#### **University of New Mexico**

# **UNM Digital Repository**

Teacher Education, Educational Leadership & Policy ETDs

**Education ETDs** 

6-6-1969

# A Follow-Up Study of Secondary Education Graduates of 1962 and 1966

Eve C. lacoletti

Follow this and additional works at: https://digitalrepository.unm.edu/educ\_teelp\_etds

Part of the Educational Administration and Supervision Commons, Educational Leadership Commons, and the Teacher Education and Professional Development Commons

# THE UNIVERSITY OF NEW MEXICO ALBUQUERQUE, NEW MEXICO 87106

# POLICY ON USE OF THESES AND DISSERTATIONS

Unpublished theses and dissertations accepted for master's and doctor's degrees and deposited in the University of New Mexico Library are open to the public for inspection and reference work. They are to be used only with due regard to the rights of the authors. The work of other authors should always be given full credit. Avoid quoting in amounts, over and beyond scholarly needs, such as might impair or destroy the property rights and financial benefits of another author.

To afford reasonable safeguards to authors, and consistent with the above principles, anyone quoting from theses and dissertations must observe the following conditions:

- 1. Direct quotations during the first two years after completion may be made only with the written permission of the author.
- 2. After a lapse of two years, theses and dissertations may be quoted without specific prior permission in works of original scholarship provided appropriate credit is given in the case of each quotation.
- 3. Quotations that are complete units in themselves (e.g., complete chapters or sections) in whatever form they may be reproduced and quotations of whatever length presented as primary material for their own sake (as in anthologies or books of readings) ALWAYS require consent of the authors.
- 4. The quoting author is responsible for determining "fair use" of material he uses.

This thesis/dissertation by <u>Eve C. Iacoletti</u> has been used by the following persons whose signatures attest their acceptance of the above conditions. (A library which borrows this thesis/dissertation for use by its patrons is expected to secure the signature of each user.)

NAME AND ADDRESS	DATE
Oct. 1968—1.000—GS	

This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of The University of New Mexico in partial fulfillment of the requirements for the degree of

#### MASTER OF ARTS

A FOLLOW-UP STUDY OF SECONDARY EDUCATION GRADUATES OF 1962 AND 1966

Title

	EVE C. IACOLETTI	
Candidate		
	SECONDARY EDUCATION	
Department -	Wayne P. Moelle June 6, 1969	n berg
	June 6, 1969	Date
Committee		
	MayBellinge	at discount
	John R. Llette	Gnairman
	Robert H. Whit	×

#### A FOLLOW-UP STUDY OF SECONDARY EDUCATION GRADUATES OF 1962 AND 1966

BY
EVE C. IACOLETTI
B.A., The University of New Mexico, 1966

#### THESIS

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts in Secondary Education

in the Graduate School of The University of New Mexico Albuquerque, New Mexico June, 1969 LO 3781 N563 Ial

#### ACKNOWLEDGEMENTS

Without the help of many people this study and the resultant report would have been impossible. The researcher especially wishes to thank Drs. William Runge, James Cooper, John Dettre, and Robert White who provided generous and invaluable time and assistance. Mr. Dale Sparks of the University of New Mexico Computer Center and Mr. Alphonse Iacoletti, a mathematician at Sandia Laboratories, provided much technical advice. Thanks are also offered to others too numerous to mention who contributed information and aid at every step in the planning and implementation of the study. Any errors either of fact or of judgment are solely the responsibility of the investigator.

#### A FOLLOW-UP STUDY OF SECONDARY EDUCATION GRADUATES OF 1962 AND 1966

BY Eve C. Iacoletti

#### ABSTRACT OF THESIS

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts in Secondary Education
in the Graduate School of
The University of New Mexico
Albuquerque, New Mexico

June, 1969

#### A FOLLOW-UP STUDY OF SECONDARY EDUCATION GRADUATES OF 1962 AND 1966

Eve C. Iacoletti Secondary Education The University of New Mexico, 1969

A 24-item questionnaire was sent to 123 graduates of the University of New Mexico's Department of Secondary Education from the classes of 1962 and 1966 exclusive of graduates of specialized departments such as industrial education and business education.

The majority of the questionnaire items were for descriptive data collecting; five items sought evaluations of one kind or another while a final item sought open-end responses. The return rate was 86 per cent with 105 of the graduates responding. Data handling was accomplished by means of computer tabulation and multiple sorts on a mechanical sorting machine. The open-end question was hand-tabulated and the responses were categorized into summary statements. The most common suggestion made in the open-end responses was that the secondary education student should spend more time in observing and serving in an actual classroom situation.

Almost one-half of the respondents are presently engaged in teaching. The next largest occupational group of 12 per cent is housewives. More than one-third of the respondents reside in Albuquerque. The next largest number reside in California. All but one-fourth of the respondents have changed jobs more than once

and more have taught in junior high schools than have taught at the senior high level.

Non-teachers, exclusive of housewives, are earning more than are teachers but most of those not teaching listed reasons other than financial for leaving teaching or for never having taught. The larger number of respondents, both teachers and non-teachers, rated their present working conditions as good to excellent. Class discussion is by far the favorite teaching method of the respondents as student teaching is rated as the most helpful class in the undergraduate preparation. More males than females responded to the questionnaire and 80 per cent of the respondents of both sexes are married. Of those who did not sign their names to the questionnaire, the largest number are teachers. All but two-fifths of the respondents have had some post graduate college work.

One of the many conclusions of the study is that the graduates, by and large, retain an identification with and an interest in their college and department. One of several recommendations of the study is that some means be found to expose the student to the realities of the classroom as early as possible in his or her college career.

# TABLE OF CONTENTS

CHAPTER								1	PAGE
I.	INTRODUCTION, BACKGROUND, AND PROCEDURES								1
	Introduction								1
	Background								2
	Procedures								3
	The Sample								4
	Final Procedures								5
	Faculty Interviews: Preparing the Preliminary Questionnaire								6
	Contemporary Follow-up Activities in Other Colleges and Universities.								9
	List of Hypotheses for the Study								14
II.	REVIEW OF THE LITERATURE								17
	Summary								38
III.	FINDINGS OF THE SURVEY								40
	Selected Data and Hypotheses Tests								40
	Portrait of a Typical Respondent								45
	Subjective Responses of Graduates								46
	Summary								54
IV.	CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS OF THE STUDY								56
	Conclusions Generated by the Hypotheses	3.							56
	Conclusions Generated by the Open-End	Res	вро	ons	sei	в.			58

		G	er	er	al	. 6	r	Pı	roc	e	du	ral	1 (	Cor	ic]	Lus	110	ns		•								58
		8	pe	ci	fi	c	Co	no	elu	ıs:	Lor	ns																59
							el										-											
							re															•						60
	Re	200		nen	de	ti	lon	8																				61
	Re	eco	1000	en	de	ti	cn	s	Ge	n	er	ate	be	by	, 1	he	a I	lyp	001	he	286	18						61
	Re	200		nen	ıda	ti	lon	8	Ge	n	er	ate	ad	by	7 8	Sub	je	ect	iiv	7e								
	Re	asp	or	186	. (	f	th	e	GI	a	du	ate	8.6							•			•			•	•	65
		G	er	eı	al		r	Pi	roc	ce	du	rai	1 1	Rec	200	nme	enc	iat	:10	ms								65
		S	pe	ci	fi	c	Re	C	omu	ne	nda	ati	Lo	as														68
							ion																	186	pe			69
	Li	imi	te	iti	or	s	of	1	the	1	Sti	udy	7 .															70
FIGURES .																												72
TABLES																												73
APPENDICES	3.																											93
REFERENCES	2.																										-	114

#### LIST OF FIGURES

FIGURE		PAGE
1.	Identification	. 73
2.	Marital Status	. 73
3.	Sex	. 74
4.	Age	. 74
5.	Degree and Year of Graduation	. 75
6.	Hours of Post Graduate Training	. 75
7.	Employment	. 76
8.	Location of Residence	. 77
9.	Level of Student Teaching	. 77
10.	Subject Categories Certified to Teach at Graduation	. 78
11.	Hiring Time after Graduation	. 78
12.	Placement Agency for First Job	. 79
13.	Number of Job Changes	. 79
14.	Reasons for Job Changes	. 80
15.	Present Salary Per Annum	. 80
16.	Annual Salary on First Job	. 81
17.	Rating of Present Working Conditions	. 81
18.	Reasons for Having Never Taught or for Leaving Teaching	. 82
19.	Teaching Experience in the Junior High	
20.	Teaching Experience in the Senior High	

21.										
	College, Elementary, Kindergarden, Adult							•	•	83
22.	Subjects Taught or Teaching									84
23.	Ranking of Library Use									84
24.	Ranking of Audio-visual-aid use									85
25.	Ranking of Supplements to Basic Texts									85
26.	Ranking of Independent Study									86
27.	Ranking of Lecture Method									
28.	Ranking of Class Discussion Method									87
29.	Ranking of Orderly, Quiet Class									87
30.	Ranking of Inductive Method									88
31.	Rating of "Foundations of Education"									88
32.	Rating of "Educational Psychology"									89
33.	Rating of "General Methods of Teaching".									89
34.	Rating of "Growth and Development"									90
35.	Rating of "Special Methods of Teaching".									90
36.	Rating of "Student Teaching"									91
37.	Rating of "Foundations of Secondary Educ	ati	o	2**						91
38.	Evaluation of Advisor Availability									92
39.	Evaluation of Completeness and Accuracy	of	Ac	ivi	Lce	2.				92

# LIST OF TABLES

TABLE									PA	AGE
1.	Table of	Summary	Statements	for	Open-end	Response	8.			93
2.			Responses the							95

#### LIST OF APPENDICES

APPE	ND:	IX		1	PAGE
1		Computer printout			97
2		Cover letter of March 5, 1969	•		98
3		Cover letter of March 20, 1969			99
4		Cover letter of April 3, 1969			
5		Preliminary Questionnaire that resulted from faculty interviews			
6		Field-test Questionnaire			103
7		Pink Final Form of the Questionnaire			105
8		Yellow Final Form of the Questionnaire			107
9		Correspondence with the American Council on Education			109
10		Letter questionnaire to colleges and universities			112
11	. 0	Mailing list of colleges and universities			113

#### CHAPTER I

# INTRODUCTION, BACKGROUND, AND PROCEDURES

#### Introduction

Institutional research by schools and colleges like product-market research by industry serves to give the parent institution feedback on the nature of the results of its programs. The human "product" or graduate has in addition to certain hoped for programmed-in attributes the ability to evaluate the appropriateness of his training to the conditions he faces in his job--an insight not available to the producers of soap or automobiles. This evaluative potential in human beings seems all the more pertinent in relation to the aims and ends of the educational process since evaluation is such an integral and high level part of both the transmitting and receiving of education. Thus it is that a college in evaluating its graduates may use the perceptions and opinions of these same graduates as partial data in the said evaluation. A prosaic but necessary first step in any value research is the description of what is. In this case "what is" refers to normative survey data concerning basic descriptive and demographic qualities of graduates. A most common device for the collection of descriptive data as well as for the determination of attitudes and values is the follow-up study, especially the follow-up questionnaire.

#### Background

The germ idea for this study came from Dr. John Dettre of the University of New Mexico early in 1967 when he pointed out to a group of cadet teachers that there is not enough known about what happens to the recipients of educational programs at any level when they leave the learning institution. Dr. Dettre also mentioned that evaluation is a crucial and high level part of teaching and that much evaluation could not be done until years after the student finished his formal education.

The researcher for this thesis project had undertaken an earlier follow-up study as a paid assistant of the University of New Mexico, Department of Journalism. The journalism department has a well-established program in which they send out double post-card questionnaires twice a year to every graduate for whom they have an address. From the responses a newsletter is prepared which gives such information as where the graduate is employed and what he is doing in his community. In the spring of 1958, under the direction of Professors Keen Rafferty and Leonard Jermain, this researcher collected and updated addresses, mailed out the questionnaires, collated the data, wrote the newsletter and sent it back to those former students on the mailing list.

This experience together with the comments of Dr. Dettre

led to the proposal of a similar study for the University of New

Mexico, Department of Secondary Education, for the partial fulfillment of requirements for a Master of Arts degree with the study

providing the material for a master's thesis. A thesis committee of Dr. Dettre, Dr. Robert White, and Dr. William Runge as chairman, showed interest in such a study.

#### Procedures

As a preliminary first step some one-hundred questions or topics of interest were listed that might be explored in a follow-up study of alumni. This first list contained both data collecting items and evaluation items and the final instrument contains both sorts. The second step was a review of the published literature available in the Zimmerman Library on follow-up studies, question-naire surveys and institutional program evaluation studies. The results of this review are in a later section of this paper.

In order to make the study of specific value to the Department of Secondary Education, it was decided that the professors who had taught recent graduates should be asked what they would like to know about their former students. The results of the faculty poll are reviewed in a later section of the paper. From the faculty interview and with the literature in mind, a preliminary questionnaire was designed and returned to the participating professors for their further comments.

The next step was an attempt to find out what other colleges have done in the field of follow-up. A three-item letter question-naire was sent to twenty colleges and universities whose addresses had been taken from the American Council on Education's Report on Questionnaires. Although the twenty institutions had been reported

as having done questionnaires of some kind, not all were follow-up studies as the results later showed.

A next step was the formulation of hypotheses. These are listed and tested and the results may be found in later sections of this paper. After the hypotheses were drawn a field-test questionnaire was constructed with the background of the literature, the professor poll, and certain suggestions by Dr. Runge and Dr. James Cooper, Director of Research of the University of New Mexico. College of Education. This instrument was field tested in two of Dr. Cooper's graduate research classes. The objective of the field testing was to find any misleading questions as well as to see what the general attitude of graduates would be to the questionnaire. Thirty-six graduate students filled out questionnaires on February 25, and 26, 1969, in two sections of Education Foundations 501, a research class. In both instances about thirty minutes were spent after it was filled out in discussing the instrument and many valuable criticisms were made. The questionnaire was revised and a final form was duplicated. The first mailing was on March 5, 1969.

### The Sample

The population sample for the study includes the classes of 1962 and 1966. The names were taken from the graduation lists for those years with the summer session graduates' names taken from the 1963 and 1967 lists. Omitted from the study are the graduates of the specialized departments of art education, business education,

physical education, home economics, industrial education, and music education. Thus the original list contained 137 names of people who received the B.A. or B.S. in secondary education exclusive of the specialties listed above. Addresses were copied from the records of the Alumni Office. Addresses for eleven of the graduates were not available and one person is deceased, reducing the first mailing to 125 persons. The questionnaires were mimeographed on two colors of paper. Pink copies were sent to the class of 1962 and yellow to the class of 1966 for class identification at a glance. Besides the first mailing on March 5, a reminder letter was sent on March 20. The first two mailings brought in 82 responses with two envelopes returned because the individual's whereabouts were unknown. The third mailing of April 3, was sent to 41 people who had not responded to the first two requests. In mailings one and three, stamped envelopes addressed to Dr. Runge's office were enclosed. From the 123 potential respondents 105 questionnaires were returned and talleyed before the cutoff deadline of April 28, 1969.

# Final Procedures

From the hypotheses a key was made for the purposes of key punching an IBM card for each of the returned questionnaires. One card was punched for each respondent with one column utilized for each of the 39 possible answers of the instrument. The results of the open-end question were compiled separately and without the

use of machine data processing. A program was written, identified as program 02292, and the program with the 105 punched cards were processed by the Fortran D. Compiler at the University of New Mexico Data Processing Center. The results were returned in the form of a two dimensional array of summations—also known as a matrix. The data were transposed and changed to percentages for the purposes of hypothesis testing. Where multiple figures were called for by the hypotheses, the experimenter utilized the mechanical sorter rather than the automatic equipment since a suitable program was not available.

#### Faculty Interviews: Preparing the Preliminary Questionnaire

Part of the preparations for the follow-up study of U.N.M. graduates of the Department of Secondary Education included the interviewing of a number of the professors of the department to determine what information they would like about their former students. In August of 1968, fourteen professors were asked:

Are there any particular questions you would like answered or hypotheses tested in a questionnaire planned for secondary education graduates of the past ten years?

Those who participated, in alphabetical order, are Drs.:
Bonner Crawford, John Dettre, Robert Doxtator, Robert Hanny,
George Hirshfield, Alvin Howard, Wilson Ivins, Robert Nesbitt,
Peter Prouse, John Rider, William Runge, Richard Warner, Robert
White and Carl Zweig. Many of the suggestions made would be
worthy of separate studies in themselves such as Dr. Crawford's

interest in continuing contacts between the college and in-service teachers or Dr. Doxtator's interest in an evaluation of a detailed breakdown of skills gained in professional classes.

Dr. Dettre suggested that the graduates be offered a forced choice ranking of their most helpful classes while Dr. Warner wished to know which classes were most appropriate given the conditions of actual teaching. Dr. Zweig suggested a two-fold evaluation of the department's advisement with the respondent indicating his feelings about the advisor and the advice received. Dr. Ivins wondered how each graduate perceived his treatment, as a person, during the matriculation period most concerned with secondary education.

