonzales, Dolores  Elementary Education
Hirshfield, George  Secondary Education
Nesbitt, Robert D.  Secondary Education
White, Robert  Secondary Education
Zick, Gordon A.  Guidance and Special Education

Promoted to Assistant Professor:

Hough, Richard G.  Art Education

9. The following faculty members were awarded tenure:

Darling, David  Elementary Education
Lawrence, Richard E.  Dean
Spolsky, Bernard  Elementary Education
Tonigan, Richard  Educational Administration

IV. Priority Need One: Cultural Diversity and Education

"Teachers and other educational workers who understand and are prepared to deal effectively with children and youth from our diverse cultures—Hispano-American: Indian-American: Afro-American—and with the very wide range of individual differences among all children."

Early in the fall the College of Education faculty formally resolved that "The Faculty designates the preparation of personnel for the multi-cultural educational situations of our State and Region as a purpose of high priority among the goals of the College" and approved the establishment of a cross-department Unit on Cultural Diversity within the College as recommended by the Conference Committee and specifically proposed by the Dean. After several unsuccessful efforts to find the funds needed to hire a director for the Unit, an ad hoc committee consisting of Drs. Horacio Ulibarri, David Darling and Wilson Ivins was established. This group worked with the Dean to set preliminary plans
for the program of the new unit and to initiate some initial studies within the College.

One-half of Dr. Ulibarri's time during the spring semester was provided by the Department of Educational Administration for development work in connection with the new unit. A survey of Master's Theses and Doctoral Dissertations completed at the University of New Mexico which might relate to understanding the area of cultural diversity was carried out under the direction of Dr. Ronald Blood. A bibliography and special collection of reference books and pamphlets on cultural diversity for use by the College of Education faculty was started under the direction of Dr. Ulibarri.

As a result of its unsuccessful efforts to find budget support for a director, the Committee finally recommended to the Dean and the faculty that the position of Associate Dean for Curriculum and Instruction be reestablished by the College and that the position be defined so that one of the major responsibilities of this new position would be to give attention to the implementation of the program of the Cultural Diversity Unit. A second major responsibility of the Associate Dean was to be the facilitation of instructional program review and modification recommended by the Lawrence Ranch Conference Committee. The ad hoc committee's recommendations were approved by the faculty.

A search committee for an Associate Dean was established in April. After two months of intensive work, the Committee recommended three persons from within the College of Education
for the position. Dr. Richard Holemon was selected by the Dean in June and began working immediately on his new responsibilities although his appointment was not officially effective until September 1, 1970.

During the year, however, progress toward the goals set by the Lawrence Ranch Conference were not limited to the matters reported above. References to a variety of efforts designed to make College of Education programs more relevant to the multicultural needs and problems of the State and Region are to be found in the individual department reports. The special activities of the Federally funded Cultural Awareness Center under the direction of Dr. John Aragon had an immediate impact on school programs in the State through a series of sensitivity seminars. (See Report of Cultural Awareness Center, Appendix K. During the coming year, it is hoped to relate the activities of the Center more closely to the College and to take advantage of the Center's experiences through special activities within the College.

The College has continued to work with interested students and faculty in the development of Ethnic Studies Programs in the University.

A variety of continuing and new externally-funded projects designed to deal with selected aspects of the cultural diversity problem were in operation in the College during the year. Details regarding these projects will be found primarily in the Elementary and Educational Foundations departmental reports.
In addition, beginning steps toward the introduction of appropriate multi-cultural materials and experiences into regular teacher education programs were made by almost all of the departments. Of special note are the changes reported by the departments of Educational Foundations, Art Education and Home Economics.

V. Priority Need Two: Program Review and Development

"An analysis of the relevance of all current programs to the students' immediate and career needs and to the state's future."

Progress with respect to meeting this need during the past year has been considerably less noteworthy than that already cited for Priority Need One. Although several departments in the College have initiated an analysis of their present programs as recommended by the Conference Committee and the Undergraduate Curriculum Committee (Committee A) has begun to review general and professional requirements in teacher education, much remains to be accomplished before the College will be in a position to make appropriate decisions regarding the allocation or reallocation of its resources. As noted earlier, it is anticipated that the new Associate Dean will be able to provide significant leadership in this undertaking. As a part of his responsibilities, he will meet regularly with both Graduate and Undergraduate Curriculum Committees and with departmental groups to further this effort.

As the departmental reports attest, program development in the College continues relatively unabated. While many of these
developments, e.g., the program in vocational rehabilitation
and the program in early childhood education, to cite but two
examples of many, are promoted by the infusion of Federal funds,
it is clear that their establishment and development have im-
portant long-range implications for the College. The initiation
of sub-baccalaureate programs and the expansion of vocational-
technical programs are under serious consideration in the
College. All of these developments underline the urgency of
attempting to meet Priority Need Two.

During the year, the following new courses were approved by
the College faculty:

**Undergraduate Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Home Ec. 101</td>
<td>Freshman Seminar</td>
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<tr>
<td>Home Ec. 125</td>
<td>Food for Man</td>
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<tr>
<td>Home Ec. 250</td>
<td>Clothing and Human Behavior</td>
</tr>
<tr>
<td>Spec. Ed. 444</td>
<td>The Emotionally Handicapped Child</td>
</tr>
<tr>
<td>Spec. Ed. 481</td>
<td>Teaching Children with Learning Disabilities</td>
</tr>
<tr>
<td>P.E. 122</td>
<td>Foil Fencing</td>
</tr>
</tbody>
</table>

**Graduate Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>P.E. 504</td>
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</tr>
<tr>
<td>Rec. 540</td>
<td>Recreational Use of Public Lands</td>
</tr>
<tr>
<td>C. &amp; I. 531</td>
<td>The Reading Process</td>
</tr>
<tr>
<td>Sec. Ed. 549</td>
<td>History of Education</td>
</tr>
<tr>
<td>Guid. 510</td>
<td>Techniques of Parent-Teacher Counseling</td>
</tr>
<tr>
<td>Spec. Ed. 419</td>
<td>Special Education in the Regular Classroom</td>
</tr>
<tr>
<td>Spec. Ed. 444</td>
<td>The Emotionally Handicapped Child</td>
</tr>
<tr>
<td>Spec. Ed. 481</td>
<td>Teaching Children with Learning Disabilities</td>
</tr>
<tr>
<td>Spec. Ed. 525</td>
<td>Clinical and Behavioral Aspects of the Emotionally Disturbed Child</td>
</tr>
<tr>
<td>Spec. Ed. 579</td>
<td>Instructional Strategies in Special Education</td>
</tr>
</tbody>
</table>

All Departments 447 - Topics: ----------
VI. **Priority Need Three: Research and Service**

"Refocusing of much staff time, energy, and commitment toward research activities geared specifically to solutions for New Mexico's educational problems."

Research and related service to the State remain a strong commitment of the College. But perhaps no area of the College program suffers from inadequate support and involvement more than the area of research. This lack is particularly dangerous in a college with a growing graduate program.

During the year, the College Research Center and the Bureau of Educational Planning and Development continued to function in the general areas of research and service respectively.

The Research Center is a one-man, part-time operation designed to provide graduate students and faculty members with assistance in developing and carrying out research projects. One-half of Dr. James Cooper's time is provided by the Department of Educational Foundations for this purpose. No additional budget support is available in the College for this important work. During 1969-70, Dr. Cooper has also attempted to enable the faculty to keep informed about new and continuing Federal support programs. The original hope that this service and the coordination of all specially funded projects in the College would be provided by Dr. Frank Angel, Assistant Dean for Special Projects, has proved unreasonable due to the rapidly growing load of responsibilities which Dr. Angel has acquired in connection with the College's international involvements. (See Appendix M, Report on International Programs.) In the spring an Ad Hoc Committee
on Research was formed by interested faculty members to seek University support for research in the College and to recommend ways in which the College can facilitate research activities.

Closely related to the College’s research efforts is the program of the Bureau of Educational Planning and Development under the leadership of Dr. Richard Tonigan, Director. The Bureau, like the Research Center, has no College budget. Its work is made possible by the donation of faculty time by several departments and by the income it generates from contracts for service. During the past several years, the University Administration has contributed to the survival of the Bureau by absorbing the budget overages which have been incurred. Dr. Tonigan continued to divide his time during 1969-70 between the Bureau and the Department of Educational Administration. Under his leadership, the New Mexico Research and Study Council, which operates through the Bureau, had a successful year.

Although no action has been taken with respect to the Lawrence Ranch Conference Committee’s recommendation that a cross-department Unit on Research Activities and Grantsmanship be established in the College, it is likely that developments along these lines will be attempted during the coming year. The University Administration’s decision to begin to share overhead income with the colleges which produce it may facilitate the support of a research unit in the College of Education. How this unit should be related to the presently operating units
in the College will be a matter for serious study in the months ahead.

VII. Priority Need Four: Policy Development and Administration

"Administrative action at all levels in line with clearly established policies, and faculty action to clarify College policies, goals and priorities."

During the past year, a number of changes in the College's policy-making and administrative structures have been effected with a view to providing for better utilization of faculty and student time and interests, to facilitating more planning and more significant activities, and to reducing the time spent on maintenance-type activities.

In accordance with the recommendation of the Conference Committee, the faculty voted to replace the Administrative and Policy Committee (which consisted of department chairmen, College-wide administrators, three elected faculty representatives and two student representatives) with a Policy Committee made up of eight elected faculty representatives, two elected student representatives, the College representative to the University Policy Committee, and the Dean, ex-officio without voting rights. This new committee has been charged with reviewing and developing College policies and recommending action to the College faculty.

An Administrative Committee made up of department chairmen, unit directors, and College-wide administrators now serves as an advisory body to the Dean on administrative matters.

As noted earlier, an Associate Dean has been appointed.
Efforts are under way to clarify the definition of responsibilities of all administrators in the College as a means for facilitating administration within established policies as recommended by the Conference Committee.

A College Newsletter has been initiated to keep faculty informed of administrative actions and to facilitate communication about the multifarious activities of the College among faculty and interested students. The Assistant to the Dean is responsible for the editing and production of this newsletter.

After much discussion in committee and faculty meetings during the year regarding the desirability of formalizing College operations through the development of a Constitution, the faculty decided to ask the new Policy Committee to take this matter under consideration. It is anticipated that the Policy Committee will recommend next steps regarding the codification of College policies during the coming year.

One important organizational question which remains unresolved in the College after a year of discussion, proposals and counter-proposals, has to do with whether additional departments should be established in the College. It is hoped that at least some aspects of this problem will be settled during the next few months.

VIII. Planning and Development

Among the important matters which are scheduled for study and possible action during 1970-71 are the following:
Program Developments

1. Programs dealing specifically with the preparation of teachers for Indian education. A Teacher Corps proposal with this particular focus is in the early stages of development. Student teaching programs in BIA schools in Albuquerque and Fort Wingate will be initiated. A faculty member with specific responsibility for coordinating the development and operation of Indian education is needed.

2. Sub-baccalaureate programs in the human services (especially teaching). The College already is involved with New Careers and Career Opportunity Programs in cooperation with ISRAD and the Albuquerque Public Schools. Attention will be given to coordinating the operation of these programs and to initiating a long-range plan for their development.

3. Vocational-Technical Education Programs. Questions which will be faced in this area during the coming year include:

   To what extent should the College of Education expand its teacher training programs in vocational-technical areas?

   How much direct technical education (e.g., the two-year secretarial program) if any, should be made available through the College?

   It is hoped that the developments in this area can be appropriately directed and fostered by the designation of a
faculty member for special responsibility for vocational-technical education. Dr. Runge has handled this assignment together with his secondary student teaching responsibilities during 1969-70. Through his efforts the College has established productive working relationships with the Vocational Education Division of the State Department of Education.

4. Implications of BUS for teacher education. A growing number of students are completing BUS degrees and requesting College recommendation for teacher certification. Appropriate guidelines for dealing with this development will be drawn up during the coming year.

5. Instructional Media and Library Science. Efforts to resolve questions regarding the development of coordinated or separate programs in these two areas of specialization will be continued.

6. Overall program review - graduate and undergraduate. As has been noted earlier, the Associate Dean will work with the College departments and curriculum committees on this badly needed study during the coming year.

Student Personnel

1. Additional attention will be given to the recruitment of minority group students for teacher education.

2. The inadequacies of the current procedures for screening and selecting students for teacher education and for graduate programs will continue to receive attention during the coming year. It is hoped that with the appointment of a new
Assistant Dean for Student Affairs a carefully planned program to resolve the difficulties in this area can be initiated.

3. Placement and follow-up of College of Education graduates need more attention by the College. The new Assistant Dean will be charged with developing activities related to these problems.

Faculty Personnel

In accordance with the agreements reached by the faculty at the Lawrence Ranch Conference, increased attention will be given to the following during 1970-71:

1. Programs and opportunities for faculty development, especially with respect to cultural diversity.

2. Improving the quality of faculty meetings through greater attention to substantive issues in education, by utilizing outside consultants, etc.

3. Encouraging involvement in professional meetings which are particularly relevant to College goals.

4. Clarifying and implementing College policies with respect to faculty and administrator evaluation.

Organization and Administration

During the coming year efforts will be made to build on the changes in College organization and administration which were effected in 1969-70. Among the functions which remain to be provided for are:
1. The coordination of research and service activities in the College.

2. The coordination of special (externally funded) programs and projects in the College.

3. The coordination of clinical and field experiences which are becoming more prevalent in the College's programs.

Through these operations it is hoped that all of the College's activities may be more appropriately and effectively directed toward the goals of the College.

As was mentioned earlier, the question of change with respect to the present departmental structure of the College remains to be resolved.

Finally, it is anticipated that by the end of the 1970-71 year, the College will have a preliminary plan for dealing with its long-range needs with respect to physical facilities.
APPENDICES

A Lawrence Ranch Conference Report
B Art Education Department Report
C Educational Administration Department Report
D Educational Foundations Department Report
E Elementary Education Department Report
F Guidance and Special Education Department Report
G Health, Physical Education and Recreation Department Report
H Home Economics Department Report
I Secondary Education Department Report
J Bureau of Educational Planning and Development Report
K Cultural Awareness Center Report
L Learning Materials Center Report
M International Programs Report
REPORT OF THE
LAWRENCE RANCH FOLLOW-THROUGH COMMITTEE

John Aragon
Harold Drummond
Richard Holeman
Alvin Howard
William Runge

Preamble

The cumulative growth of the College of Education over the past few years, changes in personnel therein, and societal changes in the State and Nation have resulted in conditions which call for extensive changes in practices now utilized for getting the work done and the hard decisions made in the College of Education. The Committee which has prepared the following recommendations has attempted to place the major tasks in priority order. The substantive changes we think are necessary (as represented in items I, II, and III below) are not likely to be achieved as we think they must be unless the procedural changes outlined in IV are implemented. We think the actions recommended in IV should, therefore, be taken at once—so that we can get on with the work that needs to be done.

I. The Recognized Need

Teachers and other educational workers who understand and are prepared to deal effectively with children and youth from our diverse cultures—Hispano-American; Indian-American; Afro-American—and with the very wide range of individual differences among all children. We think that we must "get off the dime" and begin soon to practice what we preach—at all levels of our functioning.

The Committee recommends that:

1. A new cross-department Unit for Educational Diversity be established. We think that UNM funds should be secured NOW to provide for a Director (3/4 time) and three consultants from our full-time staff (1/4 time
each) to begin exploration of possible action. We think this group should seek outside as well as state funds for significant action **this year** on teacher re-education, preparation of instructional materials, etc.

2. The new Unit for Educational Diversity take a hard look, as rapidly as possible, at:
   - present screening practices
   - the current general education program
   - the professional courses
   - the laboratory experiences
   - the graduate programs
   - the services to teachers already in service and propose changes needed in preparation programs to
     - the Policy Committee
     - the Departments
     - the College Faculty

3. This Unit accept special responsibility for as many COE faculty meetings **this year** as necessary for the re-education of us--and the development of commitment for action.

4. The new cross-department Research Unit (See III) provide the research support (and grantmanship aid) needed to get things moving.

5. The Unit look at possible utilization of new media and technology as means for better instruction of children from our diverse cultures and better provision of relevant instruction for all.

6. After careful study by the new Unit and subsequently by the Policy Committee, a presentation be made to the COE Faculty of Bill Huber's longitudinal study of the UNM Freshman Class, 1963-1967. Follow-up work with individual departments should result.

II. The Recognized Need

An analysis of the relevance of all current programs to the students' immediate and career needs and to the state's future. We think that much of what we are now doing appears to our products as having little relevance to their needs--and we think that changes should, therefore, occur.

The Committee recommends that:

1. Each Department be charged with completing an analysis of present programs with student participation for presentation to the Policy Committee not later than August 15, 1970. The analysis should include at least:
   - entrance to the program and guidance during it
   - evaluation of course offerings and requirements
   - evaluation of the effectiveness of instruction
   - local and state needs--and utilization of our products
   - laboratory and field experiences
placement and follow-up
activities to upgrade the competencies of all educational personnel in-service.
Specific recommendations should be made by the Department to include such matters as:
- elimination of some activities, courses, programs
- reallocation of efforts, personnel, budget
- new, needed programs
- changes needed in the general education program
- changes needed in all required courses.

2. The Research Unit (See III) provide logistic support and suggestions to Department's as they undertake the analysis of present programs.

3. The Policy Committee make a careful analysis of the Departmental reports prior to the opening of school next year--and bring to the faculty early in the year some specific recommendations for college-wide reallocation of resources. We recognize that this will be tough--and threatening. Some currently established programs may be eliminated entirely. The emphasis is some programs may need to be expanded, and in others modified. We think the hard look must be taken--and the hard decisions made at the earliest possible time.

4. To the extent possible, recognizing the difficulty of timing, the budget requests submitted to the central administration for the next biennium reflect the changes recommended as a result of this analysis of relevance.

III. The Recognized Need

Refocusing of much staff time, energy, and commitment toward research activities geared specifically to solutions for New Mexico's educational problems. We think that the COE should be the research center to which the Governor, the State Legislature, the State Department of Education, other Universities, and public school systems in New Mexico naturally turn for research help.

The Committee recommends that:

1. A new cross-department Unit for Research Activities and Grantsmanship be established, supported, and staffed for effective functioning. In addition to someone who would have leadership responsibilities, the Unit should have several of our full-time research-oriented faculty members, drawn from different departments, who would serve on a part-time basis as staff consultants.

2. The cross-department Research Unit should be charged with activities such as:

   - the deliberate design of a master plan for research activities for the College which will focus much of the research energies of most departments--so that we will have a real impact on educational practices, problems,
issues, and decisions in New Mexico. The master plan should not only seek to extend knowledge but also to disseminate and use existing knowledge.

keeping up to date on developments in Washington, so that we know where the money is--and what is likely to move some of it this way.

help to any staff member who desires to write and submit a proposal for grant money--especially when the grant is harmonious with the master research plan.

coordination of research with priorities established by the Policy Committee.

coordination with the Unit on Educational Diversity.

3. Central administrative approval be secured so that at least one-third of all overhead monies generated by COE activities be returned to COE for support of this Unit (and the Educational Diversity Unit until it becomes self-supporting).

4. Research assistance be provided to all Departments as they make an analysis of the relevance of current programs (See II).

IV. The Recognized Need

Administrative action at all levels in line with clearly established policies and faculty action to clarify College policies, goals, and priorities so that better utilization can be made of staff time, interests, capacities, more planning can be done, more significant undertakings will be started, and less time will be spent on maintenance-type activities.

The Committee recommends that:

1. The title of the A&P Committee be changed to the Policy Committee and its workload be changed from administration of established programs to discussion of basic issues, establishment of priorities, and long-range planning. We think that this important step should be taken immediately.

2. The Policy Committee consider at once the need for new horizontal and vertical structures within the college (and the possible elimination of some which are currently non-functional). We see the need NOW for two new horizontal structures which for lack of a better term we have called units. (See I and III above). The Policy Committee should recommend sufficient status and resources for these units that action will result. The Policy Committee should also consider the requests for new Departments which were voiced at Lawrence Ranch.
3. The Administration report on actions taken, policies under consideration, etc., through a monthly newsletter prepared for faculty, staff, and interested students. The Assistant to the Dean, we think, should be specifically charged with this assignment.

4. The Dean and his Assistants act forcefully within established policies, keeping the faculty informed of actions taken through the Newsletter (rather than by announcements in faculty meetings). When policies have not been established, the Administration should recommend needed changes to the Policy Committee for action—so that administration within policies is possible.

5. Most faculty meetings be redirected toward (1) discussions and dialogues of new policies, new goals, new priorities which the Policy Committee recommends; or (2) re-education of ourselves. No meetings should be held for maintenance activities alone—and a minimum of such activity at staff meetings should be the agreed-upon goal.

6. The Policy Committee undertake as one of its early assignments the clarification and redefinition of roles at all levels (dean, assistant deans, chairmen, faculty, project directors, committees, committee chairmen, etc.). Authority to act commensurate with responsibility within established policies should, we think, be clearly specified.

7. Curriculum Committees A and B be henceforth called the Graduate Curriculum Committee and the Undergraduate Curriculum Committee. Representatives of the Administration should be added to these committees. These groups should be given authority to act for the faculty on new course proposals and other curriculum matters—subject to challenge at the next faculty meeting by Administration or any member of the faculty. Reports of the actions of these committees shall be transmitted to the faculty through the monthly newsletter prior to scheduled faculty meetings.

8. Departments should be given responsibility—authority to develop policies for admission to and retention of students in their programs at all levels. The administration shall act to implement departmental policies through the Assistant Dean for Student Affairs. The Research Unit (See III) shall institute periodic studies of practices and products as background data for discussion in the Policy Committee of policies and priorities concerning admission and retention.

Postscript

As a Committee we recognize that there are other needs—and that another group of faculty members might have set some other priorities and/or made other recommendations. Based upon our Lawrence Ranch experiences we are convinced that the COE Faculty wants ACTION NOW! We believe that the COE Faculty will go to work on these four basic fronts—and we call upon all administrative officers of the University and the Board of Educational Finance to help us make such efforts a reality.
I General Department Information

A. Significant Achievement During the Year 1969-70

The Art Education Department attempted to improve its program in several significant areas.

1. Student Teaching:

Art education centers were developed in both the elementary and secondary student teaching program. The purpose of these centers is twofold: they enhance the quality of the art education experience for the public school student by the more extensive use of the expanding facilities of the art education department and the free recourse to the different expertise of the department's faculty; on the other hand, the department has a better laboratory for the mutual interchange of student teaching experience with more control of the student teaching environment with the closer and more effective supervision by its faculty. The elementary art education center was located this year at Comanche Elementary School. It was developed under the enthusiastic efforts of Mrs. Baker, Principal of Comanche, and Professors Rutkowski and Hough. The secondary art education center was at Highland High School, supported by Mr. W. Wright, principal, and successfully structured by their art department chairman, Frank McCulloch, and Professor Rutkowski. Mr. McCulloch
also worked with three satellite junior high school programs connected with this art center concept. Reports from the student teachers, school students, A.P.S. faculty, and parents who participated in the art center concepts generally testify to their success and are available in the art education office.

In addition to the regular student teaching program, the art education department developed, under the direction of J. A. Waldie and Mr. D. Chavez of Continuing Education, a special art program designed to bring both elementary and secondary art students to the campus facilities of the art education department. Three children's classes, two primary and one for grades 4, 5, and 6 were given on Saturday morning. Mrs. B. Vogel, Miss B. Baird, and Mr. J. Hardwick were the instructors. Two high school art classes were presented on Thursday afternoons with Mr. Frank McCulloch and Mr. Frank Walker, both outstanding A.P.S. high school art teachers, as instructors. The art education students of the pre-student teaching course (Art Ed 220) worked with these classes, observing and teaching in a rather more favorable circumstance than usual and working with individual or groups of interested public school art students. Other faculty participated in this program, introducing, for example, ceramics to high school students (Waldie) and movie making (McIntosh).
2. Facilities

In an endeavour to improve our facilities to enable the department to provide programs as described above, and in order that our secondary methods classes can fulfill their purpose of preparing art education majors to teach in secondary schools, the art education department undertook some of the responsibility for a number of community art programs. Some of our faculty (Waldie, Stiener, Kravagna) gave courses in weaving, jewelry, and ceramics, and the department gained certain basic equipment such as a loom, a potter's wheel, and jewelry tools. The active support and co-operation of Mr. Dan Chavez of Continuing Education has been an encouraging factor in the development of both this program and the children's art classes.

3. Film Programs and High School Film Festival

The art education department, with the support of Professor R. Kline, ran a successful series of art film programs through fall into the spring. Even more successful was the first annual High School Film Festival this May. Forty four entries were received and many outstanding high school student films were screened over the three night festival. Mr. I. Wright, K. Rousseau, and L. Precastin, student teachers in the department, played key roles in organizing and running the festival.
4. Graduate Offerings

The department endeavoured to strengthen this rather weak area by scheduling more graduate courses and offering them later in the day so as to be available to A.P.S. teachers.

A graduate seminar (McIntosh), a workshop in art education administration and curriculum (Steiner), and a workshop in South west cultural weaving (Kravagna) were introduced in the spring. All began after 4:30 p.m. The graduate seminar and two other graduate workshops (New Media and Materials in Art Education - Hough; South West Indian Weaving - Arviso) were included in the summer program.

5. General Program Modifications

The department is attempting to make the program more sensitive to student needs but at the same time more reflective of faculty resources. The student teaching hours have been blocked together with their respective lecture courses and are scheduled to be given in alternate semesters; Art Ed 461 (Secondary Student Teaching) with Art Ed 434 (Secondary Art Education Methods and Philosophy) in the spring semester, Art Ed 400 with Art Ed 401 in the fall. The number of Art Ed 110's and Art Ed 115's were increased with the addition of five part time instructors and in the spring semester II two sections of Art Ed 110 were added to the normal offerings of Art Ed 115 to permit more student flexibility in scheduling.
6. South West Cultural Considerations

The department, in its concern for realizing the richness of the regional cultural environment, has offered two courses directly concerned with the Indian craft of weaving (mentioned above - Kravagna and Arviso). Both courses have been enthusiastically subscribed to by the art education students. Mr. Dennis Keefe, on the other hand, designed a craft course, (Art Ed 120, given spring, '70) particularly for the needs of New Career students and the interest which evolved from this course from both New Career administration and students suggest the need in that area for the development of a special program. Mr. Waldie conducted special workshops for the Model Cities Neighborhood and at Dulce for the development of art education programs designed to meet the needs of their specialized areas.

B. Number of Students choosing program as Major or Minor.

Fifty-two students were accepted after screening into the Art Education Department as Art Education Majors for the past Academic Year (June 1969 to June 1970.) Thirty-eight students applied and were accepted during the preceding year. Fifteen Art Education Majors graduated this past year, 14 the previous year. There is no accurate record of Art Education Minors. An approximate guess would be about 45 Elementary Majors and about ten Secondary Majors are Art Education Minors. The Art Education Department has 72 active graduate folios, five of which are doctoral students. Approximately 10 masters graduated this past week.
C. Significant Plans and Recommendations for the Near Future

The Art Education Department proposes to develop the following areas.

1. Student Teaching

Other A.P.S. elementary schools have shown interest in the art center idea as it has developed at Comanche. Four elementary centers, situated in different areas of the city, will be used by some 24 K-12 Art Education student teachers. A proposed secondary art center program, consisting of at least two high schools and their feeder junior high schools, is planned for the spring (71).

The art education department's public school art classes given through Continuing Education will be expanded for the fall semester with special high school sections on ceramics, film making, and painting-drawing; a junior high school section; and advanced elementary and pre-school classes added to last year's program. Mrs. B. Vogel has taken over the directorship of this children's art program and is also responsible for the co-ordination of the community art classes. Mrs. Vogel supervises the work of the student teachers within these classes.

The department, with Mr. James McGrath, Director of the art program at the Santa Fe Indian School, has begun to explore the possibilities of working some of our student teachers into the school in Santa Fe, and also to design
a teacher education program tailored to the needs of their graduates.

2. Facilities

Plans are under way to increase permanent office space in the art education building and to add a dark room, locked storage space, and a safety enclosure around the power saws, etc. A collapsible spray booth for this summer's workshop is under construction. With the addition of Mr. N. Townsend to the staff, further renovation of tool storage and machinery space, new kilns and vacuum formers are hopefully planned as are the procurement of the supplies necessary to bring our craft facilities up to high school standards.

An educational concept of a south west cultural craft center with the facilities to engage in cultural awareness programs for the college is a future aim.
D. Appointments to Staff

D. J. McIntosh - Department Chairman, effective Sept 1969
J. A. Waldie - Visiting Instructor, Sept 69 - June 70
Beverly Vogel - Instructor, Sept 1970
Neal Townsend - Assistant Professor, Sept 1970
Donald Joplin - Visiting Asst Professor, Sept 70 - June 71

E. Separation from Staff

Assistant Professor Walter Rutkowski, as of July, 1970, to become Associate Professor, Acting Chairman, of the Department of Fine Art at Peabody University, Nashville, Tenn.

II Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study

Walter Rutkowski this spring obtained his Ed.D in Art Education from Penn State University.

Donald J. McIntosh completed his dissertation defense for an Ed.D. from Teachers College, Columbia University.

2. Sabbaticals, Leaves etc.

None

3. New Scholastic Honors, fellowships etc.

D. J. McIntosh - Canada Council Doctoral Fellowship (through September, 1969)
4. Publications


5. Other Research Projects or Creative Work

R. Hough, Faculty Research grant - $500.00, "An Investigation of Methods of Using Styrofoam as a Structural Base for Fibreglass Sculpture", October, 1969. Second Grant, $500.00, June, 1970/

R. Hough, Painting Show - see #7 below.

6. Activities in Learned and Professional Societies

R. Hough, J. Waldie, attended Western Art Education Conference, Portland, Oregon, Spring, 1970, set up Placement Interview Bureau at the Conference.


7. Other Professional Activities

W. Rutkowski, D. McIntosh, Mountain State Evaluation of Valley High School.

W. Rutkowski, Painting Exhibition, Numero Uno Gallery

R. Hough, One Man Show of Paintings, Jonson Gallery, University of New Mexico, April, 1970.
J. A. Waldie, Indian Community Planning Program, designing brochures for recreation areas.

D. J. McIntosh, organizing Albuquerque's first annual high school film festival.

J. A. Waldie, Workshops: Model Cities Recreation Leaders, 4 days; Dulce area, 3 days.

8. Non Teaching University Service

J. Waldie, Faculty Advisor, Sky Diving Club
W. Rutkowski, Chairman, Curriculum Committee A; Faculty Advisor, Student Publications Board; COE Research Committee.

R. Hough, COE representative to UNM Audio Visual Committee

D. J. McIntosh, Policy Committee; Administrative Committee; Graduate Curriculum Committee "B".

9. Public Service

D. J. McIntosh, Member of Model Cities Cultural Committee; Designed three proposals for the Model Cities Summer program; Directing a Film Making Workshop, MNA Summer Cultural Program, Summer, 1970; Speech for A.P.S. Awareness Project, Model Cities area, "Film Making"; Consultant, Awareness Display, A.P.S. Model Cities Awareness project.

