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The Framework for Information Literacy: Academic Librarians' Perceptions of Its Potential Impact on Higher Education Library Praxes

Patrick Keller

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**The Framework for Information Literacy:
Academic Librarians' Perceptions of Its Potential Impact on
Higher Education Library Praxes**

by

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B.A., English, Colorado State University—Pueblo, 1989
M.A., Educational Media, University of Northern Colorado, 2004
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DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

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Dedication

To Tony "Mojo" Moffeit for his poetry, energy, inspiration, kindness, and laughter.

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I am truly grateful to so many people who have supported me over the past seven years.

Thank you, Dr. Boverie. Thank you for chairing my committee. Thank you for providing guidance when I needed it. Thank you for giving me space and autonomy when I needed those, too. Most of all, thank you for encouraging me to research one of my greatest passions—information literacy. I will always be your student.

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Bob and Sally, my parents, what can I say to you both that I have not already said? Thank you for your advice, your wisdom, your strength and, above all else, your love. Joe, my dear friend, our late-night phone conversations over the years have kept me, at least relatively, sane. And Julia, you are my world. As Dylan once said, "I been meek, and hard like an oak. I seen pretty people disappear like smoke. Friends will arrive, friends will disappear. If you want me, honey baby, I'll be here."

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ABSTRACT

The Framework for Information Literacy for Higher Education ("the Framework") may serve to influence academic library praxes. A total of 138 academic librarian participants were randomly selected (32 deans and 106 non-deans) from public and private institutions. The institutions spanned across six accrediting regions recognized by the Council for Higher Education Accreditation. Participants completed a 22-item survey designed to elicit their perceptions of the Framework's impact. Professional position (deans or non-deans) was significantly correlated with the perceived level of impact that the Framework might have on library praxes. That is, deans tended to rate the Framework at a higher level of impact than non-deans. The final question on the survey was open-ended, asking participants to explain their rating of overall impact the Framework may have on library practices at their institutions. Qualitative coding of responses to the final question revealed three themes indicating advantages of the Framework, and twelve themes indicating challenges of the Framework. Findings from this study may be useful to academic librarians, discipline faculty, and other institutional stakeholders in determining how information literacy instruction is defined, promoted, and taught in

higher education. Findings may also serve to initiate and illuminate conversations around the Framework, and how to approach possible implementation.

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Chapter One

Introduction

To ask why we need libraries at all, when there is so much information available elsewhere, is about as sensible as asking if roadmaps are necessary now that there are so very many roads.

—Jon Bing

That which today calls itself science gives us more and more information, an indigestible glut of information, and less and less understanding.

—Edward Abbey

In a daily flood of information from social media, television, radio, the Internet, and more traditional information sources, information literacy (IL) is a survival skill that keeps us from "drowning in the abundance of information that floods [our] lives" (Breivik & Gee, 1989, p. 12). Anyone with access to the Internet, a minimal amount of literacy skills, and the ability to tap out words on a Google search can find information within seconds. However, the emphasis in our information society has changed from simply finding information to more critical evaluation and selection. From the vast array of information available at our fingertips, evaluation and selection involves understanding how, when, and what to select and then how to use it appropriately (Marshall, 2006). The Final Report of the American Library Association's (ALA) Presidential Committee on Information Literacy (1989) defined an information literate person in this way:

Ultimately, information literate people are those who have learned how to learn. They know how to learn because they understand how information is organized, how to find information, and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can

always find the information needed for any task or decision at hand. (p.1)

People who are information literate also have developed information technology skills—the ability to use the Internet, computer software, databases and other technologies to achieve personal, professional, and educational goals (ALA, 2000).

Researcher Background

I earned a Master of Arts in Educational Media in 2004 that allowed me to spend the latter part of my career in K-12 public schools as a library media specialist, where I became familiar with IL standards and library instructional practices specific to the K-12 student population. In 2008, I completed a Master of Science in Library and Information Science (MLIS), where I was introduced to IL standards specific to the higher education student population. The primary result of my studies in library science was an increased awareness of IL standards and their implications in higher education. In 2009, I was accepted into the doctoral program of Organizational Learning and Instructional Technology (OLIT). Prior to my completing all Program of Studies coursework in 2013, OLIT transitioned from the University of New Mexico's (UNM) College of Education to the College of University Libraries. The transition resulted in a name change from OLIT to Organization, Information, and Learning Sciences (OI&LS) as well as change in physical location. OI&LS is located on the second floor of Zimmerman Library. The new location as well as the new name (i.e., the inclusion of the word "information") reestablished my interest in IL as an intrinsic and essential goal of higher education—not just an interest, but a passion to study IL in higher education.

Background of the Study

The research process began by searching for current documentation from the

Association of College & Research Libraries (ACRL). This was a logical place to start because the ACRL Information Literacy Standards Committee (ILSC; one of many committees that sit under the umbrella of the ACRL and, in turn, the American Library Association) oversees all activities involving the creation, reviews, and revisions of the current IL standards for higher education. Searching the ACRL website revealed that a change initiative was taking place.

As of 2010, the ACRL ILSC put a task force in place to review the IL Competency Standards for Higher Education (hereafter referred to as "the Standards") that had been originally adopted in 2000. The appointed ACRL IL Competency Standards Review Task Force, after an extensive review of the Standards, recommended to the ACRL Board of Directors in a June 2, 2012 document to the ILSC that the Standards "should not be reapproved as they exist but should be extensively revised" (Association of College and Research Libraries, June, 2012, p. 1). The ACRL Board approved the recommendation that the Standards should undergo significant revision. For this revision process, the Board agreed that a Task Force be created for the purpose of drafting the Framework for IL for Higher Education, hereafter referred to as "the Framework" (with the exception of the specific language used in the research questions).

The Task Force began its work in March of 2013. They released two parts of the first draft. Part one was released in February of 2014 and part two was released in April of 2014. A completed second draft was released in June of 2014 and a third draft was released in November of 2014. The final draft was first approved by the ILSC in mid-January of 2015 and then unanimously approved by the ACRL ILSC and subsequently submitted to the Board of Directors for final review at the ALA mid-winter conference

(January 30-February 3, 2015). On February 2, 2015, the Board of Directors took positive action and "accepted the Framework and it will assume its place among the constellation of documents used by information literacy practitioners" (Williams, 2015).

Although the Board filed the Framework, during the Board of Directors' meetings I and II, that took place on Saturday, January 31st, and Monday, February 2, 2015 (Payne, 2015, January 31; Payne, 2015, February 2) certain points of contention were recognized and voiced by the board members. The following were the most relevant controversial issues discussed at these meetings:

- Opportunities for feedback from key stakeholders, over the course of multiple drafts of the Framework, produced differing opinions that were challenging to incorporate into the Framework.
- There were conflicting opinions regarding the Standards coexisting with the Framework; i.e., some board members were in favor of sunseting the Standards, while others were not—additional time would be needed to adopt the Framework.
- There was concern about the small amount of feedback responses from ACRL members relative to overall ACRL membership.

These issues revealed a need for more feedback regarding the Framework from academic librarians. Because a level of controversy existed around the Framework, there was also a need to study it further.

Statement of the Problem

Within the Action Form (Association of College and Research Libraries, January, 2015) that the chair of the ILSC submitted to the Board of Directors on January 16, 2015,

the following assertion was made:

ACRL recognized early on that the effect of any changes to the ILCSHE [the Standards] would be significant, both within the library profession and in higher education more broadly. (p. 4)

This assertion led to one major unanswered question. What specifically are the potential significant effects that the change will make on the library profession and in higher education? This led to the first problem statement:

- *The significant effects (i.e., impact) of changes to the IL Competency Standards for Higher Education on the library profession and in higher education **have yet to be determined.***

Although descriptive statistics from multiple surveys and open forums and blogs about the Framework reflected its controversial nature, there remained a need to more rigorously study the perceptions of academic librarians regarding the Framework. This led to the second problem statement:

- *The perceptions of academic librarians regarding the level of impact that the Framework for Information Literacy for Higher Education will have on academic library praxes **have yet to be studied.***

Purpose of the Study

This study was not intended to evaluate the Framework itself or the implementation of the Framework. Due to the Framework's reconception of the way IL is addressed in higher education (e.g., IL instructional methods), the implementation is going to be a lengthy process for many institutions (Association of College and Research Libraries, January, 2015). Also, since the Framework had just been approved by the

ACRL Board of Directors, at the time of this research it was not possible to study its implementation because it had yet to be implemented (at least not in any large scale effort).

This study was designed to investigate the perceived level of impact (or the significant effects) that the Framework could have on academic library and higher education praxes (see Definitions of Terms). More specifically, the purpose of this study was to determine, through a multiple regression analysis, the best predictor variables for the perceptions of the Framework's level of impact, i.e., the perceptions of library deans, assessment librarians, and instructional librarians.

Significance of the Study

As stated by Susanna Boylston, Chair of the ACRL Standards Committee, in the January 16, 2015 Board of Director's Action Form:

The Information Literacy Competency Standards for Higher Education, adopted by ACRL in 2000, have become an essential document related to the emergence of information literacy as a recognized learning outcome at many institutions of higher education. (p. 1)

In the same Board of Director's Action Form, Boylston asserted that any changes to the Standards would have a significant effect "both within the library profession and in higher education more broadly" (2015; see Statement of Problem). This contention was well-reasoned, considering that the Standards adopted in 2000 had significant impact on how IL was defined, how IL competencies were defined and measured, and on how library instruction produced measureable student learning outcomes at higher education institutions across the United States.

Just as the Standards have influenced or otherwise generated educational reform, the Framework will also be important in educational reform. Just how much it may impact, change or influence the field of IL depends in part on understanding the perceptions of those most affected by the change. Jansen (2000) underscored a more general idea of the importance of understanding individuals' perceptions of change. "Readiness for change considers an organization's capacity for making change and the extent to which individuals perceive the change as needed" (p. 53).

As stated in the Purpose of the Study, a multiple regression was conducted in order to determine the best predictor variables for the perceptions of the Framework's level of impact. The primary purpose for a regression analysis is to develop an equation in order to predict the values on a dependent variable in a specific population (Mertler & Vannatta, 2010). The use of a multiple regression was especially important to the significance of this study for the following reason: if significant predictors can be determined, then people who make decisions can minimize risks and maximize the odds of advantageous results (Siegel, 2000).

Determining the best predictors of perceived impact of the Framework on higher education library praxes through a regression analysis may help to inform decisions about how to use the new Framework. If institutions *want* to implement the Framework, then those engaged in the change process will need findings to inform their decisions—they will need a deeper understanding of the perceptions of academic librarians regarding the Framework's impact on their praxes and the *predictors* of this perceived impact. They can then use the predictors to help make informed decisions.