Dr. Howard, besides clarifying many points about thesis writing as well as surveys and questionnaires in general, would have liked the graduates' specific suggestions for new course offerings in the teacher training curriculum. Dr. White is interested in what kinds of classroom approaches or methods the graduates use and in whether the primary resource of each class is a single textbook or various supplementary materials. A somewhat related interest was expressed by Dr. Hirshfield in his desire to evaluate the professional attitudes of the graduates that might be reflected in information such as the educational journals subscribed to or the books recently read in the content area of each individual.

Dr. Prouse would be interested in a correlation between the ease of employment finding and the major field of study while Dr.

Rider expressed interest in the kinds of work, if any, the graduates who are teachers do in the summer. Dr. Runge, besides contributing to every detail of procedure of the study, was interested in how many teachers have changed from junior high to senior high and vice versa while Dr. Hanny would like to see a correlation made between the attitude of the graduate, whether positive or negative, and his grade point average. In contrast to the other faculty members who were interviewed, Dr. Nesbitt said he would not be interested in the results of a general questionnaire. He explained that 85 per cent of the industrial education graduates can be located at any time and that the department conducts follow-up studies of its own people every two or three years.

There were unique and provocative suggestions other than
the above made in almost every interview. The most common
questions concerned basic demographic survey data such as: is
the graduate teaching? Is he teaching what he was prepared to
teach? Where is he? The results of these interviews were the
basis for the preliminary questionnaire drawn from interests stated
by the professors. The sample questionnaire that was prepared and
returned to the faculty who participated in the interviews for
further comment corresponded highly with what much of the literature
on follow-up studies reports is usual in other college and university follow-up questionnaires.

#### Contemporary Follow-up Activities in Other Colleges and Universities

In December of 1968, a three-item letter questionnaire was sent by the investigator to secondary education departments of twenty colleges and universities in the United States asking:

1. Has your department conducted a follow-up study of its graduates within the past five years?

2. Has your college or university conducted a follow-up study that included graduates of your department within the past five years?

3. If the answer to either of the above questions is yes, will you please send me a copy of the questionnaire or questionnaires that were used and a copy of any final report that was prepared including the information collected by the study.

This approach was suggested by the report of Effie Geneva Bathurst who tells of a similar query made in 1929 to forty-five universities. Of this early study, Bathurst says thirty-six replies were received; four had a systematic follow-up service, twenty had an incidental service, and twelve had no service.

In the investigator's 1968 query, thirteen replies were received. A fourteenth return envelope was received with an unsigned questionnaire dealing with problems of retirement enclosed. It was postmarked Warwick, Pa., and may have come from either the University of Pennsylvania or Temple University since both were on the mailing list and neither otherwise replied.

<sup>&</sup>lt;sup>1</sup>Effie G. Bathurst, <u>A Teacher's College Follow-up Service</u> (New York: Columbia University Press, 1931), p. 8.

Of the thirteen who replied, two had a systematic followup service, five had an incidental service while six had no service.

Of the seven which had a follow-up service, two continue on a regularly established basis. Columbia University Teacher's College,

Department of Curriculum and Teaching sends out a card that asks the graduate's name, home address, position and professional address. The response from Columbia did not state how often the card is sent out.

From Eastern Illinois University at Charleston, Harry
Merigis, Director of the School of Elementary and Junior High School
Teaching reported:

I am including with this letter a verifax copy of an instrument we have just completed. It attempts to ascertain the strengths of our elementary teacher education program and we do not as yet have the results since the instrument was only recently sent to 500 of our graduates.

This questionnaire is six pages long. It contains several demographic questions but the bulk ask evaluation of the college's programs and services. Included are fill-in questions, circling responses and value scales. Dr. Merigis instructed his college's placement office to send a copy of the results of a 1967 placement office follow-up of beginning teachers. It is an annual survey sent to employers of graduates and asks that the employer characterize the teacher with reference to personal qualities, professional qualities, class procedures, pupil responses to teacher, and adaptability to the community. A final question

asks, would you employ this person as a new teacher in your district.

The five colleges which also reported having follow-up studies on occasion are: University of California, Berkeley; Ohio University, Athens; Johns Hopkins University, Baltimore; University of Washington, Seattle; and Graceland College at Lamoni, Iowa. Alvin H. Thompson, in a letter from Berkeley said that follow-up is done at the University on an individual instructor basis with the instructor's own former students. Robert M. Boyd tells that the Ohio University placement office did a study but the results had not as yet been tabulated. He adds that a copy of the questionnaire is not available. Johns Hopkins University sent a copy of its ten year report (1957-1967) for the Master of Arts in Teaching program. The report includes two questionnaires. The first asks graduates for an opinion of the strongest and weakest aspects of the program. The second asks such questions as position and further education since graduation. The report included a unique cover letter that was sent with the questionnaires and was in the form of a chatty newsletter giving information about the university and the instructors.

While the secondary education department at the University of Washington made no studies, the query was passed on to Athol R. Bailey, professor of industrial education. He sent a seven-page questionnaire that he used with his majors. There are included extensive course ratings in his instrument, two pages of

open-ended questions and an interesting question as to whether or not the teacher moonlights," has supplemental employment during the regular school year.

Graceland College at Lamoni, Iowa, did a study of what had been done in other colleges regarding follow-up of graduates. It began with the sending of a double postcard to every other name on the 12th annual list, 1965-66, of colleges and universities with NCATE accreditation. The study was to provide information about the practices and procedures used in collecting and analysing data obtained in the follow-up studies in these institutions as well as what types of standardized and unstandardized instruments were used. It was found that the questionnaire, sent to graduates and to their administrators, was the most common tool of follow-up studies. Other methods include pupil achievement, ratings by supervisors, pupils, fellow teachers, and expert observers. The study reports that 49 institutions had permanently established follow-up programs, 24 had more informal programs while only 13 institutions followed a group more than once. The placement office conducted studies in almost half of the institutions. Some of the recommendations that were the outgrowth of the study were that the atypical nature of the first year of teaching would seem to render partially invalid the follow-up data gathered at the end of the first year of teaching and that institutions preparing teachers seek to determine the feasibility of establishing

offices in which the primary function is the responsibility of follow-up programs.

A final review is of a study done by W. B. Runge, director of secondary student teaching at the University of New Mexico in February, 1968. While it studies the responses of undergraduates rather than alumni, it may still be classified as a follow-up questionnaire of the student teaching experience. In this case, student teachers were requested to answer nineteen questions concerning their experiences in student teaching and other activities related to the preparation of teachers. All subject areas were represented in the 102 questionnaires that were returned and tabulated. All the questions were open-ended and similar trends in answers were noted. From this data, Dr. Runge made nine summary statements and recommendations for future consideration.

The universities and colleges that were selected as recipients of this query were selected, in part, from entries found in the American Council on Education's Report on Questionnaires. An institution was included in this study if it was mentioned in one of the reports as having had a questionnaire study of some kind. On July 12, 1968, a letter was written to the above mentioned publication asking for specific information on college follow-up studies. A reply was received on July 23 with five additional resources named. The names of colleges and universities that the council's list mentioned were added to the mailing list

for the letter questionnaire that was sent to the twenty institutions. The responses received from the thirteen which replied were used in the present research in several ways. Among other things specific items and wordings of items were suggested and illustrated while details of format and procedure provided insights and examples for the planning by the researcher.

# List of Hypotheses for the Study

- 1. At least 50 per cent of the respondents will enter their names on the questionnaire.
- 80 per cent of the married males who have left teaching will give finances as the reason for having left.
- 3. 80 per cent of the married women who have left teaching will give marriage and child rearing as the reason for leaving.
- 4. 80 per cent of the respondents will have at least three post graduate credit hours of course work.
- 5. Of the 1962 graduates, 70 per cent are not teaching.
- 6. Of the 1966 graduates, 30 per cent are not teaching.
- 7. 25 per cent of the graduates will be in the armed forces.
- 8. 40 per cent of the graduates will be residing in Albuquerque.
- 9. 80 per cent of those who have taught will have taught at a grade level other than that in which they student taught.
- 10. 80 per cent will have been hired within three months of graduation.
- 11. 80 per cent will have been placed in employment by the U.N.M. placement office.

- 12. 50 per cent of the respondents will have changed positions or schools one or more times.
- 13. 50 per cent of those who have changed positions will have done so because of financial reasons.
- 14. 75 per cent of those teaching will be earning between \$6,201 and \$6,800 annually.
- 15. 75 per cent of those not in teaching will be earning between \$8,001 and \$10,000 annually.
- 16. 75 per cent of those who have taught will have earned between \$5,001 and \$5,600 annually on the first job after graduation.
- 17. 50 per cent of those who have taught will have taught at both the junior high and high school levels.
- 18. 40 per cent of the respondents will have taught subjects or classes which they were not certified to teach at graduation.
- 19. 80 per cent of the respondents will rate class discussion with a 1 or 2, high value response; and, orderly, quiet class with a 7 or 8, low value response.
- 20. The student teaching course will be rated with a 1 or 2, high value response by 80 per cent of the respondents while foundations of education will be rated with a 6 or 7, low value response.
- 21. 80 per cent of the respondents will rate their advisor's availability—that is, their accessibility with a 3 or 4, medium to high value response.
- 22. 80 per cent will rate the advice they received with a 3 or 4, medium to high value response.

23. All the respondents will enter either 1962 or 1966 as having been the year of graduation.

#### CHAPTER II

#### REVIEW OF THE LITERATURE

More and more educational establishments are undertaking institutional research in the form of follow-up. The data that are collected in research studies of this sort provide the parent institution with feedback as to how its programs are perceived and how its products are filling needs in the community. Besides the questionnaire, other kinds of educational follow-up include the interview, field visits to in-service teachers by college personnel, correlations between employer ratings and myriad other measures such as grade point average, student teaching grades, personality profiles, pupil gain on standardized tests, and the like.

Thomas J. O'Connor points out and summarizes several of the rationales of follow-up studies. He states that follow-up may provide data on the effectiveness of teaching, the reasonableness of standards and the relevance of material included in courses. He adds, somewhat in warning:

Follow-up studies should not be undertaken merely to compile records. Their ultimate

Thomas J. O'Connor. Follow-up Studies in Junior Colleges:

A Tool for Institutional Improvement (Washington: American
Association of Junior Colleges Publications, 1965), p. 9.

objective is to gain information which will enable educators to do a better job.... Follow-up is not and cannot be an end in itself. The essential goal of this type of study is a college sensitive and attentive to the needs of its students.<sup>2</sup>

Walter Crosby Eels points out that the questionnaire survey is almost the only means possible to contact a group that is as scattered as alumni. He also states that the first extensive study of higher education that may be classified as a survey was made in the United States by a group of educators from Great Britain in 1903. He adds that by the close of 1915 such practices had been clearly established. E. C. Higbie, in 1928, and, Effie G. Bathurst, in 1931, carried out pioneer studies in the follow-up of graduates of teacher training institutions in America. Higbie wanted to know, in his follow-up study of graduates of Eastern State Teachers College, South Dakota, primarily how to fit a teacher's training to the conditions he or she meets in schools. His study showed that most graduates stayed within a 150 mile radius of the college from which finding he concluded

<sup>&</sup>lt;sup>2</sup>Ibid., pp. 51-52.

<sup>&</sup>lt;sup>3</sup>Walter Crosby Eels, <u>Surveys of American Higher Education</u> (New York: Carnegie Foundation for the Advancement of Learning, 1937), p. 117.

<sup>&</sup>lt;sup>4</sup>Ibid., pp. 15-16.

<sup>&</sup>lt;sup>5</sup>E. C. Higbie, "The Follow-up Activities of a Teacher Training Institution with its Graduates in Rural Schools," <u>U.S. Bureau of Education Bulletin</u>, No. 6 (Washington: Government Printing Office, 1928), p. 33.

that local needs should have priority in the individual teacher's training. His position is that the college should attempt to keep in contact with new graduates by providing conferences with professors with the objective of solving problems met in the first job. He also suggests that a newsletter containing helpful hints, personal news and findings of the follow-up study be sent to graduates who participate. Effie G. Bathurst, like Higbie, concludes that the responsibility of a teacher's college has not ceased when it graduates teachers. While she appreciates that follow-up encourages better understanding between graduates and their college, she stresses that the main goals are to provide the college with an awareness of the actual problems in the public schools, 10 to assist graduates in adjusting their training to their first teaching difficulties, and to adjust the program to one more realistic for future graduates.

Maurice Troyer and C. Robert Page, in 1944, summarized another attitude that is held by many researchers in the field of follow-up studies when they assert that the objectives for a

<sup>6</sup>Ibid., p. 90.

<sup>7</sup> Ibid., p. 34.

<sup>8</sup>Ibid., p. 29.

<sup>&</sup>lt;sup>9</sup>Effie G. Bathurst, <u>A Teacher's College Follow up Service</u> (New York: Columbia University Press, 1931), p. 12.

<sup>10</sup> Ibid., p. 7.

<sup>11</sup> Ibid., p. 1.

follow-up study should be the same as those which define the education program of the college. 12

A Philosophical or cultural approach to evaluative research is taken by Edward A. Suchman when he speaks of the many educational as well as other social changes that are taking place so rapidly in the late 1960's.

Fundamental changes are taking place...and the resulting ferment has created an insistently strong demand for evaluative research to determine the extent to which current programs are meeting the challenge of a rapidly changing world. 13

A most pointed comment concerning evaluation was made by John R. Mayor in a speech in 1966. He states that "perhaps the greatest weakness in all education at this time is our lack of adequate means of evaluation, particularly evaluation of the achievement of behavioral objectives." Edward Pomeroy, the editor of the book in which the Mayor speech is included, has this to add concerning future evaluations:

Sufficient data on professional assignments, activities and performance of graduates will

<sup>12</sup> Maurice E. Troyer and C. Robert Page, <u>Evaluation in Teacher Education</u> (Washington: American Council on Education Publications, 1944), p. 233.

<sup>13</sup> Edward A. Suchman, Evaluative Research (New York: Russell Sage Foundation, 1967), p. 2.

<sup>14</sup> John R. Mayor, Speech Given in Chicago, February, 1966, Evaluative Criteria for Accrediting Teacher Education, ed. Edward C. Pomeroy. (Washington: AACTE Publication, 1967), p. 30.

be secured to enable an institution to evaluate itself. 15

At least one attempt has been made to evaluate one aspect of the program of the College of Education of the University of New Mexico through the use of a follow-up questionnaire sent to graduates. Ilse J. Gay sent questionnaires to the 1964 graduating class of the Department of Elementary Education with the purpose of assessing the content and quality of the college program. 16 Gay's eleven page instrument attempted to ascertain the respondent's attitude toward the relevance of each course taken to the conditions met in elementary school teaching. The questions were framed to elicit the former students' attitudes toward such intangibles as instructor warmth as well as toward course content. In many contexts, the respondent was asked open-end questions for opinions on how the program as a whole and in specific areas such as student teaching experience or subject matter competency could have been improved given the conditions the graduate met in the first job. 17 Gay recognized the atypical nature of the first year of teaching and she suggested that a follow-up be made so that the results could be compared with her findings. Bathurst too suggests that

<sup>15</sup> Ibid., p. 112.

<sup>16</sup>Ilse J. Gay, "The Elementary Teacher Education Program at the University of New Mexico" (unpublished Master's Thesis, The University of New Mexico, Albuquerque, 1966), p. 6.

<sup>17</sup> Ibid., appendix.

follow-up is of more value when it is systematic so that trends and changes in attitude over the years after graduation may be available to the training institution. 18

Steve Bodnarchuk explains a common attitude toward an established practice of on-going follow-up:

It is imperative then, to have a well organized and continuous program with effective use of the results obtained, a functional application of the information can be an asset to the total educational program... Adequate personnel to carry on follow-up, this integral part of guidance services, should be available. 19

The Bodnarchuk article tells of a follow-up program that has been established in a New Jersey high school. He points out that in the case of his school's program, follow-up has gone from being an integral part of curriculum to a basic determinant of it.<sup>20</sup>

William Kastrinos, in reporting on a follow-up study of participants in a summer institute for biology teachers notes that little is found in literature concerning specific follow-up studies. 21 Perhaps the reason for this lack of published records of follow-up studies is that the material of the studies is so

<sup>18</sup>Bathurst, op. cit., p. 8.

<sup>19</sup> Steve Bodnarchuk, "Improve Through Follow-up," Clearing House, 43:31-32, September, 1968.

<sup>20</sup>Tbid., p. 32.

<sup>21</sup>William Kastrinos, "Summer Institute--A Follow-up," American Biology Teacher, 29:620, August, 1967.

intimately tied to the individual institution, its programs and its interests, that results of the many studies which are mentioned in a general way in the literature—even when the actual question—naires are published—are not given because the data are not thought to have enough applicability or external validity apart from the specific programs of the individual institutions to be publishable.