10. Personal Information

None
The Report of the Department of Educational Administration
July 1, 1969 - June 30, 1970
Richard L. Holemon, Chairman

I. General departmental information

A. Significant achievements during the academic year, 1969-70

1. The department continued its transition to developing an emphasis upon advanced graduate programs.
   a. The number of persons enrolling in the M.A. in Educational Administration was reduced and included more students from Latin America and students not planning to pursue an administrative career in elementary and secondary schools.
   b. The Joint Master's degree offered by the Departments of Elementary Education and Secondary Education in cooperation with the Department of Educational Administration was made fully operational during this year. A number of students were screened and admitted to the programs.
   c. Efforts to improve the supervision and guidance of doctoral programs continued. Student research and dissertation direction received considerable attention. The dissertation proposal hearing before the department faculty was utilized for all new dissertations considered during the year.
   d. A department curriculum committee, chaired by Ronald Blood, charged with program examination made a study and submitted recommendations. On the basis of this report the department
      1. adopted an administration core to be incorporated into the Master's program,
      2. agreed to refocus several courses to make them more
relevant to contemporary and regional conditions,
3. made changes in the credit hour and level of several
courses, and
4. agreed to have several advanced courses developed
and proposed to the College of Education faculty
during the 1970-71 year.

2. The department sponsored several workshops and seminars to relate
its program to public school in-service needs. It offered a
seminar on the Organizational Role of the Student for persons in
Santa Fe. This seminar, offered through the Office of Continuing
Education, was conducted on a revised time schedule which holds
promise. A weekend retreat, attended by graduate students, pro-
fessors, public school personnel, and five high school students,
dealt with the issue of dissent on the high school campus.

3. The department carried the major responsibility for conducting
an internship program for 22 Colombian educators. The interns
attended classes on campus, as well as worked in the public
schools of Las Vegas, Espanola and Albuquerque.

4. Effective efforts were taken to develop a more cohesive and self-
conscious group of resident graduate students. Regular student-
conducted luncheons were held. They provided the students an
opportunity to discuss their expectations of their program and
to evaluate their experiences. Students have already begun to
criticize constructively their program.
5. The department invested considerable effort in recruiting three staff members. The new members were selected so that their skills and interests compliment those of persons remaining in the department. The staff appears to represent a good balance of interests and skills along several continua.

6. Perhaps the most significant achievement realized during the year was the improved communications and working relationships with national organizations of educational administration. The University Council on Educational Administration selected a member of the department, Martin Burlingame, to serve as a staff affiliate during the next year.

B. Appointments to staff.

1. New staff additions

   a. Ignacio Cordova, Ph. D., University of New Mexico, 1968, Assistant Professor, September 1, 1970. Mr. Cordova was selected because of his interest in administration of public schools in minority group areas.

   b. James Hale, Ph. D., University of Wisconsin, 1970, Assistant Professor, September 1, 1970. Mr. Hale was selected because of his training and interest in the area of educational finance.

   c. Paul Pohland, Ph. D., Washington University, 1970, Assistant Professor, September 1, 1970. Mr. Pohland was selected because of his training and interest in focusing upon the school as a social system.
2. Changes in staff assignments.

Professor Ronald Blood was appointed department chairman when the former chairman, Professor Richard Holemon, assumed the position of Associate Dean.

C. Separations from staff.

1. Professor Herbert Hughes resigned from the department effective August 7, 1970.

2. Professor Horacio Ulibarri resigned from the department effective June 6, 1970. He assumed the position of Professor of Education at Southern Methodist University.

3. Professor C.W. Richard completed his one year appointment with the department as Visiting Associate Professor of Educational Administration.
II. Composite of information requested on individual biographical supplements.

1. Advanced Study.

None.

2. Sabbaticals, leaves, etc.


Richard F. Tonigan: Brazil and Colombia, S.A. (See #7 below)

3. New scholastic honors, etc.


4. Publications


Developmental Change: An Evaluation of Concerted Services in Sandoval County, Center for Technical Education, 1970 (with Ulibarri and Hanson.)

Richard F. Tonigan - A monthly article series on Plant Management of Educational Facilities in School Management magazine, starting January, 1970 and continuing for one to seven years.

Horacio Ulibarri - Bilingual Education: A Handbook for Educators, ERIC.

The Spanish American: A Study on Acculturation, Cultural Awareness Center, U.N.M.

5. Other research projects or creative work, etc.

John A. Aragon: Director, U.N.M. Minority Group Cultural Awareness Center.

-5-
Ronald E. Blood: In progress—An Organizational Analysis of the Role of Student; Development of School Assessment Models—Student Unmet Needs (Title III Project, Santa Barbara, California); Development of Community Assessment of Schools—Los Alamos, N.M.;

Martin Burlingame: University Research Allocation; OCDQ and Principal Personality.

Richard F. Tonigan: Comparative Analysis of Educational Planning Systems of 10-20 Selected Nations; Director and contractor to several New Mexico Educational studies including state-wide assessment of Vocational Education at the Secondary and Post-Secondary levels.

Horacio Ulibarri: Bilingual Research Project, Office of Education; Migrant Education Project, Office of Education.

6. Activities in learned and professional societies.


Richard L. Holeman: American Association School Administrators; New Mexico School Administrators Association; American Educational Research Association (Attended meetings of each.)


7. Other Professional Activities.

John A. Aragon: Consultant to San Jose State College for the Evaluation of its Secondary Education Project in Santo Domingo, Dominican Republic; Consultant to Texas Education Desegregation and Technical Assistance Center, University of Texas, Austin; Member Board of Directors of Hispanic American Community Development Corporation, Washington, D.C.

Martin Burlingame: Assistant Director, U.N.M. Bilingual Education Conference.


Richard F. Tonigan: Educational Planning and Management Project consultant to government of Brazil Project for Expansion and Improvement of Secondary Education; consultant to ISRAD on Model Cities Child Care and Development Center.

Horacio Ulibarri: Consultant to: White House Committee on Consumer Education; HEW Assessment and Program Evaluation; HEW Bilingual Education; S.M.U. Mobility Study.
8. Non-teaching University Service:

John A. Aragon: Member of U.N.M. Continuing Education Committee; Curriculum Committee.

Ronald E. Blood: Chairman, Department of Educational Administration.

Martin Burlingame: Member, U.N.M. Scholarship Committee.

Richard L. Holemon: U.N.M. Research Allocations Committee; COE Administrative and Policy Committee; Graduate Curriculum Committee.

Richard F. Tonigan: U.N.M. Research Policy Committee; COE Ad Hoc Research Committee.

9. Public Service:

John A. Aragon: Member, Board of Directors of Albuquerque Association for Retarded Children.

10. Personal information:

None.
I. General Departmental Information

A. Significant achievements during the academic year, 1969-70

1. The Department began its new program of small Ed. Fdns. 290 sections with tutoring in the public schools. Evaluation of the program indicates the expected success.

2. The Department began its new program of coordinating Ed. Fdns. 300 and Ed. Fdns. 310 with the Elementary Junior Block. Informal evaluations indicate that this internship is working well.

3. The Department joined with the New Careers staff in supervising their personnel teaching the specially sheltered section of Ed. Fdns. 290.

4. The Department experimented with internships for the staff of the New Careers Project.

5. The Department cooperated with the Chicano Studies Program to help develop Summer courses.

6. Dr. Vera Johns from Brandies University taught a special Seminar in Linguistics and the Culturally Deprived Child.

B. Significant plans and recommendations for the near future.

1. The Department will continue to look for an educational anthropologist with special qualifications to help in the development work of this region.
2. A general reexamination of all Department course offerings will be undertaken to determine the relevancy in professional education programs.

3. Steps will be taken to coordinate Ed. Fdns. 300 and Ed. Fdns. 310 with the Department of Secondary Education.

C. Appointments to staff:

1. Dr. Raul Ruiperez was added to the departmental staff, teaching one course, with primary responsibility in the Latin American program.

2. Mr. Charles Becknell joined the Department on June 8, 1970, with primary responsibility in the Black Studies Program.

3. Dr. William Merz was appointed a Temporary Instructor, performing the duties of Dr. Lewis Dahmen who is on assignment in Latin America.

D. Separations from Staff:

1. Dr. William Merz left at the end of the year to accept an appointment at San Jose State University, San Jose, California.

II. Composite of information requested on individual biographical supplements.

1. Advanced Study.
   John T. Zepper attended AHA History Education Institute, Indiana University, Bloomington, Indiana, June-August, 1969.

2. Sabbaticals, leaves, etc.
   James G. Cooper, Summer term, Eastern Washington College, Cheney, Wash.
   Mary Bierman Harris, summer travel in Europe.
3. New Scholastic honors, etc.

James C. Moore selected for inclusion in 1970 edition of:

American Men of Science: Social and Behavioral Sciences and
Who's Who in the West

4. Publications

D.L. Bachelor - Foundations of Education: A Sociological View
(with Vogel & Zepper) U.N.M. Press (Sept., 1970) Article
"Chicanos and the Schools" in above book.

James G. Cooper - (With Ulibarri, H.) two reports on Bilingual
Research Project.

Mary B. Harris - "Improving Word Recognition in Retarded Readers"

Wayne P. Moellenberg - "Some Logical Weaknesses," Phi Delta Kappan,
50, April, 1969; "National Assessment: Are we Ready?" The Clearing
House, April 1968; "Conceptual Systems Theory and the Superintendent

James C. Moore - (with S.M. Jung) "The Reliability of Self-Reported

John T. Zepper - Book review of Sylvia Ashton-Warner's Myself,
Journal of Thought, 4:253-254, July, 1969; "Bulldog, Bulldog,
Bow-Wow-Wow, or The Watchdog Attitude in American Education,
Educational Quest, 13:13-15, Fall, 1969; "V.T. Thayer: Progressive

Albert W. Vogel - Educational Foundations, A Social View
(with Zepper and Bachelor) U.N.M. Press-in production; Book
Review: "Politics and Purse Strings" by Tom Wiley, History

5. Other research projects or creative work, etc.

D.L. Bachelor: Tutors and Teachers (in preparation.)

Research project in sociolinguistics of the classroom (not yet
funded.)

James G. Cooper: HEW, OE Bilingual Research Project, funded by the
Research Dissemination Department, a continuation of an earlier grant.
The continuation was funded at $51,000. for nine months.
Richard M. Gorman: Several chapters of a discovery approach in educational psychology have been completed.

Mary B. Harris: N.I.M.H. Grant for $4,834—Models, Norms and Altruism (10 months). Other research on the effects of praise and criticism on children's learning, imitation of simple or complex sentences, training of conservation in kindergarten children, etc.

Wayne P. Moellenberg: Continuing work on screening and characteristics of applicants to teacher education.

James C. Moore: "The Effect of Analogy Instruction on Analogy Test Performance."

John T. Zepper: Article on N.K. Krupskaya and John Dewey was sent to School and Society.


6. Activities in learned and professional societies.

D.L. Bachelor: Attended Comp. Ed. Society & ACTE Meetings in Chicago; served as contact for Com. Ed. Society evaluation of Albuquerque as meeting site (decision pending.)
James G. Cooper: Held two meetings, one in Albuquerque and one in Minneapolis on the potential for establishing a Rocky Mountain Educational Research Assn. A third planning meet is scheduled for May 4, 1970 in Albuquerque.


Mary B. Harris: Attended International Congress of Psychology as a member.


Albert W. Vogel: Attended CERA Conference, San Francisco, February, 1970 with Tom Gustafson to read paper derived from Study; attended the Workshop and observation at Durango, Colo. concerned with Multi-cultural Education.

7. Other Professional Activities.

D.L. Bachelor: Consultant to SWCEL, Model Cities Program and Center for Community Action Services; attended meeting of Cultural Awareness Seminar in Santa Fe and served as evaluator; abstractor for University Council for Educational Administration.
James G. Cooper: Consultant to Southwest Cooperative Educational Laboratory on evaluation of Consortium F's Title III project on handicapped.

Mary B. Harris: Consultant, The Rehabilitation Center.

Wayne P. Moellenberg: Consultant, Bi-lingual Education Conference; Consultant, Handicapped Child Project, SWCEL.

James C. Moore: Visiting Staff Member of Los Alamos Scientific Laboratory, Los Alamos, N.M.; proposal reviews for National Science Foundation; abstractor of two Journals for Psychological Abstracts.

John T. Zepper: APS-HEP forum on the problems of history teaching; APS-HEP forum on history and the slow learner; HEP institutes at Highland H.S. twice in February, 1970; AHA HEP meeting in Los Angeles, California April, 1970.

Albert W. Vogel: Gave annual lecture to staff at Nazarene Hospital, Albuquerque, N.M., January, 1970.

8. Non-teaching University Service:

James G. Cooper: Faculty advisor on design and analysis of many doctoral research projects. Spent several days in Washington, D.C. locating research resources. Assisted various staff and students write proposals.

Richard M. Gorman: Secretary, Education Doctorate Committee; Faculty advisor for 40 undergraduates.

Frank Angel: Director, Latin American Projects in Education.
Mary B. Harris: Advisory Committee, Bureau of Educational Planning and Development.

Wayne P. Moellenberg: Assistant Graduate Dean; Faculty Marshal.

James C. Moore: Committee on Entrance and Credits; Chairman and/or member of doctoral committees.

John T. Zepper: COE Curriculum Committee A (undergraduate programs); Study of PE activity course requirement in EF 290.

Albert W. Vogel: Provided tutoring and other services to Win; New Careers, MHC; New Careers, ISRAD; New Careers, CEP; Albuquerque Tutoring Council; Child Developmental Center; developed special courses for Laguna Pueblo, Cuba Public Schools, Jemez Springs Public Schools; directed educational program of Maxwell Museum of Anthropology; member CEEP; Publications Committee; COE Policy Committee; Chairman, Committee B, College of Education.

9. Public Service:

D.L. Bachelor: Lectured to teacher groups in Grants and Cuba, N.M.; lectured and led Seminar for American Association of University Women.

James G. Cooper: Public Member of New Mexico State Apprenticeship Council.

Wayne P. Moellenberg: Taught adult seminar at First Congregational Church; conducted workshop at Kennedy-Tomasita School
James C. Moore: Consulted with the Bureau of Educational Finance on research project.


None.
General departmental information

A. Highlights of 1969-70

The department completed a most successful year in 1969-70. The pace of activities accelerated considerably. This was due to a variety of forces. Continued efforts to enhance the undergraduate program, heavier graduate enrollment, more special projects funded and still more proposals produced, added contact and cooperation with the State Department of Education, SWCEL, BIA and other educational groups, involvement in major University events, and the like, all were productive and necessary activities, but all took a good bit of extra attention.

From a very subjective point of view, I feel the word "quality" best describes the work of the department and the term "harried" describes the feeling of the department members.

1. The undergraduate program

a. The cooperative efforts to integrate the foundations and methods courses in the junior module progressed very well last year. There is much more to do to achieve optimum integration but the work of Dr. Auger, Dr. Greer, Dr. Merz, and the block personnel has laid excellent ground work for 1.
future program development.

b. We are looking forward to the inclusion of the materials production course as a part of the senior module to give our students an integrated media-methods block. Dr. Kline has been quite helpful in the conceptualizing and working out of the technical details. This addition and the shifting of Children's Literature out of the block were done only after careful thought and discussion with students, faculty, and public school teachers and administrators.

c. The department acted to change the general education requirements to provide greater program flexibility. Up to now we have had a prescriptive set of general education requirements, although we have permitted modifications of the program where deemed appropriate.

d. Dr. Tweeten has worked closely with professors in the Chemistry and Biology departments to effect changes in these areas. He is working toward the establishment of the science courses "for non-science majors." Two of the three have now been established, life science and physical science, and will be taught this fall. The earth science component is yet to be added.

e. Dr. Merle Mitchell in the Department of Mathematics and Statistics continues to be most cooperative. She provides excellent leadership in the improvement of the offerings for teachers in math. We now have differentiated require-
ments in math for our students based on the students' test scores and professor judgment.

f. We have created a committee on the undergraduate program, Dr. Auger, chairman, Drs. Tweeten and Van Dongen. This committee is to assist the chairman and the department in the improvement and administration of the undergraduate program.

g. A very significant action was taken by the department regarding the limitation of enrollment in the undergraduate program. This decision was made after a long series of discussions. Essentially, we propose to maintain the undergraduate program at its current level and provide for growth in the leadership functions in teacher education and inservice education and in research. This decision was made taking many factors into consideration including data concerning teacher supply and demand, funding limitations through state appropriations, and the growing need for inservice training and school improvement.

2. The graduate programs

There was a noticeable increase in the number of Master's degrees and Education Specialists Certificates awarded this past year. The increase was primarily due to the Bilingual Specialists Training Project, a graduate level program. I rather suspect that the Department of Elementary Education produced a greater
portion of Spanish-surnamed graduate degree recipients than any other department in the University. I also expect we will have a greater number of students from the minority groups in our graduate programs next year than any other department.

The Department moved to change its M.A. requirements to permit greater flexibility in program planning. The requirements now provide more options in course selection and still conform, naturally, to the Graduate School requirements and the College of Education requirements.

The Department went on record as approving the idea that advanced degree programs should contain an internship or a form of practical field related experience for the student.

The graduate level courses being offered in our student teaching centers are functioning quite effectively. In addition to providing necessary training for cooperating teachers, they are also serving as the coalescing activity around which new curricula and instructional materials are being developed and tested.

It is highly significant that almost all of the active and progressive elementary schools in APS have a strong affiliation with the Department. This involvement has grown out
of UNM initiated activity and also programs initiated by APS. I think this reflects the Department's efforts both as an initiating agent and as a responding agent. It also indicates the mutual confidence and respect that exists in both the organizations.

Two field schools were in operation during the 1970 summer session, one in the College of Santa Fe and one in the Universidad Autónoma de Guadalajara. Enrollment was quite low in the Santa Fe operation. The Guadalajara center provided an excellent setting for our institute in bilingual teacher training. The facilities, the cooperative efforts of the Universidad staff, particularly Lic. Humberto Dávalos, and the total cultural setting provided the background for an outstanding institute.
Special Projects

The Department will expand from four special projects last year to seven next year with planning taking place for two additional projects for the 1971-72 year. Dr. Zintz's highly successful Bilingual Teacher Specialists' Institute with 28 participants concluded in June. Dr. Condie's Navajo Culture Based Social Studies Project will culminate production of units this next year. Dr. Spolsky's Navajo Reading Study Project will continue through the next year. Dr. Gonzales' inservice teacher training program in Grants will continue through the next year.

New projects include a contract with the State Department of Education to train teachers to teach the content areas in Spanish. The first phase of this project was to be held in Guadalajara in the summer of 1970, under the direction of Mr. Henry Pascual and Mr. Cecilio Orozco. This will continue through the year under the direction of Mr. George A. Gonzalez and Mr. Cecilio Orozco.

Dr. Dolores Gonzales will direct a project to train eight persons in the methods and techniques of developing and adapting instructional materials for bilingual education. Dr. Carolina Acosta will assist in this project.

An inservice bilingual teacher training project similar to the Grants project will be conducted in Coronado Elementary School, APS, next year.
Dr. Marie Hughes brings her project in Early Childhood Education Leadership for Spanish Speaking to the University of New Mexico from the University of Arizona. Dr. Joanne Woods and Mrs. Halene Weaver will assist her in this project. The primary training site will be in Old Town School, APS.

The Department hopes to be involved in the development of the Teacher Corps proposal for the Pueblo Indian groups.

The Ecuador Project continues in operation but the Department’s involvement in the project continues to diminish.
Plans for the Near Future

1. The department plans to maintain and continue to upgrade the quality of our undergraduate teacher education program.

The cooperative relations with the Department of Educational Foundations continues to provide our students with a more integrated experience.

2. The department decided to contain enrollments at the current levels in the undergraduate program. (See April 17, Department Report for details.)

3. We intend to use the professional semesters as teaching laboratories for our graduate students and to increase our research of these experiences.

4. The department feels a great need to shave our efforts in the upgrading of the undergraduate teacher education program with the professional community and will undertake efforts to accomplish this during the coming year.

5. We intend to increase our efforts in developing improved educational environments and in-service education of teachers.

6. Our dedication to improving education for minority groups of this region is evidenced in our special projects and it is safe to predict continued interest and activity in this area.
Appointments to Staff

Dr. Dean Brodkey, Assistant Professor, joined the Department and University College to develop the language skills program for university students. He completed his doctorate at UCLA.

Dr. Dolores Gonzales rejoined the department after her two years in charge of the text book writing project in Ecuador. She was promoted in rank to Associate Professor.

Mrs. Lenore Wolfe joined the staff as an instructor in the kindergarten at Manzanita Center. She recently completed a year of graduate study at UNM.

Separations from Staff

Mrs. Mary Ann Howell, formerly the kindergarten teacher at Manzanita Center, resigned to accept a position with APS to develop their kindergarten program in the Model Cities area.
Faculty Contributions

Dr. Keith Auger served on a national planning committee of the Association of Supervision and Curriculum Development and was Co-director of the Teacher Education section of the 1970 annual ASCD conference. He was appointed to the Board of Directors of the New Mexico Department of Elementary School Principals. He also served as a consultant to various school, educational and industrial groups.

Dr. Dean Brodkey, administrator of the experimental freshman English program for Speakers of Other Languages and Dialects (SCESOLD) worked in the conceptualization, coordination and development of this program.

Dr. LeRoy Condie, in addition to continuing the project, was coordinator of the section meeting in "Indian Children and the Social Studies," a section of the National Council for the Social Studies annual meeting, 1970. He also was asked to display his materials at the meeting. Dr. Condie was promoted in rank to Professor this year.

Dr. Harold D. Drummond contributed a chapter in a public school survey under the coordination of George Peabody College for Teachers. His article on "Leadership for Human Change" was selected for reprint in a book on supervision. He published The Western Hemisphere with accompanying Workbook and Teacher's Manual, Allyn and Bacon, Inc. In addition to numerous addresses, consultancies and the like across the country, he served as a member of important committees locally and nationally. The reader is referred to his annual supplement for details. I would like to comment particularly on his role as a Senior Professor at UNM.
and his work as Chairman of the Academic Freedom and Tenure Committee.
Obviously, it was a year of crises but the destructive potential of
the many points of controversy failed to mature due, I feel, to the
effective and intelligent leadership of Professor Drummond. Professor
Drummond's call for an emergency meeting of selected faculty and students
on the Sunday in May, in my estimation, kept the University open and
began a serious, effective dialogue among individuals of varying
stations and points of view on truly critical issues of our age.

Dr. Dolores Gonzales, in addition to serving as a regional and national
consultant in bilingual education, read a paper at the annual meeting
of the International Reading Association. Dr. Gonzales was promoted
in rank to Associate Professor this year.

Dr. Catherine Loughlin continued her research on preschool peer inter-
action analysis observation development and the utilization of video
tape feedback in the affective development of children. She served as
vice-president of the New Mexico Association for Education of Young
Children and was a member of the examination and reorganization task
force for the NAEYC. She was also active in consulting and serving
on various policy boards on child development and day care centers.

Dr. Bernard Spolsky has been a most productive scholar during the past
year. In addition to his continued development and coordination of the
program in linguistics and language pedagogy and his conceptualization
and initiation of the Navajo reading research study, he has published
numerous articles and reviews in publications such as the TESOL Quarterly.
Language Learning, Language Sciences, Monograph Series on Language and Linguistics. He is Assistant Editor of Current Trends in Linguistics, Vol. XII. Dr. Spolsky presented papers at regional and national conferences, and was denied his presentation at an international meeting in England due to an emergency appendectomy. Professor Spolsky's participation on many committees is detailed in his biographical report.

Dr. Mari-Luci Ulibarri published two monographs related to improving education for the Spanish-American. She read a paper at the annual International Reading Association meeting. She is active in organizations concerned with TESOL and bilingual-bicultural education and is considering a contract with Harper and Row to write instructional materials for Spanish speaking children.

Dr. Richard Van Dongen served as a Graduate Associate for the Southwest Regional Laboratory, Inglewood, California and produced a program pair test. He has been active in inservice education activities at the local level.

Dr. Helen Walters co-authored a Workbook for the Western Hemisphere for Allyn and Bacon, Inc. She was coordinator of the university students work in the Book Fair at the Student Union Ballroom. Professor Walters attended the National Conference or the Language Arts in St. Louis.

Mrs. Lenore Wolfe served as a consultant to various special training projects concerned with educating the young Indian child. She served
as a demonstration teacher at one of the institutes. Mrs. Wolfe served as a Board member for the New Mexico Association for the Education of Young Children and participated in planning local conferences.

Dr. Miles Zintz directed a most successful institute in training bilingual education specialists. This project was funded at $250,680. He directed the summer field school in Guadalajara, Mexico, during the summer of 1969. Professor Zintz published his new book *The Reading Process*, Wm. C. Brown Publishing Company and several articles or chapters for edited works such as "Reading and the Indian Child", "Cultural Aspects of Bilingualism." Professor Zintz presented papers at regional (Oregon, Minnesota, Texas, Arizona) and national (International Reading Association) conferences. He served as a consultant, regionally, nationally and internationally on matters related to reading, bilingual-bicultural education, language learning, and the like.

Dr. David Darling was heavily involved in the planning and negotiations of the four bilingual education projects funded for the coming year. His article on "Why a Taxonomy of Affective Learning?" was selected for publication in a book of readings for the third time. He made presentations at two regional meetings, one for math teachers and one for early childhood teachers. He also worked closely with the State Department of Education personnel and public school personnel on educational programs for minority group children in New Mexico. Dr. Darling was promoted in rank to Professor this year.

13.
As the report indicates, the Department members have been very active as scholars and leaders in crucial areas of high educational concern. As Department chairman, I would like to express my personal appreciation for the significant contributions made by these extremely competent, dedicated, and very human-oriented professionals. It is a delightful experience to be associated professionally and personally with the members of this department. I look forward to a most productive year, and I would hope (but not anticipate) a less harried one.
The Report of the Department of Guidance & Special Education

July 1, 1969 - June 30, 1970

L. C. Bernardoni, Chairman

I. General Departmental Information:

A. Significant achievements during the academic year, 1969-70:


2. Workshops: Workshop in Learning Disabilities, Counseling & Testing the Bicultural Student, Medical & Psychiatric Aspects of Rehabilitation, Vocational Guidance Institute, Special Education in the Regular Classroom, Motor Skill Learning for the Handicapped, 3 day Workshop in conjunction with A.S.C.A. in Group Counseling, Vocational Rehabilitation Counseling.

3. Conferences: Helped sponsor the region for the convention of the American Association on Mental Deficiency, Visually Handicapped.

4. Continued to operate a Special Education Materials Center in cooperation with the State Department, Public Schools and the Department.

5. Conducted special classes for Neurologically and Other Health Impaired Children and Mentally Retarded Children,

7. Awarded a Training Grant in Rehabilitation Counseling, including five traineeships; anticipate continued funding in this program.

8. Received grant for traineeships, junior and senior, from the Department of Health, Education & Welfare in Mental Retardation and Emotional Disturbance.

9. Received grant from State Department in the area of Special Education for traineeships and fellowships.

10. Received grant from State Department for the partial funding of a Demonstration Class in Special Education, and some summer trainees.

11. Received NDEA and UNM Fellows in Guidance & Special Education.

12. Awarded an EPDA Grant to prepare regular teachers to handle Special Education children in their classrooms (summer and year long traineeships). Anticipate continued funding for this program.

B. Significant Plans and Recommendations for the Near Future:

1. The Vocational Rehabilitation Counseling program hopefully will be expanded on the basis of grants from Washington.

2. An expanded program in the preparation of personnel in the treating of Learning Disabilities, hopefully, will be expanded in the coming year.

3. Departmental members recommend that the department be split into two separate departments: Guidance & Special Education.
C. Appointments to the Staff:
   1. Dr. Robert Micali appointed to Special Education and Guidance, June, 1969.
   3. Dr. Marion Heisey appointed to Guidance in September, 1969.

D. Separations from the Staff:
   2. Mr. Leo Munoz, June, 1969.
II. Composite of information requested on individual biographical supplements:

1. Advanced Study: None

2. Sabbaticals, etc:

   Louis A. Bransford

3. New Scholastic Honors:

   Louis A. Bransford
   Recipient of the Rosemary B. Dybwad International Award in the field of Mental Retardation.

   George L. Keppers

4. Publications:

   Louis A. Bransford
   "Poverty and Mental Retardation: Implications for Mexican-Americans", Southwest Educational Development Laboratory, Texas Technological College; "El Retardo Mental en las Escuelas Publicas", Boletín de Pediatría y Deficiencia Mental, Fall, 1969.

   Wm. R. Fishburn
Marion J. Heisey

Development of three instruments which were included in the textbook The Counselor's Work in the Elementary School, James J. Muro, International Textbook, 1970.

5. Other Research Projects or Creative Work in Progress:

L. C. Bernardoni

Director of five year follow-up study in evaluation of Rough Rock School sponsored by O.E.O. Amount of Grant - $85,000.
Title: Evaluation of Rough Rock School.

Marion J. Heisey

Development of the Use of Sentence Completion and Draw-A-Person forms for Navajo children.

Gordon A. Zick

Relationship of group membership and performance in effectiveness in counseling practicum.

6. Activities in Learned & Professional Societies:

L. C. Bernardoni

Regional Rehabilitation meetings in Shreveport, Little Rock; APGA in New Orleans; C.E.C. in Chicago. President-elect of New Mexico Personnel & Guidance Association; member, Board of Directors, and Chairman of Finance Committee, for New Mexico Rehabilitation Association.

Wm. R. Fishburn

APGA Convention, New Orleans; University of Georgia Symposium on Group Procedures, Regional Rehabilitation Conference.
Marion J. Heisey
APGA Convention, New Orleans; New Mexico Delegate and Secretary, National Association of Psychologists.

George L. Keppers

Robert Micali
APGA Convention, New Orleans.

Gordon A. Zick
APGA Convention, New Orleans; Group Symposium, Georgia.

7. Other Professional Activities:

L. C. Bernardoni
Consultant for Social Security Administration

Wm. R. Fishburn
Vocational Consultant, Bureau of Hearings & Appeals, Social Security Administration; Faculty Member, New Mexico Group Psychotherapy Association, Spring Institute; Faculty Member, Group Counseling Workshop sponsored by UNM and American School Counselors Association; In-Service Training Consultant, New Mexico Services for the Blind.

Marion J. Heisey
Lecturer on Learning Disabilities, New Mexico Tech., Socorro; Consultant for Psychological Services, Farmington School District; Lecture, Farmington Women's Club; Conducted a series of six open meetings on Group Dynamics for Community People.
George L. Keppers
Guest on TV Program, "The University in Social Services";
Consultant for Volt Technical Corporation (Head Start);
Co-director, Vocational Guidance Institute, UNM, Summer, 1969.

Robert Micali
Addressed High School Seniors, "Psychology as a Vocation".

Gordon A. Zick
Consultant to Albuquerque and Las Vegas, N.M. school systems;
guest speaker, state and local Nurses' Association; Albuquerque
professional women's groups and teachers' groups.

8. Non-teaching University Service:

L. C. Bernardoni
Department Chairman, Department of Guidance & Special Education;
University Summer Session Committee; College of Education
Policy Committee; Administrative Committee, numerous Ad Hoc
committees; Advisor to 75 graduate students in Guidance.