In simpler terms, discovering the perceptions that individuals have about the

Framework was important as a first step. However, simply studying the perceptions gave only part of the picture. Discovering relationships between variables and the best predictors of impact gave a more defined picture, providing more specific information. Determining or discovering reasons (i.e., predictor variables) that might contribute to those individual's perceptions was a much larger step towards informing potential directions that institutional leadership may take. This was a leap in understanding, instead of a single step.

This study was intended to offer a contribution to the available literature about (a) how the new Framework may serve to influence the ways academic libraries function in delivering information literacy instruction and (b) the best predictor variables for perceived level of impact. It may be of interest to stakeholders who are looking at ways that IL is defined, promoted, and taught in higher education academic libraries. The results of this study may also serve to initiate and illuminate conversations around the Framework and how to approach possible implementation.

Research Questions

Three main research questions were addressed in this study:

- 1. What level of impact on academic library praxes do library deans, assessment librarians, and instructional librarians perceive that the Framework for Information Literacy for Higher Education will have?*
- 2. What are the best predictor variables for the perceived level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*
- 3. How do academic library deans, assessment librarians, and instructional*

librarians explain their perceptions of the level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?

Summary of Research Methods

After selecting participants using a stratified, random sampling method, 186 academic librarians were surveyed to determine the level of impact they perceived that the Framework will have on library praxes (i.e., the dependent variable or DV). In order to answer this study's research questions, the survey was designed using specific assertions and suggestions contained within the Framework (see Chapter Three for definitions of assertions and suggestions). An example of an assertion in the Framework is: "The Framework redefines the boundaries of what librarians teach and how they conceptualize the study of information within the curricula of higher education institutions" (Association of College and Research Libraries, January, 2015, p. 14). The key words that make this an assertion are "The Framework redefines..." Question 20 on the survey asked: "Do you think the Framework will redefine the boundaries of what librarians teach and how they conceptualize the study of information literacy within the curricula at your institution? Yes or No." An example of a suggestion in the Framework is: "ACRL encourages the library community to discuss the new Framework widely and to develop resources such as curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames" (Association of College and Research Libraries, January, 2015, p. 14). The key word that makes this a suggestion is "encourages." Question 18 on the survey asked: "Do you think the Framework will encourage the library community at your institution to develop resources such as

curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames? Yes or No."

After survey data was collected, a multiple regression was conducted to determine if any of the following seven independent variables (IVs) significantly predicted the DV:

1. Professional position or titles of participants within the library setting;
2. Whether or not the institution offers an American Library Association (ALA) accredited program of study in Library Science;
3. Whether or not regional accreditation agencies use the term IL in their assessment guidelines;
4. Current context of library instructional practices;
5. Current use of the IL Competency Standards for Higher Education;
6. Institutional membership in the Association of Research Libraries (ARL);
7. Individual membership in the Association for College and Research Libraries (ACRL).

Qualitative data consisted of answers to an open-ended question on the survey that asked participants to explain and provide examples of why they think the Framework will have an impact on the library praxes at their institution. Excerpts from these answers were chosen to best illustrate the range of rationales offered by participants, providing a deeper understanding of the participants' perspectives.

Limitations and Delimitations

Some of the limitations of this study were as follows:

1. This study did not take into account the enrollment size of institutions. It may be that librarians in smaller institutions perceived a certain level of impact

because of a low student-librarian ratio, and the same could be said of larger institutions, with a higher student-librarian ratio. Also, the allocation of library funding differed at each institution, and differences in institution size can also affect the integration of IL (Weiner, 2012), thereby impacting librarians' perceptions of the Framework. It could be that larger institutions had more funding, thereby compensating for their larger student-librarian ratio. If this study had only used institutions of a specific enrollment, it would have significantly limited the sample size. Therefore, enrollment size and library funding complexities were not accounted for in this study, thus somewhat limiting its generalizability.

2. Social desirability bias can be explained as a participant's effort to answer questions the way they think others would answer or possibly the way they think others would *want* them to answer (Cozby, 2009). The opposite may hold true as well. Participants may answer questions the way they think others would *not* answer or possibly the way they think others would *not want* them to answer. Social desirability bias can be described as a way of conforming or *not* conforming. In most cases, social desirability bias is something a researcher hopes to avoid. In the case of this study, it was something that was taken into consideration through the identification of the IVs. For example, whether or not a participant is biased to answer a certain could have been relative to their position within the organization (IV 1). The primary goal of this study was to identify relationships between the IVs and the DV; in other words, to see if the IVs *influenced* the DV. Influence could be considered a

source of bias. Again, bias is generally undesirable. However, the research design allowed for the parsing out of some sources of bias—bias as defined to be the influences on a participant's perceived level of impact on academic library praxes that the Framework will have. However, it was not possible to identify and account for all sources of bias due to the countless differences between individuals.

3. The population of academic library deans, instructional librarians, and assessment librarians working within higher education institutions in the United States is substantial, so only a small sample of this population could be surveyed. This limited the generalizability of study results to the larger population.
4. This was a self-administered survey—that is, after receiving an email invitation containing an online link that provided access to the survey, participants decided whether or not to accept the invitation. This meant that the sample was biased towards participants who were motivated to complete the survey.
5. When data is collected via the Internet, there is the possibility of participant misrepresentation (e.g., age, or whether or not they have read the Framework—see Delimitations below). However, this was a relatively minor limitation. As Cozby (2009) stated, "for most research topics it is unlikely that people will go to the trouble of misrepresenting themselves on the Internet to a greater extent than they would with any other method of collecting data" (p. 133).

Some of the delimitations of this study were as follows:

1. Participants recruited for this study were limited to academic library deans,

assessment librarians, and instructional librarians. Faculty members from other disciplines and students were not surveyed. Although the Framework asserts that it will affect the broader population of academic institutions (e.g., faculty from other disciplines and students), the impetus of the change will begin in the academic library. Until there is a general understanding of how the Framework will impact library praxes, it would have been premature to include faculty members from other disciplines and students.

2. Question 8 of the survey asked if participants had read the Framework. If they indicated that they had, then the survey continued. If not, they were automatically taken to the End of Survey page. After receiving each participant's survey responses, the data showed that participants were "disqualified" if they answered no to Question 8. However, the data from participants' responses to Questions 1-8 was still available for analysis.
3. This study was limited to academic deans, assessment librarians, and instructional librarians working in higher education institutions with a Carnegie Classification (Carnegie Foundation for the Advancement of Teaching, February, 2012) of very high research activity (RU/VH), high research activity (RU/H), and Doctoral/Research Universities (DRU). All RU/VH, RU/H, and DRU universities necessarily offer graduate studies. The Framework states that it "can guide the redesign of information literacy programs for general education courses, for upper level courses in students' major departments, and for graduate student education" (Association of College and Research Libraries, November, 2014, p. 2). Even though some institutions offer graduate

programs, they may not offer doctoral programs. The sample for this study ensured that institutions that have doctoral programs were included. However, because the minimum sample size requirements (120 participants) was not met using only the RU/VH, RU/H, and DRU universities, the sample was extended to include universities with the following Carnegie Classifications: Master's Colleges and Universities, larger programs (Master's L), Master's Colleges and Universities, medium programs (Master's M), and Master's Colleges and Universities, small programs (Master's S).

4. The study did not include participants who were serving (at the time the study was being conducted) on the ACRL Board of Directors, on the ACRL IL Competency Standards Review Task Force and/or the ACRL IL Competency Standards Task Force. Membership in these groups may have had the potential of creating a conflict of interest.

Definitions of Terms

Information Literacy: "The set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning" (Association of College and Research Libraries, 2015, p. 3).

Level of impact: How much or how little key assertions that the Framework makes will determine changes on academic library praxes.

Academic library praxes: Existing practices or methods for addressing IL, including, but not limited to integrating IL in curricula and assessment, developing resources, designing instruction, collaborating with discipline faculty as well as with other academic librarians

to design IL programs.

Perceive: In this study, perceptions (or what people perceive) refer to attitudes and beliefs—how "people evaluate and think about issues" (Cozby, 2009, p. 124).

Chapter Two

Literature Review

In 1992, after interviewing ARL librarians about the quality of library and information science literature, Hernon and Metoyer-Duran stated that, "If library and information science is to advance as a scholarly field, and further justify the position of its programs within college and university graduate schools, the quality of the research, theoretical, and scholarly literature of the field must increase" (p. 501). Twenty-two years later, Hollister (2014) completed a content analysis of papers submitted to the journal, *Communications in Information Literacy*, between the years 2007-2013. According to Hollister, common reviewer criticisms of these articles were: (a) poor presentation and development of ideas, (b) the lack of significant contribution or scientific validity, (c) problems in methodology, and (d) the anecdotal (e.g., non-empirical) nature of the articles. I hope to make a significant and empirical contribution to the library and information science literature through this study, and, with that aim, present the following review of literature to support the methodology described in Chapter Three. The literature review will cover IL and its importance in higher education, how the Standards translated IL into measurable learning outcomes and the importance of the Standards in higher education, and finally, how the Standards have evolved into the most current articulation of IL—the Framework.

Origins of Information Literacy

Cowan (2014) and many others credited the work of Paul Zurkowski as being the "formative moment for information literacy in the United States" (p. 24). Zurkowski (1973) gave the following charge to librarians, who he envisioned at the center of the

establishment of a major national IL program:

A word to individual librarians, to you who devote your lives to making information available to users: ours is a populist industry. We share your commitment to the open marketplace of ideas and its continual and fearless sifting and winnowing by which alone the truth can be found. (p. 258)

Zurkowski (1974) further advanced the position that IL was a programmatic goal and his vision of librarians, as devoted to the democratization and ceaseless "winnowing" of information in order to find the truth, is one that has inspired decades of library professionals. Over the past forty years, IL has evolved from a proposition to a well-developed science of information. Originally defined by the ALA as "the ability to recognize when information is needed and to locate, evaluate, and use effectively the needed information" (American Library Association, 1989, para. 3), IL has become an important part of the instruction and assessment of students in higher education.

Importance in higher education. By making sure that students develop critical thinking and reasoning skills, and by assisting them in the construction of a framework for lifelong learning, colleges and universities supply a solid base for sustained development throughout their academic and professional careers. IL is an essential part of becoming a lifelong learner (Association of College and Research Libraries, 2000). Teaching students to critically assess, evaluate, and use information is now viewed as essential to student success and has become a central component of library instruction. There are numerous studies (e.g., Hardesty, 2007) that speak to how academic librarians can help to increase IL skills among adult learners, and, in so doing, increase student retention.

Importance in student retention. Hagel, Horn, Owen, and Currie (2012) suggested five ways that university libraries can increase student retention. "The literature reviewed suggests several key means by which libraries can contribute to retention" (p. 218). Perhaps the most important or relevant finding of Hagel et. al is that libraries can help students become more academically engaged by providing access to information services. Students tend to use the library more when they are enrolled in rigorous academic programs. This necessarily involves a collaborative working relationship between librarians and instructors—especially instructors from rigorous academic programs. Librarians need to educate instructors on IL strategies so that students know how to effectively locate, utilize, and discriminate among information sources.