Jack Nelson conducted a follow-up study of the graduates of Los Angeles State College who had received a Master of Arts degree in secondary teaching from 1956 through 1961. 22 The questionnaire he used asked for information concerning present professional positions, school district where employed, school subjects taught, the scope end nature of post masters work, and used an open-end question designed to elicit the respondent's attitude toward the college. He found that only eight per cent of the 200 graduates who responded had left the education profession and only six per cent had left California. His open-end question received mostly positive or favorable responses with only seven negative opinions and thirty-two neutral which included those who had no comments.

Two separate British studies attempted to evaluate graduate teachers through follow-up. The first compared the results of a

<sup>22</sup> Jack Nelson, "Graduates of A Secondary Education Program,"

Improving College and University Teaching, 14:116, Spring, 1966.

questionnaire with final exam scores and headmaster's rating after five years of teaching. The researchers found little correlation between college assessment and various criteria of success in the profession. 23 The second British study reported a common feeling of young teachers that their theory of education courses were somewhat distant from the actual teaching situation. Moreover, the article concluded that more competent teachers are not more satisfied than less able teachers. Ability was defined by the use of head teacher's references and undergraduate grades. The study showed that older, less fully trained teachers are the happiest and most satisfied. 24

W. A. Owens gives warning to those researchers who would say that a cause and effect relationship can be proved between age and opinion change. In his follow-up study there were indications that "cultural changes might be mistaken for age changes." He adds that it is dangerous to attribute causation to mere aging in attitude measurement in cross sectional as well as in longitudinal studies. 26

<sup>23</sup>S. Wiseman and K. B. Start, "A Follow-up of Teachers Five Years after Completing Their Training," The British Journal of Educational Psychology, 35:342-61, November, 1965.

<sup>24</sup>K. B. Start, "How They Got On," The London Times Education Supplement, p. 355, September 1, 1967.

<sup>25</sup>W. A. Owens, "Age and Mental Abilities: A Second Adult Follow-up," <u>Journal of Educational Psychology</u>, 60:322, December, 1966.

<sup>26</sup> Ibid.

Ray C. Phillips is of the opinion that unless the student perceives teaching as effective, it is not effective regardless of the standards and criteria that are met.<sup>27</sup> Added to this is the opinion of Troyer and Page that there is a halo effect in older graduates attributable to the fact that memory becomes blurred with time.<sup>28</sup>

There are many comments on the subject of teacher rating scales to be found in the literature of survey research. Jack Nelson summarizes a most common attitude when he states:

The main weakness of the data collected in follow-up studies is that the individual's success or failure cannot be credited purely as a result of having attended a particular institution or department within an institution. 29

It might be postulated in this regard that the individual's success or failure in his employment might affect his attitude toward his college as much as does his actual experience in the college. Gus Turbeville suggests that "rating scales have yet to be proven reliable or valid." J. E. Rooks takes a less extreme position when he says that three or four rating devices used to-

<sup>27</sup>Ray C. Phillips, <u>Evaluation in Education</u> (Columbus, Ohio: Charles E. Merrill Publishing Company, 1968), p. 22.

<sup>28</sup> Troyer and Page, op. cit., p. 246.

<sup>29</sup> Jack Nelson, "Follow-up Study of Graduates," Improving College and University Teaching, 12:11, Spring, 1964.

<sup>30</sup> Turbeville, loc. cit.

gether gave a higher degree of agreement than any two devices used by him in his dissertation study of four teacher rating devices. 31 Miller, Willey and McComas found it a problem to isolate criteria to use in defining or predicting teacher effectiveness. 32 Donald P. Hoyt, in a study correlating college grades and adult accomplishment, concluded:

With few exceptions, neither overall college grades nor grades in specific courses were significantly related to any measure of teaching success...Other independent, non-related measures are pupil gain scores, ratings by supervisors and student evaluations.33

A danger of isolating criteria is pointed out by Woellner and Wood in their book which lists minimum requirements for teachers, state by state, when they say that too often minima become maxima. 34 Barr explains that teaching is nowhere adequately defined. 35 He further states that coefficients of correlation

<sup>31</sup> J. E. Rooks, "Abstract of an Analysis of Four Teacher Rating Devices," <u>Dissertation Abstracts</u>, No. 26, p. 5831, 1965.

<sup>32</sup>L. K. Miller, D. S. Willey, and James D. McComas, "A Suggested Research Model for the Investigation of Classroom Teacher Effectiveness," <u>Journal of Educational Research</u>, 58:408, May-June, 1965.

<sup>33</sup>Donald P. Hoyt, "College Grades and Adult Accomplishment,"
The Educational Record, 47:71, Winter, 1966.

<sup>34</sup>Elizabeth H. Woellner and M. A. Wood, Requirements for Certification: Teachers, Counselors, Librarians, Administrators, 30th ed., (Chicago: University of Chicago Press, 1966), authors' introduction.

<sup>35</sup>A. S. Barr (ed.), Teacher Effectiveness. A Summary of Investigations (Denbar Publications, Inc. Madison, Wisconsin, 1961), p. 29.

cannot be taken at face value because of the fact that measures that go together do not prove cause and effect. <sup>36</sup> He suggests that descriptive rather than explanatory statements be made in exploratory follow-up studies. <sup>37</sup>

The results of two more follow-up studies will precede
the review of the literature that deals with the construction of
the survey questionnaire. Jean A. Wells and Muriel B. Woll resurveyed college women seven years after graduation. The same
women had responded to a similar questionnaire one year after they
left college. In the resurvey, questionnaires were returned by 84
per cent of the 5,846 women contacted. It was found that salaries
were 60 per cent higher in 1964 than in 1957, that 51 per cent
were in the work force as compared with 85 per cent in the earlier
survey and that less than one half had taken post graduate courses
although three fourths indicated they wanted further education or
training. Fewer than one per cent had received the doctorate
while 15 per cent had a master's degree. 38

A final follow-up study correlates scores on standardized tests by children who had been through a head start program with classmates in kindergarden who lacked the earlier experience. It

<sup>36</sup> Ibid., p. 135.

<sup>37</sup> Ibid., pp. 28 and 107.

<sup>38</sup> Jean A. Wells and Muriel B. Woll, "College Women Seven Years after Graduation, Resurvey of Women Graduates, Class of 1957," ERIC, 3:146, May, 1968.

was found that while no educational gains had been made by the head start children, they showed greater learning readiness and eagerness six months later. 39 This last example, while not relating directly to a college follow-up, illustrates the fact that more and more educational experiments are building evaluation into their overall objectives. Harold C. Hand explains the philosophy behind such an inclusion:

Systematic polls results are superior to guesswork as a basis for structuring programs ....Personal observation is unreliable because of the influence of unrepresentative observations; reluctance of people to be frankly critical; and, the influence of observers' opinions and interests. 40

Hand adds that reliable data of the kinds needed in education can be had only if guesswork is replaced by systematic data. 41 Dr.

James G. Cooper has said that many federally funded programs are now beginning to insist that some sort of evaluation or follow-up be included in the preliminary plans before financial aid is forth-coming. 42

<sup>39</sup> Max Wolff and Annie Stein, "Six Months Later--A Comparison of Children who had Head Start, Summer, 1965 With Their Classmates in Kindergarden," ERIC, 3:90, May, 1968.

<sup>40</sup>Harold C. Hand, What People Think About Their Schools; Values and Methods of Public Opinion Polling as Applied to School Systems (New York: World Book Company, 1948), p. 26.

<sup>41</sup> Ibid., p. 3.

<sup>42</sup> James G. Cooper, Discussion, February 25, 1969.

By far, the largest body of literature having to do with follow-up studies, surveys and questionnaires deals with details of construction. The question of how to plan and execute studies has been treated exhaustively by authors of books and articles for the past forty years. Many of the complaints about question-naires, their weaknesses and excesses, may also be traced relatively unchanged from pioneering studies to the latest reports.

Leonard V. Koos in <u>The Questionnaire in Education</u> written in 1928 gives insights into details of construction that are still relevant today. Among other things he lists seven types of responses that may be sought in questionnaires. These are: 1. the filling in of simple information; 2. the filling in of variable verbal responses; 3. the indicating of yes and no; 4. checking; 5. ranking; 6. rating; and 7. weighting. He advised that the cover letter be sent with the questionnaire explain the study, motivate the respondent and promise a summary of the results; 44 and, he mentions the still widely accepted belief that those who fail to respond constitute a selection factor that renders the final results less reliable for the purposes of generalization. 45

W. S. Monroe and M. D. Englehart, in 1936, pointed out that one of the worst offenses in questionnaires is their triviality--

<sup>43</sup>Leonard V. Koos, The Questionnaire in Education (New York: The Macmillan Company, 1928), p. 70.

<sup>44</sup> Ibid., p. 124.

<sup>45</sup> Ibid., p. 133.

adding that they are most successful in collecting simple factual information. 46 They also suggest that begging, technical terms and items open to misinterpretation be avoided while numbering, yes or no marking, underlining and checking are best. 47 They give advice about submitting the first draft to objective observers and about conducting preliminary trials or field tests to clarify the instrument and increase handle-ability. 48 They even give examples of institutional or associational headings with their advice on form. 49

Walter Crosby Eels, in 1937, said one should certainly give the number and percentage of replies received. He added that for a validity check at a glance one should have a hypothesis on the number of returns expected for comparison with those actually received. 50

Ray C. Phillips provides working definitions of a questionnaire; of evaluation, and of educational evaluation:

Evaluation is defined as the procedure used in determining the value or worth of a process or thing, whereas educational evaluation is

<sup>46</sup>W. S. Monroe and M. D. Englehart, The Scientific Study of Educational Problems (New York: The Macmillan Company, 1936), p. 43.

<sup>47</sup> Ibid.

<sup>48</sup>Ibid., p. 44.

<sup>49</sup> Ibid., p. 44.

<sup>50</sup> Eels, op. cit., p. 114.

the process used in determining the effectiveness of teaching and/or the value of a learning experience in assisting students to achieve the goals of education. 51

In defining a questionnaire, he says:

It is a list of planned written questions related to a particular topic with space provided for indicating the response to each question, intended for submission to a number of persons for reply; commonly used in normative-survey studies and in measurement of attitudes and opinions. 52

In dealing with the responses to open-end questions, Phillips says the researcher should be concerned primarily with patterns in responses and frequently occurring observations rather than with isolated grievances. 53

Ray H. Simpson defines evaluation in another way when he says it is part of the process by which people make choices and come to decisions. 54 Charles Backstrom and Gerald D. Hursh define survey research as the gathering of information about a large number of people by interviewing a few of them. 55 Backstrom and Hursh add that in beginning the study the prospective survey

<sup>51</sup> Phillips, op. cit., p. 1.

<sup>52</sup> Ibid., p. 15.

<sup>53</sup>Ibid., p. 25.

<sup>54</sup>Ray H. Simpson, <u>Teacher Self-Evaluation</u> (New York: The Macmillan Company, 1966), p. 11.

<sup>55</sup> Charles H. Backstrom and Gerald D. Hursh, Survey Research (Evanston, Illinois: Northwestern University Press, 1963), p. 3.

workers should write down everything they can think of that would be interesting to know in such a study; what others have done in the same line can be a guide in this preliminary listing. 56 The authors add that the way the researcher has defined the problem dictates the relative weight of the questions and that background research prevents weak questions. 57 Backstrom and Hursh also give a checklist they say is helpful in the planning of survey research. Their list includes: 1. hypothesizing; 2. designing; 3. planning; 4. financing; 5. sampling; 6. drafting; 7. constructing (in regard to format); 8. pre-testing; items 9 through 13 refer to face to face interviews; 14. coding data for analysis; 15. processing; 16. analysing; and, 17. reporting. 58 Backstrom and Hursh prefer questionnaires in which all but a few of the questions are highly structured. 59 They suggest that each individual item be checked for ambiguity, misperception, and loading. 60 In partial summary they state that the researcher should have found a topic worthy of study, defined the scope of the research, formulated the hypotheses to be tested, and specified the methods to be used. 61

<sup>56</sup>Ibid., p. 68.

<sup>57</sup> Ibid., p. 69.

<sup>58</sup>Ibid., p. 19.

<sup>&</sup>lt;sup>59</sup>Ibid., p. 73.

<sup>60</sup> Ibid., p. 84.

<sup>61</sup>Ibid., p. 67.

Lastly, they state that if the population is homogenous a smaller sample suffices. 62

Harold C. Hand suggests a table of contents that would reflect the nature of the structure of a survey study. In an introduction he would have: 1. the purpose of the study; 2. how the study was conducted; 3. number and characteristics of respondents; 4. number and characteristics of samples; and, 5. representative character of the findings. In a second section he would have a discussion of the method of analysis. In a third section he suggests placing the findings of the study; the way he would like these reported are: 1. general ratings; 2. each item discussed; 3. correlations between items discussed; 4. feelings and open end trends. In a fourth part he would place a summary and a sketch of the typical respondent. Part five would contain appendices and tables. 63

Melvin N. Freed lists ten steps to follow in the construction of questionnaires. These are: 1. formulate specific objectives for the study; 2. define the purpose, every item should further the avowed pruposes and there should be no tangential items; 3. items should be in logical order in accord with the flow of thought and should reach a climax with continuity used to see the relationships between items; 4. do not include questions if the answers will not

<sup>62</sup> Ibid., p. 26.

<sup>63</sup>Hand, op. cit., pp. 111-117.

be used; 5. clearly state each question; avoid overgeneralities and do not allow too many interpretations; 6. define controversial terms and numbers; 7. do not allow any skipping of items; 8. make sure choices are exclusive with no applicable alternatives; 9. do not use weakening modifiers like often or perhaps; and, 10. ask in relation to the intelligence level of the respondent, not over or under. 64

Richard A. Fear tells of two types of questions that may be asked. These are the direct limited and specific questions and the indirect unstructured or loosely structured. He suggests that the best instruments are patterned—that is a merger of direct and indirect. 65

A. S. Barx makes the point that total population studies in follow-up studies are to be preferred to sampling, especially in exploratories. He adds that after the basic data is collected on populations then samplings can be done. Thomas J. O'Connor says that the main trouble with many questionnaires is the lack of a main idea to tie it all to. He adds that individual items are often bad. 67

<sup>64</sup>Melvin N. Freed, "In Quest of Better Questionnaires," Personnel and Guidance Journal, 43:187-88, October, 1964.

<sup>65</sup>Richard A. Fear, The Evaluation Interview (New York: McGraw Hill Book Company, 1958), pp. 24-25.

<sup>66</sup>Barr, op. cit., p. 28.

<sup>670&#</sup>x27;Connor, op. cit., p. 9.

Wise, Nordberg and Reitz say that a balanced questionnaire has closed and open end items, <sup>68</sup> that respondents should be promised a copy of results, <sup>69</sup> and that a trial questionnaire should be field tested before the final form is sent out. <sup>70</sup>

Three recent studies deal with specific aspects or problems that are likely to arise during the planning and implementation of a follow-up study. The first, by Bruce Eckland, concerns the effects of prodding to increase mail back returns. Noting that errors may be caused by low return rates and that poor veracity may be acute when it is hard to get respondents who most clearly possess the special attributes which the researcher wishes to investigate, he used three unusual types of "prods" to elicit questionnaire returns. In the first instance he used certified mail to ask for returns and in the second he used telephone calls; in the third he used both. These unorthodox methods resulted in 94 per cent returns in his study. The back of the product of the product

<sup>68</sup> John E. Wise, Robert B. Nordberg, and Donald J. Reitz, Methods of Research in Education (Boston: D. C. Heath and Company, 1967), p. 100.

<sup>69</sup> Ibid., p. 101.

<sup>70</sup> Ibid., p. 102.

<sup>71</sup>Bruce K. Eckland, "Effects of Prodding to Increase Mail Back Returns," <u>Journal of Applied Psychology</u>, 49:165-66, March, 1965.

difference in sending the latter. 72 Orr and Neyman also state that costs are kept down if questionnaires are filled out on the same cards that are punched for computer tabulation and if all the responses can be pre-coded for ease in punching. 73 The last study of the three, by Stuart M. Klein, John R. Maher and Richard A. Dunnington is a report of an experiment which attempts to find how identification on a questionnaire determines the honesty of respondents. In their words:

Identification is threatening...and thus leads to response distortion....The degree of distortion depends upon the way identification takes place and the kinds of questions asked. When the questionnaire must bear an identifying mark and the respondent is aware of this a considerable amount of faking takes place even though he is assured of the confidentiality for his responses.

This study also showed that different types of questions are more or less threatening than other types. The researchers say that certain areas of the respondent's job attitudes are perceived as being safe topics for complaint—others may be taboo:

We find that some items produce more distortion than others. Items dealing with pay and with

<sup>72</sup>D. B. Orr and C. A. Neyman Jr., "Considerations, Costs, and Returns in a Large-scale Follow-up Study," <u>Journal of Educational Research</u>, 58:377-78, April, 1965.

<sup>73&</sup>lt;sub>Ibid., p. 374.</sub>

<sup>74</sup>Stuart M. Klein, John R. Maher, and Richard A. Dunnington, "Differences Between Identified and Anonymous Subjects in Responding to an Industrial Opinion Survey," <u>Journal of Applied Psychology</u>, 51:159, April, 1967.

adequacy of evaluations made by superiors with regard to the individual's skills and abilities are sufficiently threatening to produce distortion 75 even under low threat conditions of identification.