Louis A. Bransford
Director, Chicano Studies Program.

W. R. Fishburn
Advisor to 40 Masters and 2 Doctoral students.

George L. Keppers
University Entrance & Credits Committee (sub-committee); Ad
Hoc Committee on University Advisement; Committee on Diagnostic
Center for Model Cities; Graduate student advisor.
Robert Micali
Advisor, University College; Member, Committee B.

Gordon A. Zick
Secretary, Athletic Council; Member, Committee A

9. Public Service:

Wm. R. Fishburn
Member, Albuquerque Public Schools Rehabilitation Committee

Marion J. Heisey
Consultant for Directors of 4-H Projects; Administrative Director, Navajo Brethren in Christ Mission School and Navajo Hospital.

Gordon A. Zick
School Board Member and Sunday School.
I. GENERAL DEPARTMENTAL INFORMATION:

A. Significant achievements during the academic year, 1968-69:

1. The department awarded 55 Bachelor of Science Degrees in Health and Physical Education; 7 Bachelor of Arts Degrees in Recreation; 12 Master of Science Degrees in Physical Education; 4 Master of Arts Degrees in Recreation; 7 Doctor of Education and 4 Doctor of Philosophy Degrees.

2. The Bachelor of Science degree program in Health Education was initiated in September, 1968, and a total of 30 students are now enrolled in that program; 4 students were awarded the Bachelor of Science in Health Education this year.

The Master of Science with a Health Education major was approved by the Graduate Committee and the first candidate will receive this degree in August, 1970. The department conducted a number of workshops with different agencies and provided consultant services in Health Education in Estancia and in a local hospital in Albuquerque.
3. The department enrolled 6,119 students in the Fall of 1969, more than six academic colleges on this campus.

4. The Intramural Sports programs offered 35 different sports which provided over 60,000 student participations of one type or another. The student/faculty recreation programs averaged approximately 6,000 participations per week which resulted in over 240,000 participations for the year.

5. The Women's Extramural Sports Program, which is conducted as an activity of the Department of Health, Physical Education and Recreation, provided ten varsity athletic teams for women and held an expanded, but limited, competitive program during the academic year.

6. The department conducted a number of therapeutic physical education programs including:

a) A program in motor skills for 200 mentally retarded children;

b) An out-patient clinic in corrective therapy operated for handicapped children who require specific therapy;

c) A learning disabilities clinic for 100 children five to ten years of age;

d) A therapeutic physical education clinic for handicapped adults was administered; and
e) Under a special contract with the Division of Vocational Rehabilitation, a program for 150 mentally retarded boys and girls, ages 15-17, in motor skill learning was conducted.

7. The department conducted a number of special summer programs which are worthy of note. They include:

a) A National Summer Youth Sports program sponsored by the National Collegiate Athletic Association, serving 350 economically disadvantaged boys and girls.

b) The Summer Sports Fitness program continued its growth and enjoyed strong university and community support.

c) The children's instructional swimming program offered five programs to community children.

d) The department also conducted a Special Services Institute on Motor Skill Learning for the Handicapped with an enrollment of 47 children.

e) The department offered a Children's Summer Playground Adventure Program which had an enrollment of 240 children.

f) The adult fitness program continued with an increased enrollment through the summer session.

g) The Human Performance Laboratory and the Therapeutic Physical Education Laboratory and out-patient clinics both operated during the summer session.
and provided services to numerous students, faculty and citizens.

8. The weight lifting facility was moved from Room 139, Johnson Gymnasium, to Room 58 in Johnson Gymnasium and the combatives facility moved from Room 58 to Room 139, Johnson Gymnasium. These changes were effected in order to protect the structural integrity of the building. Both rooms are heavily used by the University of New Mexico population.

9. The Adult Fitness programs conducted by the department served an increasing number of faculty and citizens of the community and is strongly supported by these participants. This program is now funded by Community College.

10. The Human Performance Laboratory of the department provided facilities and equipment for the conduct of several doctoral dissertations and masters theses and a large number of graduate research studies. Additionally, the laboratory provided services to the Summer Sports Fitness Program, research classes taught by the department, and also was the location of a number of seminars conducted by the departmental faculty and the faculties of other agencies.

11. The New Mexico High School Activities Association vacated the suite of offices
located in Room 201, Johnson Gymnasium, and this was occupied by the recreation faculty of this department.

12. The Recreation and Park Field Service was as active as it could be with little or no budgetary support. Some requests for services of this type have been received.

13. The Center for Leisure and Recreation was established as an integral unit in the Institute for Social Research and Development and a number of research and developmental programs were begun in cooperation with various Indian tribes.

14. The department held its first Annual Alumni Banquet at the national convention of the American Association of Health, Physical Education and Recreation in Seattle, Washington. 41 persons were in attendance and the department looks forward to holding the next such banquet at the national convention in Detroit in the Spring of 1971. The UNM Alumni Association provided an outstanding plaque to be given each year to the person honored at this banquet for "Distinguished Leadership in Physical Education." The first recipient of this award was Professor H. Harrison Clarke of the University of Oregon.
B. Significant Plans and Recommendations:

1. The need for the Department of Health, Physical Education and Recreation to be restructured administratively is urgent and compelling. For a number of years, the department has functioned as one of the eight departments in the College of Education, even though in size and complexity it is enormously different than the other departments in the College. In 1969, the department enrolled more students than six colleges on the University of New Mexico campus and more than 6/11ths of the total enrollment in the College of Education. It offered degree programs through the doctorate in Health Education, Physical Education and Recreation. It supported a large number of non-credit university activities. A consideration of the department's needs for establishment as a division in the College of Education or as a College of Health, Physical Education and Recreation is considered by the faculty to be absolutely essential.

2. Facilities needs for programs operated by this department are crucial. The university has approved the new swimming pool complex and hopefully this facility will be constructed during the 1970-71 academic year.
Johnson Gymnasium was constructed to serve a university population of 10,000. This population is expected to reach 17,000 in the Fall of 1970, and and will soon reach an enrollment of 25,000. With the present enrollment, the university should have for physical education and physical recreation:

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<tr>
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<th>Does have</th>
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<tr>
<td>Basketball Courts</td>
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<td>Tennis Courts</td>
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<td>Exercise Track</td>
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<td>Swimming Pools</td>
<td>9</td>
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*Four courts will be lost the moment construction begins on the swimming pool.

The department of Health, Physical Education and Recreation has submitted to the University Building Committee, on behalf of the entire university population, specific requests for modifications to Johnson Gymnasium which would greatly enhance its function as an educational and recreational facility. These include:

a) The construction of an additional floor in the main arena which would greatly increase the service capacity of this structure;

b) The construction of additional tennis courts in the immediate future;

c) The construction of an inexpensive running track on the roof of the building; and for
d) The construction of additional handball and squash courts.

3. The department expects to be able to expand its offices, conference and equipment rooms to some degree when the Athletic Department moves out of Johnson Gymnasium in November or December of 1970.

Johnson Gymnasium is extremely deficient in locker room spaces for women students and faculty and for men faculty. It is extremely short of available seminar and conference rooms.

Compounding this problem is the changing conditions relating to Carlisle Gymnasium. This old building is located in the heart of the academic area occupying extremely valuable land. It is not in good condition and is gradually losing its surrounding athletic fields. It will be necessary to plan a large addition to Johnson Gymnasium to meet the needs of our growing student/faculty population and to provide space which will be lost with the imminent demise of Carlisle Gymnasium.

4. The department is extremely hopeful that university recognition will be made of the size and scope of the programs conducted by it and that necessary additional facilities and staff will be provided to allow for efficient operation.
Composite of Information Requested on Individual Biographical Supplements

1. ADVANCED STUDY:


Russell D. Mitchell, 15 hours above Masters Degree, New Mexico Highlands University.

Donald Scott Warder, additional hours toward the Doctor of Philosophy Degree taken at the University of New Mexico (9) and Montclair State College (2).

2. SABBATICALS, LEAVES OF ABSENCE, SUMMER TEACHING ELSEWHERE, TRAVEL, ETC., DURING THE PERIOD:

Beverly J. Bond, to Nevada, Missouri, to visit Cottey College, observed their program changes.

Lloyd R. Burley, traveled to Washington, D.C., President-Elects Conference; Las Vegas, Nevada, Board of Directors Meeting, Southwest District AAHPER; Las Cruces and Socorro, New Mexico Board Meetings, NMAHPER; Seattle, National Meeting, AAHPER, Representative Assembly.


Lorain F. Diehm, attending Workshop on Athletic Injuries, University of Wisconsin, Superior, Wisc.

Phyllis L. Douglass, Spent two weeks in New England; ten weeks in New Mexico, Arizona, Nevada, California.

Russell D. Mitchell, Attended Gymnastic Institute Workshop, Indiana State University in July at Terre Haute, Indiana.

Frank E. Papcsy, attended summer workshop "Motor Skill Learning for the Handicapped" at New York University.
Janice K. Olson, June, 1970, attended summer school for graduate credit workshop, "DGWS Basketball Officiating" at Western New Mexico University.

George T. Petrol, traveled in Mexico and California.

Donald Scott Warder, traveled to seven different Outdoor Education Centers during the 1969 summer; also visited another center in the state of Washington during April.

3. NEW SCHOLASTIC HONORS, FELLOWSHIPS, ETC.:

Lloyd R. Burley, Achievement Award in recognition of contributions to the area of Physical Education at UNM, from the department of HPER and the Alumni Association; Fellow, AAHPER.

Mercedes Gugisberg, honored by the Women Physical Education Teachers of New Mexico for outstanding contributions in the development of Health and Physical Education programs in the state.

Frank E. Papcsy, Fellow, American College of Sports Medicine; Phi Kappa Phi.

Charlotte L. Piper, a) New Mexico Assn for Health, Physical Education & Recreation honor award; b) Charter member of the Aquatics Council of the General Division of AAHPER (honorary and appointive); c) Coordinator of Women's Programs at the Univ. of NM.

Donald Scott Warder, received a fellowship from the New Jersey Garden Club to attend a workshop on Outdoor Education and Camping at the New Jersey State School of Conservation.

4. PUBLICATIONS:

Lloyd R. Burley, lead article "Newsletter" NMAHPER, December, "What are Clear Indications of Professionalism", Newsletter, April, 1970, "What is Physical Education?"


Donald Scott Warder, one book in progress during this period.

5. OTHER RESEARCH PROJECTS OR CREATIVE WORK IN PROGRESS OR COMPLETED DURING PERIOD:

Lloyd R. Burley, restructuring of the Physical Education curriculum at UNM, graduate and undergraduate.

Mercedes Gugisberg, in progress: innovative work on the Junior Block to improve the pre-student teaching experiences: serving also as coordinator.

Lawrence F. Locke, new course proposal made and accepted - PE 504, Research in Physical Education; new proposal for Doctoral Specialization in Teacher Education (PETE) completed, and now under discussion in the COE; prime investigator for evaluation study of AAHPER Workshops in Teacher Behavior, now complete and report submitted for study and publication.

Frances McGill, the Electrocardiogram during and after Exercise in relation to Serum Electrolytes and pH paper presented to American College of Sports Medicine, May, 1970; Energy cost of Sports from Telemetered Heart Rates (continuing); Indirect Measurement of Oxygen Debt in Sprint Swimming; Inter-individual variations in exercise and recovery heart rate patterns during standardized work; Importance of direct measurement of total lung volume when using hydrostatic weighing to determine body density.

Russell D. Mitchell, Stroboscopic slides for gymnastics, beginning to advance "Strobe Coach."

Frank E. Papcsy, Program Director and Researcher, Special Grant Division of Vocational Rehabilitation.

Ella May Small, currently developing Health Education Training Program for Indian Head Start.

6. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES:

Jacquelyn A. Boaz, National Conference on Leisure and The Quality of Life; State Recreation and Parks Meeting (March).


Lloyd R. Burley, President, NMAHPER, Member Representative Assembly AAHPER and Southwest District AAHPER; Chairman, Executive Board NMAHPER; Editor "Newsletter" NMAHPER; Chairman, Program NMAHPER Annual Meeting of NMEA Convention Time.

Woodrow W. Clements, Chairman, Health Section, NMEA; Member of the Executive Committee of NMAHPER; hold membership in NMEA, NEA and NMAHPER.
Lorain F. Diehm, Member of Professional Advancement Committee, National Athletic Trainers Assn.

Phyllis L. Douglas, Rehabilitation - The Psychological Aspects, Santa Fe (3 days).

Linda K. Estes, New Mexico Representative to the AAHPER International Council, Secretary of NMAHPER; attended Intermountain Winter Conference; attending SW District AAHPER Convention in Hawaii, June 14-18.

Mercedes Gugisberg, NMAHPER; Winter Conference for New Mexico Women Physical Education Teachers.

Fred J. Hinger, Chairman, New Mexico Elementary Physical Education Committee.

David H. Hunt, AAHPER, Seattle Convention, 1970 (April); American College of Sports Medicine, May, 1970.

Lawrence F. Locke, completed first year as Associate Editor for Quest; Scholarly Directions Committee for AAHPER (now budgeted and screening research proposals); Main address, University of Toledo Symposium on Research and Practice; addressed Philosophical and Cultural Section of AAHPER, Research Council of AAHPER and National Convention of the Society for Sport Psychology.


Frank E. Papcsy, Representative Nat'l Assn for Retarded Children, Miami, Florida; appointed Chairman Therapeutic Council AAHPER; Therapeutic and Rehabilitation Committee, London, England.

Janice K. Olson, ICCWPE, Santa Fe, October, 1969-Secretary; DGWS, Director, National Intercollegiate American Tenpin Tournament (68-70); AAHPER, NMAHPER, State Membership Chm; Chm of State Meeting Registration - Carlisle - NMWRAA.

George F. Petrol, State PE Organization Meeting.

Charlotte L. Piper, a) Western Society Program-Asilomar, Calif; b) Winter Conference of NM Physical Education Women; c) Participant (announcer) and coach of team at first DGWS Intercollegiate Swimming and Diving Championships, Normal, Illinois; d) speech at Recreation Section of Southwest District of AAHPER, Kauai, Hawaii; e) Program Committee Chairman at the American College of Sports Medicine National Conference, Albuquerque, NM.

E.A. Scholer, Society for Park and Recreation Educators: Chairman, Constitution and By-laws Committee; member; Nominating Committee: member; Program Planning Committee, NM Park and Recreation Assn; Southwest District Nat'l Park and Recreation Assn Conference (Galveston-2 papers "Undergraduate Education for Parks and Recreation in a Period of Change," "Program Planning and Development"; Participant Remote Sensing Conference for Recreation and Resource Administrators, College Station, Texas; member, Membership Committee, Family Camping Federation; "Camping for Exceptional Adults" paper read NM Section American Camping Assn; presented paper "Role of Work and Leisure in Man's Life",
North Dakota University, Grand Forks; presented paper "Professionalism in Recreation," Armed Forces Recreation Society Conference, Alamogordo; American Assn for HPER Assn--Discussion Leader: Leisure and Quality of Life.

Armond H. Seidler, attended National Convention of AAHPER, Seattle; International Conference on PE, Washington, D.C.; Conference in Therapeutic PE, Los Angeles, Calif.; member, Organizing Committee, Nat'l Convention of American College of Sports Medicine, Albuquerque; U.S. Delegate from ICHPER to first Symposium on "Importance of Physical Education in the Mexican School." affiliated with the WCOTP, Mexico City, Mexico.

Ella May Small, Community Health Education, Program Proposals, APHA Evaluation Session, Dallas, Texas, May, 1970.

Donald Scott Warder, attended the National Convention of American Camping Assn, St. Louis, Mo., University faculty representative to a nat'l meeting on the environment sponsored by the Population Institute, Buck Hill Falls, Pa.; attended the National convention of AAHPER, Seattle; presented keynote address to the HPER division of the NMEA; Program committee member of the NM Rec. & Park Assn; Chairman, Manual of Procedures Committee, NM Rec. and Park Assn; Chairman: By-laws Committee, NM Rec. and Park Assn; Member: Board of Directors, NM Rec. and Park Assn; Member: Nominating Committee, Council on Outdoor Education and Camping, AAHPER; Member: Nat'l Standards Committee, American Camping Assn; Camp Visitor (Inspector) for the American Camping Assn.

7. OTHER PROFESSIONAL ACTIVITIES:

Beverly J. Bond, New Mexico representative to the National Intramural Sports Council.

Lloyd R. Burley, Member, UNM Academic Freedom and Tenure Committee.

Lorain F. Diehm, Guest Lecturer - New Mexico Coaches Association Coaching School.

Phyllis L. Douglass, Del Norte High School, Highland High School and Sandia High School talks, Subject: Sexuality in the Schools; spoke in opposition to Motorede at Sandia High School, reported in the Albuquerque Journal.
Fred J. Hinger, Commencement Address, Public School, Ojo Caliente, NM.

David H. Hunt, Television Appearance, Newspaper Articles, NCAA, NSYSP, refer to No. 5.

Lawrence F. Locke, attended CIC Motor Learning Symposium at University of Iowa; served as AAHPER sponsor for Teacher Behavior Workshop at Temple University, Philadelphia; In Spring semester began work (1/3 time) on Chapter for revision of Handbook of Research on Teaching for the AERA.

Frances McGill, Consultant, Intermountain Conference on PE College Women, Co-Director, Tucker Golf Tournament; National Sports Medicine Committee, AAU.

Russell D. Mitchell, Exhibitions - 1/2 time show Oakland Raiders; San Diego Chargers, Football Game; 58,000 people, regionally televised. Assembly Programs: Farmington, Roswell High Schools; Abq High Schools as well as Junior High Schools; Abq Country Club; Elks Club; Off-campus talks: Civitans; Boy Scout Jamboree; Radio-T.V.: several times throughout the year in promotion of gymnastics; Consultant: American Athletic Equipment Company.

Frank E. Papcsy, Consultant to Roswell, Los Alamos, Alamagordo and Albuquerque Public Schools.

Janice K. Olson, DGWS - Officiating Services Area (OSA) - Officiating, training and providing officials for city schools, city church groups; Furnished timers and scores for State AAU Coaching, Volleyball, Inter-mountain Conf., championship team and NM State Championship; Basketball - NM State Championship and NM State AAU Championships.

George T. Petrol, two radio interviews; Civic Club talk.

E.A. Scholer, Consultant - Work evaluation, Work Training Project State Hospital, Jamestown, North Dakota., October 22, 23, 24. Organized basketball tournament for Canoncita Navajo. Assisted in Organization of Indian Pow Wow. Member New Mexico Outdoor Writers Assoc., chairman, Membership Committee. NMOWAA Consultant work - Tourism and Recreation, Indian Tribes; member Advisory Board State Office Bureau of Land Management; ISRAD, Director of Center for Leisure and Recreation.
Armond H. Seidler, gave numerous speeches and acted as consultant on facilities design for several schools and universities.


Donald Scott Warder, Consulted with a new camp for children re: general operational procedures and redesign of the camp; after-dinner speaker to the Optimist Club of Socorro; after-dinner speaker at the Albuquerque Indian School; speaker at a NM Mountain Club Meeting.

8. NON-TEACHING UNIVERSITY SERVICE:

Jacquelyn A. Boaz, Faculty Advisor to Recreation Club; Chairman, Section of Recreation Curriculum Revision.

Beverly J. Bond, Faculty advisor to majors and non-majors, PEMM sponsor, Field Hockey coach to Fort Collins, Las Cruces and Phoenix; Softball coach to Greeley.

Lloyd R. Burley, Member UNM Academic Freedom and Tenure Committee, COE Policy Committee, PE Curriculum Comm., Chairman; Asst Chairman, Dept. Phys. Educ.

Woodrow W. Clements, Asst. Chairman for Basic Service Program, Dept of HPER; Advisor for Departmental Undergraduate Programs; Member of the Admin. Committee for the Dept; served on numerous Master's Orals and Departmental Committees.

Lorain F. Diehm, Faculty advisor to Fellowship of Christian Athletes fellowship on campus.

Phyllis L. Douglass, faculty advisor – 25 students.

Linda K. Estes, Coach of UNM Women's Tennis Team.

Mercedes Gugisberg, Advisor for transfer women majors; for minors in Physical Education who are majoring in Elementary Education, Secondary Education and in Recreation.
Fred J. Hinger, COE Committee A, University College Faculty Advisor.

Lawrence F. Locke, COE Committee on the Doctorate (Committee B - Now chairman); COE Committee for Selection of the Associate Dean; Department Committee on Curriculum.

Frances McGill, Assoc. Director, Human Performance Laboratory; Curriculum Committee, Physical Education; Chairman, COE Human Research Review Committee.

Russell D. Mitchell, Faculty Advisor 25-30 students.

Frank E. Papcsy, Board of Directors, Abq Assn of Retarded Children, Special Education Center.

Janice K. Olson, Director, Women's Sports Council; Director, Women's Extramural and Intercol. Council; Women PE Majors Jr. Class Advisor.

George T. Petrol, University College Advisor, summer school advisor.

Charlotte L. Piper, Special Counselor at University College and Counseling Center.

E.A. Scholer, Chairman, University Committee on Rural Lands.

Armond H. Seidler, Chairman of the Department of Health, Physical Education and Recreation; Member of Administrative & Policy Committee of the College of Education; Member of UNM Intramural Board; Chairman and member of numerous doctoral committees for dept. doctoral candidates.

Ella May Small, Acting Chairman for Health Education; Advisor for Undergraduates and graduates in Health Education; resource in Health Educ. for Community Medicine; UNM Medical School; NM Coordinating Committee for School Health; Committee to Study crucial Health issues in NM; Member, University Task Force for Health Personnel, Regional Medical Program.

Donald Scott Warder, Unofficial faculty advisor to the "Students for Environmental Action" during the Earth Day preparations; member, Learning Materials Center Committee; Member, (Secretary) Committee on Rural Lands.
9. PUBLIC SERVICE:

Beverly J. Bond, worked with Santa Fe prep. teacher on field hockey for its promotion.

Lloyd R. Burley, First Aid Instructor, American Red Cross; First Aid Merit Badge Counselor - BSA.

Woodrow W. Clements, Member Trinity Methodist Church; Building Solicitor for the United Fund.

Linda K. Estes, Member of NM Democratic Council, Member of New Democratic Coalition, Member of Legal Aid Society, First Vice-Chairman of Precinct 461 of Democratic Party.

Frances McGill, Water Safety Instructor-Trainer, American Red Cross.

Russell D. Mitchell, Varsity Gymnastic Coach (Western Athletic Conference Champions); 3 All Americans - 5th NCAA.

Frank E. Papcsy, Door-to-door collector for Muscular Dystrophy.


Charlotte L. Piper, Mental Health Assn, Block Chairman; Cybrosis, Block Chairman.

E.A. Scholer, Board Member American Red Cross; Member, Evaluation Team, Model Cities.

Armond H. Seidler, Member of Metropolitan Park and Recreation Advisory Board, Abq.

Donald Scott Warder, gave two slide presentations to Boy Scout troops.
1. General Department Information

A. Significant achievement during the academic year 1969-70.

In September the faculty arrived at several goals we felt were important to strive for. The report reflects what the Department did to reach some of the goals.

Considerable time was spent in developing the home economics core and a new course of study for home economics education majors. The new program is rooted in sociology, anthropology and psychology to meet the changing role of home economics. The new course of study and its rationale is attached. The core courses will be required of any major in home economics.

Another goal of the Department was to help students better understand the disadvantaged. Foods and nutrition classes were based on and surveys made of nutritional adequacy, price comparison, and people's shopping habits in the south valley of Albuquerque. Students made home visits with the Mental Health Nutritionist in order to have a realistic view of dietary problems in the area.

Child Development classes worked with EOB Nursery Schools, as well as Manzanita Center. Manzanita Nursery School had approximately one-fourth of its population from sources other than the waiting list. The agencies which sent us this group were Welfare, International House and EOB. The majority of this population were on pro-rated tuition. Eleven out of fourteen
mothers participated Friday mornings in a parent education discussion group on "Children and Their Environment" lead by the Nursery School teacher.

The home economics seminar involved teaching projects with Maternal and Infant Clinics, YWCA classes, Southeast Edith Community Center, Girls Welfare and the Extended Nutrition Programs. In addition, observations were made of various community educational programs. Included were Bernalillo Vocational School, TVI, Indian School, Santa Domingo homemaking classes, community center and Job Corps.

In order to help the faculty member become more sensitive, three members attended a conference on "Working with the Socially Disadvantaged," and one member attended John Aragon's Cultural Awareness Program in Santa Fe.

Additional goals were: to help students understand research; to update teaching methods; to work on professional education sequence.

B. Number of Students

The Home Economics Department showed ninety undergraduate majors in the Department, twenty graduate students on MAT programs, plus many enrolled in classes not working toward a degree and approximately one hundred University College students who appeared to be majoring in Home Economics (majors are required to take eighteen hours of Home Economics during the freshman and sophomore years.) Thirty-three students received bachelor degrees in the College of Education or Arts and Sciences and three received MAT degrees.
At the present time, there are no records of minors, however roughly 50% of class enrollment is non-major.

Miss JoAnn Castonguay, a 1969 graduate, accepted an EPDA Fellowship to prepare for college teaching at Kansas State University.

Miss JoAnn Jones received the Marion Coons Kindness Award voted by her classmates.

Mrs. Jean Louis, graduate student, was invited to present her paper on "Suggested Plans for Food Service in College Health Centers" at the spring conference of the Society for Advancement of Food Service Research Meeting in New Orleans. The paper was the result of 551 problem course.

Miss Wendy McGovern was appointed student representative to the New Mexico Council of Food, Nutrition and Health. She coordinated activities on all five campuses.

The following scholarships were awarded to majors and were sponsored by the Department and community groups.

Kappa Omicron Phi - Jean Hetzel Jenkins - $100
College Chapter AHEA - Graciela Armendariz - $100
Albuquerque Home Economists - Marilyn Gaskin - $100
Food Service Association - Lynn Whalen - $75

C. Plans and Recommendations

The Allied Medical Grant of $11,565 for 1970-71 will be used to complete the individual learning carrels.

A professional block in working with families be instigated in the fall for seniors. The Home Management residence will be four weeks and each student will be assigned a family from the nursery school to assist with management in the home. At the
same time, students will be blocked in nursery school laboratory.
A pilot study was conducted this past spring to give the faculty
members involved an opportunity to test ideas and get feedback
from the consumers of this service and the students. This
has helped us design the program for next year.

Home Management kitchen remodeling will be completed during
1970-71 session.

The Department is anxious to fill the position of a Family
Life specialist in order that students will be able to have a
major emphasis in this area. This will give greater flexibility
to our program, meet the demands of students, and the employment
market.

Entering freshmen will start on the new curriculum. During
the year the additional core courses will be completed and the
professional education sequence will be revised to allow some
pre-student teaching.

D. Appointment to Staff

Mrs. Mary Margaret Smith joined the staff in September, 1969.
Mrs. Smith is a specialist in Home Management.

Mrs. Frances Seaman, temporary full-time, joined the staff
in September, 1969.

E. Separation from Staff

Mrs. Frances Seaman effective June, 1970. Mrs. Seaman is
leaving due to her husband's military transfer.

II. Composite of Information Requested on Individual Biographical Supplements

1. Advanced Study:

   Carolyn M. Hill - Sensitivity workshop "Working with the Socially
   Disadvantaged"
Mary M. Smith - Traveled in the south and southwest


2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc.:

Carolyn M. Hill - Early Childhood Education Workshop for the Indian Child - Elementary Education Department

Ednell M. Snell - Teaching 8 weeks session at Oregon State University in Home Economics Education. Traveled extensively in Michigan in August, 1969.

3. New scholastic honors, fellowships, etc.:

Florence Schroeder - not a scholastic honor but a cherished one... selected September-October Professor of the Month by Campanas.

4. Publications:

None

5. Other research projects:

None

6. Activities in learned and professional societies:

Ruth B. Harris - Conference - University of Tennessee Medical School: Nutrition for Retarded and Handicapped Children. President and President Elect of New Mexico Home Economics Association--attended National Meeting, Boston State Meetings Chairman - Building Fund Campaign - AHEA - White House Conference on Food, Nutrition, Health College Teachers of Food and Nutrition of Pacific Region Meetings Local Dietetic, Home Economics Society

Carolyn M. Hill - Attended NAEYC National Convention; NMAHEA State Convention; NAEYC - Placement Bureau Planning Committee NAEYC - Task Force Telephone Committee

Imogeann McMurray - Conference of College Teachers of Textiles and Clothing, Western Region at Provo, Utah in October (Membership Committee)

Florence Schroeder - Attended NAEYC Conference at Salt Lake City in November, 1969 Conference on Research in Infancy at Merrill-Palmer Institute, Detroit, February, 1970
Florence Schroeder - (continued)
NAEYC Conference, October 1969 - Secretary elect, 1970-71
Consultant ISRAD - Model Cities Seminar on Child Development Centers
Spring, 1970
Cultural Awareness Seminar, Santa Fe, Spring, 1970

Ida Frances Seaman - Secretary - Albuquerque Home Economists
Attended State Convention of the New Mexico Home Economics Association
Initiated into Kappa Omicron Phi

Mary M. Smith - Attended the Western Regional Conference of Home Management and Family Economics College Teachers, New Mexico State Meeting of the American Home Economics Association

Ednell M. Snell - Participated in National FHA Leadership Conference
Attended Regional Home Economics Education Vocational Conference
New Mexico Home Economics Association State Meeting
ISRAD - Child Development Program

7. Other professional activities:

Ruth B. Harris - Guest lecturer to graduate seminar - junior high teachers
Speaker annual meeting New Mexico Public Health Association,
College Teachers of Food and Nutrition, New Mexico Council on Food, Nutrition and Health
Planning Committee Nutrition Symposium

Carolyn M. Hill - Consultant - Carrie Tingley Hospital Curriculum and Programming Project
Consultant - Child Care Project ISRAD (contracted to Bureau of Educational Research)

Imogene McMurray - Auditing Committee for NMHEA Scholarship Committee for Albuquerque Home Economists

Florence Schroeder - AAUW Child Development Program - Fall, 1969
Attended New Mexico Nutrition Study Conference, 1970
Member of National Nutrition Committee in Head Start
Helped with film "Jenney is a Good Thing"

Mary M. Smith - Chairman of the Scholarship Committee of the Albuquerque Home Economists
University College Advisor

Ednell M. Snell - Consultant - Carrie Tingley Hospital Curriculum Programming Project
8. Non-teaching University Service:

**Ruth B. Harris** - Curriculum Committee A - College of Education
Flower Fund - College of Education
Faculty advisor to Dietetics Majors - College of Education, Arts and Sciences
Sponsor Home Economics Honorary Society
Advisory Committee - Bureau of Educational Planning

**Carolyn M. Hill** - Curriculum Revision Committee
Nursery School Committee
University College Advisor
AHEA Student Club Advisor

**Imogene McMurray** - Advisor for University College and Home Economics majors
Department Committee on Revision of Home Economics Curriculum

**Florence Schroeder** - Manzanita Center Committee member
Director, Manzanita Nursery School Program
Faculty advisor to 18 College of Education Home Economics majors and 30 University College students

**Ida Frances Seaman** - Faculty Advisor - UNM Student Section of American Home Economics Association

**Mary M. Smith** - Committee member for the College of Education, Learning Materials Center Committee

**Ednell M. Snell** - Administrative & Policy Committee, College of Education Nursery School Committee
Chairman - Department of Home Economics
Chairman - Curriculum Revision - Department of Home Economics Nursery School Committee

9. Public Service:

**Ruth B. Harris** - Charter member New Mexico Council on Food, Nutrition and Health

**Carolyn M. Hill** - Liturgical Revision Committee - Canterbury Chapel

**Imogene McMurray** - Chairman of Educational Project Committee for El Segundo Chapter, ABWA

**Florence Schroeder** - Professional member of Child Development Board of Economic Opportunity Board and voluntary consultant Consultant - Special Education Center.
9. Public Service: (continued)

Ednell M. Snell - Member Board of Directors, WISH Model City
Worked on committee to develop program and get approved by Model City

10. Personal Information:

None
1. Need

Historically the primary purpose of Home Economics Education curriculum has been to help family members of all ages develop attitudes, appreciation, understanding and abilities for achieving a satisfying personal family and community life. When the family was primarily a producing unit, there was great need for emphasis on foods, clothing and sciences. Today's family has changed drastically. It has become a consuming unit with major concerns in identifying values, setting goals, making decisions which utilize individual, family and community resources.