Importance in academics. IL is an essential skill for students in today's academic world. As Breivik (1991) stated, IL skills allow students to:

...verify or refute expert opinion and to become independent seekers of truth. By letting students experience the excitement of their own successful quests for knowledge, this kind of literacy creates the motivation for pursuing learning throughout their lives. In our efforts to combat illiteracy, information literacy—not just teaching people to read—should be our goal. (p. 87)

Many studies have assessed students' demonstration of IL skills. These studies have evaluated IL skills in four different ways (Mahmood, 2013). One method uses the ACRL Standards to create an instrument for assessing IL (cf. Marshall, 2006). Secondly, researchers have used achievement tests to measure IL. For example, Ali, Abu-Hassan, Daud and Jusoff (2010) asked 49 engineering students in Malaysia to complete an

information skills test (a multiple-choice test on the information research process).

Results from this study showed that the students did not have the knowledge and skills necessary to assess information on the Internet, to find and apply effective search strategies, to use academic resources and databases, and to use information ethically and responsibly.

A third group of studies used a qualitative method to assess IL skills. The researchers who conducted these studies analyzed citations or bibliographies in student assignments (Mahmood, 2013). For example, Ali et al. (2010) triangulated the data from an achievement test with a citation analysis in 19 essays written by Malaysian engineering students. The researchers found that students used a total of 32 scholarly works (journals, conference proceedings, books, and government documents) and a total of 35 non-scholarly works (websites/blogs, reports, handbooks, magazines and newsletters).

Finally, there are studies that demonstrated a significant correlation between students' evaluation of their IL skills and their academic skills (Mahmood, 2013). Caspers and Bernhisel (2007) surveyed 246 entering students, asking them to rate their IL skills and also administering a test to measure their IL skills in gathering information. Most of the students judged their IL skills to be less than "excellent"—62% of them thought their skills were "good," 16.7% thought their skills were "excellent," 19.5 % rated themselves as "fair," and 1.6% evaluated their skills as "poor." On the skills test, the mean score was 72.4%—an average of 15.2 correct answers out of 21 questions. After running a correlative analysis, Caspers and Bernhisel found a significant relationship between the "Total Score" (on the IL skills test) and students' GPA ($r = 0.242$ $p < 0.001$). This

suggests that the higher the students' IL skills, the higher their GPA and vice versa.

Importance in accreditation. The fundamental requirement for students to be able to locate, manage, analyze and use information is now accepted by some regional accreditation associations as a key learning objective for college students (Association of College and Research Libraries, 2000). In addition to defining IL, accreditation standards also incorporate learning outcomes for IL and highlight the need for collaboration between library and faculty (Samson, 2010).

An example of the importance of including IL terminology in accreditation standards comes from the Middle States Commission on Higher Education (MSCHE). A draft revision of the MSCHE accreditation standards (Middle States Commission on Higher Education, 2013) removed all references to the library or IL as a learning outcome. According to Steven Bell (2014), ACRL Past-President, this came as a shock to many librarians who worked in the mid-Atlantic region because MSCHE was one of the first to specifically address IL as a learning outcome in its standards. Bell also stated, "It was MSCHE that set the bar for the recognition of information literacy by accreditors" (para. 3).

After the presentation of the November, 2013 draft revision at the MSCHE Annual Conference, academic librarians began writing letters to the ACRL and the MSCHE, expressing a concern voiced by Bell (2014):

The concern is that just eliminating the language about information literacy and libraries will send a symbolic message that it either no longer needs our attention or is so well embedded in our curriculums that it requires no further mention in the standards. Neither of those perceptions is an acceptable proposition for many

academic librarians. (para. 4)

According to Bell (2014), academic librarians flooded MSCHE with comments about the exclusion of any reference to IL and libraries. In June of 2014, just four months after Bell wrote a blog for the ACRL Insider encouraging librarians to continue expressing concerns about the lack of IL language in the MSCHE accreditation standards, the final MSCHE draft of their accreditation standards (Middle States Commission on Higher Education, 2014) used the term "information literacy" exactly one time as part of their third standard.

Library instructional practices. The rapid evolution of technology necessitates library instructional programs be crafted in order to teach individuals how to quickly and effectively find the necessary information (Cowan, 2013). Because of their role in the creation, maintenance, and provision of research tools and acquisitions, librarians are in a good position to provide IL instruction. Hardesty (2007) presented numerous studies that speak to how academic librarians can help to increase IL skills among adult learners (particularly first year college students). In a nutshell, library instruction should include, but not necessarily be limited to:

- helping students with the hows and whens of using the library resources;
- helping make the library environment "user-friendly";
- developing tutorials for students (both online and face-to-face) that concentrate on how to navigate through the cataloguing system;
- designing and developing orientation courses;
- designing assignments and co-curricular activities in close collaboration with instructors and departments;

- helping to reduce "library anxiety" by presenting students with library orientations that center on "real-life" applications (careers, entertainment, community resources, etc.).

In these ways, library instruction has been shown to lead to higher levels of IL skills.

There are three main contexts for library instructional programs. Some of these contexts may overlap. For example, library orientation can take place in a "one-shot" session, in a credit-bearing course throughout the year, or in an orientation a few weeks before the semester begins.

"One-shot" sessions. The typical context for library instruction is the "one-shot" session, where librarians have a limited window of time to give students instructions on how to complete their assignments. Because of time limitations, library instruction is usually restricted to the hows of using research tools, rather than on the whys of using them (Adyelott, 2008). One-shot sessions generally rely on faculty members inviting the librarian to teach a session for their class. In this context, the librarian is little more than an assistant to the course instructor, a visitor who seldom gets to see how students apply the skills they are attempting to teach (Fister, 2008). Within these limitations (e.g., time constraints and the librarian's primary role as guest lecturer), it is difficult for librarians to develop a comprehensive program for IL.

Credit-bearing general education requirement. In her article, Fister (2008) discussed political and economic reasons why one-shot sessions are used more commonly than credit-bearing courses. First, the acceptance of a proposed course is dependent upon the political climate—how IL is valued within a particular institution or region—and on the economic environment—there may not be enough funding to pay

instructors and market course offerings. Next, offering a credit-bearing course in IL as an elective may not be economically feasible because students may choose not to enroll in it. For these reasons, it may be better to require an IL course for graduation. This would impact all students, but it requires a great deal of time and money to negotiate the curriculum and provide staff to support the requirement. Finally, librarians may think it is a better use of their time to conduct one-shot sessions with a large number of students in a variety of settings instead of spending a few hours a week with only a limited amount of students. All that being said, many librarians would agree that it is preferable for students to learn IL skills in the context of a course instead of as an isolated skill removed from meaningful content.

Orientation for incoming first-year students. Librarians often use orientations to introduce incoming students to the library. They instruct students on fundamental library skills, requiring students to focus on skill practice instead of on the valuation and critical analysis of content. At large universities (that typically have the most complicated library systems), a single orientation session may be the only time that students have contact with librarians (Fister, 2008).

Professional positions in the library. IL is most commonly taught by the instruction librarians, sometimes under the supervision and guidance of assessment librarians who are, in turn, supervised by the library dean. Research suggests that organizational positionality, or "the differing relations of authority embedded in organizational structures" (Brubaker, 2011, p. 242), can impact worker satisfaction and this, in turn, is correlated with job performance which is related to job stress (Brubaker, 2011; Jamal, 1984; Judge, Thoresen, Bono, & Patton, 2001). Job stress is linked to the

perceived organizational readiness for change, defined as "organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes" (Armenakis, Harris, & Mossholder, 1993, p. 681).

Titles of professional library positions may vary from institution to institution. For the purposes of this study, the titles "library deans", "assessment librarians", and "instruction librarians" were used. The following job descriptions of these positions were derived from the ACRL 2009 CUPA-HR (College and University Professional Association for Human Resources) Position Description Task Force and can be found on the ACRL's website under "New Academic Library Position Descriptions" (Association of College and Research Libraries, n.d.).

Library deans. Library deans, library directors and, at some institutions, university librarians, provide "strategic leadership for all functions of the library in collaboration with other academic units and in support of the mission of the College/University. Serves as primary advocate for the library and able to articulate and implement a vision for the future of academic libraries. Degree requirement: ALA Accredited Masters."

Assessment librarians. Assessment librarians play a critical role in IL instruction. The individual in this role "provides general and virtual information, research and reference services; plans, teaches and assesses information literacy instruction in collaboration with faculty; develops web and print based materials; serves as liaison to academic departments. Provides continuing education on pedagogy for all teaching librarians. Locates and creates digital content to support academic instruction; explores,

evaluates and encourages deployment of emergent technologies into library programs and services. Position may include Information Literacy/Instructional Design responsibilities. Generally this individual has 3-5 years of experience in the field. Degree requirement: ALA Accredited Masters."

Instruction librarians. The instruction and/or reference librarian, who is not in a supervisory role, "provides general and virtual information, research and reference services. Plans, teaches and assesses information literacy instruction in collaboration with faculty and/or Department Head. Develops web and print based materials. Serves as liaison to academic departments. Locates and creates digital content to support academic instruction. Explores, evaluates and encourages deployment of emergent technologies into library programs and services. Generally this individual has 0-1 year of experience in the field. Degree requirement: ALA Accredited Masters."

The Standards

The ACRL is a professional association with a current membership of more than 12,000 academic librarians and other interested people. The largest division of the ALA, ACRL is committed to improving the capacity of academic library and information professionals to meet the needs of higher education and to enhance learning, teaching and research (Association of College & Research Libraries, n.d.). In 2000, the ACRL adopted the Standards "as a framework for assessing the information literate individual" (para. 12).

They were as follows:

Standard 1: The information literate student determines the nature and extent of the information needed.

Standard 2: The information literate student accesses needed information effectively and efficiently.

Standard 3: The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

Standard 4: The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

Standard 5: The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

In addition to the five standards, there were 22 performance indicators. An example of a Performance Indicator for Standard One is: "The information literate student defines and articulates the need for information." The Standards also listed outcomes for assessing student progress toward IL, intended to be guidelines for developing methods of assessing student learning at the local, institutional level. An example of an outcome for the first performance indicator is: "Develops a thesis statement and formulates questions based on the information need" (Association of College and Research Libraries, 2000).