A conclusion of this study is that questionnaire items do contain varying degrees of threat and consequently are open to varying degrees of distortion. 76

Many of the books and articles reviewed for this study contain within their texts or as appendices sample questionnaires and cover letters that have actually been used by different institutions. A partial list of these includes the writings by Harold C. Hand, 77 Wise, Nordberg, and Reitz, 78 Backstrom and Hursh, 79 Hauck and Steinkamp, 80 and O'Connor. 81 The American Council on Education publishes a brochure called Report on Questionnaires in which it is stated that a large number of all the educational questionnaires published in America are on file in their offices by subject. 82

<sup>75</sup> Ibid.

<sup>76</sup> Ibid., p. 160.

<sup>77</sup>Hand, op. cit., throughout the text.

<sup>78</sup> Wise, Nordberg and Reitz, op. cit., pp. 95-99.

<sup>79</sup> Backstrom and Hursh, op. cit., throughout the text.

<sup>80</sup>Mathew Hauck and Stanley Steinkamp, Survey Reliability and Interviewer Competence (Urbana, Illinois: University of Illinois Press, 1964), pp. 91-112.

<sup>810&#</sup>x27;Connor, op. cit., pp. 54-74.

<sup>82</sup> American Council on Education. Report on Questionnaires (Washington: ACOE Office of Research Publication, 1966).

Two writings on questionnaires will be quoted here because they present the problem of surveys from unique points of view. Aaron Cohodes tells of a United States Office of Education official who complained that a United States Office of Education survey sent to fifty state departments of education had to be returned since every form from every state was filled out wrong. Cohodes suggests that perhaps the respondent fills out the forms wrong from hoping in a childish way that if he fills out enough forms badly they will stop coming. He adds that so far it has not worked out that way. 83 Mark H. Ingraham and Francis P. King, in reporting on a fact-finding questionnaire they sent to 6,275 college and university presidents and administrators, said that they found there was an undercurrent of dislike for questionnaires. 84 Concerning open-end items, these researchers found that much was written by the respondents and then blotted out. The authors conclude that the mere writing of complaints is catharsis enough. 85

#### Summary

Evaluation is an integral part of the process of education.

Follow-up questionnaires help in the collection of descriptive data

<sup>83</sup>Aaron Cohodes, "Can 50 Departments of Education Be Wrong?"
Nations Schools, 78:27, December, 1966.

<sup>84</sup> Mark H. Ingraham and Francis P. King, The Mirror of Brass (Madison, Wisconsin: University of Wisconsin Press, 1968), p. 167.

<sup>85</sup> Ibid., p. 146.

and of attitudes and thus contribute to the objective of helping educators do a better job. By 1915 educational surveys were popular in the United States. While little is published on the findings of specific follow-up studies, much is published on how to conduct a follow-up study. More and more educational experiments and projects are building in follow-up for evaluation of their efforts.

Questionnaires should contain both restricted and open-end questions. Steps in constructing a follow-up study should include the formulating of objectives, reviewing the literature, hypothesizing, designing an instrument, selecting the sample, collecting the data, analysing the data, and reporting the results. There may be an underlying current of dislike for questionnaires in the educational community.

#### CHAPTER III

#### FINDINGS OF THE SURVEY

Percentages of returns are as follows: if 123, the total number of possible respondents, is taken as the sample, then the 105 responses constitute an 86 per cent return; if 137, the total number of graduates of the two classes, is taken as the total sample then the 105 responses constitute a 77 per cent return. Even this lower figure is high in comparison to the returns that many of the studies in the review of literature lead one to expect from alumni questionnaires.

The data generated by the study are utilized and discussed in relation to the 23 specific hypotheses listed in the first section of the report. This is not to say that much more cannot be discussed. An unlimited number of correlations could be done with the data collected by this study that are beyond the scope and technical ability of the investigator. For this reason the data will be made available to any researcher from the college who wishes to go further as long as the pledge made to the graduates, that all results would be kept confidential, is maintained.

### Selected Data and Hypotheses Tests

1. 86 per cent of the respondents entered their names on the questionnaires even though such an entry was left optional

<sup>1</sup> For more information see figures 1-39, pp. 73-92.

with the respondent because identification has been considered threatening by much published research; 14 per cent did not enter their names thus hypothesis 1, that at least 50 per cent of the respondents would identify themselves by name is accepted.

- 2. 24 per cent of the married males who left teaching gave finances as the reason for having left. Hypothesis 2, that 80 per cent of the married males who left teaching would give finances as the reason, is rejected.
- 3. 69 per cent of the married women who have left teaching gave marriage and family as reasons for having left. Hypothesis 3, which stated that the figure would be 80 per cent, is rejected.
- 4. 60 per cent of the respondents have at least three post graduate hours of credit. Hypothesis 4, that 80 per cent would have 3 or more credit hours, is rejected.
- 5. 60 per cent of the graduates of the class of 1962 are no longer teaching. Hypothesis 5, that 70 per cent would no longer be teaching, is rejected.
- 6. 45 per cent of the graduates of the class of 1966 are no longer teaching. Hypothesis 6, that 30 per cent would not be teaching, is accepted.
- 7. 7 per cent of the respondents are in the armed forces. Hypothesis 7, that 25 per cent of the graduates would be in the armed forces, is rejected.
- 8. 36 per cent of the respondents reside in Albuquerque,
  New Mexico. Hypothesis 8, that 40 per cent of the graduates

would be in Albuquerque, is rejected.

- 9. 68 per cent of those who have taught have taught at a grade level other than that in which they student taught. Hypothesis 9, that 80 per cent taught at other levels, is rejected. When, however, the group is further subdivided, the results differ. While only 49 per cent of those whose practice teaching was in the junior high have taught at a high school level, 82 per cent of those who practice taught in a high school later taught in a junior high. The responses to this question were treated in three categories and thus an individual might have been counted thrice if he taught in junior high, in senior high, and at some other level such as college, elementary or adult education.
- 10. 77 per cent of the respondents were hired within three months of graduation. Hypothesis 10, that 80 per cent would be hired within a three month period, is rejected.
- 11. 22 per cent of the graduates were placed in their first jobs by the U.N.M. placement office. Hypothesis 11, that 80 per cent would have been placed by the college office, is rejected.
- 12. 68 per cent of the respondents have changed jobs one or more times. Hypothesis 12, that 50 per cent of the graduates will have changed jobs one or more times, is accepted.
- 13. 24 per cent of the respondents who changed jobs one or more times did so for financial reasons. Hypothesis 13, that

50 per cent would have changed for financial reasons, is rejected.

- 14. 14 per cent of those teaching are earning between \$6,201 and \$6,800 annually. Hypothesis 14, that 75 per cent of the teachers' salaries would fall in this range, is rejected.
- \$8,001 and \$10,000 annually. If the 13 housewives are subtracted from the 52 respondents who are not teaching then 23 per cent fall into the above mentioned salary category. In either case hypothesis 15, that 75 per cent of those not teaching are earning between eight and ten thousand dollars a year, is rejected.
- 16. 41 per cent of those who have taught earned \$5,001 to \$5,600 on their first job. Hypothesis 16, that 75 per cent of the graduates would fall into the above category, is rejected.
- 17. 41 per cent of those who have taught have taught at both the junior high and senior high levels. Hypothesis 17 which sets a 50 per cent level is rejected.
- 18. 26 per cent of the respondents have taught subjects which they were not certified to teach at graduation. Hypothesis 18 which set a level of 40 per cent is rejected. The simple 14-way cross-sort that supplied this data does not discriminate at a subject to subject level as a more sophisticated statistical program might.
- 19. 69 per cent of the respondents rated "class discussion" with a high 1 or 2 value response; 41 per cent rated "orderly quiet class" with a low 7 or 8 response. Hypothesis 19 which

stated that 80 per cent of the respondents would so evaluate the two classes is rejected.

- 20. 83 per cent of the respondents rated "student teaching" with a high 1 or 2 value response; 64 per cent rated "foundations of education" with a low 6 or 7 value response. Hypothesis 20 which supposed an 80 per cent figure for both is accepted for the first half of the hypothesis and rejected for the second half.
- 21. 51 per cent of the respondents rated their advisor's availability with a 3 or 4 on a five point scale. Hypothesis 21, which posited 80 per cent in these two categories is rejected.
- 22. 56 per cent of the respondents rated the completeness and accuracy of the advisement they received with a 3 or 4 on a five point scale. Hypothesis 22, that 80 per cent of the responses would fall in these two categories, is rejected.
- 23. All the respondents entered either 1962 or 1966 as the year of graduation thus hypothesis 23, a validity check, is accepted.

A final cross sort was run with the data cards for which no hypothesis was formulated. The purpose of the sort was to determine the professions of those who did not sign their names to the questionnaires. It might be supposed that those who did not sign their names feel threatened by the prospect of identification.

Fifteen respondents did not sign their names. Of these 7 are teachers, 2 are graduate students and/or graduate assistants, 3 are housewives, 1 is self-employed or works for a small business, and 1 is a state or federal government employee.

### Portrait of a Typical Respondent

If one were to project a portrait of a typical respondent to the questionnaire he might use a description similar to the following. A representative individual would be a married man about 28 years old. He is a history teacher in an Albuquerque high school who has taken two or three graduate level courses since he received his B.A. in 1966. He was hired within three months of graduation as a result of making a direct application to the hiring office of his local school system. He has changed schools once simply because he wanted to move from the junior high school where he was first employed to a high school. His favorite classroom method is leading a class discussion and he either does not like or does not understand how to use an inductive approach with his class. He is earning about \$6,800 a year although he started teaching with a salary of around \$5,600 annually. He rates his present working conditions as good to excellent except perhaps for a feeling that the salary is a bit low or that bookkeeping duties are a bit much. He has a favorable attitude towards the University of New Mexico and the Department of Secondary Education. As he recollects his undergraduate career he feels that student teaching was his most valuable course followed by his special methods course. He feels he did not profit as much from his two foundations of education courses and wishes that some of the time spent there could have been used in training him to deal with the special problems of the culturally deprived student or perhaps in the intricacies of testing

and measurement. He has a favorable attitude toward his advisor and the advisement he received and he likes being a teacher.

#### Subjective Responses of Graduates

Quoted below is item 24 of the questionnaire, an openended question.

This section, and the other side of the paper, may be used for any comments you may care to make concerning your education and training—or you may answer the question—what would you change if you had it all to do over again.

Fewer than 15 per cent of the respondents left this item

blank. Some filled two entire pages with suggestions and comments.

There were several definite trends in the responses concerning

ways that teacher training might be changed. An English teacher

in San Francisco expresses the feelings of many graduates:

I needed to learn how to teach children to read, where to turn for materials, what and where are teenage books worth reading, and techniques for teaching more individualized lessons. I am willing but sorely uninformed on how to divide my classes into small learning groups.

An English teacher in St. Louis gave a specific plan for changes when she said that a school could be operated like a hospital with future teachers serving an internship like a doctor. This teacher adds that she loves teaching and feels she is good in her profession but would have liked to have started off a little more informed. "I'm learning more each day and enjoying it all," she says.

One of the many teachers who suggested a fifth year of training or an M.A. before teaching gave these reasons for his suggestions:

One participating teacher's methods get to be so familiar they are boring and of little value after a few months. Before student teaching observations are necessary but after student teaching they are even more valuable because the student then has a basis for comparison or evaluation.

He would like a fifth year that consisted of a combination of seminar sessions and varied classroom experiences and observations. These comments are from one of several respondents who report they are returning to a university to prepare for teaching at a college level.

An Albuquerque junior high teacher says that the education student should be exposed to the classroom earlier because many people find they are unsuited for teaching for one reason or another but by the time they finally enter the classroom they are committed irrevocably because of the amount of time they have spent preparing for teaching. Another Albuquerque teacher thinks that being thrown into the student teaching experience all at once is too traumatic. Earlier exposure would help, she says.

An Albuquerque science teacher best expresses another suggestion concerning student teaching when he says:

It is my opinion that if the public school system is going to have a junior high level of instruction then it should be a prime objective of the university to train people to be junior high teachers. The most valuable

course I have taken was at the graduate level. It was entitled "The Junior High School."

He also says that there could be more superior and qualified science teachers if a course would be created by the university to teach science teachers how to use science equipment in the classroom.

A vocational rehabilitation teacher in Albuquerque believes that student teaching could be enlarged to include a semester in a junior high and one in a senior high with two cooperating teachers. He adds his opinion that if professors would spend some time each year teaching in the public schools the theoretical or idealistic slant of many university classes might be changed for the better to a more practical aspect.

A junior high teacher would like to see junior high training separated from senior high training as it is from elementary while a high school teacher suggests that the student teacher carry on all the duties and responsibilities of the cooperating teacher during practice teaching.

A teacher in California suggests that the student teaching seminar be limited to people teaching the same subjects in order to make idea exchange more valuable. She also suggests that special methods be taught at the same time as practice teaching. She is one of the many graduates who would like to see the foundations courses condensed or eliminated.

Several teachers made comments similar to the one below which reflects an abiding interest in the University:

I have heard of changes in the training program at U.N.M. which make me wish I was attending now instead of when I did.

The APSCOE project was mentioned by name in several instances and praised in each case.

A teacher who is now a full-time graduate student says that teaching teachers how to teach is of prime importance. She adds:

Methods of class discipline, how to write tests, how to handle emotional students, how to participate in curriculum projects, how to construct useful lesson plans, how to deal with low income groups, how to motivate, and how to deal with the growing political atmosphere of education—all these and more should supplant the abstractions that are set forth in the foundations courses.

This teacher also suggests that a course be added to the curriculum entitled "how to keep your classroom current." She ends with this comment:

I appreciate the opportunities I had at U.N.M. I seldom found myself at a disadvantage in comparison with graduates from other universities.

The attitude that an individual held toward the University and the Department of Secondary Education seemed, in many cases, to be related to the relationship between the student and faculty members. The comments of a young teacher in Pennsylvania illustrate feelings that were expressed by many respondents.

APSCOE stands for Albuquerque Public Schools, College of Education.

Everyone else in my department was outstanding except my advisor. However when there are so many wonderful people one misfit doesn't do much damage. It was just his methods I didn't agree with. He spoke of a most liberal way to teach and used the most dictatorial methods to put his point across. Perhaps he taught me, in his difficult way, the most important thing I learned—to teach a course in democratic history one must use democratic methods.

An extreme view was put forth by an Albuquerque housewife who had nothing but bitter complaints about her undergraduate classes, her professors, the job of teaching, and junior high students. She taught for two years after graduation and quit because of her dislike for practically everything related to education.

Two men, one 27 years old and the other 47 years old, have taken other jobs because, they both say, a grade of "C" in student teaching made it impossible for them to be hired by Albuquerque schools. A retired military man who wanted very much to teach refused an offer by Albuquerque schools for a unique reason. He said:

The Department of Secondary Education provided a more complete, meaningful and personalized education than did Harvard, Columbia or other universities I have attended in my life. I would be teaching now except for the duplicity of the central office personnel who wanted me to begin teaching at neophyte pay because of lack of experience but they wanted to place me in the roughest school in Albuquerque because of my experience. I am a very proud man with much to offer and this gave me an insight into a system that I wanted nothing more to do with.

This man is in government work in Washington at a very high salary, he reports. He regrets never having taught, he says, and he still resents what he regards as an insult to his pride and intelligence.

Another teacher in California relates an incident that might have embittered him more than it did. He says:

I recall in my student teaching that I was visited by another university supervisor, not my regular instructor, who provided destructive and discouraging criticism. Despite this I feel that my education at U.N.M. was a good one and has proven valuable.

He adds that in his opinion student teaching was not long enough.

A 27 year old man teaching in Uganda says he uses very few of the methods he learned in college. "The psychology is different here," he says.

A soldier in Viet Nam, who rates his working conditions as very poor, tells why he made a decision to give up teaching after teaching for one year in Southern California. He says:

The year of teaching was the most satisfying experience in my life. I was a good teacher but I realize I was not strong enough to withstand irrelevant administrative criticism of dress and grooming throughout an entire career. I hope I shall be able to find gratification in another career without harassment. The only comment I might make concerning the program at U.N.M. is that perhaps the young people, especially today's young people, ought to be told explicitly the administrative problems existing for them in the public schools.

Many graduates remarked how much they enjoy the classroom.

Several people sent greetings to professors; some of the comments

could be called "thank you letters" without stretching the

imagination. One man expressed anger because he received a reminder letter asking that the questionnaires be returned as soon as possible. He stated that such haste would ascertain stereotyped responses.

A large majority of the comments were favorable to the University of New Mexico, the College of Education, and the faculty of the Department of Secondary Education. On the other hand, the most bitter complaints concerned professors who were perceived as being defensive or not well prepared for their classes.