Today in our rapidly changing, unpredictable society, social, economic and technical trends become determinants of Home Economics Education curriculum. Traditionally the course of study has been oriented to the physical and natural sciences. Today the family is concerned with its human relationships, consumer problems, decision making and finance management. The home economist must have a foundation in the behavioral sciences in order to work with families.

A national study reported in 1969 shows a majority of secondary teachers indicated the need for increased emphasis in behavioral sciences in the Home Economics college curriculums.

In the fall of 1967, the Danforth Committee visited the Department and made the following recommendations.

1. Continued internal study of curriculum.

2. Work toward building home economics courses upon root disciplines available in the university.

3. Consider the development of sequential core courses in home economics that would serve the two-fold purpose of (a) sharpening the family focus within the department (b) assisting the student to use his specialized knowledge in solving socially relevant concerns.
4. Sequential course offerings, i.e., upper division work should be built on lower division work.

5. Increase course offerings in family economics and in the area of family relations.

The faculty in the Department were involved in a study in preparation of the visit and have since made a comprehensive study of the Department's program and the Department's role in the University and in the State of New Mexico.

The 1968 Vocational Education Act, Section F, requires that consumer education be a major part of the curriculum. One-third of the funds are earmarked for working with the disadvantaged. The increased emphasis on economics and behavioral sciences should better prepare teachers for this charge.

2. General Objectives

The general objectives of the Department which the faculty feel will be met by the new program are to:
- prepare students for teaching and associated professions,
- provide basic knowledge necessary for all majors (the core) and enable some degree of specialization for those who desire to use the electives in this manner,
- integrate the principles of the behavioral sciences in relationship with the home economist's work involving individuals and families,
- prepare students to identify issues and to utilize various techniques for solving problems which confront individuals and families in the community,
- identify the role of the home economist in relationship to community needs.
### Program of Studies for Home Economics Education

#### A. Present General Education Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours req. COE</th>
<th>Hrs. H. Ec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities and Social Science</td>
<td>9-15</td>
<td>15</td>
</tr>
<tr>
<td>Soc. 101 (3) Econ. 201, 330 (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthro 102 (3) Literature (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Science</td>
<td>3-6</td>
<td>3</td>
</tr>
<tr>
<td>Psych 101 or 102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological and/or Physical Science</td>
<td>8-12</td>
<td>8-11</td>
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<tr>
<td>(as in catalog)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Arts</td>
<td>6-9</td>
<td>6-9</td>
</tr>
<tr>
<td>English 101, 102, Speech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine and Practical Arts</td>
<td>6-12</td>
<td>6</td>
</tr>
<tr>
<td>HE 141 Design-Matrix for Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art Appreciation or History, Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciation, History or Architecture</td>
<td></td>
<td></td>
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<tr>
<td>Health, P.E. &amp; Rec.</td>
<td>4-8</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition, a student must take a course in each area. One of the four courses must be upper division.

Area I - Anthro 101, Soc 211, 215, 216, 225, 301-302, 313, 411, 416

Area II - Psych 221, 260, 262, 301, 305, 308, 311, 411, 414

#### B. Home Economics Core (All will be new courses, but will replace some present courses):

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*HE 101 Freshman Seminar</td>
<td>2</td>
</tr>
<tr>
<td>*HE 125 Food for Man</td>
<td>3</td>
</tr>
<tr>
<td>HE 141 Design-Matrix for Living (counted as F.A. hours)</td>
<td>(3)</td>
</tr>
<tr>
<td>*HE 250 Clothing and Human Behavior</td>
<td>2</td>
</tr>
<tr>
<td>HE 200 Human Development and the Family</td>
<td>(3)</td>
</tr>
<tr>
<td>HE 300 Decision Making</td>
<td>(3)</td>
</tr>
</tbody>
</table>

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C. Required Home Economics (to meet minimum standards for certification)

HE 120 Food Science 3
HE 150 Clothing Construction 2
HE 252 Textiles (Prerequisite HE 150 and Econ 201) 3
HE 341 Housing
HE 408 Child Development (Prerequisite Soc 101, Psych 102, Anthro 102) 2
HE 409 Nursery School Practicum (credit listed under Prof. Educ.) 1
HE 418 Family Relations 3
HE 444 Family Finance (Prerequisites 401, 330) 3
HE 445 Home Management Residence (4 weeks residence and 3 weeks field service with actual families) 4

*Course outline attached.

PROFESSIONAL EDUCATION

Ed Fdns 290 3
Ed Fdns 300 3
Ed Fdns 310 3
Sec Ed 310 or equivalent 3
HE 437 3
HE 465 2
HE 461 6
HE 409 1

Total 24

Summary

General Education 58
Home Economics Core 13
Home Economics Required 20
Electives 13
Professional Education 24

128

4. Bibliography attached to individual new courses.

5. Undergraduate program - does not need graduate approval.

6. The Department would like to offer the freshman level core courses in 1970-71 with implementation of the total program in 1971-72 catalog.

7. Staffing plans: The Department has for four years requested and shown a need for staff in the area of family relations. Until this need is filled, the last part of the Core will not be implemented. The three courses submitted will be done by current staff. One currently offered course (HE 433) will be deleted from the catalog. The present clothing course (HE 150) is being divided into two 2 hour courses. We are also working to develop an open laboratory for foods and clothing which will reduce staff time.
OPENING STATEMENT

Beginning with the Lawrence Ranch Conference, late summer-early fall, 1969, and Frank Angel's slashing attack upon departmental organization and function, plus his casting of chairmen in the roles of "straw men-villains" (e.g., "subtly undermining the authority of the Dean," etc.), continuing into the school year 1969-70 with heated discussion about the establishment of a Cultural Diversity Unit and on through the year with national problems and tensions (Cambodia, Kent U., etc.) and local problems (campus unrest, struggle over governance, options on grades, etc.), conflict, turmoil, social upheaval, power politics and value conflict have been the "norm" for the academic year. Despite all the foregoing and the constant erosion of departmental autonomy, while leaving the departmental organizational form intact, and the erosion of faculty power, departmental members found opportunity to develop departmental programs, to make personal advancements, to make group and individual adjustments, to contribute to change and to help individuals. It needs to be said that on many matters, 1969-70, departmental members were not in agreement, nor were faculty members of other departments in the college and within the University.

Departmental membership included six new faculty members in a departmental group of twenty-one faculty members. Working relationships were established. Departmental members served under a new dean, complet-
ing his first full academic year of service, 1969-70. Adjustments in behavior were made by departmental members. As the academic year 1969-70 draws to a close, departmental members are under the jurisdiction of a new Associate Dean who will be serving his first academic year in that capacity, 1970-71. Further behavioral adjustments will be called for from departmental members. Clarification will be needed, for example, and behavior will need to be shaped, where clearing of channels is involved (e.g., Dean → Associate Dean → Chairman; Chairman → Associate Dean → Dean; Chairmen → Dean → Chairman → Associate Dean; etc.).

The creation of a COE elected faculty (or College) Policy Committee brings into being a new mechanism which will call for behavioral adjustment from departmental members.

It is not the purpose of the chairman of the department in the attached report to document relationships between departmental activity 1969-70 and the larger setting within which the departmental activity took place. Implicit in any comment which follows about departmental activity is that such activity was interrelated in many ways with events on the larger scene. It seems necessary to make the foregoing point since cataclysmic events shook all of us and had impact upon our work. A report about departmental activity per se seems almost mundane, divorced from the setting in which the work took place.

One last matter. Chairmen are asked to comment upon "signifi-
cant achievements" in writing the annual departmental report. What is called "significant" and what is called "achievement" are matters of perception in part, interpretation in part, and judgment in part. On all three counts foregoing, the chairman reports as an individual but for the department.
I. General Departmental Information

A. Significant achievements during the academic year 1969-70

1. Departmental members continued the Job Corps Project, the APSCOEO English Project, the Albuquerque High School Spanish Project, and "block program" projects (e.g., Business Education, Industrial Education), all of which have been enthusiastically received. The departmental members continued to move away from separate course offerings (e.g., S. E. 301 and S. E. 310) and toward larger "blocks" of instruction (e.g., S. E. 361, six hours weekly in a school situation and three hours weekly on campus in seminar, with inductive teaching and learning attempted).

2. Departmental members continued to foster a democratic climate both in open discussion about all matters (e.g., salary, promotion, tenure, budget, summer session employment) and in the establishment of departmental sub-committees. Well in advance of the University faculty action May, 1970, calling for evaluation of chairmen, the Department of Secondary Education, through its Steering Committee, was busily engaged
in evaluating not only the chairman and his actions, but the administration of the department and the departmental programs, making recommendations for improvements in all of the foregoing areas. (An incidental point is that faculty committees seem increasingly reflected on the college-level and university-level as the vehicle for shaping of viewpoint and structuring of alternatives for action prior to bringing matters to faculty for debate, modification possibly, and decision-making in majority vote.)

3. Departmental members continued to carry heavy loads in teaching, supervision of undergraduate students in student teaching and block programs, advisement of undergraduate and graduate students, committee service at all levels (e.g., departmental, college, university; local, state, regional, and national), plus serving on doctoral committees, directing dissertations, and serving on master's committees, directing theses and comprehensive exams, and directing undergraduate and graduate problems, plus serving in consultant capacities to local, state and national groups, and finding time to travel, attend meetings, speak, research, write, develop proposals and new courses and programs.

4. Departmental members continued to work cooperatively with groups both within and outside the College of Education
(e.g., Department of Elementary Education, Department of Educational Administration, Department of Guidance and Special Education, Department of Economics, Department of History, Department of Modern Languages, Department of English, Department of Mathematics, Departments of Biology, Chemistry, and Geology. Steps were taken to work more cooperatively with the Department of Educational Foundations). Significantly, two members of COE-SEC ED met with the Arts and Sciences faculty to deliberate a change in A&S requirements to accommodate students in the APSCOE English Project.

5. Departmental members continued to hold dialogue with State Department of Education officials in Vocational Education, seeking financial and certification support for programs in Business Education and Industrial Education.

6. Departmental members continued to seek dialogue within the College of Education concerning financial support for and departmental or unit status for Business Education and Industrial Education.

In addition to maintaining most of its "regular activities" mentioned in the foregoing, departmental members:

7. Added Psychology and Sociology to the acceptable "majors" list.

8. Added a new course to the curriculum, History Education,
listed "Same as" under History or Secondary Education.

Developed a second new course, Seminar in History Education, which has not yet cleared channels. Developed agreement for an MAT in History, not yet cleared through channels.

9. Developed models and prepared overlay representations of the models as a first step to identification of similarities and differences in the various programs under the jurisdiction of the department.

10. Developed an option for the M. A. in Secondary Education degree. Dubbed an "Eastern-type MAT approach" by some members of the department, the program can meet the needs of bachelor's degree holders who have had no professional education in their undergraduate programs. The thirty-nine to fifty credit hour option leads both to certification and a master's degree. Agreements have been reached to offer the program as Option B of the M. A. in Secondary Education beginning summer session 1970.

11. Developed a major and minor in Humanities. Channels have not yet been cleared for instituting that major and minor and, indeed, more departmental discussion is needed before taking clearance steps.

12. Assumed responsibility, financial and otherwise, for the Job
Corps Project as financial assistance terminates from Washington, D.C. Hereafter, use of the Job Corps Center in Albuquerque will be as a part of the "regular program" of the department rather than constituting a "project", comparable to the departmental practice of using the local Job Corps for interns two years prior to AACTE launching the project nationally.

13. Developed and launched an APSCOE Mid-School Project, spanning elementary and secondary education, focusing upon a humanities-type curriculum, constituting a "block" program, and bringing into being cooperative curricular endeavor on the part of elementary and secondary departmental personnel.

14. Arranged and placed half-a-dozen student teachers (summer session 1970) at Fort Wingate Indian Education Center for culturally diverse experience (board and room furnished free to the student teachers, as a secondary but important point, comparable to the stipends furnished student teachers in the APSCOE projects).

15. Arranged for a "block" program to be conducted at West Mesa High School and, as some department members perceive matters, led in the discussions to restore to the staff of that school a reading specialist who had been marked "surplus" previously as national monies were committed by APS entirely,
or almost so, to Elementary Education).

16. **Arranged** for a "Center School" for secondary school social studies, placement of student teachers (e.g., McKinley Junior High School). Concentrated placement is the attempt to improve efficiency in supervision and curriculum development.

17. **Developed** and gave support to moving toward a professional semester in science education. Use of several "Center Schools" is contemplated. Initial steps will be taken fall 1970 in one "Center School", secondary school level (e.g., Highland High School).

18. **Arranged with half-a-dozen students the taking of Sec. Ed. 361 by correspondence. Those students will be attending the Quito Education Center, academic year 1970-71. Jose Gandert, formerly of NMEA, will be in Quito during that academic year. Attempt will be made to have him supervise the field work (e.g., six hours per week in an educational institution) with the seminar dialogue being conducted between the students and the Director of Student Teaching, secondary level, UNM, via mail, correspondence lessons.

19. **Conducted discussions with the Dean, COE, regarding directions and desired emphases in Industrial Education. One discussion was, in particular and in the memory of the chairman of the Department of Secondary Education, the
first "sustained" and "serious" discussion about whether Industrial Education ought to be a department or not. Members of the Industrial Education program made the point well that substantial financial support for advancement of the program was more important than whether the program was housed in its own department or not. One and a half million dollars was mentioned at one point in "getting serious".

20. Reached agreement with the Department of Modern Languages concerning a change in the major-minor requirements for COE-SEC ED students. Rather than a second language of twelve credit hours being required, students will be "freed" and, with the support of Modern Language Department personnel, can elect a minor in Teaching English as a Second Language or Teaching Reading at the secondary level; etc.

21. Received a report from Colombia, South America, that departmental participation in the Comprehensive High School Project had been brought to fruition via a year's activity at UNM and via two years' activity by a departmental member, Robert Esparza. One high school, erected in Colombia and built to accommodate 3,000 students, had its gates stormed by 10,000 students, seeking opportunity to better themselves. Mr. Esparza will be returning to the states, fall 1970, and will make his appearance for the first
time in departmental programs in New Mexico, although beginning his third year toward tenure.

22. Received word from AACTE that a departmental member, Peter Prouse, had been honored (and the institution, UNM-COE) for a creative and innovative program in teacher education. It is the opinion of some departmental members that Dr. Prouse's program does with local dollars and initiative what Teacher Corps attempts to do with national tax dollars and attempted stimulation of personnel in diverse local communities.

23. Kept pace with the new forms to be given attention, greater detail to report, channels to be followed which are, perhaps, controls needed with the increased University-college-department population, and institutional complexity, while seeking to maintain touch with the individual student.

24. Discussed, albeit informally and without reaching decisions in some cases, the "Peter Principle", and mediocrity, and whether departmentally, or at the college, university, or national level we have mediocrity in bureaucracy; discussed the place of the student in governance and evaluation — and the place of faculty members in the same and other matters (e.g., budget, promotions, tenure, salary increases, course of direction of the university, evaluation of the
performance of "superiors"); discussed whether education should take place in settings other than university settings, and the degree and form of the latter, and whether education should deal solely or even largely with more than the development of the individual.

25. Passed motions to refer to the COE Policy Committee and the COE administrative Committee:
   a) establishment of a clear and viable employment policy and program for summer session;
   b) abolishment of the Speech 256 requirement;
   c) the desire of the Department of Secondary Education members to offer their own secondary school student course (e.g., the adolescent and his behavior).

26. Conducted two workshops at Grants, New Mexico, sensitizing teachers and relating the social studies and language arts; plus conducting a workshop for Albuquerque teachers on tensions of our time.

During summer session 1969 and fall and spring semesters, 1969-1970, approximately 691 students applied for entry into teacher education through the Department of Secondary Education. More than 76 were ineligible to apply. Approximately 66 were denied admission. Approximately 556 were admitted. The figures are all for programs in the Department of Secondary Education. The admissions represent a continued growth in enrollment.

At the graduate level approximately 75 students were admitted. Approximately 25 were admitted to master's level programs, 0 to sixth-year level programs (Education Specialist), and 24 to the doctoral or
seventh-year level programs. Definite increase was noticeable.

New programs and new courses have received comment earlier.

B. Significant plans and recommendations for the near future

1. Continued emphasis can be expected upon block programming, moving toward professional semesters.

2. Development of a Humanities major and minor can be expected.

3. Continued development of the mid-school training concept can be expected.

4. Continued discussion and possibly decision can be expected of the future status of Business Education and Industrial Education.

5. Continued placement of student teachers can be expected in diverse situations to meet individual student teacher desires in their training experiences. A corollary is that sensitivity training can be expected to increase.

6. Continued cooperative endeavor can be expected with departments outside and inside the College of Education.

7. Continued effort can be expected in attempts to reach agreement with State Department of Education personnel in Vocational Education in support of local programs of vocational education.

8. Continued emphasis can be expected in increasing flexibility of requirements in teacher preparation (e.g., Option B, M.A.)
in Secondary Education).

9. Continued effort can be expected in encouraging faculty participation in governance matters and in open discussion of salary, budget, and other "sensitive" matters.

(Note: In his report for the academic year 1968-69, the chairman of the Department of Secondary Education mentioned that graduate programs in Secondary Education needed critical examination -- admissions, quality of the experiences, validity of the comprehensive examinations for programs at the master's, education specialist, and doctoral levels. The departmental members have encountered some problems academic year 1969-70 in admissions and comprehensive examinations in graduate programs. The matter of critical evaluation of graduate programs must receive attention 1970-71 in the opinion of the chairman.

The departmental report, developed by departmental members, copy of which all departmental members have received and copy of which is attached for Lawrence and Travelstead, called attention also to the need for improvement of graduate programs.

A second matter mentioned in last year's report by the chairman was that the departmental members had begun a study of behavioral outcomes desired by the students in the undergraduate program of teacher preparation. Academic year 1969-70 little attention was given to that matter. There was some discussion of "competencies" but little of a systematic nature was prepared for group discussion and development to aid the departmental members in their work and evaluation of outcomes where their students were
concerned. Attention must be given to that matter 1970-71, in the opinion of the chairman, especially the evaluation of the students.

Finally, it should be mentioned that the departmental evaluation of the department counselled against the employment of personnel for work in "regular programs" only to have employed personnel "vanish" into projects and specialties which then leaves the department in the position of having to hire "stop-gap personnel" to keep regular programs effectively in operation.)

C and D. Appointments to, and separations from, staff

Turnover in personnel, a significant feature spring 1969, was almost as much of a problem in spring 1970. Mr. Robert Esparza represents an addition to the departmental staff. He brings strength to the department in social studies education, bi-cultural education, and international education. The resignation of Dr. William Engman, science education, after one year of service with the department, is a loss to the department. Dr. Engman will be replaced by Dr. Atilano Valencia who brings strength in teaching strategies, behavioral objectives, and bi-cultural education to the departmental activity. The resignation of Dr. John Rider, Head, Business Education Program, is a loss to the department. Dr. Rider will be replaced by Dr. Albert Giordano. Dr. Giordano has a wealth of experience in junior college education, vocational education, and business
education. Dr. Richard Warner was granted a year's leave of absence without pay for post-doctoral study. He will be replaced with a one-year, temporary appointment, Mr. Paul Stewart. Professor Joyce Heemstra was granted a one-year leave of absence without pay to work on her doctorate at Michigan State. Her duties will be taken care of with various part-time personnel in a general shift of duty for all Business Education personnel.

E. **Comment on promotions, tenure, and rank of department members, plus supplemental personnel**

Fall 1967, the current chairman of the department began his duties. At that time there were four full professors carried on the departmental roster (Runge, Brown, Ivins, and Crawford), three associate professors (Doxtator, Prouse, and Rider), eight assistant professors (Dettre, Hanny, White, Hirshfield, Zweig, Nesbitt, Warner, Howard), and one teaching assistant (Cunico). Six of the foregoing were on tenure. Four of the preceding are no longer with the department. Fall 1970, the departmental roster carries eight full professors (Ivins, Runge, Crawford, Brown, Reva, Doxtator, Prouse, Giordano), eight associate professors (Howard, Stoumbis, Nesbitt, Warner, Valencia, Kline, Hirshfield, White), and three assistant professors (Heemstra, Esparza, Prigmore) plus two instructors (Cunico, Sampley). Eleven of the foregoing are on tenure. Two of the foregoing
are carried currently as "temporary appointments", Dr. Prigmore and Mr. Cunico. The Business Education staff consists of four personnel, including a Program Head, plus one graduate assistant. The Industrial Education program consists of four personnel, including a Program Head, plus one graduate assistant. Various part-time personnel assist in the two different programs. General Secondary Education consists of eleven full-time personnel, plus the Administrative Assistant to the Dean (Prigmore) who gives fractional but valuable service to the department, plus Robert Kline, technically attached to the department. Three graduate assistants round out the general Secondary Education roster plus part-time personnel being utilized. The chairman of the department assumes responsibility for staffing six or eight library science education courses with part-time personnel, and staffing four to six audio-visual (or multi-media) offerings with part-time personnel. At least half-a-dozen students in work study, secretarial activity, paper grading, plus two NDEA fellows, plus a full-time department secretary "round out" the departmental personnel roster.
II. Composite of information requested on individual biographical supplements

1. Advanced study

Reference has already been made to study plans of Miss Heemstra and Dr. Warner for the academic year 1970-71. Mr. Cunico will be pursuing post-master's work at Utah State University summer 1970. Dr. Rider audited Ed. Fdn. 501 to update his skills in research.

2. Reference has already been made to leaves of absence without pay for Dr. Warner and Miss Heemstra, academic year 1970-71. Mrs. Reva and Mr. Brown were granted sabbaticals Semester II, 1969-70. Mrs. Reva worked on a project-proposal for the training of Latin-American secretaries plus touring the Middle East. Mr. Brown worked on a manuscript (slide rule) plus visiting and inventorying Industrial Education programs in thirteen colleges and universities of the Mid-West. Dr. Hirshfield taught at Western Michigan University summer 1969. Dr. Crawford served as a curriculum consultant in Guam summer 1969 plus travelling around the world. Mr. Cunico taught in a Devry electronics workshop summer 1969 in Wichita, Kansas. Dr. Rider and family toured the southwest to California and within Texas summer 1969. Dr. Doxtator and family toured New Mexico, Colorado, Wyoming, South Dakota, Nebraska, Kansas, Oklahoma, and Texas.

3. Dr. Stoumbis was appointed a member of the Citizenship Advisory Committee, NCSS, for a three-year term. Dr. Doxtator was ap-
pointed to the State Teacher Education Advisory Committee, Vocational Education, and served during 1969-70. Dr. Ivins was commended for excellence in teaching by KNME.

4. Publications

Dr. Hirshfield:  "Chirp and Drift in the AF-67", Ham Radio, May, 1970
"A Solid State Pre-selector .5 to 30 Mhz" (article purchased by Ham Radio)


Dr. Kline:  "University of New Mexico Looks at Media," New Mexico Audio-Visual Monthly, April 1970

Dr. Prigmore:  A Midsummer Night's Dream, Houghton Mifflin
"Factors Influencing the Role of Supervisors in English", New Mexico Research and Study Council
Teaching the Humanities: Selected Readings, (editor Sheila Schwartz), Macmillan Co.
"Humanities: The Cosmic Glue", The Humanities Journal, November 1969, pp. 27ff

Dr. Warner:  "The Wheels are Turning", NMIAA Journal, 1969 fall issue, pp. 5-6

Dr. White:  In progress: New Dimensions In Language, Grades 7 and 8, co-author with Peter Prouse, McCormick Mathers (in editorial stage)

4. Publications (continued)

Dr. Runge: Assisted with report on National Cooperative Education Institute, New York City, October 1969
Handbook for Secondary Student Teaching, 10th edition, UNM, 56 pp

Dr. Prouse: Senior author (with Dr. Robert White and Devin McAnally) of two junior high textbooks entitled New Dimensions in Language, to be published by McCormick-Mathers of Litton Educational Publishing, New York

Schools for the Middle Years, with George Stoumbis, International Textbook, June 1969
The Junior High and Middle School, with George Stoumbis, International Textbook, June 1970

5. Other research projects or creative work

Dr. Engman completed research on teacher attitudes toward elements of human sexuality dealt with in sex education courses.

Dr. Howard completed a four-state survey of the junior high school (with William Phillips) and submitted four articles to publisher with no word as to acceptance.

Dr. Kline completed an analysis and evaluation of NDEA Summer Media Institutes for the National Historical Association (USOE Grant), 1969-70.

Dr. Runge assisted Bureau of Educational Planning, UNM, with post-secondary evaluation of four area vocational schools and all vocational-technical education in New Mexico. He also
worked with Title I funds, APS, on development of new block projects and was co-director for the Job Corps Teacher Education project. Drs. Runge and Doxtator secured a second $15,000 grant for a second Job Corps Project.

Dr. Tweeten did an evaluation of the use of the computer in high school physics instruction and also is doing research into student teacher-cooperating teacher matching.

Dr. Prouse continued as Director of the APSCOE Project and was also instrumental in inaugurating the APSCOE Project in the Middle Schools. Both are cooperative programs with the Albuquerque Public Schools for curriculum development and teacher training of competitively selected honors interns.

Dr. Rider had three mini-grants to develop audio-visual materials for vocational business teacher education (New Mexico State Department of Vocational Education, $475). Dr. Rider also prepared the following slide-tape presentations: "Improving the Education of the Vocational Business Teacher through the Use of Models on Video Tape"; "Improving Vocational Business Education Via the Single-Concept Film"; and "Success in New Mexico".

Dr. White has the following manuscripts in progress: "Teaching Literature to Adolescents"; "Teaching Communication Arts to Adolescents"; "Teaching Reading to Adolescents"; and "Developing Language Arts Programs for Culturally Diverse Adolescents".

6. Activities in learned and professional societies

Dr. Runge was secretary of the New Mexico Vocational Education
Advisory Council, attended meetings over the state and in Denver and participated in a National Institute on Cooperative Vocational Education in New York City.

Dr. Ivins sponsored Phi Delta Kappa.

Dr. Kline was state legislative chairman of the New Mexico Audio-Visual Association; chairman of the New Mexico Library Audio-Visual Round Table; chairman of the NML/AV Certification Committee. He attended the DAVI convention in Detroit and was on the Legislative Committee. He was also on the Advisory Committee of the Educational Facilities Charrette.

Dr. Prigmore was a chairman of Committee on Improving Supervision, member of Board of Directors, speaker at national convention, and conducted a workshop at National Council of Teachers of English convention in Washington. He was discussion leader for National Committee on Teacher Education and Professional Standards in Denver. He was elected president of western region and elected to national board of directors of NAHE.

Dr. Warner attended Mt. States Educators' Conference in Salt Lake; he was over-all chairman of NMIAA spring conference and a session leader of same. He attended NMEA convention and Albuquerque Industrial Education meetings; he was membership chairman of NMAVA and executive secretary-treasurer of NMII. He was also manager of NMIAA Journal.

Dr. Doxtator completed six years of service to the New Mexico Council for the Social Studies, serving as chairman of the Nominating Committee and the Program Committee.
Mrs. Sampley was a member of National Business Education Association, Mountain-Plains Business Education Association, and New Mexico Business Education Association. She attended the convention of National Business Education Association in Chicago, the state Business Education meeting in October and state National Secretaries meeting in April.

Dr. Hirshfield and Dr. Prigmore created and participated in a workshop on contemporary issues (272 teachers) and participated in a workshop in Grants, New Mexico, on the improvement of instruction.

Dr. Crawford attended National Association of Secondary School Principals meeting in Washington, D. C., and was a panel discussant on the subject, "School Evaluation and Negotiated Agreements". He also attended North Central Association meetings in Chicago and Columbia, Missouri.

Mr. Cunico attended American Industrial Arts Association convention in Louisville, Kentucky, April, 1970.

Miss Heemstra attended a CPS seminar in Santa Fe in May and the NABTE in Chicago in February.

Dr. Howard attended the North Central Association annual meeting in Chicago in April. He was a member of the State Executive Board of the New Mexico Secondary School Principals and also a member of the National Committee on Junior High and Middle Schools, NASSP.
Mr. Nesbitt was a member of the Legislative Information Committee of the American Industrial Arts Association and he participated in Mountain States Conference of Industrial Arts Teacher Educators and Supervisors. He was state membership chairman of the Industrial Arts Association. He also attended TEPS meeting in Denver and the New Mexico Area Vocational meetings in Bloomfield.

Dr. Prouse attended the national convention of American Association of Colleges of Teacher Education where APSCOE Project received one of ten top national awards for excellence in teacher education.

Dr. Rider attended the Mountain-Plains Business Education Association meeting in Bismarck, North Dakota, and was a member of the Executive Board representing New Mexico.

Dr. Stoumbis attended National Council for the Social Studies annual convention in Houston November 1969; Association for Supervision and Curriculum Development in San Francisco March 1970; and also a workshop on Guided Self Analysis in San Francisco at the same time.

Dr. Tweeten attended the National Association for Research in Science Teaching, Chicago; and AAAS in Denver. He was president, Southern Rockies Region of AETS, and chairman of the Nominating Committee of NABT.
Mr. Brown attended the American Industrial Arts Association convention in Louisville, Kentucky in April.

Dr. Doxtator attended meetings in-state of Teacher Education Advisory Committee - Vocational Education, and also meetings of the Executive Committee of the New Mexico Council for the Social Studies.

Dr. Engman attended the National Science Teachers Western Regional Conference.

7. Other professional activities

Mr. Nesbitt was part of APS-COE program, "Improvement of Instruction in Industrial Arts" under Title I funds. He also visited the Gallup branch of the Industrial Education program. He was on the advisory committee for Automotive Instruction of TVI. He prepared a demonstration at the New Mexico Industrial Teachers conference on the effects of heat and pressure on the operation of the internal combustion engine.

Dr. Runge on a number of committees: Joint UNM-APS committee on professional laboratory activities; State Vocational Education research unit; he was an advisor on joint projects with the State Department of Education and APS. Dr. Runge appeared on educational television for vocational and technical education.