Importance in higher education. Doing a search for ACRL IL Standards as a search string resulted in 524 peer-reviewed articles in libraries worldwide, using WorldCat. Narrowing the search to UNM Libraries resulted in 466 peer-reviewed articles. This simple search alone revealed the impact that the Standards have had on the world of higher education. They have served to promote discussions about IL as an instrument of educational reform and have made it possible for colleges, universities, and

regional accrediting bodies to incorporate IL as a necessary learning outcome (Association of College and Research Libraries, February, 2014). Since their adoption in 2000, the Standards have been used in a wide variety of contexts. Examples of how the Standards have been used in higher education include:

- Assessing university library instruction programs (Davidson, McMillen, & Maughan, 2002);
- Comparing the Standards with evidence-based practice (Adams, 2014);
- Developing modular critical-thinking-based IL tutorials (Adyelott, 2008);
- Connecting the Standards with the teaching approach of Problem-based Learning (Holler, 2009);
- Redesigning introductory courses for first-year students (Karshmer & Bryan, 2011);
- Infusing the Standards into a doctoral program (Grant & Berg, 2004);
- Creating assessment instruments (Samson, 2010);
- Integrating the Standards into introductory management courses (Leigh & Gibbon, 2008);
- Developing and implementing undergraduate research methods courses (Marfleet, Dille, & Dille, 2005).

Marshall (2006) created a 40-item self-report survey to assess IL skills based primarily on a synthesis of the Standards. The survey asked participants to rate 10 statements (e.g., "I feel confident determining what topic I need to search") on a seven-point, Likert-scale (1 = strongly agree, 7 = strongly disagree). Marshall administered the survey to 520 students who also rated their GPA on a scale from one to five (1 = 2.0 or

below, 2 = 2.01-2.49, 3 = 2.5-2.99, 4 = 3.0-3.49, and 5 = 3.5-4.0; $M = 3.62$). The survey significantly correlated with students' self-rating of their GPAs ($r = .109$, $p < .05$).

"The times they are a-changin'." While the Standards have had an enormous impact on the development of IL as a disciplinary science, they were written in a simpler time. Since 2000, there have been significant shifts in higher education, including an increased emphasis on students as information producers who create online content in the form of videos, podcasts, blogs, etc. Other examples of significant shifts discussed in the first draft of the Framework (Association of College and Research Libraries, February, 2014) are: (a) integrative learning programs that focus on interdisciplinary critical thinking and communication skills; (b) an increase in professional master's degrees where the typical student has a full-time job while finishing their degree requirements and so need efficient methods for locating and creating information; (c) blended learning, a combination of face-to-face and online instruction; (d) Massive Open Online Courses, an online course offered to a large number of students who respond to instructional materials "freely" available online; and (e) the "flipped classroom," in which students get course content outside of class through videos and readings, and use class time for discussion and the completion of collaborative assignments. "The changes in higher education, coupled with a more complex information ecosystem than existed at the end of the last century, demand new engagement with the concept of information literacy." (Association of College and Research Libraries, February, 2014, p. 1).

Wiggins and McTighe (2005) identified three problems with content standards. They are paraphrased below:

1. The overload problem: the large number of content standards exceeds the

amount of time needed to study them.

2. The Goldilocks problem: Just like Goldilocks and the beds and chairs of the three bears, some standards are too big while others are too small.
3. The nebulous problem: Standards are so nebulous that they are almost certain to be interpreted in multiple ways; they are therefore not achieving one of the goals of the standards movement—to articulate clear and cogent learning outcomes.

Looking at the Standards through the lens of the Wiggins and McTighe criteria, these three problems are evident throughout. First, the overload problem exists because of the large volume of content—5 standards, 22 performance indicators, and over 90 learning outcomes. It is not possible to cover all this content, even in the context of an IL course that lasts a semester. The Goldilocks problem can be seen in the extensive differences between the learning outcomes. And, since many of the outcomes are too broad—not specific, measurable, or connected with the content of the relevant standard—the Standards are nebulous (Townsend, Brunetti, & Hofer, 2011).

Because of the problematic nature of the Standards and the shifts in higher education, the ACRL IL Competency Standards Review Task Force, after reviewing literature on IL, information technology, and critical theory, decided that the Standards "should not be reapproved as they exist but should be extensively revised" (Association of College and Research Libraries, June, 2012, p. 1). They recommended these revisions:

1. The Standards must be simplified as a readily understood model for greater adoption by audiences (both disciplinary and collegiate) outside of ALA.
2. The Standards must be articulated in readily comprehensible terms that do not

include library jargon.

3. The Standards must include affective, emotional learning outcomes, in addition to the exclusively cognitive focus of the current standards.
4. The Standards must acknowledge complementary literacies.
5. The Standards must move beyond an implicit focus on format.
6. The Standards must address the role of the student as content creator.
7. The Standards must address the role of the student as content curator.
8. The Standards must provide continuity with the American Association of School Librarians' Standards for the 21st Century Learner. (pp. 4-6)

The remaining section of the literature review presents the theoretical underpinnings of a framework that allows IL to be seen "in a more holistic way" (Malenfant, 2014).

The Framework

In the January 7, 2015 "Open Letter Regarding the Framework for Information Literacy for Higher Education," Berg et al. stated that, "the Task Force has created a new document that establishes a theoretical basis for information literacy." It is important to note that this open letter was authored by 14 academic librarians, all of whom were either members of the New Jersey Chapter of the ACRL and the College and University Section of the New Jersey Library Association User Education Committee and/or the Virtual Academic Library Environment Shared Information Literacy Committee. The contention the authors made, that the Framework is a theoretical basis for IL, seems sound and reasonable, given that the Framework (Association of College and Research Libraries, 2015) stated that it:

...has been conceived as a set of living documents on which the profession will

build. The key product is a set of frames, or lenses, through which to view information literacy. (p. 14)

The Framework is a different approach to IL than the Standards. Intentionally called a framework, it relies on a conceptual approach rather than being prescriptive, allowing for greater flexibility in implementation. Central to the Framework are conceptual understandings that consolidate multiple ways of thinking about information, research, and scholarship into a comprehensible model (Association of College and Research Libraries, 2015). The paradigmatic shift from a standards-based approach to the conceptual approach the Framework offers is a change that will have a significant effect on the library profession and in higher education (see Chapter One). A closer look at the key conceptual elements of the Framework reveals the substantial departure it takes from the Standards.

The theory of *threshold concepts* is the fundamental departure point from the Standards to the Framework. Originating from the work of Meyer and Land (2003), threshold concepts are foundational ideas and processes in any discipline that, once grasped, lead to the transformation and integration of the student's understanding and practice of that discipline (Association of College and Research Libraries, 2015; Townsend, Brunetti, & Hofer, 2011). Meyer and Land advanced five criteria for threshold concepts:

1. transformative—cause an important shift in the learner's perspective
2. irreversible—the learner does not forget this change in perception
3. integrative—synthesizes separate ideas into a coherent whole
4. bounded—delineates the borders of a specific discipline

5. troublesome—contains ideas that are stumbling blocks, or conceptual understandings that students have a hard time with

On the surface, threshold concepts might be seen as similar to standards.

Townsend et al. (2011) stated that the similarity lies in the fact that, when correctly applied, they can ground instructors in the central concepts of their discipline, provide pedagogical strategies for instructional and curriculum design, and be used as a possible tool for measuring learning objectives or competencies. The Framework does not contain specific objectives or competencies. Instead, it provides *knowledge practices* and *dispositions* (see end of "Searching as strategic exploration" section for a discussion of these). Unlike Bloom's Taxonomy of Educational Objectives, on which the learning outcomes of the Standards were based (Association of College and Research Libraries, 2000), the knowledge practices and dispositions provided in the Framework are not based on "higher order" or "lower order" thinking skills. Instead, these practices and dispositions are based on threshold concepts. These conceptual understandings are intended to be doorways for student learning, that, once entered, transform the learner's frame of reference (Townsend et al., 2011). This is a *conceptual* approach versus a *prescriptive* approach to learning outcomes. Because threshold concepts are the basis for the Framework, it can be said that the departure the Framework takes from the Standards is, at its root, theoretical.

According to Townsend et al. (2011), threshold concepts are especially appealing to instruction librarians (and instructors from all content areas) because they are free of educational jargon and, therefore, easy to use with a variety of instructional approaches and disciplines. Instead of having to pledge allegiance to a particular pedagogical theory,

librarians can use classroom observation and their knowledge of IL to make instructional decisions. Current research has indicated that IL instruction typically consists of embellished bibliographic instruction. Librarians who wish to teach more complex IL skills often wrestle with how to and what to teach. Threshold concepts can guide the struggling instruction librarian because they can help answer the "why" questions that students often ask: Why is it important to cite this article properly? Why do I need to take this course? Instruction librarians who use threshold concepts to design their instruction can answer these procedural questions in a more meaningful context (Townsend et al., 2011).

Townsend et al. (2011) first came across threshold concepts while they were teaching a required course in IL at California State University-East Bay. Examining their course content through the lens of threshold concepts, Townsend et al. began the lengthy, iterative process of formulating thresholds unique to IL. For months they searched for inconsistencies and weak spots in their IL instruction, and reflected on concepts that were consistently troublesome for students. This process transformed their own understanding of IL. The transformation led to clearly communicating concepts they had known before but had not otherwise shared with students.

Townsend et al. (2011; Townsend, Hofer, Hanick, & Brunetti, 2016) are involved in an ongoing Delphi study, the purpose of which is to continue the process of identifying and refining threshold concepts in IL. In a Delphi study, a moderator collects and summarizes written responses from a small group of experts, who answered questions on a topic anonymously. The experts then have the opportunity to read the responses of their peers and adjust their own answers accordingly (Brunetti, Hofer, Lu, & Townsend,

2014). While relying on the threshold concepts identified in the Delphi study, "the Framework has been molded using fresh ideas and emphases" for the thresholds, organizing them into six "Frames" (Association of College and Research Libraries, 2015, p. 2). What follows are shortened, paraphrased descriptions of the six Frames for the purpose of illuminating the threshold concepts theory as it applies to IL.

Authority is constructed and contextual. The first frame addresses the need for learners to critically examine and evaluate the authority (e.g., the expertise and credibility) of an information source. Authority does not necessarily mean scholarly authority. It is "constructed" because different groups of people acknowledge varying kinds of authority. It is "contextual" because the context for the information may help to decide what kind of authority is needed. For example, Farmer Green has not received a formal education, but he is a fifth-generation farmer who has been growing and selling chile peppers for the past 20 years. He has written a blog about growing the best chile in New Mexico. A biologist reads the farmer's blog to find out which chile seeds are the hottest ones to grow. The farmer does not have scholarly authority, but he has experiential authority.

Information creation as a process. Many students are confused by the format of information. For example, they cannot tell the difference between a journal and a website. They call everything that shows up in a browser window—news articles, blogs—a website, meaning they found it online. They fall back on old modes of locating information (e.g., "Googling it") and do not realize they lack skills in recognizing what they have found (Townsend et al., 2011). Experts understand format as the outcome of different processes, and this understanding helps them select the resources best needed

for the product they are creating.