The most frequently stated suggestions concerned various aspects of the teacher training curriculum. A most common desire was that more time be spent on practical matters as opposed to theoretical. The usual breakdown of this expressed preference was that more time be spent in student teaching. Some graduates would like to see the student teacher take the entire day of the cooperating teacher's duties from periods that ranged from two weeks to an entire year. Many suggested that the student be exposed to the classroom much earlier in his college career than was common in 1962 and 1966 and that teaching practice be provided in both junior and senior high school classes. The respondents, in large numbers, would have liked more time spent in the observing of successful and unsuccessful classroom teachers and many would have liked a corresponding seminar in which to discuss the observations. Many mentioned the desirability of a teaching-internship program. Other preferences along these lines were desires for more training in testing and measurement and more time spent on specific remedial

courses in the problems of the culturally and educationally disadvantaged. Many specific needs were expressed such as the need to know how to break a class into smaller groups for individualization of instruction, how to make a classroom more relevant to the lives of the students, how to motivate a group, and a fairly large number remarked that they would change nothing or very little in their training. Quite a number said they felt they were well prepared in comparison to graduates of other colleges and universities. There was no appreciable difference in quantity or quality in the responses to the open-end question between the classes of 1962 and 1966. Several respondents of both classes said they wished they had planned their undergraduate careers differently. Some wished they had a degree from the College of Arts and Sciences with separate certification rather than one from the College of Education while some would have preferred to have majored in elementary education. There was somewhat of a split of opinion in several details mentioned in the questionnaire. About as many respondents said they would have liked more specific methods courses as said they would have wanted more academic training. Another division was between those who praised their cooperating teacher and those who said their cooperating teachers were not effective. The usual criticisms of the cooperating teacher were that he or she was too busy to help or disinterested or that he or she set a bad example.

There was an undercurrent of dislike for many conditions found by the graduate in his employment. The most usual feeling

was that of teachers being squelched or harassed by school administrators. Specific complaints were about lowness of salary, excess of clerical and sponsoring duties, and lack of freedom to innovate. One young man said he wished that all teachers could be taught to fight the system. Many teachers said they felt a need for a fifth year of training or a master's degree before starting to teach. Several would have liked some exposure to teaching requirements in states other than New Mexico. Four people made the comment, "I should have tried harder." One person would have liked some exposure to professional associations while still in college and one would have liked to have omitted the student teaching notebook. One young woman in an Albuquerque junior high school reported that she has developed and is using her own remedial reading program for underachievers.

#### Summary

An ideal program suggested by the responses to the open-end item of the questionnaire would be one where foundations courses were combined to avoid repetition, where the student was exposed to the classroom as soon as possible in his college career, where he or she served an internship or a longer period in student teaching in both jumior and senior high classes, and where the co-operating teacher was very carefully selected in order to be compatible with the student teacher.

Graduates of U.N.M.'s department of secondary education, classes of 1962 and 1966, for the most part, feel an identification

with and warm feelings for their College and Department. The extraordinarily high number of returns and the praise and regards for many faculty members expressed in the responses support this conclusion.

#### CHAPTER IV

# CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS OF THE STUDY

Three sets of conclusions are presented in this section.

The first were derived from the results of the hypotheses tests;

the second were derived from the open-end responses of the graduates while the third were generated by data not specifically treated in the hypotheses or in the free responses.

#### Conclusions Generated by the Hypotheses

- Graduates, in general, do not feel threatened by the questionnaires in that most did not omit their names when they filled out the instruments.
- Most married men do not leave teaching because of financial reasons.
- Many married women leave teaching to be housewives and rear children.
- Many graduates have taken college courses after receiving their first degrees.
- Working teachers, a valuable resource in any community, leave the profession every year for myriad reasons.
- 6. Few graduates are serving in the armed forces.
- 7. Many graduates remain in Albuquerque after graduation.

- Many graduates teach at grade levels other than those in which they practice taught.
- 9. Most graduates were hired within three months of graduation.
- 10. A large number of graduates were not placed in their first positions through the U.N.M. placement office.
- 11. Many graduates have changed jobs more than once since graduation.
- 12. Not too many of those who changed jobs more than once did so for financial reasons.
- 13. Few graduates are earning the salaries reported as average for teachers by the NEA Research Bulletin.
- 14. Those graduates who are not teaching, exclusive of housewives, earn more annually than do teachers.
- 15. Most graduates earned more than the national average for teachers as reported by the <u>NEA Research Bulletin</u> for their first jobs.
- 16. Several graduates have taught at more than one grade level since beginning to teach.
- 17. Few graduates have taught subjects they were not certified to teach at graduation.
- 18. Most graduates value the class discussion method more than other pedogogical methods.
- 19. Student teaching is valued highest of the undergraduate courses; foundations courses receive the lowest ratings.
- 20. Most graduates are satisfied with the advisement they received at the Department of Secondary Education as undergraduates.

# Conclusions Generated by Open-end Responses

This second set of conclusions has been divided or categorized in two parts. The first reflect general or procedural points while the second are specific or limited conclusions.

## General Procedural Conclusions

- A laboratory K 12 school on or near the U.N.M. campus would serve the teacher training program in many useful ways.
- 2. A fifth year or M.A. program separate from the in-service M.A. program is desired by some students who feel they needed more preparation before beginning to teach.
- The needs and methods of the junior high teacher differ from the needs and methods suitable for senior high teachers.
- 4. Experiences in junior high schools and senior high schools with two cooperating teachers would have better prepared many graduates for their eventual jobs.
- 5. The full work load of the cooperating teacher should be experienced by the student teacher for a more realistic practice teaching situation.
- 6. The student teaching seminar might be of more value if attended by students teaching the same subjects.
- Special methods would be of more practical value if taken concurrently with student teaching.
- More training in testing and measurement as used in the normal secondary classroom would be helpful.
- 9. Some graduates feel weak in subject areas in their teaching

while others wish to master more pedogogical methods.

- 10. Some graduates were enthusiastic about their cooperating teachers while others were disenchanted or felt cheated for various reasons by their cooperating teachers.
- 11. A need is expressed to know teaching requirements in states other than New Mexico.
- 12. Some graduates are involved in creative and innovative projects in their work.
- 13. Graduates maintain an interest in college programs such as the APSCOE project.
- 14. A "C" grade in student teaching may prevent a graduate from being hired in the Albuquerque school system. In this sense a "C" is equivalent, for all practical purposes, to an "F".
- 15. A few people who go into teaching dislike the profession and/or dislike children.

## Specific Conclusions

- There is a need for specific training in remedial reading teaching.
- There is a need for easy access to supplementary materials for class work.
- There is a need for mastering the techniques for individualizing lessons in a classroom.
- 4. There is a need to know how to divide classes into small learning groups.

- Science teachers need special training in the handling of science equipment used in classrooms.
- There is a need for training in methods of classroom discipline.
- 7. There is a need for knowledge about the problems of emotional students and methods for handling such students.
- There is a need to know how to participate in school curriculum planning projects.
- There is a need for knowing how to reach and teach the low income or culturally deprived student.
- 10. There is a need to know how to evaluate many different kinds of teaching and learning situations in the public school classrooms.

#### Selected Conclusions Generated by Data Other Than That Treated by the Hypotheses and the Free Responses

- In collecting addresses in the Alumni office, the researcher found that many colleges and departments have the names and addresses of their own graduates tabbed so that they may be selected out automatically for the purposes of special mailings. All such addressings are printed automatically by metal plates.
- Many more treatments may be done with the data already collected in this study.
- Many graduates maintain an interest in and an identification with their university, college, and department.

- 4. Long range, longitudinal follow-up that is cumulative is more useful for purposes of evaluation than are sporadic, nonconnected follow-up studies.
- 5. Students are very vulnerable to certain comments and methods used by college instructors; and, faculty may find it difficult to make students see goals from a long range view.

#### Recommendations

These recommendations have been suggested by the conclusions drawn from the hypotheses tests, the subjective responses of the graduates, and other data not directly related to the above two treatments. In most cases they have a one to one relationship with an accompanying conclusion.

# Recommendations Generated by the Hypotheses

- 1. The faculty and staff should reassure undergraduates so the latter will not fear punishment for expressing honest opinions. It should be pointed out that this study found very few alumni with such fears.
- 2. An in-depth study to find why men never teach or leave teaching should be initiated so that eventually such potential teaching dropouts can be identified early in the college career and so much time, money and effort may be spared in their behalf.

- 3. An effort should be made to retain contact with housewives who have left teaching, perhaps in the form of yearly seminars on campus, for the purpose of encouraging them to return eventually to teaching and to discourage the waste of so much potential and training.
- 4. A study seeking data about who enters graduate school, who does not, who is successful in graduate school, who is not, should be made with the goal of identifying and encouraging people, while still undergraduates, to value in-service training and constant learning of the new discoveries in the profession of teaching.
- 5. A study might be made over a long period of time of those who leave teaching, those who return and those who never return.

  The results of such a study could be used as resource materials by many agencies. For example, the public schools could use such a list to bring their substitute group up to a high professional level by the use of selective recruiting. Many other uses could be found for such data.
- 6. A study might be made with the object of finding if there are a substantial number of trained teacher graduates who go into other professions. Such trends could be studied with the goal of identifying people who would go into other careers, such as social work, so that they may be rechanneled while still undergraduates, into other fields.

- 7. A study should be made to find where graduates go to teach and why with the object of keeping more in New Mexico.
- 8. Some practice should be provided in student teaching at both a high school and a junior high level. A study of characteristics of those who change grade level jobs and why they make such changes would provide data for better placement in student teaching given the characteristics of high school teachers and junior high school teachers.
- 9. A correlational study might be made of the ease of hiring and the subjects the teacher is trained to teach. Such data would help advisors channel potential teachers into fields where there is a shortage if the student is not definite in his preferences.
- 10. A study might be made of the placement office to see why more students do not use these facilities in finding a job.

  Perhaps the students do not know about the facilities that are available on campus.
- 11. An in-depth study of the graduates who change jobs, who changes to what and for what reasons, might be made. The data would provide invaluable feedback to those whose responsibility is curriculum planning. Perhaps the curriculum should prepare students for changes in jobs by telling them what advisors do or what administrators do in the public schools.

- 12. An in-depth study might be made of the earnings of graduates with a view of bringing up New Mexico salaries if it is found they are not conducive to keeping the best people.
- 13. A study might be made of who changed grade levels in teaching and why. Perhaps screening could find those who would be best at each level.
- 14. A discriminative study should be made of those who taught subjects for which they were not certified. An effort should be made to encourage those teachers to get further training for such work.
- 15. A correlational study of grade point averages of those who rated teaching methods in the way they did should be made.

  Undergraduates could benefit from the results of such a study by being exposed to more methods and working teachers could be encouraged to become familiar with more approaches.
- 16. Foundations courses need to be made more relevant to the needs of the working teacher. Perhaps this could be done by allowing teachers and undergraduates some voice in the planning of these courses.
- 17. Perhaps students should be assigned to advisors with whom they could be compatible. A computer program could easily sort out students and advisors using any sort of traits as criteria.

# Recommendations Generated by the Subjective Responses of the Graduates

These recommendations are presented in two categories.

The first contains general or procedural suggestions while the second lists specific, limited recommendations.

#### General or Procedural Recommendations

- 1. A laboratory K 12 school on or near the U.N.M. campus might be run by the C.O.E. wherein undergraduates could observe actual teachers, work as sides, or serve an internship before and after the student teaching experience. Professors could use the school to keep in immediate contact with the realities of the classroom; and, children would have excellent individualized attention.
- 2. A fifth year or master's degree plan should be made available for those students who feel that they need more training before beginning to teach, or who plan to teach in states like California which demand a fifth year of training for secondary teachers. Such a plan should be separate from the in-service master's program for working teachers who have different needs and interests.
- 3. Special training for those students who wish to teach in a junior high school should be available separate from the training given to those who wish to teach in senior high schools.

- 4. Two semesters of student teaching or two distinct teaching experiences in one semester with two cooperating teachers might be initiated for the purpose of more fully preparing the new teacher for either job later.
- 5. The student teacher should carry all the duties and responsibilities of the cooperating teacher as a finale to the student teaching experience. A period of a week or two might be sufficient in this regard.
- 6. Student teaching seminars attended by those teaching the same subjects should be arranged by the department of secondary education at least part of the time for more meaningful discussions of problems met in the classroom. One possible way of arranging this would be to have all the student teachers meet in a large lecture hall and then divide them into flexible and changeable groups.
- 7. The student teacher should take the special methods course during his student teaching so he would have more skills available than those he copies of his cooperating teacher.
- 8. A unit or a course in classroom uses of testing and measurement might be made mandatory or elective in the teacher training curriculum.
- 9. After student teaching the student should be given the option of taking one of two courses. The first would be an intensive study in subject areas where the student feels weak; the second would be in pedagogical methods for those who feel they need more training in methods.

- 10. The traits and attitudes of potential student teachers and cooperating teachers should be identified so that compatible individuals in the same subject areas could be matched.

  Computer matching could easily accomplish this. If a cooperating teacher receives a bad report three or four times in succession, especially if the report is of busyness or lack of interest in the student, the services of the cooperating teacher should be dispensed with.
- 11. One member of the faculty should have an in-depth knowledge of teaching requirements of other states so that interested students could be referred to one resource person for such information.
- 12. Graduates who are involved in creative and innovative projects in their schools should be identified and followed-up in depth for purposes of finding what characteristics in the individual or in his training contribute to his creativity. Such individuals could then be identified and encouraged while still undergraduates or whatever curriculum experiences helped them to become innovative might be retained and given high priority in the teacher training classes.
- 13. Graduates should be sent periodic communications about the activities of the department such as the APSCOE project.

  Either a separate mailing could be made to them or the department could send items to the alumni office to be included in the periodic newsletters they mail to virtually all University of New Mexico graduates.

- 14. Students should be warned early in their college career that a "C" in student teaching is interpreted by many administrators as meaning the student failed.
- 15. People who dislike children or teaching should be identified early in the college career and encouraged to change to another field of studies. A study to discover the traits of those graduates who disliked teaching and children would be very desirable but hard to design or find participants willing to cooperate.

#### Specific Recommendations

- A course or part of a course should be devoted to teaching future English teachers the principles and skills involved in remedial reading.
- Every student who wishes to become a teacher should be trained to find supplementary materials related to his major field of study.
- 3. The naming and illustrating of techniques for individualizing lessons should be part of every student's repertoire either before or during student teaching.
- 4. Each education student should learn how to divide classes into small learning groups—when and for what purposes such divisions are appropriate.
- A period of time should be devoted to the training of science teachers in the use of science equipment.

- 6. The student teacher should be helped to learn what class discipline methods are effective and which are not. He could be given practice in various discipline problems in a role playing session.
- 7. The study of human growth and development as regards adolescents should contain practical advice on the handling of emotional problems that afflict youngsters.
- 8. Education students should be shown how to help in curriculum planning given the needs of a particular student community.
- 9. Some time should be devoted to learning to understand, teach, and motivate the culturally deprived students for whom the "A", "B", "C" system of rewards is inappropriate.
- 10. Freshmen who plan to become teachers should begin observing teachers and should be given the opportunity to do so.

## Recommendations Generated by Data Other Than That Treated by the Hypotheses and Free Responses

- Since follow-up should be on-going, it could be facilitated by the department's requesting the tabbing of addressograph plates of all secondary education graduates for whom addresses are available in the U.N.M. Alumni Office. This could insure quick automatic addressing of envelopes for communication.
- Since many more uses can be made of the data collected in this study, the investigator will turn over the question-

naires and/or the IBM cards to any serious researcher for further study if the receiver agrees to keep the promise of confidentiality made to the respondents.

- 3. Lines of communication with the graduates might be kept open by the combining of regular follow-up with a newsletter giving the results of the follow-up and news about University, College and Department plans and projects. Any new and pertinent findings in the field of education might also be included.
- 4. Long range, longitudinal follow-up kept up over many years should be established by the department so that continuous data for curriculum improvement would be available to the faculty.
- 5. Some sort of sensitivity sessions including students, faculty, and perhaps alumni could be encouraged by the department so that insights into the needs and problems of each group might be communicated and shared.

# Limitations of the Study

This study as an exploratory investigation in institutional research did little more than collect descriptive data and touch upon evaluation—the primary objective of follow-up studies.

The data apply to secondary education graduates of the classes of 1962 and 1966 of the University of New Mexico and may not be representative of U.N.M. secondary education graduates

of other years or of graduates of other colleges and universities. FIGURES

#### EXPLANATION OF FIGURES

of respondents who supplied information to each item of the questionnaire as broken down for data processing. Figures 1 through 18 and figures 38 and 39 are based on 105 as the total population. Figures 19 through 37 use as an 100 per cent base the 81 respondents who have taught. The 24 respondents who have never taught except at the cadet level were instructed not to respond to items 18 through 21 on the questionnaire. These latter items were key punched as columns 23 through 37.

Each number within the rectangles of each individual illustration refers to the percentage who responded in a given way. The explanatory captions identify the response categories. The maximum responses for any given item are 10. The minimum responses are 2 for any one item. For the actual numeric responses to each item, see appendix for the computer compilations.

Figure 1. Identification	
86	14

86% entered their names; 14% did not identify themselves.