Mr. Brown was a member of the Woods Technology Advisory Committee (Ind. Ed.) for the APS.

Dr. Crawford was a consultant to the high schools at Roosevelt

Mr. Cunico was a member of the Electronic Advisory Committee for TVI.

Dr. Doxtator coordinated efforts of five faculty members in Secondary Education in an evaluation of the Carrie Tingley Hospital education program, Secondary Education. Much of the wording of the basic report which he submitted was included in the published report. He gave leadership to, and participated in, the workshop reactivating the NMCRSC, topic: Relevance in Education.

Miss Heemstra was state chairman of Future Business Leaders of America and a member of the Education Committee of NSA.

Dr. Howard was chairman of two of the three North Central evaluations of New Mexico high schools he was a member of in 1969; speaker at various conferences and workshops held in New Mexico. He was also the speaker at the Jemez High School graduation ceremonies.

Dr. Ivins was an evaluator and summarizer of the New Mexico White House Conference held in Santa Fe in January. He was the main speaker and panelist at a meeting of the New Mexico Research and Study Council.

Dr. Kline was a consultant for Instructional TV Project in
Washington County, Maryland; Media Center Projects at Valley and Sandia High Schools; and Medical School, University of Puerto Rico, on Media and Technology. He was also on a TV program in Lansing, Michigan, called "The Professor Speaks".

Dr. Prigmore was consultant to the State Board of Education, State Department of Education, Bernalillo Public Schools, New Mexico State University; Ankeny, Iowa, Schools; Santa Barbara, California, Schools, and West Virginia Region II Schools.

Dr. Prouse was a consultant and lecturer at Fort Wingate In-Service Teacher Training Program; conducted two three-hour sessions on "Language and Social Attitudes" and "Language Arts and Social Studies Related" for the Grants teacher in-service training program. He also appeared on KUNM-TV program on university teaching.

Dr. Rider was a speaker at National Secretaries Association meeting in Albuquerque; District 16, Texas Business Education Association, Amarillo; SER Motivation Class in Albuquerque; and the Moriarty High School Bookkeeping Class. He was a member of the State Department of Vocational Education for the Roswell Branch of ENMU.

Dr. Stoumbis was a consultant for the State Department of Education at Springer, Clayton, and Farmington, New Mexico. He conducted a workshop for teachers at Clayton and a workshop for New Mexico St. Department Curriculum Specialists. He was elected to a three-year term on the Executive Committee, NMCSS.
Dr. Tweeten was a consultant to the Bureau of Indian Affairs, various public schools, State Department of Education, School for the Deaf. He made several North Central Association visitations, and participated in a leadership conference for ISCS and SCIS.

Dr. Warner was an advisory committeeman for the Industrial Arts Advisory Council of New Mexico, a team member of the North Central evaluation at Artesia, and a member of Committee A, COE. Dr. White spoke to Bnai Brith on Jewish youth and Hadassah on education in Israel. He was also a speaker at the Kirtland Toastmistresses on oral reading. He taught a UNM undergraduate seminar on Kibbutz in Israel during the fall.

8. Non-teaching university service

Dr. Crawford continued as State Chairman of the North Central Association and directed evaluation of eight New Mexico secondary schools. He was also on the UNM Committee on Scholarships, Prizes and High School Relations.

Dr. Hirshfield was a member of KUNM Radio Board, COE Petition and Waivers Committee and COE Doctorate Committee.

Dr. Ivins was an alternate member of the UNM Academic Freedom and Tenure Committee and Committee on Governance. He was also a member of the Advisory Board UNM Bureau of Educational Planning and Development. Dr. Ivins was also a member of the COE
Advisory Committee on a Cultural Diversity Unit and chairman of the Advisory Committee of the Department of Secondary Education.

Dr. Prigmore was appointed assistant to the Dean of the College of Education. He was also a member of the COE Policy Committee and Administrative Committee.

Dr. Prouse was a member of the UNM Faculty Policy Committee. He was also a member of the COE Policy Committee. He was on the Committee on the SCESOLD Project and the Ad Hoc A&S Committee on Tenure Decisions in Psychology, together with being a member of the COE Committee on Associate Deanship.

Mr. Nesbitt was acting Program Head for Industrial Education Semester II. He was also a member of the COE Policy Committee and V-Chairman of the UNM Safety Committee. He was also appointed to the Secondary Education Salary Committee.

Mrs. Sampley assisted during the Future Business Leaders of America state convention in April and with Phi Beta Lambda monthly meetings.

Dr. White was on the A&P Committee in Secondary Education, the COE Manzanita Center Committee, UNM Student Affairs Committee. He continued to coordinate MAT of English program, and began service as coordinator of secondary education programs in TESOL.
and reading. He was also a member of UNM Linguistics and Language Pedagogy Coordinating Committee.

Miss Heemstra was on the COE Learning Materials Center committee.

Dr. Doxtator was a member of the UNM Library Committee, COE Policy Committee and COE Administrative Committee.

Mr. Brown was given the title of Program Head for Industrial Education. He was also a member of Curriculum Committee A of the College of Education.

Dr. Rider was a member of the COE Scholarship Committee and faculty adviser for Business Education at all levels.

9. Public Service

Mr. Brown was made "Marshal Emeritus" for Ballut Abyad Shrine Temple.

Mr. Cunico was manager of Little League Thunderbird team.

Dr. Hirshfield was a member of the Caravan Club of Albuquerque which provides emergency communications when needed.

Dr. Howard was COE United Fund chairman.

Mr. Nesbitt was president of the Chaparral Flying Club and manager-coach of the Chargers, Alta Monte Little League.

Dr. Prouse was a member for the third year of Board of Trustees of the International Folk Art Foundation. He was also a member of the Model Cities Cultural Advisory Board.
Dr. Rider was a member of the Arkansas chapter of the Sons of the American Revolution.

Mrs. Sampley was a teacher at the Hoffmantown Baptist Church, a committee member of the Girl Scouts (Brownies) Troop 472. She was also a member of the AAUW Child Study Group's Community Kindergarten Survey committee.

Dr. Warner was a Little League field manager and committee man and also a Boy Scout committeeman. He is a deacon of the Christian Church.

Dr. White was elected a member of the Albuquerque Jewish Welfare Board and a co-worker in the Albuquerque combined Jewish Appeal.

10. Personal information

None. (So as not to leave the category blank, Professor Doxtator says that his hair is graying and he is a year older than last year.)
On June 30, 1970, the Bureau of Educational Planning and Development completed its second year of operation. Several observations seem pertinent:

1) The Bureau's activities continued to expand in scope and number during 1969-70.

2) The involvement of UNM/COE students and faculty also expanded significantly.

3) Positive response to the Bureau's efforts from the field continues to increase.

New projects initiated during the year were:

1) Revision of the N.M. State Education Departments handbook on health occupations.

2) Educational specifications for the ISRAD/Model Cities Child Care and Development Centers; also equipment specifications.

3) Assistance to the N.M. State Department of Education's Research Coordinating Unit in a computerized state-wide vocational-technical student dropout study.

4) A state-wide secondary education vocational education program for the N.M. Council on Vocational Education.

5) A state-wide study on health knowledge and practices in New Mexico elementary and secondary schools.

6) A draft of a policies manual for the State Board of Education.

7) A curriculum and facility program for Carrie Tingley Hospital School.

8) A USOE Health Occupations Charrette.
9) A state-wide, post-secondary education study.
10) Adult and student opinion polls for a Los Alamos citizens committee.
11) Plans for an addition to the Los Lunas High Schools.
12) A facilities evaluation proposal for the American Association of Junior Colleges.
13) A proposed training program for UNM non-academic employees.
14) An area vocational school feasibility study for the UNM Gallup Branch Community College.

All except items three and four of the above have been completed, and they will be completed within the first several months of the 1970-71 fiscal year.

The outlook for the coming year looks promising. Many new projects are in the prospective stage of development. One of these is a seven-county manpower/vocational education study. Another relates to analyzing the resources of UNM that might be applied to the growth of New Mexico schools and communities. A third is the development of a new fine arts curriculum and related facilities for the Farmington New Mexico school district. Others are equally interesting, and new ones can be anticipated as the Bureau "repeat client" business appears to be growing as does the "new client" grants and contract activity.

The principal problem of the year was again funding. The general tightening of federal funds was reflected in the Bureau's governmental projects; these clients almost uniformly wanted more work performed at lower cost. The failure to secure adequate state budgetary support also hurt. Fortunately, the University's administration continued to lend moral and financial support to the Bureau's programs.

Financial problems for the coming year should be lessened since the UNM administration allocated $16,680 to the Bureau for 1970-71 and agreed to go to the Board of Educational Finance for 1971-72 program of the Bureau.

Any success which the Bureau may have attained during the past year is primarily the result of employees who were dedicated in their service, to faculty consultants who creatively assisted with the completion of projects, and to graduate students who took advantage of the opportunity to partake of field service experiences.

cc: Associate Dean R. L. Holemon
File
The Report of the
CULTURAL AWARENESS CENTER
July 1, 1969 - June 30, 1970
John A. Aragon, Director

I. General Center Information

A. Significant achievements during the academic year 1969-70.... The principle activity of the year was the conducting of the weekly institutes for New Mexico Public School personnel. These institutes numbered 19, and included 960 participants - teachers, administrators, and school board members from 71 school districts in the state. The purpose for the institutes is to expose the participants to an intensive series of activities designed to demonstrate the need for educators to become profoundly aware of the manner in which cultural differences among the students, when not taken into account in curriculum development and in instructional practices contribute heavily toward seriously minimizing the effectiveness of the traditional educational process with respect to minority group children.

The other major portion of the Center's activity involved the rendering of direct technical assistance to personnel from the many school districts which asked for it, either as a result of having attended the institutes or as a result of having heard about the Center's function through other means.

B. Number of students, etc. (Does not apply) Attached herewith, however, is a copy of our report to the
Washington Office. This contains information which is somewhat analogous to that requested in this item.

C. Plans and Recommendations for the near future -- The institutes proved so successful that they will be continued. Direct technical assistance to school districts will be continued also; however, because of the accelerated rate at which requests have been increasing, it will be necessary to device a new system of priorities so as to utilize staff time more constructively in terms of the relative significance of the different types of requests from school people.

During this summer, the Center will conduct two 10-day institutes on the University of New Mexico campus. The first one will be aimed at public school administrators, while the second one will be primarily for classroom teachers. Plans are also being formalized for implementing a series of additional 10-day institutes at the other institutions of higher education throughout the state. A supplementary grant of $250,000.00 has been allocated for this purpose.

D. Appointments to staff ---

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bryan C. McOlash</td>
<td>August 8, 1969</td>
</tr>
<tr>
<td>Laurie Chupco</td>
<td>September 18, 1969</td>
</tr>
<tr>
<td>Orlando Stevens</td>
<td>September 22, 1969</td>
</tr>
<tr>
<td>Steve Rhodes</td>
<td>January 17, 1970</td>
</tr>
</tbody>
</table>

E. Separations from staff ---

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Hess</td>
<td>July 1, 1969</td>
</tr>
<tr>
<td>Josie Chavez</td>
<td>August 4, 1969</td>
</tr>
<tr>
<td>Secretary</td>
<td></td>
</tr>
<tr>
<td>Lucille Ortiz</td>
<td>April 30, 1970</td>
</tr>
<tr>
<td>Secretary</td>
<td></td>
</tr>
</tbody>
</table>
Mr. Jerry H. Brader, Director  
Division of Equal Educational Opportunities  
Department of Health, Education and Welfare  
Office of Education  
Washington, D.C. 20202  

Your Ref: BESE/DEEO

Dear Mr. Brader:

Enclosed please find the Title IV Technical Assistance Survey for fiscal year 1970.

We have had a most active summer and have had a number of end-of-summer reports and evaluations to compile and thus this report will be received one week late.

As we have discussed before, the Title IV Center at the University of New Mexico is somewhat unique from the other Centers in that our activities center around problems dealing with accomplished desegregation rather than issues dealing with integrating the schools, thus the reports and plans covered in this survey deal with technical assistance and plans submitted to school districts to bring about curricular desegregation rather than the physical integration of the students.

Worthy of note is that we have involved 71 of 89 school districts in New Mexico in one activity or another; 960 people were put through our two-and-a-half day institutes. In addition we received 33 requests for direct technical assistance to school districts and school districts are listed in the report itself. Lest anyone conclude that only 960 people were the only ones reached, I would like to point out that in item 7D the figure 960 refers only to participants in institutes. The total number of people directly affected is the number totaling 2,389.

The amount of activity that this Center is involved in will accelerate quite rapidly. Our acceptance in the field is currently very good and we anticipate continued excellent cooperation from those school districts with whom we work. This acceptance should not be interpreted to mean lack of problems in New Mexico, rather it is indicative of the talent and tact used by the excellent
Mr. Jerry H. Brader

2

September 23, 1970

staff of the Center.

Should you wish further information please do not hesitate
to call upon us.

Sincerely yours,

Dr. John Aragon

JA/pbo
Encl.
cc: Dr. Richard M. Hawkins
Date: September 1, 1970

Title IV Unit Name: New Mexico

Title IV of the Civil Rights Act of 1964
Technical Assistance Survey
(July 1, 1969 - June 30, 1970)

The following information is needed to complete records for the program and to inform interested persons of Title IV technical assistance activities. Would you please complete all items related to your operation and return the completed form to this Office no later than September 15, 1970. If you need additional space, please attach a blank sheet and number the continued item as it is numbered on the form. Please follow the format indicated for each item, so as to simplify our use of the data. Your cooperation is greatly appreciated.

1. a. Number of districts for which you have PREPARED a school desegregation plan which was submitted to the superintendent and/or board of education by the Title IV staff during the period July 1, 1969 - June 30, 1970.

<table>
<thead>
<tr>
<th>STATE</th>
<th>NUMBER OF DISTRICTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.M.</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Districts: 6

b. List the name and location of each of these districts. If the plan as submitted has been totally or largely approved by the district, please place an asterisk next to the name.

<table>
<thead>
<tr>
<th>NAME OF SCHOOL DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>See attached list: #1b.</td>
<td></td>
</tr>
</tbody>
</table>

2. a. Number of districts where you ASSISTED in the development of a school desegregation plan which was submitted to the board of education by the superintendent or someone other than the Title IV staff during the period July 1, 1969 - June 30, 1970.

<table>
<thead>
<tr>
<th>STATE</th>
<th>NUMBER OF DISTRICTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.M.</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Districts: 6
### # 1 (b) NAME OF SCHOOL DISTRICT

<table>
<thead>
<tr>
<th>NAME OF SCHOOL DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Los Lunas Consolidated Schools</td>
<td>Los Lunas, N.M.</td>
</tr>
<tr>
<td>*Silver City Public Schools</td>
<td>Silver City, N.M.</td>
</tr>
<tr>
<td>*Bernalillo Public Schools</td>
<td>Bernalillo, N.M.</td>
</tr>
<tr>
<td>*East Las Vegas Public Schools</td>
<td>Las Vegas, N.M.</td>
</tr>
<tr>
<td>*Albuquerque Public Schools</td>
<td>Albuquerque, N.M.</td>
</tr>
<tr>
<td>*West Las Vegas Public Schools</td>
<td>Las Vegas, N.M.</td>
</tr>
<tr>
<td>*Fort Sumner Public Schools</td>
<td>Ft. Sumner, N.M.</td>
</tr>
<tr>
<td>Tucumcari Public Schools</td>
<td>Tucumcari, N.M.</td>
</tr>
<tr>
<td>Mora Independent Schools</td>
<td>Mora, N.M.</td>
</tr>
<tr>
<td>Ramah Independent School District</td>
<td>Ramah, N.M.</td>
</tr>
<tr>
<td>Anthony Gadsden Indep. School Dist.</td>
<td>Anthony, N.M.</td>
</tr>
</tbody>
</table>

Five (5) of the school districts (Los Lunas, Silver City, Bernalillo, East & West Las Vegas (jointly) and Albuquerque) during this reporting period have been funded under Title IV, Civil Rights Act, 1964. The other six (6) school districts (Tucumcari, Mora, Ramah, Anthony-Gadsden, and Ft. Sumner) have on-going programs which the local school districts have implemented without federal funds.

### # 2 (b) NAME OF SCHOOL DISTRICT

<table>
<thead>
<tr>
<th>NAME OF SCHOOL DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Santa Fe Public Schools</td>
<td>Santa Fe, N.M.</td>
</tr>
<tr>
<td>*Bloomfield Public Schools</td>
<td>Bloomfield, N.M.</td>
</tr>
<tr>
<td>*Mora Independent Schools</td>
<td>Mora, N.M.</td>
</tr>
<tr>
<td>*Anthony Gadsden Indep. School Dist.</td>
<td>Anthony, N.M.</td>
</tr>
<tr>
<td>*Santa Rosa Public Schools</td>
<td>Santa Rosa, N.M.</td>
</tr>
<tr>
<td>**Albuquerque Public Schools</td>
<td>Albuquerque, N.M.</td>
</tr>
</tbody>
</table>

**

The Albuquerque Public Schools have a Title IV Grant, system-wide, but there were six (6) school buildings within the system that requested and received assistance from the Cultural Awareness Center staff in preparation of their own plan.

| ** 1) Duranes Elementary School                  |                                   |
|                                                | 2) Kit Carson Elementary School   |
|                                                | 3) Lincoln Junior High School      |
|                                                | 4) Jefferson Jr. High School       |
|                                                | 5) Los Padillas Elementary School  |
|                                                | 6) Coronado Elementary School      |
b. List the name and location of each of these districts. If the plan as submitted has been totally or largely approved by the district, please place an asterisk next to the name.

<table>
<thead>
<tr>
<th>NAME OF SCHOOL</th>
<th>DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See attached list: #2b.

3. List by State, the name of each school district listed in No. 1 and 2, that is desegregating under Court Order.

<table>
<thead>
<tr>
<th>NAME OF SCHOOL</th>
<th>STATE</th>
<th>DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. a. Number of requests for technical assistance received during the period 7/1/69 - 6/30/70. (Please DO NOT include meetings to inform about availability of services, project monitoring, or giving speeches). Technical assistance is defined in the law as "assistance... in the preparation, adoption, and implementation of plans for the desegregation of public schools. Such technical assistance may, among other activities, include making available... information regarding effective methods of coping with educational problems occasioned by desegregation, and making available to such agencies personnel... specially equipped to advise and assist them with such problems." (Assistance in proposal development, training programs and dealing with post-desegregation problems can be considered technical assistance for purposes of this survey).

<table>
<thead>
<tr>
<th>STATE</th>
<th>NUMBER OF REQUESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. M.</td>
<td>21 (2/1/69-12/31/69)</td>
</tr>
<tr>
<td>N. M.</td>
<td>15 (1/1/70-6/30/70)*</td>
</tr>
</tbody>
</table>

Total Requests: 58*

b. Number of different school districts making the above requests for technical assistance during the period 7/1/69 - 6/30/70 (assuming some districts requested assistance more than once in the 12 month period).

<table>
<thead>
<tr>
<th>NAME OF SCHOOL</th>
<th>DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. M.</td>
<td>- See attached list: #4b.</td>
<td></td>
</tr>
</tbody>
</table>

Among the 15 requests listed for the period (1/1/70 to 6/30/70) we include the Albuquerque Public Schools. A school district of 84,000 students where technical assistance was rendered to individual buildings - 22 requests. Thus the total technical assistance requests are actually fifty-eight (58) in number.

<table>
<thead>
<tr>
<th>NAME OF SCHOOL DISTRICT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque Public Schools - 22</td>
<td>Albuquerque, N.M.</td>
</tr>
<tr>
<td>Belen Public Schools</td>
<td>Belen, N.M.</td>
</tr>
<tr>
<td>Bernalillo Public Schools</td>
<td>Bernalillo, N.M.</td>
</tr>
<tr>
<td>Bloomfield Public Schools</td>
<td>Bloomfield, N.M.</td>
</tr>
<tr>
<td>Clovis Public Schools</td>
<td>Clovis, N.M.</td>
</tr>
<tr>
<td>Dulce Public Schools</td>
<td>Dulce, N.M.</td>
</tr>
<tr>
<td>Deming Public Schools</td>
<td>Deming, N.M.</td>
</tr>
<tr>
<td>East Las Vegas Public Schools - 2</td>
<td>Las Vegas, N.M.</td>
</tr>
<tr>
<td>Espanola Public Schools</td>
<td>Espanola, N.M.</td>
</tr>
<tr>
<td>Fort Sumner Public Schools</td>
<td>Ft. Sumner, N.M.</td>
</tr>
<tr>
<td>Grants Municipal Schools</td>
<td>Grants, N.M.</td>
</tr>
<tr>
<td>Gadsden Independent School Dist.</td>
<td>Anthony, N.M.</td>
</tr>
<tr>
<td>Las Cruces Public Schools</td>
<td>Las Cruces, N.M.</td>
</tr>
<tr>
<td>Los Alamos Public Schools</td>
<td>Los Alamos, N.M.</td>
</tr>
<tr>
<td>Los Lunas Public Schools</td>
<td>Los Lunas, N.M.</td>
</tr>
<tr>
<td>Mora Independent Schools</td>
<td>Mora, N.M.</td>
</tr>
<tr>
<td>Mosquero Public Schools</td>
<td>Mosquero, N.M.</td>
</tr>
<tr>
<td>Pecos Public Schools</td>
<td>Pecos, N.M.</td>
</tr>
<tr>
<td>Pojoaque Public Schools</td>
<td>Santa Fe, N.M.</td>
</tr>
<tr>
<td>Ramah Independent School Dist.</td>
<td>Ramah, N.M.</td>
</tr>
</tbody>
</table>
5. Please break down the total requests for technical assistance, listed under 4a above, into the sources of referral as indicated below:

- Requests direct from school district 33 + 22*
- HEW's Office for Civil Rights (Title VI)
- Department of Justice
- District or Circuit Court
- State Education Department 3
- Universities and Colleges (for institutes, conferences, etc.)*
- Other (Please specify) *

6. Please estimate what portion of the Title IV professional staff time available to your unit has been spent on technical assistance, such as described in #4a above, during the period July 1, 1969 - June 30, 1970 45%.

7. CENTER DIRECTORS ONLY: Please answer the following questions regarding training programs conducted by your Center during the period 7/1/69 - 6/30/70.

   A. Number of training programs 19
   B. Number of districts served 71*
   C. Name of School
   District Location No. of Participants
   See attached list*
   ____________________________
   ____________________________
   D. Total Number of Participants 960 (2389)

   Number of board members: 21
   superintendents: 26
   other central office personnel: 59
   principals: 85
   counselors: 30
   teachers: 628
   non-professionals: 15
   other (please specify): 96*

8. Notes, questions and comments pertaining to this survey are welcomed.

Thank you for your prompt attention to this survey. Please review all data submitted for accuracy.

OE FORM 4501, 6/70
*Not listed in the breakdown under this item are requests for assistance from universities and colleges and other agencies. These requests are listed in another part of this report under the heading: T. A. to Other than Public School Districts.

*Of the seventy-one (71) school districts reported in this item are included those districts who sent representatives to more than one training program.

*The attached list shows the name and location of the school district and also, in some cases, the number of times each school district was represented. On the average each school district attending the training programs, sent eight (8) to ten (10) participants.

### SCHOOL DISTRICTS

- Alamogordo Public Schools
  Alamogordo, New Mexico
- Albuquerque Public Schools (10)
  Albuquerque, New Mexico
- Anthony-Gadsden Public Schools
  Anthony, New Mexico
- Artesia Public Schools
  Artesia, New Mexico
- Belen Public Schools
  Belen, New Mexico
- Bloomfield Public Schools
  Bloomfield, New Mexico
- Capitan Public Schools
  Capitan, New Mexico
- Carlsbad Public Schools
  Carlsbad, New Mexico
- Carrizozo Public Schools
  Carrizozo, New Mexico
- Cloudcroft Public Schools
  Cloudcroft, New Mexico
- Clovis Public Schools
  Clovis, New Mexico
- Cobre Public Schools
  Bayard, New Mexico
- Cuba Public Schools
  Cuba, New Mexico
- Deming Public Schools (1)
  Deming, New Mexico
- Dulce Public Schools
  Dulce, New Mexico
- Encino Public Schools
  Encino, New Mexico
- Espanola Public Schools
  Espanola, New Mexico
- Farmington Public Schools
  Farmington, New Mexico
- Fort Sumner Public Schools
  Fort Sumner, New Mexico
- Gallup-McKinley County Schools
  Gallup, New Mexico
- Hagerman Public Schools
  Hagerman, New Mexico
- Hatch Public Schools
  Hatch, New Mexico
Hobbs Public Schools
Hobbs, New Mexico

Jemez Mountain Public Schools
Gallina, New Mexico

Jemez Springs Public Schools
Jemez Pueblo, New Mexico

Kirtland-Central School District
Central, New Mexico

Lake Arthur Public Schools
Lake Arthur, New Mexico

Las Cruces Public Schools (2)
Las Cruces, New Mexico

Las Vegas City Schools
Las Vegas, New Mexico

Lordsburg Public Schools
Lordsburg, New Mexico

Los Alamos Public Schools
Los Alamos, New Mexico

Los Lunas Consolidated Schools
Los Lunas, New Mexico

Loving Public Schools
Loving, New Mexico

Magdalena Public Schools
Magdalena, New Mexico

Mescalero Public Schools
Mescalero, New Mexico

Mora Public Schools
Mora, New Mexico

Mosquero Public Schools
Mosquero, New Mexico

Mountainair Public Schools
Mountainair, New Mexico

Ojo Caliente Public Schools
El Rito, New Mexico

Pecos Public Schools
Pecos, New Mexico

Penasco Public Schools
Penasco, New Mexico

Pojoaque Public Schools
Santa Fe, New Mexico

Quemado Public Schools
Quemado, New Mexico

Quinta Public Schools
Quinta, New Mexico

Roswell Public Schools
Roswell, New Mexico

Santa Fe Public Schools (2)
Santa Fe, New Mexico

San Jon Public Schools
San Jon, New Mexico

Santa Rosa Public Schools
Santa Rosa, New Mexico

Shiprock Independent Schools
Shiprock, New Mexico

Silver City Consolidated Schools
Silver City, New Mexico

Socorro Public Schools
Socorro, New Mexico

State Department of Education
Santa Fe, New Mexico

Taos Public Schools
Taos, New Mexico

Tucumcari Public Schools
Tucumcari, New Mexico

Tularosa Public Schools
Tularosa, New Mexico

Vaughn Public Schools
Vaughn, New Mexico
Personnel attending the training programs other than public school types were as follows:

Note: (These participants attended the various training programs on their own initiative and at their own personal expense.)

<table>
<thead>
<tr>
<th>Agency or Unit</th>
<th>No. of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwestern Cooperative Educational Laboratory</td>
<td>3) Research Assistants</td>
</tr>
<tr>
<td>TED/TAC</td>
<td>3) Staff Members</td>
</tr>
<tr>
<td>Lawyers</td>
<td>3) Practicing Attorneys</td>
</tr>
<tr>
<td>Newspapers</td>
<td>2) Reporters</td>
</tr>
<tr>
<td>Universities &amp; Colleges (Out-of-State)</td>
<td>11) Professors of Education</td>
</tr>
<tr>
<td>U. S. Navy (Public Affairs)</td>
<td>2) Naval Officers</td>
</tr>
<tr>
<td>Northern Pueblos Council</td>
<td>4) Administrative Personnel</td>
</tr>
<tr>
<td>Sandia Corporation</td>
<td>8) Education Specialists</td>
</tr>
<tr>
<td>Universities &amp; Colleges (In-State)</td>
<td>18) Instructors &amp; Professors</td>
</tr>
<tr>
<td>Model Cities</td>
<td>6) Social Workers</td>
</tr>
<tr>
<td>Indian Community Action Program</td>
<td>4) Teachers &amp; School Psychologists</td>
</tr>
<tr>
<td>University of New Mexico Graduate Assistants</td>
<td>16) Graduate Assistants</td>
</tr>
<tr>
<td>Young Women's Christian Association</td>
<td>2) Counselors</td>
</tr>
<tr>
<td>Home Education Livelihood Program</td>
<td>4) Program Supervisors</td>
</tr>
<tr>
<td>New Mexico Employment Security Commission</td>
<td>4) Program Directors</td>
</tr>
<tr>
<td>Utah State Employment Service</td>
<td>4) Program Coordinators</td>
</tr>
<tr>
<td>New Mexico Education Association</td>
<td>3) Field Workers</td>
</tr>
<tr>
<td>New Mexico State Department of Education</td>
<td>5) Program Specialists</td>
</tr>
</tbody>
</table>
Name of Title IV Unit: Minority Group Cultural Awareness

Title IV of the Civil Rights Act of 1964
Office of Education
Division of Equal Educational Opportunities

Technical Assistance Survey: July 1, 1969 - June 30, 1970

Summary Report: Center Training Programs

<table>
<thead>
<tr>
<th>Name &amp; location of school district</th>
<th>No. of training programs</th>
<th>No. of school districts served</th>
<th>Total No. of Participants</th>
<th>Types of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belen &amp; Los Lunas Public schools</td>
<td>1</td>
<td>2</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Belen, N.M. Los Lunas, NM</td>
<td></td>
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</tr>
<tr>
<td>State Dept. of Education</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Las Vegas Public Schs.</td>
<td>2</td>
<td>1</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Las Vegas, NM</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Santa Rosa Public Schs.</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Santa Rosa, NM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eos Public schools</td>
<td>1</td>
<td>1</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>eos, N.M.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>amah Ind. schools</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>amah, N.M.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board Members</th>
<th>Supts.</th>
<th>Other Central Off. Pers.</th>
<th>Principals</th>
<th>Counselors</th>
<th>Teachers</th>
<th>Non-Prof Pers</th>
<th>other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>8</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
**Title IV Unit:** Minority Group Cultural Awareness Ctr.