Information has value. In an age where the most frequently used IL strategy is to "just Google it," where information on a multiplicity of topics is accessible to anyone with Internet access, it is not surprising that most students think that all information is free for the taking. Is it any wonder then that students express shock or anger when they bump into a paywall after finding the perfect article? Or that they are confused by their instructor's insistence on the need to cite their sources (Townsend et al., 2011)? When students traverse this particular threshold, they realize that information has value, either as a product that can be bought and sold, or as a method for educating oneself, influencing others, and negotiating with the world.

Research as inquiry. IL is commonly thought of as "learning how to do research." This frame addresses research skills, including the formulation of research questions, the collection of information using diverse research methods, the organization and synthesis of ideas, and the ability to interpret and form conclusions based on the gathered information. However, this frame is about more than learning research skills. Novice learners need to understand that research is an inquiry process focused on finding answers to questions that have not yet been answered or are unresolved. Inquiry is an iterative process—a problem-solving procedure that involves breaking down complex questions into simple ones, reformulating research questions based on the available information, and engaging in dialogue and debate with others about differing answers to their questions.

Scholarship as conversation. When the ENG 101 freshman is trying to complete her research paper, she may become frustrated, unable to find a simple answer to her

research question. For example, while researching the "cause" of learning disorders, she finds that one scholar definitively states that dyslexia is the result of visual difficulties while another completely refutes the visual hypothesis, asserting that dyslexia is the result of a defect in phonetic processing. The student who has crossed the threshold of this frame has discovered that scholars are involved in an ongoing debate and dialogue. Instead of avoiding other perspectives, the student participates in the scholarly conversation by seeking out divergent ideas in the literature and engaging in conversations with peers and instructors that enlarge their understanding of an issue. They also recognize that participating in the conversation means providing citations to the work of others.

Searching as strategic exploration. Novice learners usually have only a limited set of search strategies. They look up answers to research questions on Wikipedia, but do not check the references at the end of the Wikipedia article in order to verify the information. They may search the World Wide Web, but are not able to evaluate information sources. For example, when their dog gets sick, they are not able to distinguish between advice offered by a medical expert and advice offered by another dog owner. Experts, on the other hand, are able to search strategically, evaluating a wide range of sources and identifying those sources most relevant for their research need.

Each description of the Frames in the Framework is followed by a list of *knowledge practices* and *dispositions*. Knowledge practices are the resulting skills that learners may develop as a result of mastering a threshold concept/Frame. An example of a knowledge practice is the ability to "define different types of authority" (Association of College and Research Libraries, 2015, p. 5). Dispositions address the affective

component of learning. In contrast to the Standards, that focused almost exclusively on cognitive learning outcomes (Association of College and Research Libraries, February, 2014), the Framework was conceived to encourage a more holistic approach to the design of learning outcomes or objectives—one that includes student preferences and attitudes. An example of a disposition is the ability to "develop and maintain an open mind when encountering varied and sometimes conflicting perspectives" (Association of College and Research Libraries, 2015, p. 6). These knowledge practices and dispositions are not intended to be prescriptive or exhaustive. Instead, they are intended to promote a collaborative effort between stakeholders at the local, institutional level for the co-development and co-writing of learning outcomes (Association of College and Research Libraries, January, 2015, Board of Directors Action Form).

In addition to threshold concepts, two other terms important to understanding the Framework's theoretical approach to IL are *metaliteracy* and *metacognition*. Metaliteracy proposes a transformed vision of IL as an all-encompassing set of skills whereby students use and produce information and engage effectively in collective environments (Association of College and Research Libraries, 2015). "Metaliteracy empowers learners to participate in interactive information environments, equipped with the ability to continuously reflect, change, and contribute as critical thinkers." (Jacobson & Mackey, 2013, p. 86). This emphasis on the individual as an information producer can be seen in the Framework's use of words like "collaborate," "produce," and "share" in the writing of the Frames, knowledge practices, and dispositions. Metacognition, or the awareness of one's own thought processes, has been shown by research to be important in cognitive development and academic learning (Paris & Winograd, 1990). This emphasis on the

importance of metacognition can be seen in the Framework's use of phrases like "develop awareness" and "are conscious." The concepts of metaliteracy and metacognition are also important in the Framework's new proposed definition of IL.

The Framework's definition of IL. The definition of IL adopted by the ALA in 1989 was "the ability to recognize when information is needed and to locate, evaluate, and use effectively the needed information" (Association of College and Research Libraries, 1989, para. 3). Subsequently, the definition was used as part of the introduction to the Standards (Association of College and Research Libraries, 2000). In the first draft of the Framework (February, 2014), the Task Force asserted that the Standards' definition of IL described it as a skill set identical for all learners, based on a fixed conception of IL as a hierarchy of proficiencies, presumed to be the same across all disciplines and contexts. Additionally, the Task Force asserted that the Standards envisioned the information literate student as "a construct of imagined accomplishment, at the endpoint of a set of learning experiences, without the involvement of peers, tutors, coaches, faculty advisors, or other collaborators" (p. 3). This focus on discrete skills acquired in isolation has been replaced by a socio-constructivist perspective on learning in more recent definitions of IL. The findings of Limberg, Alexandersson, Lantz-Andersson, and Folkesson (2008) indicated IL pedagogy is moving in the direction of determining the value of students' research questions, creating an avenue for teachers and learners to negotiate instructional goals, and critically evaluating information sources in the various contexts of student assignments. Limberg et al. (2008) provided a valuable bridge between the traditional IL skill-centered approach to a pedagogy more in tune with what the Framework offers.

Based on the work of Limberg et al. (2008) and other researchers, the Framework provides an expanded definition of IL that attempts to move beyond the Standards' limited and formulaic approach to IL (Association of College and Research Libraries, February, 2014):

The set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning. (p. 3)

In contrast to the Standard's limited definition of IL, the Framework moves beyond the acquisition of abilities to include references to threshold concepts ("the understanding of how information is produced and valued"), metaliteracy ("creating new knowledge") and metacognition ("reflective"). It focuses on collaboration ("communities of learning"), student creativity and ethical participation ("creating new knowledge and participating ethically"), and individual growth ("discovery of information").

ARL membership. The ARL and the ALA are two organizations that are especially important in the world of academic libraries. Their visions of IL, as expressed in their mission statements, are very similar to the Framework's conceptions of IL. The ARL is a nonprofit association of 125 research libraries in the United States and Canada. Its member libraries spend more than 1.4 billion dollars every year on library materials.

Like the Framework, collaboration is an important theme in the ARL's vision statement, guiding principles, and its proposed Strategic Framework 2015. In its June, 2014 "Report of the Association of Research Libraries Strategic Thinking and Design Initiative," the ARL's vision statement is that, "in 2033, the research library will have

shifted from its role as a knowledge service provider within the university to become a collaborative partner within a rich and diverse learning and research ecosystem" (p. 1). This statement, in addition to emphasizing the importance of collaboration, also echoes other ideas in the Framework—the need for librarians to move away from teaching IL as a set of discrete skills ("the research library will have shifted from its role as a knowledge service provider"), and the diversity of the information environment or "ecosystem." Other guiding principles of the ARL are their commitment to the open access of information and their ongoing promotion and advocacy of intellectual freedom in public policy.

ALA accreditation. Founded in 1876 during the first official World's Fair in Philadelphia, the ALA is the oldest and largest library organization in the world. It has accredited 63 master's programs in library and information in the United States, Canada, and Puerto Rico. Attaining an ALA-accredited master's degree is a requirement for most professional librarian positions in higher education or public libraries. Like the ARL, ALA is also committed to ensuring the open access of information, promoting intellectual freedom, and advocating for state and national legislation helpful to libraries and users of libraries. Like the Framework, themes of library transformation and the dynamic nature of the information environment are evident in the ALA's key action areas. "ALA provides leadership in the transformation of libraries and library services in a dynamic and increasingly global digital information environment" (American Library Association, n.d.). Like the Framework, it maintains that its standards for accreditation are not intended to be prescriptive, but instead are intended to promote merit by developing criteria for the evaluation of educational efficacy (American Library Association, 2008).

It is also important to note that the ACRL is the academic arm of the ALA.

Feedback on the Framework

Since the Framework has only recently been accepted by the ACRL Board of Directors, no current instruments exist to specifically measure the potential perceived impact the Framework may or may not have on higher education library praxes. It is important to note, however, that throughout the process of revising the Framework, each draft contained questions for stakeholders to answer that were directly related to the content of the drafts. The first draft of the Framework asked for stakeholders to respond to a survey containing these questions (Association of College and Research Libraries, February, 2014):

1. In what ways will the focus on threshold concepts help you to generate conversations with other campus stakeholders (such as disciplinary faculty partners, members of the general education curriculum committee, and academic support services staff)?
2. How do the sections for knowledge practices and assignments/assessments provide helpful guidance when considering implementing the new Framework? What else would you want to see in these sections?
3. We plan to include additional materials in a subsequent phase. What other elements would you find helpful that aren't mentioned in our plans?

The results of the survey were described in the ACRL Interim Report (Association of College and Research Libraries, March, 2014). Twenty-one people responded to the survey. In the summary of the survey findings, some of the more pertinent observations were:

- "Threshold concepts can facilitate cross-disciplinary discussion."
- "These concepts may be too theoretical for some instructors."
- "If librarians don't understand threshold concepts, it will be hard to talk with others about them."

Some of the participants' recommendations, as summarized in the Interim Report were:

- "Simplify language and shorten document."
- "Incorporate benchmarks."

The results of this initial survey, albeit from a very small sample, revealed a concern with the language of the document and a desire to return to a more prescriptive and formulaic approach (e.g., "incorporating benchmarks").

Creed-Dikeogu (2014), Director of Library Services at Ottawa University, also expressed misgivings about the Framework's theoretical approach in an article entitled "Exploring the Revision of the ACRL Information Literacy Standards." She stated that some might find the Framework's philosophy to be "entirely alien." She also said that librarians who wish to adopt the Framework's teaching philosophy would have to accept the whole "theory-practice package," and this might involve abandoning their own ideas.

Like the respondents to the first draft's survey, Howden (January 23, 2015), Assistant Dean of the library at El Centro College, in a comment about the blog post, "ACRL board update on the proposed Framework for Information Literacy for Higher Education," also expressed dislike of the wording in the Framework: "The high flown phrases are empty and meaningless." In addition, he acknowledged doubts about the Framework's conceptual approach. "This Framework represents an attempt to ditch learning outcomes and any ability to deal with professional accountability."

In the third draft of the Framework (Association of College and Research Libraries, November, 2014), the Task Force asked stakeholders to respond to the following questions:

1. How satisfied are you with the new definition of information literacy?
2. How satisfied are you with each of the six Frames?
3. How satisfied are you with the opportunities to provide feedback to the task force on drafts of the Framework?
4. How satisfied are you that the task force has been responsive to feedback provided on previous drafts of the Framework?
5. OVERALL, how satisfied are you with the third draft of the proposed Framework for Information Literacy for Higher Education?