3

16 % are single; 80% are married; 3% are divorced; 1% are widowed.

Lgure 3. Sex	
54	46
<b>的对方在自己的基本的现在分词形式的现在分词形式的现在分词形式</b>	

54% are males; 46% are females.

	NOT THE P	1	
69	15	7	32 4

69% are between 20 and 30 years of age; 15% are 31 to 40 years old; 7% are 41 to 50 years old; 3% are 51 to 60 years old; 2% are over 60 years old; 4% did not respond to this question.

Figure 5. Degree and Year of Graduation

35	7	49	9

35% B.A., 1962; 7% B.S., 1962; 49% B.A., 1966; 9% B.S., 1966.

Figure 6.	Hours	of Post	Graduate	Trainin	ng	,	_	-	-
									- Charleston
	39		15	12	8	7	11	7	The
									-

39% = 0 hours; 15% = 3 to 7 hours; 12% = 8 to 14 hours; 8% = 15 to 30 hours; 7% = over 30 hours; 11% = M.A. or M.S. degree; 7% = M.A. or M.S. plus three or more hours; 1% = no. response; No doctorates.

Figure 7. Employment

6	48	6	7	3 7	7	.12	2	2

6% = full time graduate students and/or graduate assistants; 48% 2 teachers; 6% = those employed in education but not as teachers; 7% = those in active duty with the armed forces; 3% = the self-employed or those working for small businesses; 7% = those employed by large corporations; 12% = full time housewives; 2% = those in other jobs not already mentioned; 2% = no response.

Figure 8. Location of	Re	sid	ence		T		
36	4	5	6	15	4	20	10

36% in Albuquerque; 4% elsewhere in New Mexico; 5% in Colorado; 6% in other states adjoining New Mexico; 15% in California; 4% outside the United States; 20 % in various other states; 10% no response.

Figure 9. Level of Student Teaching

43

55

43% junior high; 55% senior high; 1% neither; 1% no response.

Figure 10. Subject Categories Certified to Teach at Graduation

14	27	6 3 3	44	3

14% language arts; 27% social studies and/or history; 6% sciences; 3% languages; 3% mathematics; 44% cross category combinations; 3% no response.

Figure 11. H	iring Time after Graduation			П
20	57	5	13	5

20% immediately; 57% within three months; 5% within six months; 13% other intervals; 5% no response.

Figure 12. Pla	cement Agency for Firs	st Job	
22	39	32	7

22% = U.N.M. placement office; 39% = direct school district contact; 32% = other contacts; 7% = no response.

Figure 13. Numb	er of Job Chang	es			
A TO A MARIN MANAGEMENT			******		
25	25	23	13	7	7

25% = no changes; 25% = one change; 23% = two changes; 13% = three changes; 7% = more than three changes; 7% = no response.

Figure 14.	Reasons	for Job (	Changes	
16	16	16	17	35

16% = financial; 16% = interest; 16% = marriage and family; 17% = other reasons; 35% = no response.

Figure 15. Present Salary Per annum

automorphism and a second	A Part of the	3	*****		199 191	
11 2	1 15	11	17	13	13	17

11% = under \$4,000; 2% = 3,001 to 4,000; 1% = 5,001 to 5,600; 15% = 5,601 to 6,200; 11% = 6,201 to 6,800; 17% = 6,801 to 8,000; 13% = 8,001 to 10,000; 13% = above \$10,000; 17% = no response.

Figure 16. Annual Salary on First Job

6	5	28	35	8 22 8 6

6% = under \$3,000; 5% = 3,001 to 4,000; 28% = 4,001 to 5,000; 35% = 5,001 to 5,600; 8% = 5,601 to 6,200; 2% = 6,201 to 6,800; 2% = 6,801 to 8,000; 8% = above \$8,000; 6% = no response.

Figure 17. Rating of Present Working Conditions

3 11 15 23 29 19

3% poor; 11% barely adequate; 15% adequate; 23% good; 29% excellent; 19% no response.

Figure 18. Reasons for Having Never Taught or for Leaving Teaching

7 11 3 22 57

7% financial; 11% marriage and family; 3% boredom; 22% other reasons; 57% no response.

Figures 19 through 37 use 81, the number of those who have taught, as the total sample. The 24 respondents who have never taught were instructed not to answer the corresponding items on the questionnaire.

Figure 19. Teaching Experience in the Junior High School

		X (0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
444		
	84	16

yes; 10% no.

Figure 20.	Teaching	Experience	in	the	Senior	High	School
	56					44	

56% yes; 44% no.

Figure 21. Teaching Experience at Other Levels Such as College, Elementary, Kindergarden, Adult

23	77	

23% yes; 77% no.

Figure 22. Subjects Taught or Teaching

19	20	5 1 6	26	21 2

19% language arts; 20% social studies and/or history; 5% sciences; 1% languages; 6% mathematics; 26% cross category combinations; 21% other subjects; 2% no response.

Figures 23 through 30 use a value scale of 1 to 8 with 1 being of highest value and 8 of lowest value for classroom use.

Figure 23. Ranking of Library Use 7 8 NR

1 = 1%; 2 = 1%; 3 = 4%; 4 = 16%; 5 = 16%; 6 = 17%; 7 = 17%; 8 = 19%; No response = 9%.

								_NR
10	12	19	11	9	15	7	7	10

Figure 25. Ranking of Supplements to Basic Texts

1 2 3 4 5 6 7 8 NR

6 20 16 15 20 5 2 7 7

1 = 6%; 2 = 20%; 3 = 16%; 4 = 15%; 5 = 20%; 6 = 5%; 7 = 2%; 8 = 7%; no response = 7%.

-	Fig	ure 26.	Ranking of	Independe 4	ent Stu	dy 6	7	8	NR
	5	10	18	16	11	9	15	7	9

1 = 5%; 2 = 10%; 3 = 18%; 4 = 16%; 5 = 11%; 6 = 9%; 7 = 15%; 8 = 7%; no response = 9%.

	State of the		ALK KY				72.712.	T
14	14	4	11	7	16	12	15	7

1 = 14%; 2 = 14%; 3 = 4%; 4 = 11%; 5 = 7%; 6 = 16%; 7 = 12%; 8 = 15%; no response = 7%.

Figure 28. Ranking of Class	Discussion Meth	od 3	4	5 67 NR
45	24	10	5	5 22 7
1 = 45%; 2 = 24%; 3 = 10%; 4 8 = 0; no response = 7%.	= 5%; 5 = 5%;	6 = 2%	6: 7	= 2%:

Figure 29. Ranking of Orderly, Quiet Class

7 9 7 9 9 9 15 26 9

1 = 7%; 2 = 9%; 3 = 7%; 4 = 9%; 5 = 9%; 6 = 9%; 7 = 15%; 8 = 26%; no response = 9%.

ì	2	3	4	5	re Method	7	8	NR
7	7	12	9	14	14	15	7	15
= 7	1%: 2	= 7%;	3 - 129	6; 4 = 9%	5; 5 = 14%	. 6 - 1/	1%: 7	= 15%:

1 = 7%; 2 = 7%; 3 = 12%; 4 = 9%; 5 = 14%; 6 = 14%; 7 = 15%; 8 = 7%; no response = 15%.

Figures 31 through 37 are evaluations of courses that virtually all recent secondary education graduates have taken. A value scale of 1 to 7 is used with 1 signifying the most value—7 the least—from the point of view of the working teacher.

Figure 31. Rating of "Foundations of Education"

NR

123 4 5 6 7 NR

124 9 23 41 20

1 = 1%; 2 = 1%; 3 = 1%; 4 = 4%; 5 = 9%; 6 = 23%; 7 - 41%.

1 = 1%; 2 = 1%; 3 = 1%; 4 = 4%; 5 = 9%; 6 = 23%; 7 = 41%; no response = 20%.

Figur	re 32.	Rating of	"Educational	Psycholo 5	gy"	7	NR
7	9	20	20	16	4	11	13

1 = 7%; 2 = 9%; 3 = 20%; 4 = 20%; 5 = 16%; 6 = 4%; 7 = 11%; no response = 13%.

Figu	re 33. Rati	ng of "General Me	ethods of	Teach 5	ing" 6 7	NR
-						
6	20	27	. 13	10	4 5	15

l = 6%; 2 = 20%; 3 = 27%; 4 = 13%; 5 = 10%; 6 = 4%; 7 = 5%; no response = 15%.

-						
6	10	19	25	7	10	23

Figure 35. Rating of "Special Methods of Teaching"

2 3 4 5 6 7 NR

10 33 17 10 6 4 4 16

1 = 10%; 2 = 33%; 3 = 17%; 4 = 10%; 5 = 6%; 6 = 4%; 7 = 4%; no response = 16%.

Figure 36.	Rating of "Studer	nt Teaching"	2	(7) 3 4 56 NR
	67		16	5 311 7
1 - 67%: 2	- 16%. 3 - 5%. //	= 3%: 5 = 1%:	6 - 1%:	7 - 0:

1 = 67%; 2 = 16%; 3 = 5%; 4 = 3%; 5 = 1%; 6 = 1%; 7 = 0; no response = 7%.

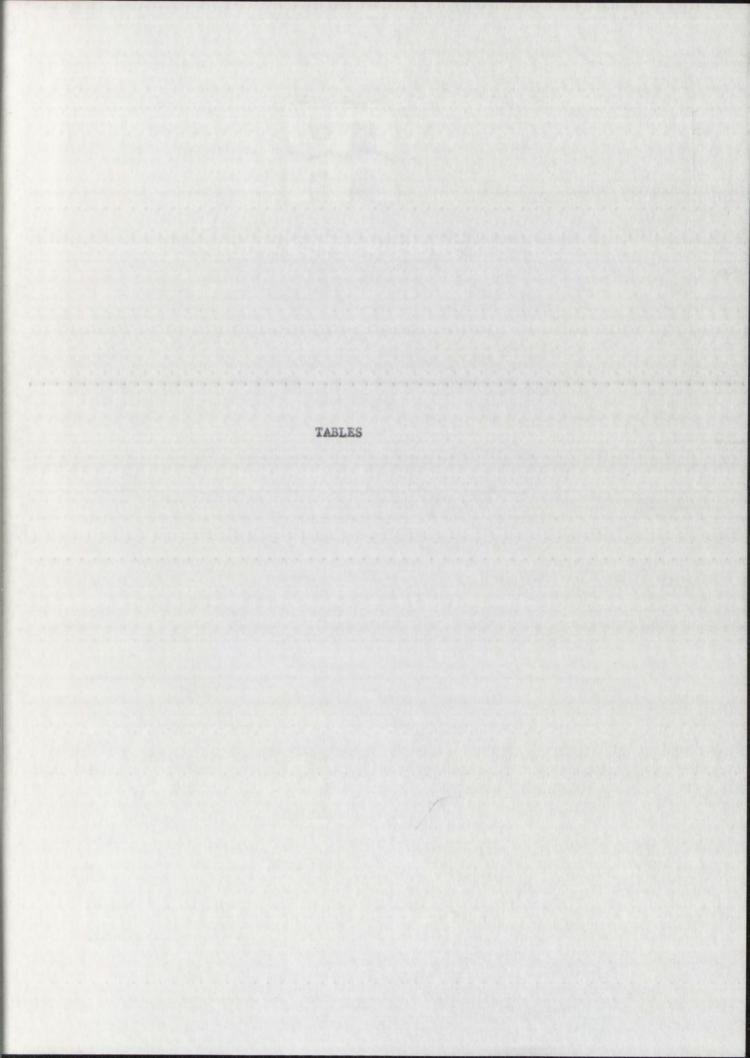
(1) I	Figur 4	e 37. Ra	ating of "Foundations	of Secondary	Education"
33	7	12	33	23	19

1 = 0; 2 = 3%; 3 = 3%; 4 = 7%; 5 = 12%; 6 = 33%; 7 = 23%; no response = 19%.

Figure 3	38. Evaluati	on of Advisor Avai	ilability 5	NR,
2 9	21	30	35	3
1 = 2%;	2 = 9%; 3 =	21%; 4 = 30%; 5 =	35%; no response =	3%.

These final two figures return to the use of the total group of 105 which includes the 24 graduates who never taught. The figures represent evaluations of advisors on a scale of 1, low, to 5, high.

Fi	gure, 2	39.	Evalu	uatio 3	n of	Com	plete:	ness	and	Accu	racy of	Advid	e _NR
	+ 10												
3	7			29			27				31		3
1 :	= 3%:	, 2 :	= 7%;	3 =	29%;	4 =	27%;	5 =	31%:	no	respons	e = 3%	6.



### TABLE 1

## TABLE OF SUMMARY STATEMENTS FOR OPEN-END RESPONSES

Item 24 of the questionnaire: This section, and the other side of the paper, may be used for any comments you may care to make concerning your education and training—or you may answer the question—what would you change if you had it all to do over again?

The number following each statement refers to the number of graduates who made such a suggestion.

- 1. More practical rather than theoretical training is desirable. 21
- 2. More time should be spent in student teaching and/or practice teaching in both senior high and junior high schools would be helpful. 18
- 3. A teaching internship including more observations of successful and unsuccessful working teachers would be helpful. 16
- 4. Faculty members and/or special educational projects of the Secondary Education Department receive favorable mention. 16
- 5. Respondents left the open-end question blank. 16
- 6. Favorable references were made to the University of New Mexico. 10
- 7. Combine repetitious foundations courses. 8
- 8. More training in remedial education and/or special training for the disadvantaged student would be helpful. 8

- Few or no changes in the undergraduate training are necessary.
- 10. A degree from the College of Arts and Sciences with a separate teaching certificate would have been more appropriate. 7
- 11. More academic training would have been helpful. 6
- 12. A fifth year of training and/or a master's degree before starting to teach would be desirable. 6
- 13. The job of teaching receives favorable mention. 6
- 14. Higher pay would be appreciated. 5
- 15. More training in testing and measurement would be helpful. 5
- 16. Dislike for the cooperating teacher is expressed. 4
- 17. U.N.M. graduates compare favorably with graduates of other colleges. 4
- 18. School administrators squelch or harass teachers. 4
- 19. Faculty members receive unfavorable references. 4
- 20. "I should have tried harder." 4
- 21. Teachers have too many clerical and sponsoring duties. 3
- 22. The cooperating teacher was helpful. 3
- 23. "I should have majored in elementary education." 2
- 24. Teachers should be taught to fight the system.
- 25. The student teaching notebook should be omitted.

## TABLE 2

## TABLE OF NUMBER RESPONSES THAT RESULTED FROM CROSS-SORTS DONE ON A MECHANICAL SORTER

- (Ho 2)\* 57 males; 51 married males; 29 not teaching; 7 gave finances as the reason for leaving teaching.
- 2. (Ho 3) 85 married; 34 females; 16 not teaching; 11 for reasons of marriage and children.
- 3. (Ho 5) 43 = class of 1962; 26 no longer teaching.
- 4. (Ho 6) 62 = class of 1966; 28 no longer teaching.
- 5. (Ho 9) 42 students taught in junior high; 32 taught in junior high; 15 taught in senior high; 7 taught at other levels such as college, elementary, etc.
- 6. (Ho 9) 58 student taught in high school; 36 taught in junior high; 30 taught in senior high; 12 taught at other levels such as kindergarden, adult education.
- 7. (Ho 13) 71 changed positions 1 or more times; 17 did so for purely financial reasons.
- 8. (Ho 14) 51 are teaching; 8 are earning \$6,201 to \$6,800 annually; 22 are earning under \$6,201; 18 are earning over \$6,800.
- 9. (Ho 15) 52 are not teaching; 9 are earning \$8,001 to \$10,000 annually; 13 are earning over \$10,000; 17 are earning less than \$8,001.

<sup>\*</sup>Ho means hypothesis.

- 10. (Ho 16) 81 have taught at some time since graduation; 33
  earned \$5,001 to \$5,600 on first job; 33 earned less than
  \$5,001 on first job; 12 earned more than \$5,600 on first
  job.
- 11. (Ho 17) 81 have taught at sometime since graduation; 69 in junior high schools; 45 in senior high schools; 33 have taught in both junior and senior high schools; 12 have never taught in junior high; 36 have never taught in senior high; 19 have taught at other levels.
- 12. (Ho 18) 14 were certified to teach language arts; 15 have taught language arts; 21 were certified to teach social studies or history; 16 have taught social studies or history; 5 were certified to teach science; 4 have taught science; 2 were certified to teach math; 5 have taught math; 2 were certified to teach languages; 1 taught languages; 35 were trained to teach cross-category combinations of subjects; 21 have taught cross-category combinations of subjects; 17 taught other subjects or classes for which they had no certification.