**Division of Equal Educational Opportunities**

**Technical Assistance Survey: July 1, 1969 - June 30, 1970**

<table>
<thead>
<tr>
<th>Name &amp; location of school district</th>
<th>No. of training programs</th>
<th>No. of school districts served</th>
<th>Total No. of Participants</th>
<th>Summary Report</th>
<th>Center Training Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mora Ind.Sch. Mora, N. M.</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Pojoaque Ind. Sch. Pojoaque, N.M.</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>State Dept. of Education Santa Fe, NM</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td></td>
<td></td>
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*SEE NOTE ATTACHED*
The Albuquerque Public School System made several requests to the Cultural Awareness Center for technical assistance in training programs dealing with post desegregation problems. Since Albuquerque Public Schools is such a large system - a separate sheet for the summary report (7/1/69 to 6/30/70) has been used to indicate this activity.
Seminars:

July 1969  
June 30, 1970

Name of Title IV Unit: Minority Group Cultural Awareness

TITLE IV OF THE CIVIL RIGHTS ACT OF 1964
Office of Education
CTR.
Division of Equal Educational Opportunities

Technical Assistance Survey: July 1, 1969 - June 30, 1970

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**Technical Assistance Survey:** July 1, 1969 - June 30, 1970

**Name of Title IV Unit:** Minority Group Cultural Awareness Center
Name of Title IV Unit: Minority Group Cultural Awareness

Title IV of the Civil Rights Act of 1964
Office of Education
Division of Equal Educational Opportunities

Ctr. Technical Assistance Survey: July 1, 1969 - June 30, 1970

Sources of Requests for Technical Assistance: University School Desegregation Centers

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**School Districts Assisted Under Title IV**

July 1, 1969 - June 30, 1970, by Type of Assistance

**Name of Title IV Unit:**

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*Key: Place the appropriate symbol or combination of symbols in plan development column:
1. Plan developed for district and submitted to board by Title IV staff
2. Title IV staff assisted board with plan development
3. Plan approved by board
## Technical Assistance Survey: July 1, 1969 - June 30, 1970

### Name of Title IV Unit:
**MINORITY GROUP**  
**CULTURAL AWARENESS CENTER**

### Name of Title IV Unit:
**TITLE IV OF THE CIVIL RIGHTS ACT OF 1964**  
**Office of Education**  
**Division of Equal Educational Opportunities**

### Summary Report: Center Training Programs

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**Name of Title IV Unit:**
**MINORITY GROUP CULTURAL AWARENESS CENTER**

**TITLE IV OF THE CIVIL RIGHTS ACT OF 1964**
Office of Education
Division of Equal Educational Opportunities

**Technical Assistance Survey: July 1, 1969 - June 30, 1970**

<table>
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</table>
CURRICULUM LIBRARY SECTION

The Curriculum Library offers service eight hours daily during the school year and summer session. Additional hours were scheduled for evening classes upon request. During 1969-70, the average daily circulation was in excess of 150 items.

Other functions of the Curriculum Library not reflected in circulation figures include: (1) small group meetings; (2) preview and listening; (3) class orientations; (4) tours for visiting groups; (5) administration of reserve collections for COE faculty (averaging 900 items); (6) soliciting, receiving, and complete processing of gifts of materials from publishers; (7) reference and bibliographic services; (8) circulating weekly notice of acquisitions.

In compliance with the decision of the Learning Materials Center Committee, Curriculum Library is limiting its holdings to those listed below which experience indicates are most useful to faculty, graduate, and undergraduate students of COE:

Textbooks, guides, manuals, workbooks, and non-print materials for grades K-12.

Curriculum guides, pamphlets, and miscellaneous material for classroom use of student teachers in teaching subject areas.

Selected pedagogical writings in Bicultural and early Childhood Education.

College of Education theses, dissertations and problems papers selected by COE faculty.

Textbook catalogs, grades K-12.

AV catalogs and miscellaneous publications.
Annual Report - Continued

Picture files for use by student teachers.

Reserve collections requested by COE faculty.

Book selection tools for Children's Literature classes.

Children's and young adults' trade books from Zimmerman Library, when purchased by COE departments for deposit in Curriculum Library.

Children's encyclopedias and reference books.

As a continuing policy, the Curriculum Library makes available facilities for previewing non-print materials—microfiche and microfilm, films, filmstrips, slides, records, tapes.

Exhibits of interest to the College of Education were scheduled throughout the year in the facility. Major and minor publishers, special materials, and interest exhibits prepared by students were included.

Limitations of space and furnishings necessitated rigorous weeding and updating, to keep within the scope of the collection heretofore outlined in the report. An urgent need for additional shelving was met in June by modifying existing furnishings. However, increasing success in acquiring curriculum materials by gifts indicates that additional shelving and catalog cabinets must be budgeted for in fiscal 1970-71.

Even though many publishers generously supply examination sets of curriculum materials, much that is new and needed cannot be obtained in this way. Therefore, it is recommended that funds be allocated to the Curriculum Library for the purchase of materials as soon as economically feasible.
Annual Report - Continued

LEARNING MATERIALS SECTION

Production facility is now equipped to provide the following services:

Photo service, production of slides, production of transparencies, lettering, duplication, lamination, dry mounting.

The Learning Materials Center production facility provide the following service to College of Education:

Eighty manhours of service per week. Time and labor charges not included.

Charges listed for materials at cost only.

<table>
<thead>
<tr>
<th>Department</th>
<th>Charge</th>
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Additional services were provided to the following departments:

AHA History Educational Program
Anita Osuna Carr Memorial Library
Anthropology
Architecture
Bilingual Research
Black Studies Program
Chicano Studies
Colombians, Bolivians Projects
Cultural Awareness Center
Data Processing
Experienced Teacher Fellowship in Bilingual Education
Headstart
Health Charrette Program
Indian Social Studies
International Reading Association
Language Lab
Law School
Annual Report - Continued

Medical School
National Council of Teachers of English
Nursing
Printing Plant
Southwestern Cooperative Educational Laboratories
Special Education Materials Center
Students
Student Education Association
Student Senate
Womens' Housing

In cooperation with Instructional Media Services, equipment has been scheduled for use through Learning Materials Center approximately 10,900 hours.
ADDITIONS TO STAFF

1. Mr. Ambrosio J. Ortega
   Co-Director of Latin American Projects in Education
2. Mr. John S. Bakas
   Program Development Assistant and Coordinator of Latin American Participants
3. Mr. Jorge Díaz de Bedoya
   Coordinator of Duplicated Materials Center
4. Miss Eufemia Sanchez
   Administrative Secretary
5. Mrs. Luisa Laeser
   Bi-lingual Secretary
6. Mrs. Rocío Brimhall
   Bi-lingual Secretary

MOVE TO NEW QUARTERS

New office space was allocated to our programs in Mesa Vista office building. We occupy five offices, one storage room, a duplicating room for our Spanish language publications and one large classroom for participants enrolled in special courses.

SEMINAR ON HIGHER EDUCATION

The 1969-70 seminar was held in October of 1969. Plans are now under way for the 1970-71 seminar to be held in April.

BOLIVIAN PARTICIPANT GROUP

Fourteen Bolivian participants arrived at the University in October of 1969 and returned to their home country in August of 1970. Their fields of specialization included Educational Administration, Curriculum Development, Guidance and Counseling, Elementary Education and School Architecture. Specially designed courses were taught by Dr. Frank Angel, Dr. Raul Ruiperez, Mr. Ralph McLeod and others. These special courses have the section number of 887. (See attached class schedules)
Supplementing their academic endeavors were field trips to schools and institutions related to education. Because the group members had different specialties, more individual attention was provided for them, such as tutoring, translation of professional materials, and interpretation of certain class lectures into Spanish. The following are some of the activities:

1. Visit to El Paso, Texas, to study certain schools.
2. A two week trip to Los Angeles, California, for all the group to attend special seminars in education with visits to Las Vegas, Nevada; San Francisco, California; the Grand Canyon; etc.
3. Field trip to the Albuquerque Technical-Vocational Institute.
5. Field trip to the New Mexico State Department of Education.
6. Various individual visits to different departments of the University such as the Audio-Visual Center, Printing Plant, etc.
7. Field trip to Los Alamos and to the Los Alamos High School.
8. Field trip to Stanford University for four of the participants studying Educational Administration to attend a one week seminar on Micro-teaching techniques and methods.
9. As part of their return home, ten participants attended professional meetings in Washington, D.C., concentrating mainly on the U.S. Department of Education. From Washington the group attended a one week seminar on communication at Michigan State in Lansing, Michigan.
10. Three other participants left Albuquerque for study-work visits to Educational facilities in Mexico, El Salvador, Ecuador and Colombia. Two of the participants were especially interested in UNM's work with Colombian Secondary school development.

THE COLOMBIAN PARTICIPANT GROUP

Twenty-two Colombia participants, nine school administrators and thirteen guidance counselors, arrived at the University of New Mexico in October of 1969 for a twenty week period of specialized training in their particular fields.
The primary task of the participants was to engage themselves in selected New Mexico comprehensive high schools so that they could return to Colombia with some concrete background on the day-to-day operations of a modern high school. They needed to know scheduling, cafeteria management, student activities, school maintenance, and up-to-date testing methods. The Colombian participants served as interns in the school systems of three New Mexico cities—Albuquerque, Las Vegas, and Española. Other related activities included field trips to the El Paso school system and a two-week seminar and tour in Los Angeles, California. The group returned to Colombia via Washington, D.C., in January of 1970.

PARTICIPANTS REMAINING FOR SECOND SEMESTER 1970-71

Of the fourteen Bolivians who attended the University of New Mexico from October 1969 to August 1970, one, Mr. Franz Sensano, was authorized by the Bolivian government and his employer to stay and complete his Master's Degree in Educational Administration. He is to be graduated in January 1971.

Other participants in 1970 are Mr. Juan Portorreal of the Dominican Republic in Educational Administration and Miss María Olga de Andrade of Brazil in Secondary Education.

1970 ECUADOR PROJECT

Textbooks and teacher guides in mathematics, reading and science were completed and off the press in October of 1970. In addition, three more textbook writers and illustrators were added to the UNM staff in Quito, bringing it to a total of nine Ecuadorian writers and illustrators. UNM also worked with Juan Montalvo, Santa Dorotea and Bebahoyo Normal Schools during this period.

In June of 1970, Mr. José A. Gandert replaced Mr. Ambrosio J. Ortega as Chief of Party. Mr. Gandert is a teacher education specialist. Also in June Miss. Eustolia Pérez replaced Mr. George Gonzales as a textbook development specialist.
THE 1970 COLOMBIA PROJECT

The period covered by this report, July 1969-July 1970, has been a critical one in the development of the INEM (Instituto Nacional de Educación Media) program. It has been characterized by the opening of the first INEM schools and the reaching of certain key decisions with regard to operations. The statements following summarize briefly the most significant developments of the period.

1. At the request of the outgoing AID Education Development Officer (who was transferred to Chile in September 1969) and his replacement, the UNM Group assisted in familiarizing assigned AID Education Personnel with the operations of the Ministry of Education, including ICCE and ICFES.

2. During August and September 1969, at the request of USAID the New Mexico Group provided orientation activities for the newly arrived University of Oklahoma and the University of California contract groups. In addition to conducting sessions and individual conferences in Bogotá, a Group member, Dr. Louis Dahmen, accompanied the Oklahoma Group to Cali and remained there one week, assisting the members to get located and introducing them to their counterparts at the Universidad del Valle. Dr. Raymond Braine had provided a similar service to the California team in Medellín. These two UNM advisors continued to work in these zones through August assisting with the INEM and "regular" teacher training programs of six universities.

3. Many small group meetings were held during the period by representatives of the UNM contract with various members of the Ministry and its ICCE and ICFES branches concerning planning and administrative decisions.

4. The UNM Group as a whole has discussed various Ministry and ICCE-ICFES issues referred either through the Chief of Party or through USAID. Group consensus was then relayed back orally or by memorandum by the Chief of Party. In most instances the outcome (new policy) announced by the relevant agency has been in agreement with the recommendation made.

5. At an early planning stage the University of New Mexico Group decided to follow a loosely organized pattern of counterpart training rather than one that is highly structured. This plan
sacrifices something in terms of measured progress but provides much greater flexibility and perhaps is more effective under certain circumstances. Other sections of this report deal with counterpart training in specific areas. It has been observed that group sessions in which there is multi-representation from each of the UNM Group, ICCE and/or ICFES, produce better balanced consensus results. Hence, the informal group counterpart training is at work.

6. A tentative draft of our Phase B workplan was completed in August 1969 and submitted to AID and our counterpart Ministry of Education agencies for review. Following its return with several constructive comments, a final workplan was completed and distributed in October 1969.

7. During July and August 1969, members of the UNM Group assisted instructors at Bogotá National Pedagogical University with orientation sessions for twenty-two Colombians who were being oriented to spend a semester on the UNM campus at Albuquerque in Aid Participant Training Programs. Prior to the group's leaving for the United States, they were brought to the Ministry for another full day of orientation by UNM and ICCE personnel.

8. Numerous meetings have been held between Team members, individually and in groups, with personnel from ICFES in assisting toward the improvement of Higher Education in Colombia with particular emphasis on Teacher Education. Some of these meetings are already showing results in the Phase B program.

9. During the report period different members of the UNM Group took the initiative in setting up group planning sessions related to the following areas: (1) Administration, (2) Guidance and Counseling, (3) Teacher Education, (4) Extension Services, (5) Educational Specifications and Licitation Procedures, (6) Total Project Coordination, (7) Pre-school Workshop Planning, (8) INEM School Curriculum, (9) Participant Training, and (10) INEM Teacher Selection and Appointment.

10. Various members of the Group visited several universities and departments of Education in connection with INEM project work during the period. The record reflects 15 trips by eight staff members for a total of 42 days.
11. The total Group collaborated to produce a complete workshop plan for use as a pre-school training activity for the INEM school at Ciudad Kennedy. The plan was designed to have application to any INEM schools.

12. Several Group sessions were held with Colombian counterparts on the topic of evaluation as it would apply to INEM programs. At the request of the Colombians, a member of the New Mexico Group served as moderator. These sessions served as a training activity and at the same time clarified points of misconception which some held in the area of evaluation and its application to school programs.

13. A pre-school opening workshop was planned for INEM in Ciudad Kennedy and to serve as a model for others throughout the country.

14. A continuing inservice training program was designed for the INEM schools which would dovetail with the pre-school workshop and would continue indefinitely.

15. A seminar for deans and faculties of education was planned and held during the period.

16. A maintenance program plan for taking care of the INEM physical facilities was developed during the period and a manual for its implementation published.

17. Eleven out-of-country subject matter consultants were programmed in connection with the workshop plan and their services were utilized during the period.

18. Textbook studies were conducted in connection with ICOLPE and decisions were made concerning texts for the INEM schools.

19. Final steps were taken to complete the organization of a country-wide guidance and counseling organization.

20. Interviews were conducted and screening done for the selection of AACTE fellowship candidates for 1970-71.

21. Assistance was rendered AID and ICCE for the purpose of securing RTAC books for the INEM Schools and Colombian teacher preparation institutions.

22. Six INEM Schools were opened during the period.

23. Staff changes during the six months period include: the arrival and assignment of two high school administration advisers, one at Bucaramanga and one at Barranquilla; the resignation of the
school plant planning adviser, and the completion of tour and replacement of the teacher-education adviser.

24. A framework was established in ICCE for purpose of providing INEM wide supervision and "evaluation".

25. A more active role for ICFES in the matter of teacher education has been developed.

26. Initial steps have been taken with several universities toward the establishment of division of extension.

27. An arrangement has been agreed upon whereby the UNM group will have major responsibility for INEM/University work on North Coast.

28. Planning has been started toward the establishment of a net-work of Satellite and Affiliate schools.

29. Some restructuring of ICCE administration has been accomplished in order to put the operation of the INEM schools more directly under the educators rather than architects and engineers.

30. Advice and assistance have been provided as ICCE has moved into the planning and preliminary drawing stage for the next construction phase of nine (9) buildings.

31. Assistance has been provided in planning for a program of participant training in New Mexico.

32. Considerable staff time has been devoted during the period toward formulating a Five Year Plan of Educational Development for Colombia and in detailing more immediate plans. Three other position papers on pertinent topics were also prepared by staff members during the period.

33. During the early summer of 1970 the UNM Group was invited to send a representative and participant to an international education sponsored by Venezuela. A Group member was sent and did participate in the conference at Rubio, Venezuela.

Details of work toward the specific objectives, and later, conclusions and recommendations related to this period are included in the General Progress report. Returning UNM personnel from Colombia were: Ernest Gurule, Lewis Dahmen, Robert Esparza, James Théodores and Raymond Braine. New personnel additions to the project are: Raul Ruiperez, teacher education specialist; Ray Rodriguez, High School Administration Specialist; and Elias Bernal, Teacher Education Specialist.
BOOKS TRANSLATED INTO SPANISH

1. Taxonomy of Educational Objectives:
   b. Handbook II: "Affective Domain".
3. Art Guide - Beverly Vogel
4. Foundations of Educational Administration
   "A Behavioral Analysis" - Willard R. Lana
   Ronald G. Carwin
   William G. Monahan
5. Elementos del Plan de Lección - "De Cecco"
6. Maestros para el Mundo Real - "Teachers for the Real World"

MATERIAL WRITTEN IN SPANISH

BOOKS

1. Algunos Aspectos de la Sociedad y la Educación en Bolivia
2. Resumen del curso de lectura en cinco días, dictado por el Dr. Miles Zintz y Eustolia Pérez en la Escuela Normal "Manuela Cañizares" - September 22-26, 1970.
3. Investigaciones sobre la lectura y sus implicaciones para la enseñanza - Dr. Angel - Autor
4. Ejercicios para los diferentes niveles de lectura en la escuela primaria - Autor: Sra. Chacón de la Universidad "Rodrigo Facio" San Jose, Costa Rica
6. Mission Ecuador - John Bakas (In English only)
7. Proyecto de Max Escobar (Participante Boliviano)

ESSAYS

1. La enseñanza de Conceptos.
2. La enseñanza de Principios.
3. La enseñanza de Destrezas.
4. Elementos del Plan de Lección.
1. Tipos de Objetivos para la Instrucción y por lo tanto tipos de Estrategias para la educación.
2. Las Destrezas del Período de Aprestamiento de la Lectura.
4. Palabras claves de la Taxonomía de las Destrezas.
5. Un modelo para la elaboración de Curriculum.
6. Conocimiento sobre el Curriculum.
8. Objetivos Generales del Curso.
   Tareas
   Calificaciones
   Método de Operaciones
9. Matriz de Observación.
10. Resumen de las Categorías para el Análisis de Interacción.
11. Análisis de Interacción.
12. Comportamientos críticos de la Enseñanza.
13. Objetos Educativos.
15. Preparando objetivos de Instrucción - Hoja de trabajo - Primera Fase.
16. Hoja de trabajo sobre los objetivos del comportamiento.
17. Versión condensada de la Taxonomía de los Objetivos Educativos. "Dominio Cognitivo".
19. Orientación del Penúltimo año de secundaria "Primer Semestre".
20. Ciencia Física.
22. Domino Sicomotor.
23. Enseñando español oral y escrito.
24. Objetivo de Aprendizaje para los Estudiantes.
27. Módulo para el penúltimo año (16 horas de seminario.)
30. Teoría de la Psicología.
31. La interpretación de una matriz.
32. Enseñanza de la Destrezas del lenguaje (lectura).
33. Papel para maestros-practicantes.
34. Preparando Objetivos Educacionales—Frasas "Interiores" y "Exteriores".
35. Objetivos de la Conferencia.
37. Matemáticas.
38. II El Acto de Enseñar.
39. Las preguntas que hacen los maestros y la lectura de los niños.
40. Modelo para la enseñanza del último año de la Escuela Secundaria.
   (15 horas por semestre)

800 transparencies (Dr. Gonzales and George Gonzales Workshop for Ecuador).

Bolivian Participants: 50 term papers.

WRITTEN MATERIALS BY BOLIVIAN PARTICIPANT FRANZ SENSANO

2. Los efectos de dos Métodos de Enseñanza de los Estudios Sociales sobre la Rentención Inmediata.
4. Estatuto del Funcionario Público de Bolivia.
5. Un caso Hipotético de "cambio" en el Comportamiento.
6. Algunas Consideraciones sobre la Educación Privada en Bolivia.
7. Especificaciones Educativas de la Planta Escolar. Also translated into Spanish.
8. The Prestige Papers. Also translated into Spanish.
9. Impresiones sobre tres edificios Educativos.
11. Comments on Foundations of Behavioral Research. Also translated into Spanish.
13. Student Attitudes toward Curriculum Change in Ayacucho Public High School. Also translated into Spanish.
1. Notes on Educational Supervision in the Dominican Republic. Also translated into Spanish.
2. In partial fulfillment of the course Administration of Minority Group Program. Also translated into Spanish.
3. Eight term papers.
1. February - Dr. Frank Angel traveled to Ecuador as a field consultant.
2. May - Dr. Frank Angel traveled to Honduras, Guatemala and El Salvador to negotiate contracts with AID for these countries.
3. The following short term field consultants traveled to Ecuador in 1970:
   - Mari-Luci Ulibarri
   - Keith Auger
   - Delfinio Valdés
   - Robert Gallegos
   - Victoria Sanchez
   - Dolores Gonzalez
   - Ambrosio Ortega
   - Miles Zintz
   - Willie Sanchez
   - Auxcencio Romero
   - Arturo Chapa
   - George Gonzales
   - Richard Lawrence
   - Enrique Almagro
4. The following short term field consultants traveled to Colombia in 1970:
   - Socorro Aragon
   - Enrique Almagro
   - Benjamin Trujillo
   - Frank Torres
   - Robert Cooper
   - George Chavez
   - Porfirio Leyba
   - Ambrosio Ortega
   - Royal Jackson
   - Ralph McLeod
   - Virgilio Martinez
   - Tony Martinez
   - John Sanchez
   - Edmund Hernandez
   - Atilano Valencia
5. NOVEMBER - Mr. José Gandert, Mr. Jon Gant and Mr. Cesar Jarmillo came to the University of New Mexico from Ecuador for on campus consultation.
6. DECEMBER - Dr. Paul Petty came to the University of New Mexico for on campus consultations.
UNIVERSITY OF NEW MEXICO
COLLEGE OF EDUCATION

First Semester Program for Bolivian Participants October 1969-January 1970

8:00 am - 10:00 am (Monday-Friday) English-Ralph McLeod, Instructor
   One hour lab. (hours arranged)

10:00 am - 12:00 am (Monday, Wednesday and Friday)
   Basic Fundamentals of Education, 290; Angel
   (Basic Concepts of Planning National Education)

2:00 pm - 3:00 pm (Monday-Friday) English Laboratory
   consultants: Enrique Almagro, Benjamín AlVargz

3:00 pm - 5:00 pm (Monday-Friday)
   Special courses taken from: Dr. Holomnon
   Dr. Muñoz
   Dr. Tonigan
   Dr. Angel
   Dr. Gonzalez
   Dr. Blumenfeld
   Data Processing
## 1970 Summer Session Courses for Bolivian Participants

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<td>Differential Diagnosis I</td>
<td>512</td>
<td>001</td>
<td>Guidance Special Education</td>
<td>11:40-12:40 (Mon-Fri)</td>
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<td>474</td>
<td>887</td>
<td>Educational Foundations</td>
<td>8:00-12:00 (Mon)</td>
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<tr>
<td></td>
<td>Problem</td>
<td>351</td>
<td>881</td>
<td>Elementary Education</td>
<td>9:30-11:30 (Tues)</td>
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<td>Choque, Vicente</td>
<td>Wksp. - Programmed Learning (Jun 15-26)</td>
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<td>Psychology</td>
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</tr>
<tr>
<td>Problem</td>
<td>552</td>
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<tr>
<td>Problem</td>
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<tr>
<td>Research Methods in Education</td>
<td>501</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>Introduction to Educational Administration</td>
<td>410</td>
<td>3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Seminar in the Foundations of Education</td>
<td>581</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. Summary

The total enrollment in the College of Engineering, measured either on the basis of student head count or student credit hours, increased for the first time in four years. Our freshman enrollment increased in spite of the fact that, nationally, freshman enrollment decreased by 3.5%.

A cooperative education program was instituted during this year. The first co-oping students were on work phase during Semester II. We are hoping to obtain a grant under the Higher Education Act which will enable us to enlarge this program, thus enrolling more students who can benefit financially from the co-op program.

The college is investigating the possible need for technical courses for non-engineering students.

Although recruitment of engineering graduates was less intense than in previous years, our graduates received an average of 1.65 offers each. Starting salary offers increased approximately 5%, the smallest increase in a number of years.

Sponsored research within the college continued to be supported at essentially the same level as it had been during the previous year.

Four assistant professors and one associate pro-
fessor were appointed to fill vacancies created by resignations at the end of the previous year or before. There were no resignations or retirements during the present year.
II. Enrollment and Degrees

Table I presents enrollment figures for Semester I over a four-year period and Table II gives data on the teaching load in the college for the same period.

**TABLE I**

**ENGINEERING ENROLLMENTS - SEMESTER I**

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Freshmen(^1)</td>
<td>408</td>
<td>343</td>
<td>348</td>
<td>366</td>
</tr>
<tr>
<td>Sophomores</td>
<td>319</td>
<td>359</td>
<td>329</td>
<td>272</td>
</tr>
<tr>
<td>Juniors</td>
<td>188</td>
<td>174</td>
<td>174</td>
<td>217</td>
</tr>
<tr>
<td>Seniors</td>
<td>145</td>
<td>161</td>
<td>143</td>
<td>191</td>
</tr>
<tr>
<td>Graduate(^2)</td>
<td>325</td>
<td>340</td>
<td>353</td>
<td>332</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1385</td>
<td>1377</td>
<td>1347</td>
<td>1378</td>
</tr>
</tbody>
</table>

\(^1\) In University College
\(^2\) Includes Los Alamos and Holloman

**TABLE II**

**ANNUAL TEACHING LOAD, COLLEGE OF ENGINEERING**

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Undergraduate Student Credit Hours(^1)</th>
<th>Graduate Student Credit Hours(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966-67</td>
<td>14,476</td>
<td>2239</td>
</tr>
<tr>
<td>1967-68</td>
<td>13,993</td>
<td>2515</td>
</tr>
<tr>
<td>1968-69</td>
<td>13,837</td>
<td>2270</td>
</tr>
<tr>
<td>1969-70</td>
<td>15,706</td>
<td>2275</td>
</tr>
</tbody>
</table>

\(^1\) Courses numbered 499 and below
\(^2\) Courses numbered 500 and above
We are particularly pleased by the fact that our freshman enrollment shows a small increase. The Engineers Joint Council (E.J.C.) reports that, nationally, freshman enrollment in engineering colleges decreased by 3.5 per cent between Fall 1968 and Fall 1969. Just why we have attracted more freshman students is not entirely clear; however, during the previous year the college made every effort to improve our communications with high school seniors. We have mailed material to every senior and junior high school counselor in the city and to every high school counselor in the state. Among other things, we have provided each counselor with a list of faculty members who are willing to visit classes and talk on a number of engineering topics. Both the college office and one of the departmental offices have written to all high school seniors who expressed interest during the high school visits made by the University Student Aids Office.

A college committee, chaired by Prof. R. H. Clough, prepared two attractive booklets describing our college and its programs. These are mailed to all prospective students. We certainly plan to continue and strengthen these activities.

Some decrease in graduate enrollment was expected and, as Table I shows, we did experience a decrease of 6% in the graduate category. E.J.C. reports that, nationally, graduate enrollment of full-time engineering students decreased by 14.3%.

As shown in Table II, the undergraduate teaching load increased significantly (+13.4%) between 1968-69 and 1969-70.
During this past year the college offered several courses to non-engineering students. N.E. 230 (Applications of Nuclear Energy) was offered for the second time, and M.E. 261 (Society and Computers) for the first time. Each course enrolled 25 students. If a need for courses dealing with engineering and technology for students in other non-science areas is established, the College of Engineering will do its best to provide these courses. This would have the effect of increasing the college teaching load independent of the engineering enrollment.

Table III presents data concerning degrees conferred during the past four years. The increase in the number of B.S. degrees awarded is primarily due to the effect of lowering the graduation requirements to 130 hours in all of our departments during the past several years.

TABLE III
ENGINEERING DEGREES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S.</td>
<td>132</td>
<td>140</td>
<td>137</td>
<td>172</td>
</tr>
<tr>
<td>M.S.</td>
<td>78</td>
<td>64</td>
<td>83</td>
<td>75</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>10</td>
<td>18</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Total Graduate Degrees</td>
<td>88</td>
<td>82</td>
<td>92</td>
<td>89</td>
</tr>
<tr>
<td>Total Degrees</td>
<td>220</td>
<td>222</td>
<td>229</td>
<td>261</td>
</tr>
</tbody>
</table>
III. Undergraduate Program

The freshman course, C.E. 104 (Introduction to Engineering), which was first offered on a trial basis during Semester II, 1968-69, was taken by all beginning freshmen during this year. The course is now well established and it appears that it has been very successful in increasing student motivation. Practicing engineers have been utilized to give lectures, act as advisors to student project groups, and to judge final design.

Both college and departmental committees have been exploring the need for courses in engineering and technology for non-engineering students. We believe that this may be an educational need that we have neglected in the past. The course, N.E. 230 (Applications of Nuclear Energy), which was first introduced during 1967-68, has had enthusiastic response and is now well established. During the second semester of this year, Prof. Arthur Houghton offered M.E. 261, Society and Computers. Seventeen B.U.S. students enrolled for this course. The Chemical, Civil, and Mechanical departments are cooperating in planning additional offerings in the technical aspects of pollution problems. The Civil Engineering department is planning some additional offerings in water pollution and water use for non-engineering students.

Having received approval in September, 1969, from the administration of the University to enter the field of co-op education, first semester freshman engineers were apprised of the new program. Twenty-five students applied
for the program, and local industries and agencies were approached about co-op agreements. The following employers agreed to co-op students: The City of Albuquerque, E.G. & G., Eidal International, Gulton Industries, Kirtland Air Force Base, The New Mexico State Highway Department, and Bridgers and Paxton Engineers.

Early in February, 1970 the first students entered the first work phase of their co-op program. This group consisted of two civil, four electrical, and three mechanical engineering students. A group consisting of five civil, three electrical, and two mechanical engineering students entered the work phase during the 1970 Summer Session.

The early reports from the employers are quite encouraging. They report the students doing well to excellent in their assignments.

During the Spring of 1970 information about the co-op program was given wide circulation among the high school counselors of the state. We are somewhat fearful that we may have many more applicants than we can place in firms with whom we are currently co-oping.

A letter campaign to enlarge our small number of co-op employers has been instituted. Our timing was anything but good. The tight money market, layoffs in engineering firms, and the general uncertainty about the economic future all made those companies contacted reluctant to enlarge their co-op commitments. Some small encouragement was received from Ford Motor Company, I.B.M., Phillips Petroleum,
John Deere Company, Kennecott Copper Company, and the U.S. Army. All of these indicated a willingness to work with us at a later date when economic conditions improve.

In April of 1970 we submitted an application for Federal assistance to strengthen and expand our co-op program. This is a new Federal Program under the Higher Education Act of 1965, as amended by P.L. 90-575, and the Labor-HEW Appropriation Act, 1970 (P.L. 91-204). This request is for $32,090, partially matched by $27,097 of University money. We were informed that we would hear the decision on our application by the end of June, 1970, but to date (July 30) no word has been received. If the application is granted we plan to use the money to pay a portion of the salary of a professor to serve as Director of Engineering Co-op Education, hire a full-time coordinator and a full-time secretary. University matching monies will be spent for two engineering professors required for the additional course offerings necessitated by the students being off campus every other academic term. Some money will be spent on industry recruitment trips in the Southwest, the Midwest, and the West Coast.

The College has continued to work with the Albuquerque T-VI in planning a program in Civil Technology. As a result T-VI has announced that a group of 28 students will enter the program this fall. The College of Engineering will not be directly involved until the Summer of 1971. We expect to provide some laboratory facilities, some equipment, and
some aid in the instruction of these students during the advanced stages of the students' program.
IV. Undergraduate Student Prizes and Awards

There has been some improvement in the scholarship picture for 1970-71. The previous 12 Harry and Mabel F. Leonard Scholarships in the amount of $125 have been increased to 16 of $200 each. The New Mexico Society of Professional Engineers' Wives Scholarship has been increased from $100 to $450.