The results of this survey appeared in the Board of Directors Action Form (Association of College and Research Libraries, January, 2015). Of the 206 people who responded, 67.4% said they supported the new Framework, 63% were satisfied with the new definition of IL, and the "majority were satisfied with the new Frames" (p. 2). It is important to note that these questions are attempting to assess stakeholder *satisfaction*, and not the perceived impact that the Framework may or may not have on library praxes.

In this same document (Association of College and Research Libraries, January, 2015), the Chair of the ACRL Standards Committee, Susanna Boylston, reported on the Task Force's rationale for not addressing some of the feedback it received. While many of the stakeholders had asked for the mapping of the Framework to the Standards, the Task Force decided that it would be counterproductive to link the conceptual approach of the Framework to the prescriptive approach of the Standards. The Task Force also decided

against providing explicit learning outcomes and a sequencing of the Frames, again in the hopes that not providing a rigid, formulaic approach would stimulate more collaborative conversations at the local, institutional level.

At the end of the Board of Directors Action Form (Association of College and Research Libraries, January, 2015), Boylston, on behalf of the Standards Committee, recommended that the ACRL Board of Directors:

Sunset the Information Literacy Competency Standards of Higher Education in July 2016,¹ allowing for one full academic year for institutions to transition to the Framework. The Framework better reflects the changed education and information environment than the Standards, and the Task Force feels strongly that it is inadvisable to have two documents available from which a choice can be made but recognizes the need for a transition period as identified above. (p. 2)

Chapter Three

Methods

The final draft of the Framework, accepted by the ACRL Board of Directors in February, 2015, redefines IL, moves away from the Standards, and gives librarians a new lens through which to view academic library instruction as well as library praxes in general. This chapter will present the purpose and significance of this study, the research design, the measure, the participants, the variables, the procedures, and the how data was analyzed.

This study was designed to investigate the perceived level of impact that the Framework might have on academic library and higher education praxes. More specifically, the purpose of this study was to determine, through a multiple regression analysis, the best predictor variables for the perceptions of the Framework's level of impact, i.e., the perceptions of library deans, assessment librarians, and instructional librarians.

As stated in the first two chapters, the Standards had a tremendous impact on library instruction in higher education. Just as the Standards have influenced or otherwise generated educational reform, the Framework will also be important in furthering educational reform in the 21st century. Just how much it may impact, change or influence the field of IL depends, in part, on understanding the perceptions of those most affected by the change. To that end, the following research questions were developed to guide the study:

- 1. What level of impact on academic library praxes do library deans, assessment librarians, and instructional librarians perceive that the Framework for*

Information Literacy for Higher Education will have?

2. *What are the best predictor variables for the perceived level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*
3. *How do academic library deans, assessment librarians, and instructional librarians explain their perceptions of the level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*

Conducting a multiple regression determined the best predictor variables of perceived impact of the Framework on higher education library praxes. Determining or discovering reasons (i.e., predictor variables) that might contribute to individuals' perceptions is a large step towards informing potential directions that institutional leadership and key stakeholders might take.

This study was intended to offer a contribution to the available literature about (a) how the new Framework may serve to influence the ways academic libraries function in delivering information literacy instruction and (b) the best predictor variables for perceived level of impact. It may be of interest to stakeholders who are looking at ways that IL is defined, promoted, and taught in higher education academic libraries. The results of this study may also serve to initiate and illuminate conversations around the Framework and how to approach possible implementation.

Research Design

This was a mixed methods study. Creswell and Plano Clark (2011) recommended the use of a notation system to communicate the complex nature of a mixed methods

design. Using the notation system of Creswell and Plano Clark, this study's research design was QUAN (+ qual). This means that quantitative and qualitative data was collected at the same time (concurrent), but there was more quantitative data collected than qualitative data. The qualitative data served as a further explication of the larger collection of quantitative data. See Figure 1 below for an overview of the research design

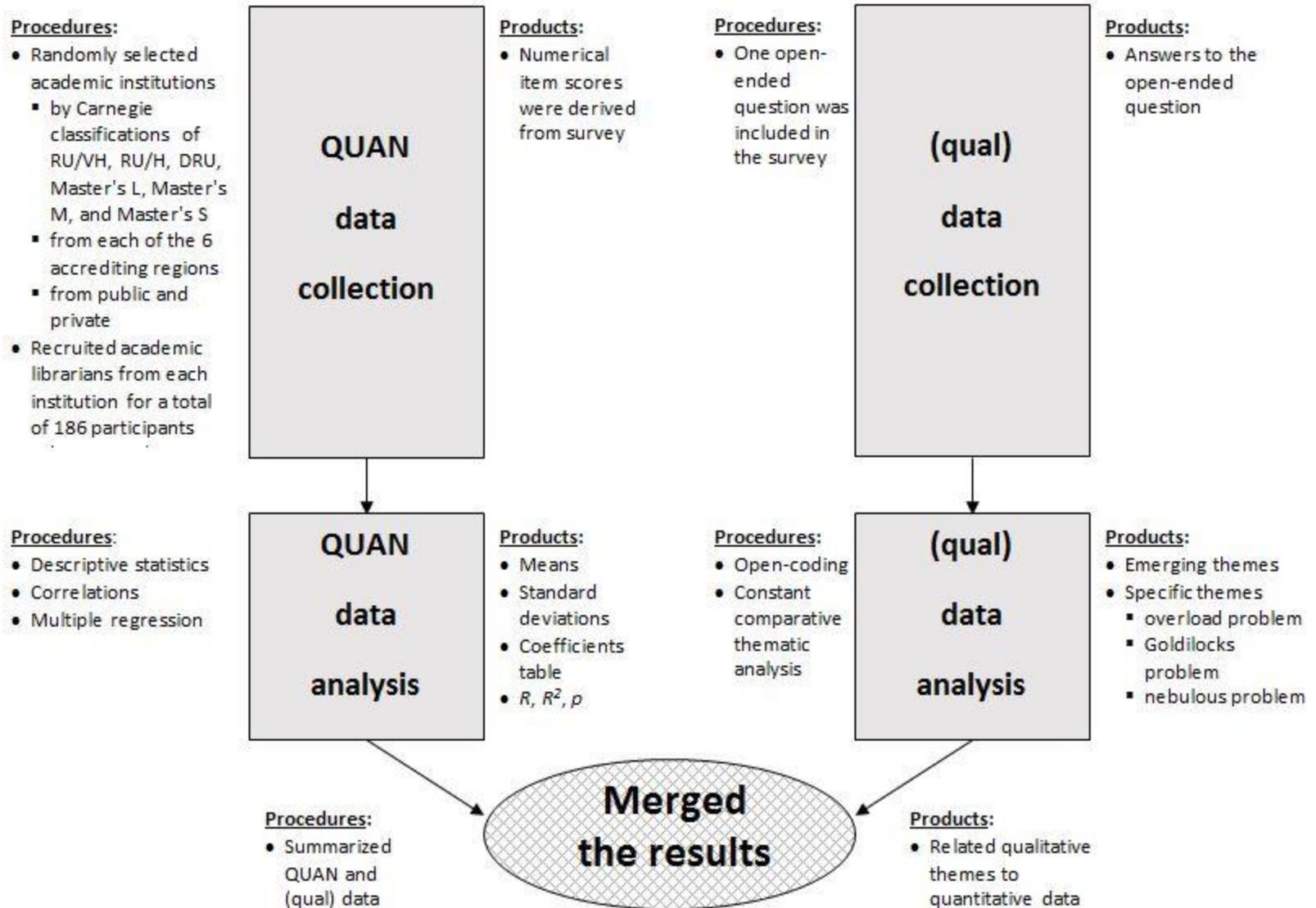


Figure 1. Research design overview.

Using a two-stage, stratified random sampling method, 186 participants were recruited. The sample was then surveyed on their perceived impact of the Framework on library praxes. After survey data was collected, a multiple regression was conducted to determine possible significant correlations between the DV (perceived impact of the Framework on library praxes) and the seven IVs: (a) professional position or titles of participants within the library setting, (b) whether or not the institution offers an ALA accredited program of study in Library Science, (c) whether or not regional accreditation agencies use the term IL in their assessment guidelines, (d) current context of library instructional practices, (e) current use of the IL Competency Standards for Higher Education, (f) institutional membership in the Association of Research Libraries, and (g) individual membership in the ACRL.

Measure

According to Yin (2009), surveys answer: who, what, where, how many, and how much. Surveys do not "require control of behavioral events" and "focus on contemporary events" (p. 8). According to Creswell (2009), the advantages of using surveys or questionnaires are "the economy of the design" (simplicity), "rapid turnaround in data collection" (expedience), and "identifying attributes of a large population from a small group of individuals" (generalizability) (p. 146).

As of its February 2, 2015 ACRL Board of Director's action to accept the Framework, no current instruments existed to specifically measure the potential perceived impact the Framework may or may not have on higher education library praxes. To that end, an instrument (in the form of a survey) was designed for the purposes of studying said potential perceived impact. The survey allowed me to make inferences

about the perceptions of the sample and generalize those inferences to the population (Creswell, 2009). This was a cross-sectional, self-administered survey; that is, as opposed to a longitudinal survey, participants will only take it one time and will complete it on their own (Creswell, 2009).

When writing questions for surveys, Cozby (2009) recommended that a researcher first consider how each question connects to the research question. Cozby has three general recommendations for the types of questions a survey should contain:

- 1) Attitudes and beliefs (perceptions)
- 2) Factual questions
- 3) Questions about past and future behaviors

In addition to the specific content considerations, questions need to be simple, using wording that is easily understandable. Simple wording should result in a participant's ability to easily respond. This survey included closed-ended and one open-ended question. Closed-ended questions are used to elicit yes/no responses, multiple choice responses, or Likert scale indications (in the case of this survey, 7-point scale ranging from "*strongly agree to strongly disagree*"). The open-ended question allowed for participants to respond however they liked within the limit of 500 words per answer.

In order to answer this study's research question(s), the survey was designed primarily around the language contained within the Framework. The final accepted draft of the Framework presents assertions and suggestions about how it can be used to guide changes of higher education library praxes. An assertion is "a firm statement of belief" (Dictionary of Information and Library Management, 2006) and a suggestion is "an idea or plan put forward for consideration" (Oxforddictionaries.com, n.d.). An example of an

assertion in the Framework is: "The Framework redefines the boundaries of what librarians teach" (Association of College and Research Libraries, January, 2015, p. 14).

An example of a suggestion in the Framework is: "The Framework encourages thinking about how librarians, faculty, and others can address core or portal concepts"

(Association of College and Research Libraries, January, 2015, p. 14).

The exact wording of assertions and/or suggestions from the Framework was used in the questions of the survey. The following contains a series of assertions presented in one complex sentence from the Framework (Association of College and Research Libraries, January, 2015):

The Framework opens the way for librarians, faculty, and other institutional partners to redesign instruction sessions, assignments, courses, and even curricula; to connect information literacy with student success initiatives; to collaborate on pedagogical research and involve students themselves in that research; and to create wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning on local campuses and beyond. (p. 1)

The following example survey question was derived from the above assertions. It fell under the beliefs and attitudes (Cozby, 2009) category of questions.

"Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to connect information with student success initiatives at your institution:

1 2 3 4 5 6 7"

An example from the survey that tied in with Cozby's factual questions was: "Does your

institution offer an American Library Association (ALA) accredited program of studies in Library and Information Science?" Cozby's past and future behavior type question is illustrated in the following survey question: "Do you use the ACRL's Information Literacy Competency Standards for Higher Education?" (For the full survey, see Appendix A). The majority of the closed-ended questions fell under Cozby's beliefs and attitudes category.

The open-ended question was asked after participants completed the last closed-ended question on the survey. The last closed-ended question asked participants to rate the overall level of impact that they perceived the Framework may have on their institutional library praxes. The open-ended question then asked participants to explain why they selected that level of impact and to provide examples supporting their answer. Questions specifically derived from the language of the Framework were used to measure the DV (the participants' perceived level of impact of the Framework on library praxes).

Questions from the survey. The following questions are listed in the order they appear on the survey:

- 1) Please provide the name of the institution where you work. For example: The University of Colorado, Denver.
- 2) Please choose the title that best describes the position you hold at your library.
 - Instruction Librarian
 - Assessment Librarian
 - Library Dean
 - Other (please specify)

- 3) Does your institution offer an American Library Association (ALA) accredited program of studies in Library and Information Science?
- Yes
 - No
- 4) Are you a member of the Association of College & Research Libraries (ACRL)?
- Yes
 - No
- 5) Are you familiar with the Information Literacy Competency Standards for Higher Education that were approved by the ACRL in January, 2000?
- Yes
 - No
- 6) Do you use the ACRL's Information Literacy Competency Standards for Higher Education?
- Yes
 - No
- 7) Your library and/or institution offers the majority of information literacy instruction in the context of:
- a credit-bearing general education requirement.
 - an orientation for incoming first-year students.
 - "one-shot" sessions.
 - Other:

8) Have you read the January, 2015 version of the ACRL's Framework for Information Literacy for Higher Education (the "Framework")?

- Yes
- No

9) Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to redesign instruction sessions, assignments, courses, and curricula at your institution.

10) Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to connect information with student success initiatives at your institution.

11) Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to collaborate on pedagogical research and involve students in that research at your institution.

12) Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to create wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning at your institution.

13) Do you think the Framework will guide the development of information literacy at your institution?

- Yes

- No

14) Do you think the Framework will promote discussion about the nature of key concepts in information in general education and disciplinary studies at your institution?

- Yes
- No

15) Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage thinking about how librarians, faculty, and others can address core or portal concepts and associated elements in the information field at your institution.

16) Do you think the Framework will help librarians contextualize and integrate information literacy for your institution?

- Yes
- No

17) Do you think the Framework will encourage a deeper understanding of what knowledge practices and dispositions an information-literate student should develop at your institution?

- Yes
- No

18) Do you think the Framework will encourage the library community at your institution to develop resources such as curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames?

- Yes

- No

19) Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage librarians to work with faculty, departmental or college curriculum committees, instructional designers, staff from centers for teaching and learning, and others to design information literacy programs in a holistic way at your institution.

20) Do you think the Framework will redefine the boundaries of what librarians teach and how they conceptualize the study of information literacy within the curricula at your institution?

- Yes
- No

21) Please indicate the *overall* extent (1 being the lowest, 7 being the highest) you think the Framework will impact library practices at your institution.

22) Please explain why you selected that overall extent of impact and provide examples to support your answer.

Validity and reliability. Validity is a broad term referring to the best practices necessary for the collection, analysis, interpretation, and presentation of data (Merriam, 2009). Validity also depends on whether or not a measure does what it is supposed to do and produces worthwhile inferences from its scores (Creswell, 2009; Powell & Connaway, 2004; Rosnow & Rosenthal, 2008). Content validity, more specifically, addresses the actual items being measured—they need to measure what they were designed to measure. That is, the content of the survey meets the study objectives or answers the study's research questions (Creswell, 2009; Sproull, 2002). Due to the design

of the survey, content validity was addressed by using the specific language of the Framework in the formulation of survey questions—not a reconstruction, rewording, or reinterpretation of the Framework's language. In order to be confident of validity, a field test was conducted. Field testing a survey "is important to establish the content validity of an instrument and to improve questions" (Creswell, 2009, p. 150).

Another important aspect of validity is referred to as face validity. Although often defined in loose terms, the general idea behind face validity is that the research apparatus gives the impression that it measures what it claims to measure. Face validity can be determined by experts in the field of study who are asked to provide opinions regarding the measurement tool (Powell & Connaway, 2004). For the purposes of determining face validity, content experts (e.g., library deans, assessment librarians, and instruction librarians) were asked to field test the survey.

Reliability refers to the internal consistency of a behavioral measure. Reliability can be assessed by calculating correlation coefficients, a measure of the strength of two variables' relationship. To test for reliability, two scores from two separate items on the same measure are correlated. If the items are similar (e.g., assessing the same construct), the Pearson correlation coefficient should be both high and positive (Cozby, 2009; Powell & Connaway, 2004). Because the survey for this study assessed perceptions of a document and not a particular construct (e.g., optimism or creativity), it was anticipated that content on items would not be completely similar and, therefore, correlation coefficients between survey items would most likely be moderately related (.50-.70).

Participants

This study sampled 186 academic librarians from higher education institution

libraries from each of the six accrediting regions. In order to provide a reliable multiple regression equation, Mertler and Vannatta (2010) recommended a ratio of 15 participants for every predictor variable (n/k). This study focused on seven variables: (a) positionality in the library (library deans, assessment librarians, and instruction librarians), (b) whether or not the institution has a program of study in library science, (c) whether or not regional accreditation agencies recognize information literacy in their guidelines, (d) current context of library instructional practices, (e) current use of the former Information Literacy Competency Standards for Higher Education, (f) institutional membership in the Association of Research Libraries (ARL), and (g) individual membership in the Association for College and Research Libraries (ACRL). Therefore, using the n/k formula proposed by Mertler and Vannatta, a minimum of 105 participants needed to be recruited.

Variables

The following were the IVs used for the multiple regression analysis:

IV 1: **ProfPos:** *The professional position or titles of participants within the library setting*

IV 2: **ALALSci:** *The institution offers an ALA accredited program of study in Library Science*

IV 3: **ILRegAcc:** *Regional accreditation agencies use the term information literacy in their assessment guidelines*

IV 4: **LibPracs:** *Current context of library instructional practices*

IV 5: **ILStands:** *Current use of the Information Literacy Competency Standards for Higher Education*

IV 6: **ARLMemb**: *Institutional membership in the Association of Research Libraries (ARL)*

IV 7: **ACRLMemb**: *Individual membership in the Association of College and Research Libraries (ACRL)*

The following was the DV used for the multiple regression analysis:

DV: **PercImp**: *The perceived impact of the Framework on library praxes*

Table 1 demonstrates how the variables correspond to specific questions from the survey (also see Appendix A for the full survey).

Table 1
Variables and Survey Questions

Variable Name	Survey Questions
ProfPos	#2: Please choose the title that best describes the position you hold at your library.
ALALSci	#3: Does your institution offer an American Library Association (ALA) accredited program of studies in Library and Information Science?
ILRegAcc	#1: Please provide the name of the institution where you work.
LibPracs	#7: Your library and/or institution offers the <i>majority</i> of information literacy in the context of...
ILStands	#5: Are you familiar with the Information Literacy Competency Standards for Higher Education that were approved by the ACRL in January, 2000? #6: Do you use the ACRL's Information Literacy Competency Standards for Higher Education?
ARLMemb	NA: <i>From directory listing of public and private higher education institutions within the United States.</i>
ACRLMemb	#4: Are you a member of the Association of College & Research Libraries (ACRL)?
PercImp	Questions #9-21

Study Procedures

While awaiting IRB approval, a directory listing of public and private higher education institutions within the United States was constructed. The directory listing was created in the form of a spreadsheet divided into six categories (columns) that

corresponded to each of the six regional accrediting organizations acknowledged by the Council for Higher Education Accreditation (CHEA). Each regional column listed all public and private institutions categorized according to three Carnegie classifications:

- Research Universities—very high research activity (RU/VH)
- Research Universities—high research activity (RU/H)
- Doctoral/Research Universities (DRU)

Each institution was linked to a subsheet including contact information, website, Carnegie classification, control (public or private), enrollment, ARL membership, and degree levels offered. (See Appendix B for an example.) This spreadsheet was used for the random selection of institutions that were included in the study.

After obtaining permission to conduct the study from the UNM IRB, the following events took place (Figure 2 at the end of this section provides a high-level view of the order of study events):

- 1) A field study was conducted to determine the simplicity, expedience, efficacy, and internal reliability of the survey instrument. Eight academic librarians from six institutions (three public and three private) completed the Information Literacy for Higher Education Survey along with a questionnaire affording them the opportunity to provide feedback regarding the relevance of the survey questions and the overall quality of the survey design (see Appendix C). Three self-identified as library deans, two self-identified as instruction librarians, one self-identified as a director of library publications, and one self-identified as a user services librarian. Responses to survey questions were correlated in order to arrive at an estimate of the survey's reliability.

- 2) Institutions were randomly selected using a directory listing constructed in the form of a spreadsheet. The spreadsheet listed all public and private higher education institutions within the United States, categorized as RU/VH, RU/H or DRU according to Carnegie Classification. First, public and private institutions from each of the six accrediting regions were numbered (e.g., if there were 17 public institutions in the Middle States Commission on Higher Education accrediting region, those institutions were listed alphabetically and numbered from 1 to 17). Then a random number generator was used to select institutions (public and private) from each of the six accrediting regions.
- 3) To meet the requirements of this study, library deans, assessment librarians, and instruction librarians were selected for recruitment as potential participants. They were identified using websites, organizational charts, and staff listings from the library of each randomly selected institution. When deans, assessment librarians, or instruction librarians were not listed with corresponding professional titles on the library websites, organizational charts, or staff listings, the library was contacted via email or phone call.
- 4) I forwarded a link to the survey by email to library deans, assessment librarians, and instruction librarians from the randomly selected institutions. In the event that participants had questions or concerns, the email invitation included my contact information. The link provided access to a secure online survey. Participants opened the link and read a consent form. At the end of the consent form, they chose whether or not they wanted to participate in the study. If subjects agreed to participate, they completed the survey.