COMPUTER PRINTOUT



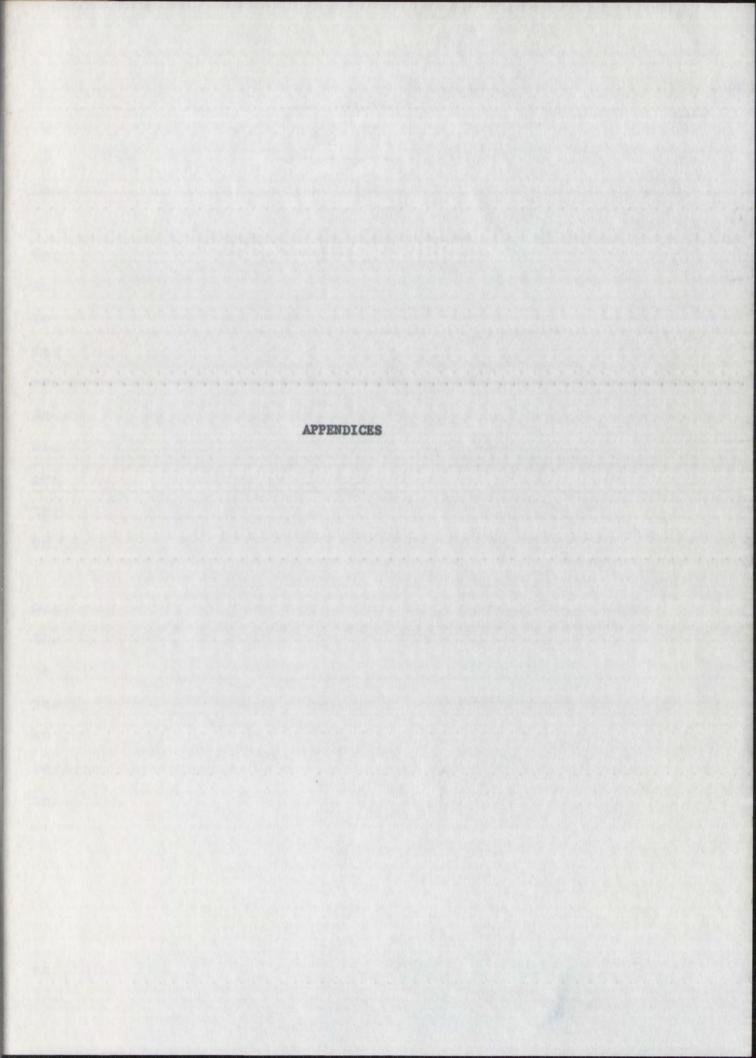
KAROLTON KLASP® NO. 63 6½ x 9% KAROLTON ENVELOPE WEST GARROLLTON, ONIO

-	0	1	U	M	N
no	-	EGP*			

0			4			COL	LUHN					4.	
	100			[2]	[3]	刷	[5]		团	181	日	[0]	
0	3 THE 9 H	10	C	0	0	4	. 0	1	2	11	1	3,	
		0 1 2		6	7	36	18	6	20	60	0	0 5	
	DIGITO	2	5	2	7	8	6	7	6	6	8	1230	1
0		3	17	11	12	15	13	6	15	3	3	1054	
		0	90	16	57	73	36	41	6	38	45	15	
		7	21	. 23	27	17	11	6	3	7	69	45 7	
0	DIGIT 1	2	19	15	1	8	5	4	11	36	6	6.	1
1150		3	1	6	5	C	8	54	0	2	3	0	1
	h .	0	15	85	48	16	7	16	51	4 .	58	28	1
0	DIGIT 2	T	61	41	27	17	2	5	12	12	13	36	
	DIGIT 2	2	62	16	1	10	17	8	11	19	7	.6	
		3	1	7	16	5	27	13	. 2	9	7	6	
0			0	3	C	7	52	13	6	5	1		
	D	012	5	34	24	17	1	30	16	. 3	0	0	
	DIGIT3	2	0	4	3	15	13	15	3	8	6	0.	
0		3.	1	16	22	8	14	4	2	22	31	3	
	5	01-	0	1	Q	3	10	9	7	6	0		
	5	1	13	1	13	18	16	37	24	23	7	0 7	
0	O DIGIT 4	2	0.	1	13	9	12	13	9	4	28	o	
Harris S	1.1	3	3	16	11	1 5	8	2	6	32	WITH THE PARTY OF	3	
100	050	0	0	0	0	2	0	7	3	16	0	0	
0	21.	1	0	C	7	0	11	9	30	4	7	11	
1. 36	S DIGITS	2	0	5	13	7	16	9	6	37.	33	0	
	of	30	7	13	8	20	5	1	10	4	0	47	
0		0	0	0	C.	C	0	11	7	0	0	0	
VALUE OF		1	0	0	C	0	18	2	13	2	7	11	17.
	DIGIT6	2	C	21	14	12	4	7	27	0	o	0	
0		3	18	3	3	6	3	7	8	21	0	0	
		0	0	0	C.	0	0	2	0	0	0		
-	DIGIT 7	1	0	C	C	0	2	12	10	2	12	0 12	
0		2	C	17	14	6 8	3	0	19	0	0	0	4
102		3	33	9	3	0	C		13	0	0	0	
-		0	0	C	0		14	8	0	0	0	0	
0	NIGIT 8	1	0	C	0	0		6	12	0	21	6	
= 4		2	C	C	15	6	6	0	0	0	0	0	
0		3	0	C		CONTRACTOR SERVICE STREET, CARROLL CONTRACTOR	C	0	2	0	0		
0		0	0	0	0	C	C	0	0	0	23	0 24	
	DIGITG	1	0	0	24	24	24	24	24	24	24	24	
0		23	24	24	24	24	24	24	24	0	0	0	
0		3	2.4	24	~ · · · · · · · · · · · · · · · · · · ·	24		The Property of the Park of th			-	Party	

There are 45 with a "1"

```
/ID RAX 543321683, EF 501 • REEDY, RICHARD L.
/JCE TIME=01.GO
/FIC LIST
BES FORTRAN C COMPILER
S.0001
S.0002
              DIMENSION L(40), K(10,40)
             1 FURMAT (4011)
5.0003
             5 READ (5,1) L
S.0004
S.0005
S.0006
               IF (L(1)) 4.4.3
             3 DO 2 J=1,40
              I=L(J)+1
5.0007
             2 K(I,J)=K(I,J)+1
5.0008
              GO TO 5
            6 FORMAT ( 11)
5.0009
S.0010
S.0011
             4 WRITE(6,6)
             7 FURMAT (1018)
                                            D$ 8 J=1,40
S.0012
S.0013
              DO 8 I=1.10
           E WRITE (6.7) (K(1.J). J=1.40) - 8 WRITE (6,7) (K(2,7), I=1,10)
 5.0014
               CALL EXIT
5.0015
               END
                  SIZE OF COMMON 00000 PROGRAM 02292
END OF COMPILATION MAIN
```



UNIVERSITY OF NEW MEXICO, DEPARTMENT OF SECONDARY EDUCATION

FROM: Office of Dr. William B. Runge DATE: March 5, 1969

TO: U.N.M. Secondary Education Graduates SUBJECT: Follow-up Study.

Dear Graduate;

A follow-up study of graduates of U.N.M.'s Department of Secondary Education is being made under the advisement of Professors William Runge, John Dettre and Robert White. You were selected to participate in this study partly in order to give the department data about its former students and partly to give you a chance to evaluate the educational experiences that were provided for you.

An educational institution cannot upgrade and develop its program meaningfully unless it knows how its present and past students are progressing in the profession. At the same time it is only through the cooperation of alumni that any information may be collected.

Master's thesis and as such the data will be available to you at the University. Your participation is needed if the study is to be truly representative of U.N.M. graduates during the past seven years. Please complete the questionnaire and return it as soon as possible in the postpaid return envelope. The results will be handled statistically rather than individually and all the responses will be confidential.

Thank you for your attention and cooperation.

Eusproletti

Eve Iacoletti Project Researcher

enclosures: 1 two-page questionnaire 1 stamped return envelope UNIVERSITY OF NEW MEXICO, DEPARTMENT OF SEJONDARY EDUCATION

FROM: Office of Dr. Wm. B. Runge DATE: March 20, 1969

TO: U.N.M. Secondary Education Graduates SUBJECT: Follow-up Study

Dear Graduate;

This is a reminder concerning the Follow-up questionnaire that you received from the University of New Mexico's Department of Secondary Education several weeks ago.

If you have already mailed in your questionnaire please disregard this reminder.

If you have not as yet completed and returned your copy please do so as soon as possible since the study cannot be really complete without your responses.

Thank you for your cooperation.

Sincerely,

Eve Iacoletti

UNIVERSITY OF NEW MEXICO, DEPARTMENT OF SECONDARY EDUCATION

FROM: Office of Dr. Runge DATE: April 3, 1969

TO: U.N.M. Secondary Fducation Graduates SUBJECT: Follow-up Study

Dear Graduate;

Many of your fellow graduates have already completed and mailed in the follow-up questionnaire of March 5. Just in case you have lost or misplaced your copy another is enclosed with this letter. Please fill it out and return it as soon as possible if you have not as yet done so since the study will be less reliable and valid without your cooperation.

As you know, any educational endeavor needs data upon how it is meeting the needs of those who experience its programs. Your help, in the form of answers to the questions asked in the enclosed instrument will be of great value in the department's determinations of how its graduates perceive their training. As you probably have noticed, much of the questionnaire is devoted to basic fact finding and you are the only one who has the facts that are sought. Please be assured that what you say is important and will matter.

Thank you for your attention and cooperation.

Sincerely,

Eve Iacoletti

Ena De pala

enclosures: 1 two-page questionnaire

1 addressed return envelope

1000/044"

Onliege of dudstion University of New Mexi 87106

# (preliminary sample)

SECONDARY EDUCATION FOLLOW-UP STUDY QUESTIONNAIRE

000	18 19 19	9	(options	1)		D	ATE_			
e cir	cle w	here	appropri	ate.						
rital	stat	us:	(1)Singl	e. (2)	Married	. (3)Di	Lvorced	. (4)Wid	lowed	
x: (	(1)Mal	.e. (	2)Female		3. P	lease fi	ill-in	your age		
									955, B.A.)	)
1			and/or				complete	ed to da	te	
me or	desc	ribe J	your pre	sent po	sition_			3000		
ll-in	the	city a	and stat	e where	you won	rk now_	11111111			
							ELAKE DE	(2) Sani	or High or High.	
hat ow so	on af	ter gi	bjects did aduatio	You act	you hire	teach		STATE		
laced	inv	our fi	otherwi rst job (3) T	. (1)0	N.M'ST	olacemen	t servi	ca. (2)	you were Direct so	nocl
lease	list	the nother	umber a	nd title	es of fu held s	all-time since gr	positi	ons in	different	
lease	list	the r	easons	for char	nges of	positio	ns	AS ELSE		
lease 1)\$54 5)800	circ 00-58 1-10,	le the	catego: 2)5801-62 7)10,000	ry which 200; (3) 0-20,000	includ 6201-66 0; (8)ab	les your 500; (4) bove 20,	preser 6601-70	t yearl	y salary. 7001-8000	;
VOU	m time	st inh	often	rmaduati	on (7)5	VION 580	0. (2)5	2001 600	you recei 0; (3)620 (8)above	7 French
lease ondit	circi	le the	item theor; (2	hat best )barely	reflect adequat	ts your e; (3)a	attitu	de towa	rd your wood; (5) exc	orking ellent
you	have	never	taught	or have	e left t	eaching	please	state	why	
	111 (	Others	HAVE NET	ue to it	em 18.			E	t and are	
achi	ng nov	W. (1)	7; (2)	8; (3)	9; (4)	10;(5)	11; (6)	12;(7)	other	
ease	list	the s	ubjects	you hav	e taugh	t in th	e past	and are	teaching	now

lease rank the following items from 1 to 8 in the order of their use
(A) library use  (B) audio-visual-aid use  (C) supplements to basic texts  (D) independent study  (E) lecture method  (F) class discussion  (G) orderly quiet class  (H) inductive method
hich classes in your professional preparation have been of most benefit of you? Please rate the items in the following list from 1 to 7.
(A) Foundations of Educations.  (C) Educational Psychology.  (E) General Methods of Teaching  (G) Student Teaching  (B) Growth and Development  (D) Foundations of Secondary Ed  (F) Special Methods of Teaching
an you remember any incident that influenced you greatly whether for bod or bad in connection with secondary education? Please recount it here.
is section is for any comments you may care to make concerning your ucation and trainingor you may answer the questionwhat would you ange if you had it all to do over again?
still think you should get at the effectiveness advisement to counseling and the leasons by for choice in 21
Thank you.

# WUESTIONNAIRE # 2 (Field Test Version)

MATERIAL STATE AND	(optional)	LA IE
ase check where	appropriate:	
Marital status:	single. marrie	ddlvorcedwidowed.
Sex:male.	female. 3. P	lesse fill-in your age
Fill-in the yes	r and initials of you	r first degree(e.g.,1955,B.A.)
		uste hours completed to date:
		on
Fill-in the city	y and state where you	work now
Please check the	e level at which you	student taughtJunior high.
		rtified to teach at graduation:
How soon after	graduation did you b	egin your first job, teaching or other
placed in your	first jobUNW's	re agency through which you were placement officedirect school s or relatives. Coher
		itles of full-time positions in ses you have held since graduation.
Please list the	ressons for changes	of positions

ease check the category which include:	s your present yearly balary.
s40004001-50005001-5600	601-62006201-6800.
_80008001-10,000above 10,000.	
your first full-time job after gradu	
4001- 50005001-56005601-6200	6201-66006801-8000.
above 8000.	
a checkmark, please rate your presen	t working conditionspoor.
rely adequategood	excellent.
you have never taught or have left to	
and the state of t	
F YOU HAVE NEVER TAUGHT PLEASE SKIP T	O ITEM 21. OTHERS CONTINUE TO 18.
eck all the grade levels at which you	have taught in the past and are
aching now. 7. 8. 9. 10. 11	12. Fill-in others
ase list the subjects you have taught	in the past and are teaching nov.
Base on a supplicance unique process of the control	
ease rank the following items from 1	
portance for use by you in the classr	
brary use dio-visual aids	class discussion method
n lemento to heele tavte	orderly quiet clase
dependent study	inductive method
ich classes in your professional prep	eration have been most helpiul
you? Please rate the following from	
undations of Loucation	Growth and Development
ucational Payerology	Toresist methods of Teauning
more and a second	
	_boudent reacting.
w do you rate the advisement and cou	_boudent reacting.
w do you rate the advisement and coupartment of secondary education?	_boudent reacting.
partment of secondary education?n you remember any incident that inil	aseling services provided by JN.'s
partment of secondary education?	aseling services provided by JN.'s
n you remember any incident that iniled or bad in connection with secondar	nseling services provided by JN.'s  nenced you greatly wrether for y education? If you can please

e to take concerning your endession and training -- r you may ensier question -- what would you shape it you had it all to do over again?

U.N.M. Secondary Education Graduate Follow-up Questionnaire. March 1969 Director, Dr. Wm. B. Runge Researcher, Eve Iacoletti
NAME(optional) DATE
Please check where appropriate.  1. Marital status:singlemarrieddivorcedwidowed.  2. Sex:malefemale 3. Please fill-in your age
4. Fill-in the year and initials of your first degree  (i.g. 1955, B.A.)  5. List higher degrees and total post graduate hours completed to date.
6. Till-in the city and state where you work now
8. Please check the level at which you student taughtJunior highSenior high
9. Please list the subjects you were certified to teach at graduation:
10. How soon after graduation did you begin your first job, teaching or other?
Please check or otherwise specify the agency through which you were placed in your first jobU.N.M.'s placement office
12. Please fill-in each full-time position, listing dates and titles, in different schools or other enterprises you have held since graduation.
13. Please list the reasons for changes of positions
14. Please check the category which includes your present yearly wageunder \$40004001-50005001-56005601-62006201-68006801-80008001-10,000above 10,000.
15. Please check the category which includes the annual salary you received on your first full-time job after graduation. under \$30003001-40004001-50005001-56005601-6200. 6201-68006801-8000above 8000.
16. By a checkmark, please rate your present working conditionspoorbarely adequateadequategoodexcellent.
17. If you have never taught or have left teaching please state why.

IF YOU HAVE NEVER TAUGHT SKIP TO ITEM 22; OTHERS CONTINUE TO 18.

18.	Check all the grade levels at which	h you have taught in the past
	and are teaching now7 _8 _9 _	
19.	Please list the subjects you have t	aught in the past and are
	teaching now	
	IN ITEMS 20 and 21, please use "1" and "8" to mean least important.	to mean most important"7" Use each number only once.
20.	Please rank the following items fro	m 1 to 8 in the order of their
	importance for use by you in the cl	assroom.
_	library use audio-visual aids supplements to basic texts independent study	lecture method class discussion method orderly quiet class inductive method
	Which classes in your professional helpful to you as an educator? Ple 1 to 7.	
	Foundations of Education  Educational Psychology  General Methods of Teaching	Growth and Development Special Methods of Teaching Student Teaching Foundations of Secondary Education
	The next two items seek your opinio	n of your advisement at U.N.M.'s
1	Depar ment of Secondary Education.	Check where appropriate.
22.	My advisor was available for confer 2 4	ences 5
riev	a second	Iways
23.	The advice and guidance I received	was complete and accurate
	1 2 3 4	5
n	lever	always
24.	This section, and the other side of	the namen may be used for

24. This section, and the other side of the paper, may be used for any comments you may care to make concerning your education and training—or you may answer the question—what would you change if you had it all to do over again?