The following awards were made by the College of Engineering Student Affairs and Awards Committee, C. T. Grace, Assistant Dean, Chairman. This list does not include those prizes and awards listed in the departmental reports.

1. New Mexico Society of Professional Engineers' Wives - Rodney Loewen, Ch.E.
5. Western Electric Fund Scholarship - D. L. Parmeter, C.E.
8. George E. Breece Prize in Engineering - Travis Crouch, Ch.E.
9. Hamilton Watch Award - Outstanding Senior - Ronald Cochran, M.E.
V. Placement of Graduates

In a news release dated April 22, 1970, the Engineers Joint Council stated:

"Employers' hiring plans for engineers are substantially lower this year in many industries. Preliminary results from 430 employers who responded to an extensive survey conducted by the Engineering Manpower Commission of Engineers Joint Council in cooperation with the National Industrial Conference Board confirm a slow-down during 1970 and 1971 in the long-term growth of engineering employment, most noticeably in the aerospace, research and development, and machinery manufacturing industries. However, all industries except aerospace indicated their expectations that growth would be resumed by 1972 and would continue on through 1975."

"When the findings for each industry group are weighted according to their contribution to total engineering employment in the United States, as estimated by EMC, overall planned hires are down about one percent from 1969. Applying the EMC index figures to the U.S. Department of Labor's count of engineers employed, it appears that there will be approximately 45,000 engineering job openings in 1970; 41,000 in 1971; and an average of 63,000 per year from 1972 through 1975. The 1970 and 1971 figures are substantially lower than those previously projected by the Department of Labor. However, they are slightly greater than the number of new engineering graduates estimated by EMC to be available for employment in these two years."
Because of this, EMC believes that most of this year's new graduates will have reasonably good opportunities to find jobs."

This softening in demand was noticeable in the recruiting activities on our campus. Our graduates had fewer offers of employment than in the past. A total of 185 engineering students signed up with the UNM Placement Bureau and collectively they received 305 offers of employment. This is far fewer than the number of offers per student received in the past; however, as Table IV indicates, starting salaries were up.

**TABLE IV**

**STARTING MONTHLY SALARIES - B.S. GRADUATES**

<table>
<thead>
<tr>
<th>Department</th>
<th>Class of 1969</th>
<th>Class of 1970</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNM</td>
<td>National</td>
</tr>
<tr>
<td>Chemical</td>
<td>861</td>
<td>849</td>
</tr>
<tr>
<td>Civil</td>
<td>781</td>
<td>797</td>
</tr>
<tr>
<td>Electrical &amp; Computer Science</td>
<td>848</td>
<td>826</td>
</tr>
<tr>
<td>Mechanical</td>
<td>813</td>
<td>820</td>
</tr>
</tbody>
</table>

1Data supplied by UNM Placement Bureau

Data is available for only a small percentage of graduate degree recipients since fewer of them register with the UNM Placement Bureau. However, this limited data indicates that salaries for our M.S. recipients ranged from $950 to $1333 per month and for the Ph.D. recipients from $958 to $1616 per month.
Among our 172 B.S. recipients and our 89 graduate degree recipients we can account for all but five as having either entered regular employment, continued full-time graduate studies, or entered military service. We have no information on these five, all of whom were B.S. degree recipients.

We continue to be concerned about the fact that, for the most part, our graduates are exported to other states. Of the 305 employment offers received by our graduates, only 27, or less than 9%, were from New Mexico firms.
VI. Research

The most recent complete data available on sponsored research is for the 1968-69 year. During 1968-69 the University was reimbursed a total of $603,779.97 for research done by the Engineering College. This included $116,480.39 for reimbursement of indirect costs. The reimbursement of $603,779.97 represents a 1.9% increase over the previous year. Because of the general reduction in amount of federally funded research, we had anticipated a slight reduction rather than a small increase.

During the past year, 1969-70, the College of Engineering has had total funding for sponsored research of $953,260. The exact amount spent and hence reimbursed to the University is not known at this time, but since this total funding figure is slightly larger than for the previous year ($904,461 for 1968-69), we anticipate a slight increase in the funds reimbursed to the University.

Our greatest concern at the moment is an indication that some funding agencies may insist that the University pay for faculty research during the academic year. Since we have no budget for unsponsored research, such a move might prevent our accepting research, even though such research would purchase equipment and support students.

The New Mexico Accident Study Program, which is a joint project between the College of Engineering and the School of Medicine, has been extended and funded for $92,000 for 1970-71. This project involves Civil and Mechanical
Engineering faculty and employs both undergraduate and graduate students.

VII. Faculty

During the past year the following men joined the full-time faculty:

Richard E. Dascher - Assistant Professor in Chemical Engineering

James A. Horak - Associate Professor in Nuclear Engineering

Lowell P. Martin - Assistant Professor in Mechanical Engineering

Dale Sparks - Assistant Professor in Electrical Engineering & Computer Science

James H. Turner - Assistant Professor in Chemical Engineering

There were no resignations from the full-time faculty. Dr. Eugene M. Zwoyer, Professor of Civil Engineering, resigned as Director of the Civil Engineering Research Facility, effective June 30, 1970. He will return to full-time duties in the Civil Engineering Department, effective Semester I, 1970-71.

The following promotions in rank become effective July 1, 1970:

Youn-Chang Hsu to Assoc. Professor in Mechanical Engineering

Cyrus Omid-Varan to Assoc. Professor in Civil Engineering

Howard L. Schreyer to Assoc. Professor in Mechanical Engineering
VIII. Physical Plant and Laboratories

During the past year the faculty and staff have spent a great amount of time and effort in making the move into the Farris Engineering Center, which was completed the previous year. Taking down, moving, and setting up laboratory equipment in the new building has consumed a great deal of our technician's time. Setting up and checking out new equipment has also been time consuming. Progress has been good. The nuclear laboratory, while still not completed, has been in continuous student use during the year. The two-inch shock tube has been installed in the shock tube laboratory and we are ready to mount the six-inch tube. Hopefully, it will be delivered by the manufacturer before September, 1970. The undergraduate fluid mechanics laboratory has been readied for student use.

Moving and installation of all major equipment items should be completed during the coming year. During the coming year several departments will be engaged in reworking laboratory space in their original buildings.
IX. College Activities

The annual Engineering Open House was held on February 27, 1970. With the added attraction of the second public showing of the Moon Rocks, loaned by the Geology Department, the crowd touring the student exhibits numbered well over 2,000. Besides the local junior and senior high school groups visiting Open House, 225 students from Belen, Bernalillo, Moriarity, Los Alamos and St. Michaels High Schools were bussed in for the event. Assistance in paying for the busses was provided by the Council of Technical and Scientific Societies of Albuquerque. One high school counselor and three engineers from the local chapters of national engineering societies selected the winners of the departmental exhibits. The New Mexico Society of Professional Engineers, Albuquerque Chapter, donated $100 to purchase trophies for the sweepstake winners and for a new traveling trophy for the outstanding showing by a department. The old trophy was retired last year after being won three times by mechanical engineering students. Mechanical Engineering won the first leg on the new trophy for their 1970 showing.

The College held a reception for our graduates and their guests on June 5. Attendance was smaller than in the previous year, but it was still very worthwhile.

The College co-sponsored the following major conferences which were held on campus during the past year:

Western Applied Mechanics Conference, co-sponsored by the New Mexico Section A.S.M.E. and Sandia Corporation, August 25-27, 1969.

"Industrial Applications of Nuclear Explosives," a short course arranged by the State Technical Services Office and the Department of Nuclear Engineering, June 1-3, 1970.

Seventh Annual Paving Conference, co-sponsored by the New Mexico State Highway Department, the Portland Cement Association, and the Asphalt Institute, December 11-12, 1969.

"Plastic Design of Braced Multistory Steel Frames," a program for practicing structural engineers and architects of New Mexico, co-sponsored by the New Mexico Steel Advisory Committee, March 13-14, 1970.

"New Developments in Concrete Construction," a program for practicing structural engineers and architects of New Mexico, co-sponsored by the Dept. of Architecture, U.N.M., the Portland Cement Association, the Albuquerque Gravel Products Company, the Hydro Cement Corporation, Prestressed Concrete Products, Inc., and the Springer Corporation, April 10, 1970.

During this past year three university buildings were named in honor of emeritus engineering professors. The University's Central Heating and Refrigeration Plant was named the Ford Utility Center, in honor of Professor Emeritus A. D. Ford. Professor Ford, a member of our Mechanical Engineering faculty from 1936 until 1960 and the chairman from 1942 to 1952, was honored at a program arranged by the Physical Plant Department.

The Civil Engineering Building was named Wagner Hall, in honor of Professor Emeritus William C. Wagner. Professor Wagner, a member of our Civil Engineering faculty from 1929 until 1962 and the chairman from 1943 until 1959, was honored at a program held during our annual Homecoming Open House.
The new Engineering Center was named Farris Engineering Center, in honor of Professor Emeritus Marshall E. Farris. Professor Farris served the College of Engineering as a professor from 1931 until 1963, and as Dean from 1931 until 1960. Dean Emeritus Farris was honored at the building dedication program held on April 25, 1970.
I. GENERAL DEPARTMENTAL INFORMATION

A. ACHIEVEMENTS

1. Faculty.

The 1969-70 academic year brought some important changes to the Chemical Engineering Department. Upon the resignation of Dr. E. J. Nowak in June of 1969, action was taken for the employment of two new professors to complete a faculty of five, the minimum number of faculty members necessary to be seriously considered for accreditation by the American Institute of Chemical Engineers through ECPD. These two positions were filled by Dr. R. E. Dascher and Dr. J. H. Turner who joined the faculty at the beginning of the Fall Semester of this academic year.

Dr. Richard E. Dascher received his Ph D from the University of Houston.

Dr. James H. Turner received his Ph D from Clemson University. Both men have had considerable industrial experience.

Dr. George H. Quentin and Dr. Kenneth E. Cox continue with the Department. Dr. K. E. Cox became an Associate Professor as of the end of the 1968-69 academic year. He spent the summer months of June 23 to August 15th at Colorado State University attending an NSF sponsored summer institute in Geophysical Fluid Mechanics. This added experience complemented the material which he taught in ChE 522 "Advanced Transport Phenomena" for graduate students.
Dr. K. E. Cox continued his interest in the Engineering Material Science Program and acted as coordinator of the Program at the Los Alamos Scientific Laboratory Center and on campus. During Semester II, he taught ChE 591 "Theoretical Physical Metallurgy" at the LASL Graduate Center. This course has usually been taught by one of the qualified adjunct professors at Los Alamos.

Dr. George H. Quentin attended the meeting for Digital Computer Simulation Applications in San Francisco during June, 1969. A number of chemical engineering applications were presented, including educational experience, some of which he has incorporated into his class work.

Dr. George H. Quentin, in 1969, was appointed Project Director of the NSF grant of $14,900 and a corresponding grant by the University previously obtained by Dr. D. D. Phillips in 1968 for undergraduate instructional equipment. Dr. Quentin has revised the equipment to scale it down in size from the original specifications. These changes resulted in a dollar savings which were applied to the purchase of additional equipment. This laboratory equipment will be located in one of the laboratories in the Farris Engineering Center.

Dr. George H. Quentin taught a section of CE 104 "Introduction of Engineering" to the freshmen, Semester I and II.

Dr. R. E. Dascher has added a new emphasis to Process Calculations (ChE 317). He is continuing to teach Process Calculations, but with the use of the computer as a tool. The student is taught new numerical techniques, showing how chemical engineering problems may be solved more quickly and more accurately. ChE 317 "Process Calculations" taught in the first semester of the junior year is the
Department's first course in the extensive use of computers. The techniques developed are used and implemented in our following professional courses.

Through the combined efforts of Dr. Dascher and Dr. Turner, new experiments have been designed and setup in our Unit Operations Laboratory (ChE 414L & 415L).

The Chemical Engineering Process Laboratories (ChE 481L & 482L) have been expanded to include actual problems in the general area of Air and Water Pollution. Dr. Dascher and Dr. Turner have worked with personnel from chemical companies in the Southwest to enhance the contents and scope of these courses.

We consider these courses to be two of the most important of the Chemical Engineering disciplines in that they give the student an opportunity to apply the knowledge they have learned in their previous courses to solve an actual engineering type problem.

Active participation by the members of the faculty in career days, Science Fairs and the American Chemical Society, has brought the faculty in closer contact with the young men and women of the junior and senior high school age who will be University students of tomorrow.

The Department has maintained its close contact with the school counselors and chemistry instructors in the Albuquerque schools through the program of sending them monthly literature on vocations. Through the New Mexico Section of the American Chemical Society, other schools in New Mexico will be added to the list to receive this information. A copy of "Chemical and Engineering News" devoted to career opportunities in Chemical Engineering,
Chemistry and Chemical Technology was sent to high school counselors throughout the state. Letters congratulating students and pointing out the opportunities available at UNM have been sent to members of graduating senior classes in New Mexico. The names of the prospective students were obtained from the list supplied by the UNM Student Aids Division.

2. Students

"Chemical Engineers are Professionals - Professionals Don't Strike", read the signs posted by the Chemical Engineering students at the entrance to the Chemical Engineering Building during the campus turmoil of May 6, 7 and 8.

The Chemical Engineering Department was one of the few divisions in the University in which no student exercised his privilege to accept the options offered to them for the remainder of the semester.

During the period, July 1, 1969 - June 30, 1970, twenty seven students received the Bachelor of Science Degree. Twenty students were awarded the B.S. Degree during the June 1970 Commencement. Starting salaries were again excellent for our graduates. The average accepted offer being $943, compared to $868 for June, 1969. Approximately half of the graduates accepted production, development and processing positions with private industrial firms at locations in the Southwest.

The Department's graduate enrollment totaled fourteen students.

The PhD. Degree in Chemical Engineering was awarded to two:

Mr. John In Joung: Dissertation Title, "A Study of the Reduction of Nickel Oxide Single Crystal in a High Vacuum System." Mr. Joung will continue his education as a post-doctorate at Iowa State University, Ames, Iowa.
Mr. Gim Tan: Dissertation Title, "A Study of the Reduction of Nickel Oxide by Hydrogen in a Vacuum Microbalance System." Mr. Tan will be employed by the Universal Oil Products Company, Chicago, Illinois.

The Master of Science Degree in the Engineering Science of Materials Science was awarded to two:

Mr. George Price: Plan II, Los Alamos Scientific Laboratory

Mr. Wm. C. Turner: Plan I - Thesis Title, "Fabrication of the Peewee Nozzle." - Los Alamos Scientific Laboratory.

The returning graduate students are continuing their work towards the M. S. and Ph D, in Chemical Engineering or the Engineering Science of Materials. Four of the returning students have been awarded Graduate Assistantships.

Sixteen of the 21 Juniors will be working in industry this summer in chemical engineering positions which will reinforce their theoretical studies at the University. Eleven Sophomores have also been placed in the chemical engineering industry. This arrangement for summer employment has helped materially in overcoming some of the advantages of the Cooperative Program which the Department is seriously considering.

To give the young chemical engineer an overall viewpoint of some of the industries in which he will apply his theoretical knowledge, plant trips are an important part of the curriculum. Students accompanied by members of the Chemical Engineering faculty visited the Grants-Gallup area and had the opportunity to observe the processes involved in the extraction of metallic oxides, refining of petroleum and other commodities of commerce.
Several of the undergraduates have been honored by election to Blue Key and Sigma Tau.

Other important awards are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
<th>Scholarship</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bryan Bartlett</td>
<td>Universal Oil Products Scholarship</td>
<td></td>
<td>$300</td>
</tr>
<tr>
<td>William Buckalew</td>
<td>Universal Oil Products Scholarship</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>Travis Crouch</td>
<td>Geo. E. Breece Prize</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert T. Duffy</td>
<td>Harry L. Doughty Memorial Prize</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melvin B. Fromm</td>
<td>Harry &amp; Mabel F. Leonard Scholarship</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Universal Oil Products Scholarship</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>James V. Hemphill</td>
<td>Humble Oil Refining Scholarship</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>ChE Dept. Scholarship</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Kent R. Hoffman</td>
<td>Stauffer Chemical Comp. Scholarship</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>R. A. Krall</td>
<td>Eric H. Wang Award</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rodney Loewen</td>
<td>NM Society of Professional Engr. Wives -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John A. Lopez</td>
<td>Stauffer Chemical Co. Scholarship</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Richard Shube</td>
<td>Universal Oil Products Scholarship</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>M. D. Wagner</td>
<td>Harry &amp; Mable F. Leonard Scholarship - 2 semesters</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>William Whiteman</td>
<td>Shell Companies Scholarship</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>F. J. Williams</td>
<td>Harry &amp; Mabel F. Leonard Sch.</td>
<td></td>
<td>200</td>
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<tr>
<td></td>
<td>Humble Oil &amp; Refinery Sch</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>ChE Dept. Scholarship</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Steven Winton</td>
<td>Cabot Corp. Scholarship</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>ChE Dept. Scholarship</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Stanley Zygmunt</td>
<td>Universal Oil Products Scholarship</td>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>
Many of the student functions in the Chemical Engineering Department are organized and coordinated by the University of New Mexico student chapter of the American Institute of Chemical Engineers.

The officers for the 1970-71 academic year are:

- **President**: Charles Wood
- **Vice President**: Jay Hemphill
- **Secretary**: None
- **Treasurer**: Steve Winton
- **Engineers Joint Council Represent.**
- **Alternate to EJC**
- **Faculty Advisor**: Dr. George H. Quentin

The trust fund established by the Chemical Engineering Department is now over $12,000. The interest from this investment is used to encourage scholarship and performance among undergraduates in the chemical engineering curriculum.

Department interest in its graduates, as well as its undergraduates, has been maintained throughout the years by the issue of a Christmas newsletter. This year's letter, Vol. XX, was mailed to department alumni in December, 1969. It gave the addresses, activities and achievements of the more than 300 members who have received their training in the department since the first graduating class of 1948.

The Engineering Open House held in February during Engineer's Week attracted hundreds of people and was a great success. The Department received the following awards:

1. **1st Place**: John Lopez for his exhibit on absorption of carbon dioxide in soft drinks.
2. **2nd Place**: Stanley Zygmunt for his exhibit on electrostatic precipitation of pollutants in an air stream.

Undergraduate activities of a more social nature which have been a tradition through the years are:

1. The annual Spaghetti Dinner given at Christmas time and prepared and served in the Department. Attendance last December more than 90 people.
2. The annual Spring Steak Fry and Picnic, with more than 75 attending was held at Pine Flats Picnic Area in May.

3. The Senior Dinner, given annually by the Department Chairman to the graduating senior class, held this year at the La Hacienda in May.

3. Curriculum

Course content and the curriculum of the Department is constantly under review. At the annual meeting of the American Institute of Chemical Engineers, the Chairman or representative of the various chemical engineering departments of the schools in the United States and Canada have a special one day session to discuss, recommend and compare trends and curricula in modern chemical engineering education.

Modifications of course content have been described under "Faculty".

In one of the most rapid growing areas in which the public has become very conscious is air and water pollution. Undergraduate seminars on air and water pollution have been held in the Department for the last several years and more emphasis was placed on this area during the past year. Thus, our Chemical Engineers who have responsibility for the processing of raw materials into a more useful form, in which pollution becomes a factor are more cognizant of the problems.

Within the next academic year the Department will initiate a technical air pollution course for the Senior year and have under consideration a course in water pollution.

With the members of the Civil and Mechanical Engineering Departments, we would like to incorporate and start a non-technical course in air and water pollution for students outside the Engineering College. The two fold purpose of which is to better understand the
problems of pollution, what can and what is being done, and to better understand the "Engineer" in the future.

Plans for the five year Co-op Program, which the Engineering College established last year, has been worked over in the Department. Through the efforts of Dr. J. H. Turner, the schedule calls for the two divisions of students to alternate their time between learning on campus and working at an industrial location. This plan allows the co-op student to earn a significant portion of his University expenses as well as giving him important and varied work experience prior to receiving his Bachelor's Degree. In our survey of various chemical companies, industry now seems to favor this plan more extensively than in the past. We may have to reevaluate our practice of placing the Juniors and Sophomores for summer work in which we have been so successful in the past. There is a disadvantage in the Co-op Program, in that, it takes an extra year to complete the requirements for the Degree with the corresponding loss in monetary return.

4. Research

Dr. Kenneth E. Cox - In progress are the following doctoral research projects in the Engineering Science of Materials Program:

"Nucleation Kinetics of Alumina and Other Higher Temperature Oxides with S. R. Skaggs
In Chemical Engineering: "Condensation on Horizontal Ellipsoidal Surfaces" with S. Chandra.

Dr. George H. Quentin - In progress is the doctoral research Project:

"A Study of Continuous Crystallizer Dynamics" with K. C. Parthasarathy.
Presently, we are actively pursuing the initiation of a comprehensive research program in the area of air and water pollution. This will initially be in the area of sewage treatment in lagoons, fly ash collection and disposal, and environmental pollutant collection and testing. We will be seeking grants and aid through such channels as National Science Foundation, the State of New Mexico, the Federal Water Pollution Control Division and private industry.

Dr. R. E. Dascher and Dr. J. H. Turner have submitted research proposals to the Bureau of Engineering Research and ISRAD.

Drs. R. E. Dascher and J. H. Turner - In progress:
"Increased Efficiency in the Use of Sewage Lagoons."
"Study and Use of Microorganisms and Microbial Stimulants to Alleviate Forms of Water Pollution."

Dr. J. H. Turner - In progress: "Carbon Particle Dispersions"

Dr. T. T. Castonguay - In Progress:
"Measurement of Heat Transfer Characteristics of Carbon Black Laden Reactor Gases"
"Wetting of Carbon Filaments Type VYB by Organic Liquids"
"Investigation of Energy Losses in a High Energy Wet Scrubber."

Our undergraduate program involves supervised research.
Undergraduate students have been actively engaged throughout the year in the following departmental projects:

1. Stabilization of adobe by cement asphalt and fibers.
3. Recovery of sulfur from flue gases.
4. Beneficiation of molybdenum ores.

It is hoped that some of these projects will eventually lead to larger projects financed by outside funds resulting in increased economic benefit to the State of New Mexico.
5. Facilities

To remove the hazards associated with the use of high pressure equipment in the main building, the Building & Grounds Department of the University constructed a small shelter on the roof of the Chemical Engineering Building to house this equipment.

The Shell Research Laboratories in Emeryville, California donated several thousand dollars of laboratory equipment to the Department. It was necessary for Dr. Dascher and Dr. Castonguay to travel to Emeryville and truck the equipment to Albuquerque.

There are no other additions or deletions to the Chemical Engineering complex.

B. PLANS AND RECOMMENDATIONS

Some of the recommendations of former years have been achieved. Many of the Department's plans and recommendations have been stated in the body of the report; but to bring them more clearly into focus for our own perusal, we may state them as follows:

1. To continue efforts by the faculty to obtain outside contract research funds in fields commensurate with the individual and department interest, in both the graduate and undergraduate areas.

2. To exploit to a greater degree than in the past, New Mexico's resources in such a way as to help in the industrial development of the state. In some ways we may retard the "brain drain" to other states.

3. To exert a greater effort to increase the graduate enrollment in the department with our present staff.

4. To obtain suitable floor space for the Department's new process dynamics and control laboratory.
5. To continue to explore and obtain from alumni and industrial concerns, funds for scholarships.

6. To continue to update and review graduate and undergraduate offerings in the Chemical Engineering curriculum.

7. To maintain excellence in teaching, which is the primary purpose of our existence, so that our graduates will receive in the future, as they have in the past, acceptance in any graduate school or industrial concern in the country.

8. To continue and develop the image of the Department, the College and the University to the public and New Mexico's schools.

9. To work closely with the Fission Products Inhalation Laboratories of the Lovelace Foundation in an effort to develop one or more cooperative research ventures.

10. To work closely with the Los Alamos Scientific Laboratory, and the American Chemical Society for a symposium on cryogenics.

11. To establish with interested personnel at the Sandia Corporation and Los Alamos Scientific Laboratory an NSF Summer Institute for 1971 involving vacuum technology.

12. To continue efforts at Los Alamos Scientific Laboratory in the Engineering Science of Materials and expand the program on the UNM campus.

13. To continue cooperative research studies with the Cabot Corporation.

C. APPOINTMENTS TO STAFF

Dr. Richard E. Dascher, Assistant Professor, starting date, September 1, 1969.

Dr. James H. Turner, Assistant Professor, starting date, September 12, 1969.
II. COMPOSITE OF INFORMATION REQUESTED ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS.

A. Advanced Study: (None)

B. Sabbaticals, leaves of absence, etc.

K. E. Cox - Visits to Departments of Civil Engineering at Colorado State University, Chemical Engineering at Colorado School of Mines. Summer, 1969.

J. H. Turner - Visited Florida Technological University for investigation of their pollution and environmental courses.

C. New Scholastic Honors, Fellowships

T. T. Castonguay - Aquinas Newman Center Faculty Appreciation Award, June, 1970

K. E. Cox - NSF, Summer Institute in Geophysical Fluid Mechanics, Colorado State University, Participant, 23 June to 15 August, 1969.

D. Publications (None)

E. Other Research Projects or Creative Work...

T. T. Castonguay - In Progress:

3. "Wetting of Carbon Filaments Type VYB by Organic Liquids".

K. E. Cox - UNM Research Allocations Committee, $800 - 1 year.

1. "Condensation on Horizontal Elliptical Surfaces"

R. E. Dascher - Research proposal submitted (with J. H. Turner) to Bureau of Engr. Research, Subject:

1. "Increased Efficiency in Use of Sewage Lagoons"
2. "Study and Use of Microorganisms and 'Microbial' Stimulants to Alleviate Forms of Water Pollution",

G. H. Quentin - Project Director of NSF Grant for Construction of Process Dynamics & Control Laboratory Equip. (Grant No. GY-5043 Obtained by Dr. D. D. Phillips, 1967-68).
F. Other Research Projects or Creative Work (Cont'd)

G. H. Quentin (Cont'd) Initiated unsponsored research project to study dynamics and control of continuous crystallizers. Supervised the completion of thesis research of PhD. candidate, Mr. Jong In Joung, studying the reduction of nickel oxide under high vacuum conditions.

J. H. Turner - Research proposal submitted (with R. E. Dascher) to Bureau of Engineering Research and ISRAD, Subject:
1. "Increased Efficiency in Use of Sewage Lagoons"
2. "Study and Use of Microorganisms and Microbial Stimulants to Alleviate Various Forms of Water Pollution".

G. Activities in Learned and Professional Societies

T. T. Castonguay - Member of National Research Committee of American Institute of Chemical Engineers; Institute of Chemical Engineers; Active in local and national Chapter of Sigma XI; American Chemical Society; American Institute of Chemical Engineers; ASEE; National and State Society of Professional Engineers; 62nd Annual Meeting of AIChE, Washington, DC (11-15-69); Wright Patterson Air Force Base, Dayton, Ohio (11-20-69); Joint Automatic Control Conference, Univ. of Colo., Boulder, Colo.(8-4-69).

K. E. Cox - Member of American Institute of Chemical Engineers; American Chemical Society; Sigma XI; Central New Mexico Section of American Chemical Society - Nominations and Elections Comm.; SX - Nominating Committee.

R. E. Dascher - Attend local ACS meetings; Member - A.I.Ch.E. also division member in Food and Bio-Engineering section.

G. H. Quentin - Attended 1st meeting on Continuous System Simulation Languages, San Francisco - June, 1969.


H. Other Professional Activities

Guest - P.G. Chemical Co., Corpus Christi, April, 1970
Field Trip - Grants-Ciniza area, New Mexico, May, 1970
Visit to Shell Research Lab., Emeryville Calif., March, 1970

H. Other Professional Activities (Con't.)

K. E. Cox (Con't.) - Engineering Consultant - E.G. & G., Inc.

R. E. Dascher - Visit to Shell Research Laboratories, Emeryville, California (3-24-70) with Dr. Castonguay to pick up and deliver to UNM, several thousand dollars worth of laboratory equipment.


I. Non-teaching University Service

T. T. Castonguay - College: Engineering Administration Committee, Publicity Committee, Freshmen Advisory Committee, All Departmental Advisor (Seniors), Advisor - Material Science Program (LASL). University: Chairman of Summer Session.

K. E. Cox - Engineering College: Graduate, Library and Freshmen committees, ad hoc P.E. Committee. Department: Graduate Advisor.


G. H. Quentin - Faculty Advisor for Student Chapter A.I.Ch.E. College: Computer Committee, Student Affairs Committee, Engr. Scholarship Committee, Committee on Committees (Ad Hoc).

J. H. Turner - Faculty Advisor for M.S. student working on carbon particle dispersions. Member of the Engr. College Co-op and Scheduling Committees. Faculty Advisor to S.R.A. Work on Engineer's Day.

J. Public Service


K. E. Cox - Member Y - Indian Guides Assoc. (Aid at UNM Arena - Basketball games, etc.)

R. E. Dascher - Sunday School Teacher - Eleventh graders.

G. H. Quentin - State Science Fair (Socorro) April 1970 - Judge
J. Public Service (Con't.)

J. H. Turner - Science Fair Judge. Did work on Environmental Week Research Committee. Wrote article for publication in Lobo and/or local newspapers during Environmental Week.

K. Personal Information

K. E. Cox - Remarried to the former Patricia R. Howard, Dec. 19, 1969

I. GENERAL DEPARTMENTAL INFORMATION

A. Student Enrollment and Degrees Granted 1969-70

Enrollments

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<tr>
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<tr>
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<td>33</td>
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<tr>
<td>Juniors</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Seniors</td>
<td>26</td>
<td>28</td>
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<tr>
<td>Graduate Students</td>
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<tr>
<td>M.S.</td>
<td>28</td>
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<td>Ph. D.</td>
<td>25</td>
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<td></td>
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Degrees Granted

B. S.

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M. S.

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<tr>
<td>February 1970</td>
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<tr>
<td>June 1970</td>
<td>6</td>
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Ph. D.

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<td>February 1970</td>
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<td>June 1970</td>
<td>1</td>
<td>3</td>
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<tr>
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<td>3</td>
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</tbody>
</table>
The undergraduate enrollment has been nearly constant for a number of years. However, based on the enrollment in our Sophomore Civil Engineering Courses during this year, it is expected that our total enrollment will increase next year. All graduating students were placed in positions by the end of the year with no difficulty whatsoever. Of the total, five are continuing their studies in a Graduate School. One student accepted an offer of a Fellowship from the Massachusetts Institute of Technology for the Fall Semester and is working in an industrial position during the summer.

The total graduate enrollment decreased slightly this year but a stable future for our program is expected. Of the ten M.S. degrees granted this year, eight of the graduates have accepted excellent positions in industry and two have decided to continue their studies toward the Ph.D. Of these two, one is continuing his studies at the University of New Mexico and the other has transferred to the University of Illinois.

Of the three students who completed their Ph.D., one has accepted a position as an Associate Professor at the California State Polytechnic College at San Luis Obispo, one has accepted a position as an Associate Professor at the University of Arizona, and one has returned
to India to teach at the College of Engineering in Poona.

B. **Significant Achievements during the Academic Year 1969-70**

1. **Cooperative Education Program**

This year for the first time, the Department has a working cooperative education program. This is a five year curriculum which combines classroom study alternated with a planned program of related engineering work experience in industry. The program gives the student an opportunity to earn a major portion of his college expenses while studying engineering. In addition, he will be obtaining practical engineering experience through productive employment. We currently have students in the program who are obtaining their work experience with the Public Works Department of the City of Albuquerque, and with the New Mexico State Highway Department. In some cases, the Highway Department accepts students in the work phase of the program during the summer immediately after graduation from high school. We have a number of students starting their cooperative program on this basis this summer; these students will start their first study phase during the Fall Semester, 1970.
2. **Curriculum Changes**

Some changes have been introduced into the program of study for freshman engineering students. The new course CE 104 "Introduction to Engineering" has been taught for three semesters and appears to be attaining its objective of motivating our students by introducing them to elementary engineering design while developing their graphical, analytical, and communicative skills. During the second semester the students are given a greater freedom of choice in their course of study. English 102 is an acceptable course but is no longer a firm requirement. It is now possible to replace it with an acceptable course in the humanities or social science areas. In addition, Chemistry 102, as a firm requirement, has been replaced with a science elective. The student may now choose a course from the areas of Chemistry, Biology, Geology, Physics, or Astronomy. With these changes, a freshman engineering student now has some flexibility in his first year of study.

The undergraduate option in construction is attracting a number of students and it seems to be fulfilling a definite need. The Construction industry in New Mexico is reacting favorably towards this program. The Building
Branch of the Associated General Contractors of New Mexico has added two additional scholarships which now makes four scholarships available for students enrolled in this option.

Except for the usual updating of courses, no major changes were made in the departmental courses required in the Civil Engineering curriculum. Two new courses were added: CE 415 "Intermediate Structural Analysis" will be used as an undergraduate technical elective and a beginning structural analysis course for graduate students with limited background in structural analysis. CE 623 "Random Processes in Mechanics" is a new graduate course originating from the research activity of Dr. Yao.

The Department of Civil Engineering is continuing to teach the courses in structural engineering for the students majoring in Architecture. Their program is going through a transition at this time and we are attempting to satisfy their changing requirements.

3. Dedication of Wagner Hall

On November 15, 1969, the Civil Engineering building was officially named Wagner Hall in honor of Professor William B. Wagner. A number of speakers recounted the many years of able and devoted service to the University of New Mexico by Professor Wagner.
4. **Conferences**

The Seventh Annual Paving Conference held at the University of New Mexico on December 11-12, 1969 was presented by the Department of Civil Engineering in association with the New Mexico Highway Department, Portland Cement Association, and the Asphalt Institute. A total of 210 persons from eleven states registered for the Conference of which 25 were University of New Mexico students and 29 were on the program. This is an increase of about 8 percent attendance over the previous Conference.

The Department of Civil Engineering in cooperation with the New Mexico Steel Advisory Committee and the American Institute of Steel Construction presented a program on "Plastic Design of Braced Multistory Steel Frames" on March 13-14, 1970 to practicing structural engineers and architects of New Mexico, and to interested students at UNM.

On April 10, 1970, the Department of Civil Engineering, the Department of Architecture, and the Portland Cement Association in cooperation with Albuquerque Gravel Products Co., Hydro Conduit Corp., Prestressed Concrete Products Inc., and Springer Corporation presented a conference on "New Developments in Concrete Construction"
to the practicing structural engineers and architects of New Mexico, and to interested students at UNM.

5. **Student Activity**

The student chapter of the American Society of Civil Engineers held monthly meetings with guest speakers. The officers for the year were: Gene Arnold, President; Wallace Stephenson, Vice President; William Kraus, Secretary, and Roni Booth, Treasurer. Chapter members organized and constructed exhibits for the annual Engineering Open House which was held in February.

The Chapter members made arrangements for and participated in the Annual Meeting of the Rio Grande Conference of Student Chapters of the American Society of Civil Engineers which was held in Albuquerque in February, 1970. Mr. Thomas Paez, from our Chapter, presented a paper in the annual student paper contest held at this meeting and was awarded first place in the competition.

6. **Student Achievements**

Sigma Tau, National Engineering Honorary, elected the following civil engineering students to membership: Michael Courtney, Alex Michalopoulos, Thomas Paez, Maurice Riggleman, Michael Roussel, and Richard Whittier.

Chi Epsilon, National Civil Engineering Honorary
elected the following to membership: Thomas Couture, Richard Crammond, Elvidio Diniz, John King, Alex Michalopoulo, Thomas Paez, David Parmeter, Mekuria Tafesse, Jhy-pyng Tang, Maharaj K. Wanchoo, Michael Whelan, Richard Whittier, Harold Williams and Paul Wirsching. The officers for the year were: Martin Barker, President; Michael Whelan Secretary; and Gene Arnold Treasurer.

Mr. Paul H. Wirsching, a graduate student, was elected as a full member to Sigma Xi. Mr. Thomas Paez, a senior in Civil Engineering, was elected an Associate Member of Sigma Xi, national research honorary. In addition he received the first UNM Sigma Xi senior award (worth $100) during the initiation banquet on May 15, 1970.

Mr. Gene Arnold was awarded the "Outstanding Civil Engineering Senior Award" by the New Mexico Section of the American Society of Civil Engineers.

The following scholarships were awarded to Civil Engineering undergraduate students during the 1969-70 year: The Rust Tractor Scholarship to Ronald M. Nelson; The Harry and Mabel F. Leonard Scholarships to Fred W. Rummell, Michael L. Whelan, and John S. King; scholarships of the Building Branch of the Associated General Contractors of New Mexico to Michael C. Cortney and Robert S. Branham;
Western Electric Fund Supplementary Scholarship to Wallace G. Stephenson; Phillip D. Miller Scholarship to Thomas Paez; the George A. Rutherford Scholarship to Gene Arnold; and the Civil Engineering Alumni Scholarship to Raymond Mondragon.

The following Fellowships were awarded to graduate students in Civil Engineering: NDEA Title IV to Larry A. Walker; NASA supplementary fund to James Kanipe; UNM to Jhy-pyng Tang and Gurbux R. Mehdiratta; NSF Science Faculty Fellow to Paul H. Wirsching.

7. Rental Funds

The Department has an excellent inventory of surveying equipment which we make available to practicing engineers on a rental basis. The rental receipts are deposited in a Departmental account 290-006-000 and these funds are used to update the equipment and for general improvement of the Departmental facilities. The account had a deficit of $1,160.12 on May 1, 1969; as of May 31, 1970, has a credit of $2,202.09. Professor M.C. May is in charge of this account.

The Department collected $25 from the rental of drawing equipment which was deposited in account 290-021-000. There were no disbursements from the account which on May 31, 1970, had a deficit of $277.12. Professor W. R. Gafford is in charge of this account.
<table>
<thead>
<tr>
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<th>Title</th>
<th>Time</th>
<th>Amount</th>
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<tr>
<td>Sandia</td>
<td>Finite Deflection Elasto-Plastic Analysis of Rectangular Plates</td>
<td>7/69-7/70</td>
<td>14,000</td>
<td>G. W. May</td>
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<tr>
<td>AISI</td>
<td>Fatigue Properties of Cold-Formed Steel Structural Members</td>
<td>2/69-9/70</td>
<td>15,000</td>
<td>C. L. Hulsbos</td>
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<tr>
<td>National</td>
<td>New Mexico Accident Investigation</td>
<td>1 Year</td>
<td>100,000</td>
<td>M. C. May</td>
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<tr>
<td>Highway</td>
<td></td>
<td></td>
<td></td>
<td>(Joint with Medical School)</td>
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<tr>
<td>AFWL</td>
<td>Disposal of Plating Wastes</td>
<td>1 Year</td>
<td>CERF</td>
<td>C. C. Patterson</td>
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<tr>
<td>AFWL</td>
<td>Director of Eric H. Wang Civil Engineering Research Facility</td>
<td></td>
<td></td>
<td>E. Zwoyer</td>
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<tr>
<td>AFWL</td>
<td>Areas of Wave Propagation, Dynamic Properties of Earth Materials, Soil Structure Interaction, Soil Stabilization, and Simulation of Air Induced Ground Shock</td>
<td>Conducted at CERF</td>
<td></td>
<td>G. Triandafilidis</td>
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<tr>
<td>Sponsor</td>
<td>Title</td>
<td>Time</td>
<td>Amount</td>
<td>Director</td>
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<tr>
<td>NSF Institutional Grant Funds</td>
<td>Laboratory Equipment—Instron Testing Machine</td>
<td></td>
<td>13,000</td>
<td>G. W. May (joint with B. Albrecht and N. Horak)</td>
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<tr>
<td>NSF Institutional Grant Funds</td>
<td>Laboratory Equipment—Water Pollution Control Laboratory</td>
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<td>C. C. Patterson</td>
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9. **Proposals submitted by the Department 1969-70 (Pending)**

<table>
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<tr>
<th>Sponsor</th>
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<th>Time</th>
<th>Amount</th>
<th>Director</th>
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<tr>
<td>NSF</td>
<td>Reliability and Design of Earthquake Resistant Structures</td>
<td>2 years</td>
<td>$132,753</td>
<td>J. T. P. Yao</td>
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<tr>
<td>Advanced Research Projects Agency</td>
<td>Dynamic Rock Response and Constitutive Relationships of Jointed Rock Media</td>
<td>3 years</td>
<td>2,120,000</td>
<td>G. Triandafilidis</td>
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<td>Research Allocations Committee</td>
<td>Hydraulics Research Flume</td>
<td>1 year</td>
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<td>J. E. Martinez</td>
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<td>Sandia Labs</td>
<td>Dynamic Analysis of Ribbed Plates</td>
<td>1 year</td>
<td>16,023</td>
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<tr>
<td>NSF</td>
<td>Dynamic Analysis of Highly Redundant Structures</td>
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<td>34,365</td>
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<tr>
<td>AFWL</td>
<td>USAF Mobility Program Wastewater Treatment System</td>
<td>1 year</td>
<td>27,006</td>
<td>C. C. Patterson</td>
</tr>
<tr>
<td>NSF</td>
<td>Short Course on Structural Fatigue</td>
<td>2 weeks</td>
<td>18,790</td>
<td>C. L. Hulsbos</td>
</tr>
<tr>
<td>FWPCA</td>
<td>Graduate development Program on Water Pollution Control</td>
<td>In Preparation</td>
<td></td>
<td>C. C. Patterson</td>
</tr>
<tr>
<td>FWPCA</td>
<td>Development of a Program of Undergraduate Design Courses on Water Pollution Control</td>
<td>In Preparation</td>
<td></td>
<td>C. C. Patterson</td>
</tr>
</tbody>
</table>
10. **Proposals submitted by the Department 1969-70 (Request not granted)**

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Title</th>
<th>Time</th>
<th>Amount</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval Ship Systems Command</td>
<td>Ship Structure Reliability Analysis</td>
<td>1 year</td>
<td>$64,100</td>
<td>J. T. P. Yao</td>
</tr>
<tr>
<td>NSF</td>
<td>Engineering Research Equipment for Analog-Simulation Laboratory</td>
<td></td>
<td>25,000</td>
<td>J. T. P. Yao</td>
</tr>
<tr>
<td>New Mexico Water Resources Research Institute</td>
<td>An Analysis of the Impact of Albuquerque Wastewater Effluent on the Rio Grande</td>
<td></td>
<td></td>
<td>C. C. Patterson</td>
</tr>
</tbody>
</table>
C. Plans and Recommendations

The Cooperative Education Program has gotten off to a good start in the Department of Civil Engineering. However, much needs to be done during the next year in broadening the base of industries which will provide opportunities for the work phase of the program. The program will undoubtedly enable many students to obtain a college education who would otherwise not be able to do so because of financial difficulties. In addition, the program will provide graduates with a superior education.

There is a demand from industry for technicians in various areas related to Civil Engineering. We are developing a cooperative program with Albuquerque Technical-Vocational Institute in the areas of surveying and materials testing. Much of the detail of this program related to our part of the program remains to be accomplished, but it appears that an effective arrangement can be made. We will continue to pursue this objective.

There is an increasing need for trained personnel in the area of environmental engineering. We are continuing in our endeavor to expand our capabilities and offerings in this area. To date we have been unsuccessful
in our attempts to obtain financial support for students and an additional faculty member from the Federal Water Pollution Control Administration. However, we believe we have made progress with them and expect that some form of support will be obtained in the near future. In the meantime we have been supplementing our regular faculty with the use of Adjunct Professors to offer a significant amount of essential course work in this area. Next year, we plan to offer courses in Water and Air Pollution Control for non-engineering students. These courses will make a significant contribution to the opportunity for students to become informed, on a somewhat non-technical basis, concerning the problems related to our environment. However, it is expected that the enrollment in these courses will be slow to develop in spite of the seemingly vocal interest of students in their environment. During this year we have recommended the introduction of a new program, Bachelor of Environmental Science, which would include the above mentioned courses as well as other engineering courses. The program was to have a home in the Biology Department since they would provide a major portion of the expertise necessary. However, the program was rejected by the Arts and Science College.
In addition to a new faculty member in the area of environmental engineering, one new faculty member should be added in the area of transportation and urban planning. We should expand our activities in this area which is also related to the problems of the environment.

Our graduates have an increasing need to have competence in computer computations. We currently have a course in the freshman year and a senior elective in computer applications. Due to the demands on time in the technical courses in the Department, we have not been too successful in the use of computers in sophomore and junior courses in the curriculum. Consequently, we plan to introduce a series of one hour elective courses on computers which will draw on the regular courses for their related problems. In this manner, interested students will be able to develop their competence in computer applications as related to all areas of Civil Engineering.

There continues to be an increasing demand for engineering courses, both undergraduate and graduate, during the summer session. We continually have students who must take summer courses at another University to obtain required engineering courses so that they can
graduate at the end of the summer. We must develop a more effective summer program so that it is unnecessary for them to transfer work from other Universities in order to maintain continuity in their program.

The technical conferences which we have arranged are providing a service to the state in the area of continuing education. We will continue to strive to improve our existing programs and expand into new areas as needs are established.

The Farris Engineering Center is providing the additional space necessary to develop adequate laboratory capabilities. However, additional funds are necessary to keep our laboratory equipment up-to-date. As the equipment becomes more complex we must have additional technician help available. We plan to add an Instrument Technician next year who will be shared by the Departments of Civil and Mechanical Engineering.

With our active graduate program we must obtain more sponsored research activity to support our students and to keep our faculty abreast of developments in their field. Even though the Civil Engineering Research Facility is not structured in the Engineering College, we hope to make increasing use of their research activity for our
students and to bring their professional staff into the educational process of the University.

Additional travel funds should be available for faculty to attend selected technical national meetings. Participation in such meetings is essential for the development of an excellent educational program both undergraduate and graduate. Some portion of the overhead collected on sponsored research projects should be available for this purpose.

D. Appointment to Staff

1. **Full time**

   Mrs. Rosemary McNerney, Department Secretary
   November 10, 1969 –

2. **Part time and temporary**

   Mr. Richard H. Allen, Graduate Assistant, Semester I and II.

   Mr. Martin F. Barker, Graduate Assistant, Semesters I and II.

   Mr. Robert L. Dineen, Teaching Assistant, Semester II.

   Mr. Elvidio V. Diniz, Graduate Assistant, Semesters I and II.

   Mr. Thomas A. Duffey, Adjunct Professor, Semester II.

   Mr. Aybars Gurpinar, Graduate Assistant, Semester II.

   Capt. Dennis I. Hirota, Adjunct Professor, Semester I.
Mr. Golden E. Lane, Jr. Special Assistant, Semester I.

Mr. John Murray, Graduate Assistant, Semester I.

Mr. Ronald M. Nelson, Graduate Assistant, Semester II.

Mr. Donald R. Parker, Adjunct Professor, Semester II.

Mr. Manubhai Ambalal Patel, Graduate Assistant, Semesters I and II.

Mr. Edmond P. Ryan, Teaching Assistant, Semesters I and II.

Mr. Alan R. Sinclair, Graduate Assistant, Semester I (resigned October, 1969).

Dr. Jimmy H. Smith, Adjunct Professor, Semester II.

Mr. Jan M. Walczak, Teaching Assistant, Semesters I and II.

Mr. Maharaj K. Wanchoo, Graduate Assistant, Semesters I and II.

Mr. Michael L. Whelan, Graduate Assistant, Semester II.

E. Separations from staff

Mrs. Alice Frances Herron, Department Secretary.
II. COMPOSITE OF INFORMATION ON INDIVIDUAL BIOGRAPHICAL SUPPLEMENTS

1. Advanced Study

CLOUGH, R. H.


TRIANDAFILIDIS, G. E.

Registration, National Society of Professional Engineers.

YAO, J. T. P.

EAI Short Course on Hybrid Computation, 2-6 March, 1970, Coronado Club, Albuquerque, N.M.

2. Sabbaticals, leaves of absence, summer teaching, travels, etc.

COTTRELL, M. M.

Visiting Associate Professor, University of California, Berkeley, Summer, 1969.

HULSBOS, C. L.

Regional Conference of Civil Engineering Department Chairmen, El Paso, Tex., UTEP, April 1-2, 1970.

JOHNSON, R. L., Jr.


MAY, G. W.

Summer Staff Member: Sandia Corp., Albuquerque, N. Mex., (summer 1969)

YAO, J. T. P.

Sabbatical - Spring, 1970
ZWOYER, E. M.


3. New scholastic honors, fellowships, etc.

NONE

4. Publications

CLOUGH, R. H.


JOHNSON, R. L., Jr.


MARTINEZ, J. E.

"Proceedings, Seventh Paving Conference, University of New Mexico - Editor.

OMID'VARAN, C.


PATTERSON, C. C.

"Radioactivity Transport in Water -- The Role of Organic Pollution and Oxygen Balance in Transport", Center for Research in Water Resources, Univ. of Texas, Austin, EHE-69-09.

TRIANDAFILIDIS, G. E.

TRIANDAFILIDIS, G. A. (Cont)


"Simulation of Airblast Induced Ground Motion at McCormick Ranch Test Side", Project Backfill, AFWL-Tl-68-27, submitted for publication.

YAO, J. T. P.


5. Other research projects or creative work in progress or completed

ABBOTT, W. T.

Commenced development of four new CE sophomore-junior level courses in "Computer Applications in Civil Engineering".

HULSBOS, C. L.

Research Project "Fatigue Properties of Cold-Formed Steel Structural Members", Sponsored by American Iron & Steel Institute.

JOHNSON, R. L., Jr.

MARTINEZ, J. E.

Proposal Title: "Hydraulics Research Flume",
Sponsor: Research Allocations Committee, 1970-71,
Funds requested $1500, Director, J. E. Martinez.

MAY, G. W.

Research: Sandia Laboratories. "Finite Deflection
Elasto-Plastic Analysis of Rectangular Plates",
$14,000, July 1, 1969 - June 30, 1970.

Grants: Co-author of proposal for funding for
an Instron Testing Machine (with B. Albrecht and
J. Horak), NSF Institutional Grant, Amount
granted: $13,000.

MAY, M. C.

Research project: New Mexico Accident Investigation
Program, sponsored by National Highway Safety
Board, DOT, $100,000. One year.

OMID'VARAN, C.

"Dynamic Analysis of Highly Redundant Structures",
A two-year research proposal submitted to NSF for

"Dynamic Analysis of Ribbed Plates", A one-year
research proposal submitted to Sandia Corp., for

"Seismic Design of Building Structures", Proposal
submitted to Army Corps of Engineers, a six-
month project, in collaboration with Dr. Yao
(principal investigator) and Dr. C. L. Hulsbos,
$14,800.

PATTERSON, C. C.

"Disposal of Plating Wastes", USAF through CERF
W.O. 10.01B.

"The Water Pollution Effects of a Proposed Pulp
for the Nordhaus Committee on The Pulp and Paper
Mill.
TRIANDAFILIDIS, G. E.


YAO, J. T. P.

The following reports are results of NSF Grant Nos. GK 2727 and GK-2865:


ZWOYER, E. M.

Continued operation of the Eric H. Wang Civil Engineering Research Facility; negotiated a contract modification in the amount of $2,216,939 for the period 16 September 1969 to 15 November 1971.
6. Activities in learned and professional societies

CARNEY, J. B., Jr.

Attended Paving Conference, UNM

Attended Highway Conference, NMSU, Las Cruces

Attended ASCE Meeting, Albuquerque

CLOUGH, R. H.

Member of national committee on Engineering Education (CEE) of American Society of Civil Engineers (ASCE).

Annual Meeting of New Mexico Building Branch, Associated General Contractors of America, Santa Fe, Nov. 13-14, 1969.

Meeting of CEE, University of Alabama in Birmingham, Ala., Dec. 4-6, 1969.

Presiding Officer, Seventh Paving Conference, UNM, Dec. 11-12, 1969.


Meeting of CEE, University of Wisconsin, Madison, Wisconsin, April 16-18, 1970.

General Chairman of meeting of Southwest Region, National Society of Professional Engineers, to be held in Albuquerque, Oct., 22-24, 1970.

COTTRELL, Marion M.

Reviewed paper "Correction to the Solution of Orthotropic Circular Plates" for publication in Journal of Structural Engineering.

Div. ASCE Director, New Mexico Section, ASCE.
HULSBOS, C. L.

Meeting of the National Cooperative Highway Research Advisory Panel C 66 in Washington, D. C., Sept. 4-5, 1969 and November 5-6, 1969.

Meeting of the New Mexico Section of ASCE in Lubbock, Texas (Joint meeting with the Texas Section, Oct. 10-11, 1969).

Highway Research Board Meeting, Wash., D. C., Jan. 11-16, 1970. Member of Committees D-C3 and D-C5. UNM Liaison Representative to Highway Research Board.

Meeting of the New Mexico Section of ASCE in Albuquerque, February 13-14, 1970.

Regional meeting of ASEE at NMSU in Las Cruces, New Mexico, April 3, 1970.

Meeting of the New Mexico Section of ASCE in Los Alamos, New Mexico, May 7-8, 1970.


A number of meetings of the Albuquerque Branch of the American Society of Civil Engineers.

Director, Albuquerque Branch, ASCE.

Director, New Mexico Section, ASCE.

Hузарски, Р. Г.

Member of AAUP.

Member of ASEE.

JOHNSON, R. L., Jr.

MARTINEZ, J. E.


Attended State ASCE Meeting.

MAY, G. W.

Attended conference, ASCE Structural Conference, Portland, Ore.

Presented lecture: AISC Symposium "Plastic Design of Multistory Buildings".

Elected Sec-Treas., ASTM, Rocky Mountain Region.

Member ASCE National Committee on Plastic Design.

OMID'VARAN, Cyrus


"Flexible Plate Finite Element on Elastic Foundation" by T. Y. Yang.

Attended ASCE Structural Engineering Meeting, April 6-10, 1970.

PATTERSON, C. C.

"American Society for Engineering Education, Las Cruces; "On the Relations Between the Engineering Profession and Secondary Schools".

American Water Resources Association, Banff, Alberta, Canada.

TRIANDAFILIDIS, G. E.

Annual ASTM meeting, June 1969, Atlantic City, N.J. Soil Dynamics and Plate Bearing Test Committees.

YAO, J. T. P.


Attended the ASCE Annual Meeting and National Meeting on Structural Engineering, Portland, Ore., 6-10 Apr., 1970.

ASCE, Member Task Committee on Structural Fatigue—Structural Division (1966- ), Chairman of Subcommittee on Fatigue Analyses and Theories (1969- ), Task Committee on Structural Safety—Structural Division (1966- ), Chairman of Subcommittee on Literature Review (1969- ).

ASTM, Member Committee E-9 on Fatigue (Sub. I on Research; Sub. II on Papers; Sub. VIII on Fatigue under Cyclic Strain).

ZWOYER, E. M.

As National Director of ASCE, District 15, the following activities have been performed:

June 10-13, 1969, Conf. on Behavior of Structural Concrete, Univ. of West Virginia, Morgantown, W.Va.

June 18, 1969, 40th Anniversary Celebration of US Army Corp of Engineers Waterways Experiment Station, Vicksburg, Miss.

July 19-25, 1969, ASCE Annual Transportation Meeting. Attended Publications Committee Meeting, Membership Qualifications Committee Meeting, Board of Directors' Meeting.


ZWOYER, E. M. (Cont).

Oct. 29, 1969, Meeting of Albuquerque Chapter of New Mexico Section, ASCE.

Dec. 10, 1969, Meeting of Albuquerque Chapter of New Mexico Section of ASCE.


May 7–9, 1970, N.Mex. Section of ASCE in Los Alamos.

Served on ASCE Committee on Adverse Weather Conditions.


Served on City of Albuquerque Building Code Committee.

Served on New Mexico Society of Professional Engineers Legislative Committee.

7. Other professional activities

CARNEY, J. B., Jr.

Talked to junior high school students, "The Population Explosion - Natural Resources and the Civil Engineer."
CLOUGH, R. H.

Consultant to Crego Block Co. on construction problems.

Member of ECPD Accreditation Committee. Visit to Mississippi State University, March 2-4, 1970.

COTTRELL, M. M.

Member, Albuquerque City Building Code Comm.

HULSBOS, C. L.

Arranged a one and one-half day continuing education conference at UNM, "Plastic Design of Braced Multi-story Steel Frames" and presented one of the lectures, "Plastic Design Fundamentals" March 13-14, 1970.

Arranged a one day continuing education conference at UNM "New Developments in Concrete Construction", April 10, 1970.

Career Day talk to students of the Upward Bound Program at the University of Albuquerque.

Career Day talk to students at Menaul High School.

Reviewed technical papers for the American Concrete Institute and the Highway Research Board.

Member of Engineers Council for Professional Development Ad Hoc Visiting Committee--visited the University of Southern California to inspect their Department of Civil Engineering and made recommendations concerning their accreditation.

HUZARSKI, R. G.

Several consultancies.

MAY, G. W.

TV appearance March 26 "Educational Process".

Consulting for MRI, Inc.

PATTERSON, C. C.

TV-Project 7, Ken Dunnagan, Gordon Sanders.

Talks: 3 Lions Clubs; American Meteorological Society; Albuquerque Geology Club; Albuquerque Urban Progress; Research Engineers Society of America.

Annual Conference of New Mexico Sanitarians.

Consultancies: Los Alamos Scientific Lab; Dale Bellamah Corp., Paradise Community Services Corp.

TRIANDAFILIDIS, G. E.

Consultant for various Foundation Engineering Projects in New Mexico, South Carolina and Colorado.

YAO, J. T. P.

"Confucianism", presented to the class of Philosophy 264, March 21, 1970.

ZWOYER, E. M.

Fulfilled several consultant assignments including structural design of $9,200,000 convention center for Albuquerque and served as a court appointed "Special Master" to determine cause of settlement of houses in a housing development.

8. Non-teaching university service

CARNEY, J. B.

Faculty Adviser - ASCE Student Chapter.

Member Student Speakers Committee.

CLOUGH, R. H.

Member and Vice-Chairman, New Mexico Union Board.

Member of Operations Committee, N. Mex. Union Board.
CLOUGH, R. H. (Cont).

Chairman, Public Relations Comm., College of Engineering.

Member of Advisory Comm, Adobe Study of Dept. of Architecture.

Member of Advisory Committee, ISRAD.

Member of Paving Conference Advisory Committee and Program Committee.

Institutional Representative to Association of NROTC Colleges.

Presiding Officer, dedication of Farris Engineering Center, April 25, 1970.

COTTRELL, M. M.

Chairman, Faculty Policy Committee

Academic Freedom and Tenure Committee

Department Graduate Adviser.

GAFFORD, W. R.

Special Counselor, Univ. College & Counseling Center.

Coordinator, Structures Course for Architecture Majors, CE Department.

Member, Entrance and Credits Committee.

Member, Engineering College Computer Use Committee.

Chairman, Freshman Advisory Committee, College of Engineering.

Member, Ad Hoc Committee appointed by Academic Vice-President for purpose of studying academic advising system for possible change.

HULSBOS, C. L.

Chairman, Department of Civil Engineering.
HULSBOS, C. L. (Cont).

Administrative Committee, College of Engineering.
Graduate Committee.
Departmental Committees (Ph.D., M.S., etc.).

HUZARSKI, R. G.
Coordinator of CE 104L.
Freshman Advisement Committee.
Chairman, Freshman and Core Curriculum Committee.
Natural Resources Journal Advisory Board.

JOHNSON, R. L.
Member: University Computer Use Committee, College of Engineering Computer Use Committee, C. E. Dept.
Computer Use Committee.
Freshman Advisory Committee.
Engineering College Committee on P. E.
Faculty Advisor - Chi Epsilon.
Department Representative, Sigma Xi.

MARTINEZ, J. E.
CE Department Student Adviser.
Athletic Council.
College Schedule Committee.
Department Curriculum Committee.
Program Chairman, Paving Conference.
MAY, G. W.

National-International Affairs Committee.
Scholarships, Prizes, High School Relations Committee.
Sponsor: African Students Organization.
Engineering Mechanics Committee.
Freshman Adviser.

MAY, M. C.

Member, Administrative Committee.
Campus Planning Committee.
Safety Committee.

OMID'VARAN, C.

Member: University Standards Committee.
College Scholarships and Awards Committee.
Faculty Adviser to: Flying Lobos
Baha'i Student Association.

PATTERSON, C. C.

Continuing Education Committee Chairman.
Graduate Fellowship Committee.
Popejoy Visiting Professor Committee.
USP - Science Advisory Committee.
Engineering College Committee on Committees.

YAO, J. T. P.

University Research Policy Committee, Member; Chairman of Subcommittee on Guidelines.
New Mexico Chapter of Sigma Xi - Vice President.
YAO, J. T. P. (Cont).


Civil Engineering Dept. Computer Use Committee.

Mechanics Committee, College of Engineering.

Advisory Board for International Program.

Ad-Hoc Committee concerning a tenure decision.

ZWOYER, E. M.

Director Selection Committee for CERF.

Long Range Planning Committee for CERF.

9. **Public service**

CARNEY, J. B.

Adult Director - Hoffmantown Baptist Church.

Committee Chairman - Boy Scout Troop 292.

CLOUGH, R. H.

Member and Worker, Major Gifts Division, Camp Development Fund Drive, Kit Carson Council of Boy Scouts, 69-70.

COTTRELL, M. M.

Chairman, Board of Trustees, Wesley Foundation, UNM.

Democratic Vice Chairman, Ward 11A.

Democratic Candidate for County Commission.

HUZARSKI, R. G.

Community Chest.

Board of Directors of Medical Aids Research Foundation.
MAY, M. C.
Member, Board of Directors, Albuquerque Metropolitan Flood Control Authority.

PATTERSON, C. C.
Nordhaus Committee on the Pulp and Paper Mill.
Comprehensive Health Planning Environmental Subcommittee.
Continuing Education Committee.
Western Branch, American Public Health Association.
Board Member, N.M. Citizens for Clean Air and Water.

TRIANDAFILIDIS, G. E.
Greek Orthodox Church.

YAO, J. T. P.
ASCE Albuquerque Branch Board of Directors (1968-70).
ASTM Rocky Mountain District Council, Secretary-Treasurer, (1967-70).