U.N.M. Secondary Education Graduate Follow-up Questionnaire. March. 1969
Director, Dr. Wm. B. Runge Researcher, Eve Iacoletti
Please check where appropriate.  1. Marital status:singlemarrieddivorcedwidowed.  2. Sex:malefemale3, Please fill-in your age
4. Fill-in the year and initials of your first degree  (e.g. 1955, B.A.)  5. List higher degrees and total post graduate hours completed to date.
6. To describe your present position
8. Please check the level at which you student taught  Senior high  9. Please list the subjects you were certified to teach at graduation:
10. How soon after graduation did you begin your first job, teaching or other?
Were placed in your first jobU.N.M.'s placement office
direct school district contactOther
13. Please list the reasons for changes of positions
14. Please check the category which includes your present yearly wage. under \$40004001-50005001-56005601-62006201-6800 6801-80008001-10,000above 10,000.  15. Please check the category which includes the annual salary you received on your first full-time job after graduation.
under \$30003001-40004001-50005001-56005601-62006201-68006801-8000above 8000 16. By a checkmark, please rate your present working conditions.
poorbarely adequateadequategoodexcellent.  17. If you have never taught or have left teaching please state why.

	he grade levels at ing now78		e taught in the past  12. Others (Fill-in)
19. Please list teaching now	the subjects you h	nave taught in	the past and are
	and 21, please us mean least import		most important"7" number only once.
20. Please rank	the following iter	ns from 1 to 8	in the order of their
importance f	or use by you in	the classroom.	
lidrary use audio-visual supplements independent	to basic texts	class orderl	e method discussion method y quiet class ive method
21. Which classe	s in your profess:	ional preparati	in have been most
			the following from
1 to 7.			
Foundations	of Education	Contraction concessions	d Development ethods of Teaching
Educational		Student T	eaching
General Meth	ods of Teaching	Foundatio	ns of Secondary Education
The next two	items seek your	opinion of your	advisement æt U.N.M.'s
Depar ment o	f Secondary Educa	tion. Check whe	re appropriate.
22. My advisor w	as available for 4	conferences 5	
never		always	
23. The advice a	nd guidance I rec	eived was compl	ete and accurate
1 2	3	4 5	
never		always	

24. This section, and the other side of the paper, may be used for any comments you may care to make concerning your education and training—or you may answer the question—what would you change if you had it all to do over again?

Thank you for your cooperation.

July 12, 1968 11513 Palm Springs Ave., N.E. Albuquerque, New Mexico 87111

Questionnaires Files
American Council on Fducation
Office of Research
1785 Massachusetts Ave., N.W.
Washington, D.C.
20036.

Dear Sir;

In reading over your back issues abstracting questionnaires in America, I noted that you file questionnaires by subject and that you welcome queries.

I am in the process of researching follow-up studies preliminarily to conducting a study by questionnaire of the graduates of the four-year program of teacher training of the department of secondary education of the University of New Mexico, Albuquerque, for a Master's thesis.

A problem I am having is that much published research on follow-up studies concentrates on design or advices while few include actual sample questionnaires or discuss the nature of the data collected or the aims or hypotheses or assumptions underlying the items included in their instruments.

I am most interested in follow-up studies done by departments of secondary education or by colleges of education within or outside of larger universities that are primarily descriptive or normative in emphasis concerning the information sought or collected.

Secondarily, I am interested in opinionnaires or evaluations done by graduates of the parent institutions that are conducted for feedback to the departments or colleges where the data is meant to contribute to curriculum revision or the like.

If there are in your files any instruments or reports of results or prospecti that you feel might elucidate my quest I would cladly pay copying fees, postage and other necessary charges.

Thank you for your attention and I hope to hear from you soon.

Sincerely,

Eve C. Iacoletti graduate student, University of New Mexico.

# AMERICAN COUNCIL ON EDUCATION 1785 MASSACHUSETTS AVENUE WASHINGTON, D. C. 20036

FFICE OF RESEARCH

July 23, 1968

Miss Eve C. Iacoletti 11513 Palm Springs Ave., N.E. Albuquerque, New Mexico 87111

Dear Miss Iacoletti:

In reply to your request, I am happy to enclose information on recent studies which may be related to the information you seek.

Enclosed is a xeroxed copy of the description as it appeared in the Report on Questionnaires and the name and address of the originator of the questionnaire.

I hope this information will lead you to data which will be useful to your purposes.

Sincerely yours,

(Mrs.) Charlene Gleazer

Assistant

Teacher Education: QR 4841. Three questionnaires seek information for an article on "Interdisciplinary Accountability for Teacher Education." One general questionnaire sent, the second was sent to the president and the third to the dean of liberal arts. Requests information on who has authority and responsibility for policies and programs of teacher preparation. (Dean, School of Education, University of Wisconsin, Madison, Wisconsin, 53706)

Feb 196:

Curriculum Development: QR 5377 (R on Q #123). A survey of 450 larger teacher education colleges and universities for instructional ideas concerning curriculum development courses and other graduate offerings in Education. A summary was prepared and is available. (Faculty for Professional Education, Eastern Illinois University, Charleston, Illinois 61920).

10. 27, 1767

1115

St. 114

Teacher Preparation: QR 4984. A survey of approximately 100 teacher preparatory institutions (50 in California and 50 non-California) is divided into two parts. The first requests information on practices and programs; the second concerns statistics such as enrollment, graduation, and placement. A descriptive summary of the results will be prepared and available after February 15. (Bureau of Teacher Education and Certification State of California Department of Education. 721 Capitol Mall, Sacramente, Carif. 95814).

Teacher Education: QR 4986. A five-page questionnaire was circulated for a survey of teacher education follow-up programs. A summary will be prepared. (Director of Teacher Education, Graceland College, Lamoni, Iowa 50140).

Teacher Education: QR 5094. Questionnaire sent to members of Illinois Assoc. for Teacher Education in Private Colleges (34 institutions responded) to determine the role and future of teacher education among the private colleges. Copies are available. (Dean of the College, Wheaton College, Wheaton, Illinois).

December 5, 1968
Office of John Dettre
Department of Secondary Education
University of New Mexico
Albuquerque New Mexico, 87106

Department Chairman's Office Department of Secondary Education John Hopkins University Baltimore, Maryland

Dear Sir;

I am a graduate student at the University of New Mexico preparing to conduct a follow-up study of graduates of the University of New Mexico, Department of Secondary Education for a master's thesis.

I am asking your cooperation in three ways which include answering two questions:

- 1. Has your department conducted a follow-up study of its graduates within the past five years?
- 2. Has your college or university conducted a follow-up study that included graduates of your department within the past five years?
- 3. If the answer to either of the above questions is yes will you please send me a copy of the questionnaire or questionnaires that were used and a copy of any final report that was prepared including the information collected by the study?

Included here are a self-addressed stamped envelope and a blank space below for comments. Thank you for your attention and assistance.

Sincerely,

Euc & Docaletto

Eve C: Iacoletti

COMMENTS

Claim sending you our 10 year report (1957-67) for our MAT Program. E specially book at page 11-18, which deal with our querlimain. College queries were sent to Department Chairman's Office, Department of Secondary Education of the following Colleges and Universities.

- 1 University of Arizona, Tucson.
- 2. University of California, Berkeley.
- 3. University of Chicago
- 4. University of Colorado, Boulder.
- 5. Columbia University, Teacher's College, New York.
- 6. Eastern Illinois University, Charleston.
- 7. Graceland College, Lamoni, Iowa.
- 8. University of Illinois, Urbana.
- 9. Johns Hopkins University, Baltimore.
- 10. University of Kentucky, Lexington.
- 11. Loyola University, New Orleans.
- 12. University of Michigan, East Lansing.
- 13. New Mexico State University, University Park.
- 14. Ohio University, Athens.
- 15. University of Pennsylvania, Philadelphia.
- 16. Temple University, Philadelphia.
- 17. University of Virginia, Charlottesville.
- 18. University of Washington, Seattle.
- 19. University of Wisconsin, Madison.
- 20. Wheaton College, Wheaton, Illinois.

#### REFERENCES

- American Council on Education. Report on Questionnaires. No. 113. Washington: ACOE Office of Research, 1966.
- Backstrom, Charles H., and Gerald D. Hursh. <u>Survey Research</u>. Evanston, Illinois: Northwestern University Press, 1963.
- Bailey, Athol R. Letter and Questionnaire. University of Washington, College of Education, Seattle, December 10, 1968.
- Barr, A. G. (ed.) <u>Teacher Effectiveness</u>, <u>A Summary of Investigations</u>. Madison, Wisconsin: Denbar Publications Inc., 1961.
- Bathurst, Effic Geneva. A Teacher's College Follow up Service.

  New York: Columbia University Press, 1931.
- Bodnarchuk, Steve. "Improve Through Follow-up," Clearing House, 43:30-32, September, 1968.
- Boyd, Robert M., Chairman, Department of Secondary Education, Ohio University, Athens, Ohio. Letter. December 6, 1968.
- Cohodes, Aaron. "Can 50 Departments of Education Be Wrong,"

  Nations Schools, 78:27, December, 1966.
- Columbia University Teacher's College, Department of Curriculum and Teaching. Postcard Questionnaire. New York, December 5, 1968.
- Cooper, James G., Discussion. Albuquerque, New Mexico, February 25, 1969.
- Crawford, Bonner. Interview, Albuquerque, New Mexico, July, 1968.
- Dettre, John. Class Lecture. Albuquerque, New Mexico, February, 1967.
- . Interview. Albuquerque, New Mexico, July, 1968.
- Doxtator, Robert. Interview, Albuquerque, New Mexico, July, 1968.
- Eckland, Bruce K. "Effects of Prodding to Increase Mail Back Returns," <u>Journal of Applied Psychology</u>, 49:165-69, March, 1965.

- Eels, Walter Crosby. <u>Surveys of American Higher Education</u>. New York: Carnegie Foundation for the Advancement of Learning, 1937.
- Evans, Mary Beth. Letter and Mimeographed Report. Graceland College, Lamoni, Iowa, February, 1969.
- Fear, Richard A. The Evaluation Interview. New York: McGraw Hill Book Company, 1958.
- Freed, Melvin N. "In Quest of Better Questionnaires," <u>Personnel</u> and <u>Guidance Journal</u>, 43:187-8, October, 1964.
- Gay, Ilse J. "The Elementary Teacher Education Program at The University of New Mexico." Unpublished Master's Thesis, The University of New Mexico, Albuquerque, 1966.
- Gleazer, Charlene. Letter. Office of Research, American Council on Education, Washington, July 23, 1968.
- Hand, Harold C. What People Think About Their Schools; Values and Methods of Public Opinion Polling as Applied to School Systems. New York: World Book Company, 1948.
- Hanny, Robert. Interview. Albuquerque, New Mexico, July, 1968.
- Hauck, Mathew, and Stanley Steinkamp. <u>Survey Reliability and</u>
  <u>Interviewer Competence</u>. Urbana, Illinois: University of Illinois Press, 1964.
- Higbie, E. C. "The Follow-up Activities of a Teacher Training Institution with its Graduates in Rural Schools," <u>U.S. Bureau of Education Bulletin, Number 6</u>, pp. 25-35.

  Washington: Government Printing Office, 1928.
- Hirshfield, George. Interview. Albuquerque, New Mexico, July, 1968.
- Howard, Alvin. Interview. Albuquerque, New Mexico, July, 1968.
- Hoyt, Donald P. "College Grades and Adult Accomplishment," The Educational Record, 47:70-75, Winter, 1966.
- Ingraham, Mark H., and Francis P. King. The Mirror of Brass.

  Madison, Wisconsin: University of Wisconsin Press, 1968.
- Ivins, Wilson. Interview. Albuquerque, New Mexico, July, 1968.

- Johns Hopkins University, Ten Year Report, 1957-1967, The Master of Arts in Teaching Program. Baltimore: November, 1967. (Mimeographed.)
- Kastrinos, William. "Summer Institute-- A Follow-up," American Biology Teacher, 29:620-21, August, 1967.
- Klein, Stuart M., John R. Maher, and Richard A. Dunnington.
  "Differences Between Identified and Anonymous Subjects in
  Responding to an Industrial Opinion Survey," Journal of
  Applied Psychology, 51:152-60, April, 1967.
- Koos, Leonard V. The Questionnaire in Education. New York: The Macmillan Company, 1928.
- Mayor, John R. Speech Given in Chicago, February, 1966, Evaluative Criteria for Accrediting Teacher Education, Edward C.

  Pomeroy, editor. Washington: AACTE Publications, 1967.
- Merigis, Harry. Letter and two questionnaires, Eastern Illinois University, Charleston, Illinois, December 10, 1968.
- Miller, L. K., D. S. Willey, and James D. McComas. "A Suggested Research Model for the Investigation of Classroom Teacher Effectiveness," <u>Journal of Educational Research</u>, 58:408, May-June, 1965.
- Monroe, W. S., and M. D. Englehart. The Scientific Study of
  Educational Problems. New York: The Macmillan Company,
  1936.
- NEA Research Bulletin, Salary Schedules for Teachers, 1968-69.

  National Education Association Publications, November, 1968.
- NEA Research Report, 1962-R3. Salary Schedules for Classroom Teachers in Urban Districts 30,000 - 99,999 in Population, 1961-62. National Education Association Publications, February, 1962.
- NEA Research Report, 1966-R17. Salary Schedules for Classroom Teachers, 1966-67. National Education Association Publications, October, 1966.
- Nelson, Jack. "Follow-up Study of Graduates," Improving College and University Teaching, 12:11, Spring, 1964.
- College and University Teaching, 14:116, Spring, 1966.

- Nesbitt, Robert. Interview. Albuquerque, New Mexico, July, 1968.
- O'Connor, Thomas J. <u>Follow-up Studies in Junior Colleges: A Tool</u>
  <u>for Institutional Improvement</u>. Washington: American
  Association of Junior Colleges Publications, 1965.
- Orr, D. B., and C. A. Neyman Jr., "Considerations, Costs and Returns in a Large-scale Follow-up Study," <u>Journal of</u> <u>Educational Research</u>, 58:373-78, April, 1965.
- Owens, W. A. "Age and Mental Abilities: A Second Adult Follow-up,"

  Journal of Educational Psychology, 60:311-25, December, 1966.
- Phillips, Ray C. Evaluation in Education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1968.
- Prouse, Peter. Interview, Albuquerque, New Mexico, July, 1968.
- Rider, John. Interview. Albuquerque, New Mexico, July, 1968.
- Rooks, J. E. "Abstract of an Analysis of Four Teacher Rating Devices," <u>Dissertation Abstracts</u>, No. 26, p. 5831, 1965.
- Runge, William B. "A Report on 102 Student Teacher Responses Concerning Their Program of Teacher Preparation At The End of Semester One, 1967-68," Albuquerque, New Mexico: The University of New Mexico, College of Education, Department of Secondary Education, February, 1968. (Mimeographed.)
- \_\_\_\_\_. Interview. Albuquerque, New Mexico, July, 1968.
- Simpson, Ray H. <u>Teacher Self-Evaluation</u>. New York: The Mac-millan Company, 1966.
- Start, K. B. "How They Got On," The London Times Education Supplement, September 1, 1967, p. 355.
- Suchman, Edward A. Evaluative Research. New York: Russell Sage Foundation, 1967.
- Thompson, Alvin H., Associate Head of Secondary Teacher Education, University of California, Berkeley. Letter, December 11, 1968.
- Troyer, Maurice E., and C. Robert Page. <u>Evaluation in Teacher</u>
  <u>Education</u>. Washington: American Council on Education,
  1944.

- Turbeville, Gus. "A Teacher Rating Scale," <u>Peabody Journal of Education</u>, 43:78, July, 1965.
- Warner, Richard. Interview. Albuquerque, New Mexico, July, 1968.
- Wells, Jean A., and Muriel B. Woll. "College Women Seven Years after Graduation, Resurvey of Women Graduates, Class of 1957," ERIC, 3:146, May, 1968.
- Wise, John, Robert B. Nordberg, and Donald J. Reitz. Methods of Research in Education. Boston: D. C. Heath and Company, 1967.
- Wiseman, S., and K. B. Start. "A Follow-up of Teachers Five Years After Completing Their Training," The British Journal of Educational Psychology, 35:342-61, November, 1965.
- White, Robert. Interview. Albuquerque, New Mexico, July, 1968.
- Woellner, Elizabeth H., and M. A. Wood. Requirements for Certification: Teachers, Counselors, Librarians, Administrators, Thirtieth Edition. Chicago: University of Chicago Press, 1966.
- Wolff, Max, and Annie Stein. "Six Months Later--a Comparison of Children Who Had Head Start, Summer, 1965 With Their Classmates in Kindergarden," ERIC, 3:90, May, 1968.
- Zweig, Carl. Interview. Albuquerque, New Mexico, July, 1968.