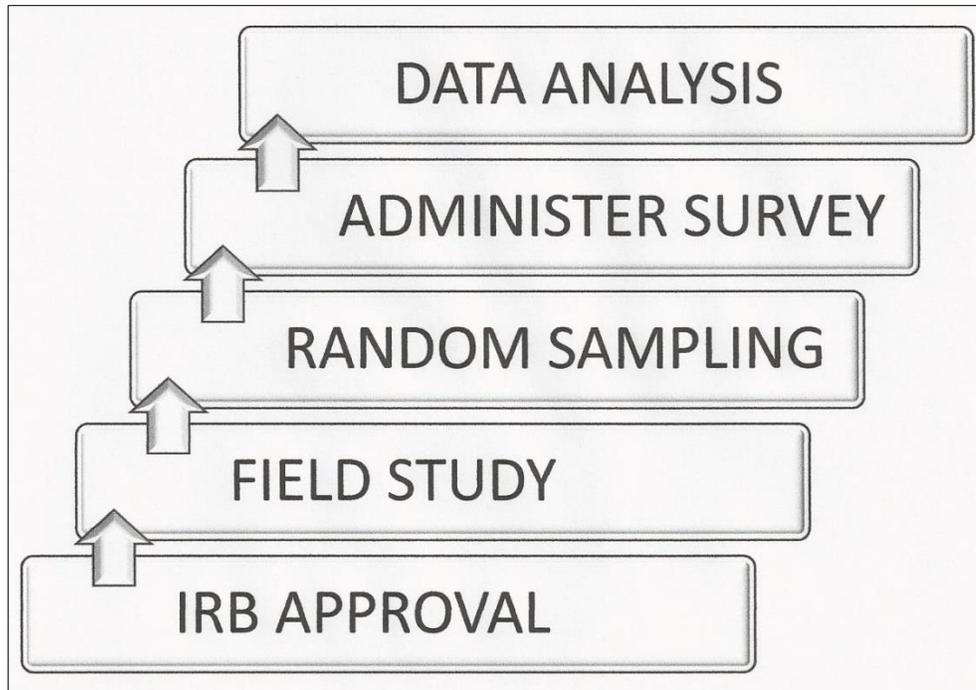


Figure 2. Order of study events.

Data Analysis

Quantitative analyses consisted of the multiple regression and reliability calculations. The qualitative contribution to the study consisted of the collection and hallmarking of participants' explanations that they provided to support an overall rating of perceived impact of the Framework on their institutional library praxes.

Quantitative. Using SPSS, a stepwise multiple regression using forward selection was conducted using the seven IVs: ProfPos, ALALSci, ILRegAcc, LibPracs, ILStands, ARLMemb, and ACRLMemb. The DV was PercImp. After calculating bivariate correlations between the IVs and the DV, the IV with the highest correlation to the DV was entered first into the analysis. Then the variable with the next highest correlation to the DV was entered into the analysis, and its contribution to the prediction of the DV was calculated by measuring the increase in R^2 . This stepwise process continued until the IVs

no longer significantly predicted the DV (Mertler & Vannatta, 2010).

Qualitative. Although summaries of the quantitative data revealed general group findings regarding perceived impact of the Framework on library praxes, they may have fallen short in communicating individuals' specific rationale—which varied from one person to another (Thomas, 2003). For the purpose of elucidating these potential differences, an additional chapter was included in this study. Chapter Five provides excerpts from the answers given to the open-ended question (Appendix D includes responses, in their entirety, of all the participants' answers to the open-ended question). The excerpts were chosen to best illustrate the range of rationales offered by participants. Excerpts were coded using Wiggins and McTighe's (2005) three problems with content standards: the overload problem, the Goldilocks problem, and the nebulous problem. Open coding was also used in order to discover other emerging themes. In so doing, I gained a more in-depth understanding of participant perceptions. The qualitative data served to provide further insight for the quantitative analysis and findings.

Chapter Four

Quantitative Results

In this chapter I will first provide a brief summary of the quantitative methods used to analyze the data collected from participants who responded to the Framework for Information Literacy for Higher Education Survey. Second, the field study results will be discussed. Third, rationale for making the a priori decision to merge library positionality into two main categories will be provided. Finally, descriptive statistics and the results of the multiple regression will be provided.

Summary of Quantitative Research Methods

After selecting participants using a stratified, random sampling method, 186 academic librarians were surveyed to determine the level of impact they perceived that the Framework would have on library praxes (i.e., the dependent variable or DV). After survey data was collected, data screening led to the elimination of 26 surveys with missing data. Then a multiple regression was conducted to determine if any of the following seven independent variables (IVs) significantly predicted the DV:

1. Professional position or titles of participants within the library setting;
2. Whether or not the institution offers an American Library Association (ALA) accredited program of study in Library Science;
3. Whether or not regional accreditation agencies use the term IL in their assessment guidelines;
4. Current context of library instructional practices;
5. Current use of the IL Competency Standards for Higher Education;
6. Institutional membership in the Association of Research Libraries (ARL);

7. Individual membership in the Association for College and Research Libraries (ACRL).

Field Study

A field study was conducted to determine the simplicity, expedience, efficacy, and internal reliability of the survey instrument. Eight academic librarians from six institutions (three public and three private) completed the survey for Information Literacy for Higher Education Survey and the feedback survey. Three self-identified as library deans, two self-identified as instruction librarians, one self-identified as a director of library publications, and one self-identified as a user services librarian.

In order to test the survey instrument for internal reliability, scores from separate questions were correlated (e.g., all of the participants' answers on one question were correlated with all of their answers on another question). On the Likert questions, correlations ranged from .181 to .872 with a mean of .665 and a median of .703. The mean indicates that, on average, there were strong correlations between Likert survey questions, demonstrating good reliability on the Likert items. On the Yes/No questions, correlations ranged from -.333 to 1.0 with a mean of .439 and a median of .467. The mean here indicates that, on average, there were moderate correlations between Yes/No questions, demonstrating moderate reliability on these questions.

There were four questions on the feedback questionnaire included at the end of the Framework for Information Literacy Survey used for the field study. One participant did not answer the feedback questions. The first question asked if the Survey was simple to understand. Of the seven responses, none of the participants chose the response "Strongly Agree," two chose "Disagree," one chose "No Opinion," three chose "Agree,"

and one chose "Strongly Agree." One of the participants who chose "Disagree" added a comment that was about the language of the Framework itself and not about the survey. "I hate the jargon of threshold concepts and if librarians try to use it with faculty it will set the profession back professionally a decade..." However, the majority of the respondents (4/7) agreed that the survey was simple to understand.

The second feedback question asked how long it took to complete the Framework for Information Literacy Survey. Three participants answered "5 minutes" and three participants answered "10 minutes." One person answered "Other" but did not specify a time amount. For six participants, the survey was expedient; it only took between 5-10 minutes to complete.

The third feedback question asked participants to rate the Framework for Information Literacy Survey's overall quality of design (1 being the lowest, 7 being the highest). Six people answered this question. One person chose 2; one person chose 4; two people chose 5; two people chose 6 ($M = 4.67$). One person who chose 6 as an answer wrote that "questions were easy to understand and answer." The person who gave it a 2 commented that "design wasn't the issue...focus was wrong...We need assessment tools..." The high mean on this answer indicated that most participants found the survey's design effective.

The last question asked participants to add any comments about the Framework for Information Literacy Survey that they thought might be helpful. Only one person wrote a comment, and it was not relevant to the survey: "It will be most helpful for librarians own curriculum doing one shots..." In summary, the majority of the respondents in the field study found the survey simple, expedient, and effective. Pearson

correlations determined that the internal reliability of the survey ranged from moderate to high.

Current Study

Merging positionality categories into "dean" and "non-dean." Thirty-eight participants out of the 138 participants who read the Framework self-identified as "other". Twenty-two of the participants who self-identified as "other" did not fit the position of instruction librarian or assessment librarian or had multiple roles (see Table 2).

Table 2

Questionable Classifications for Participants Who Answered "Other" for Position

Position Descriptions	
1)	"Associate Library Director, with responsibility for instruction and assessment among other duties"
2)	"Reference, Instruction and Assessment Librarian"
3)	"Associate Director for Library User Services"
4)	"Associate University Librarian for Public Services (Instruction, Research Services and Assessment)"
5)	"Associate Dean"
6)	"tenure-line faculty and department head"
7)	"Department head."
8)	"Director of the health science library"
9)	"Head of library department"
10)	"Head of Reference Department"
11)	"Public services librarian"
12)	"Associate Director for User Services (access services, reference, instruction)"
13)	"Head of public services"
14)	"Collection Development/Reference Librarian"
15)	"I conduct both Instruction and Assessment"
16)	"Public Librarian"
17)	"Reference Librarian"
18)	"Research Services, Adjunct Faculty"
19)	"Reference Librarian"
20)	"Online Outreach Librarian"
21)	"Reference Librarian"
22)	"Reference Librarian"

Because these 22 participants did not fit into the categories of instruction or assessment librarian, I was faced with one of three choices. First, I could have created a fourth category of "other." However, creating a fourth category was not congruent with Chapter Two, in which it was hypothesized that organizational positionality could impact perceived organizational readiness for change. The category of "other" does not necessarily contain information about the participant's position within the hierarchy of their institution. In #10 of Table 1, the description "Head of Reference Department" implied a higher position within the institutional hierarchy, but it did not fit into the definitions of assessment librarians or instruction librarians provided in Chapter One. So, I would have had to make an arbitrary decision on whether to categorize this participant as an assessment or instruction librarian. These limitations are further discussed in Chapter Seven.

My second choice was to eliminate this data, which I did not want to do for two reasons. First, because of recruitment limitations (the study enrollment limit was 180), I would not have been able to recruit any more participants. Second, I did not want to throw this data out because it contained valuable information about the perceptions of academic librarians who did not fall into the category of assessment or instruction librarians. Therefore, the third option was chosen. This option entailed making an *a priori* (before the analysis) decision to include the data from these 22 surveys by re-categorizing positions into deans and non-deans.

Quantitative Research Questions

Two quantitative research questions were addressed in this study:

1. What level of impact on academic library praxes do library deans, assessment

librarians, and instructional librarians perceive that the Framework for Information Literacy for Higher Education will have?

2. *What are the best predictor variables for the perceived level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*

Sample description. A representative sample was randomly selected from the population of academic librarians. Of the 160 surveys without missing data, 138 participants had read the Framework; 22 had not. Of the 22 respondents who had not read the Framework, 12 were deans, and 10 were non-deans. Of the 138 participants who had read the Framework, 32 were deans, and 106 were non-deans. Participants were recruited equally from both public and private institutions; 80/160 (50%) surveys came from public institutions and 80 (50%) came from private institutions. Participants were recruited across the six accreditation regions (see Table 3).

Table 3

Sample by Region and Institution Type

	Middle States	New England	North Central	Northwest	Southern	Western
Deans						
Public: FW	4	3	3	4	1	1
Private: FW	1	4	4	2	3	2
Public: No FW	0	0	2	1	3	0
Private: No FW	2	1	1	0	2	0
Non-deans						
Public: FW	11	5	12	8	11	7
Private: FW	11	12	8	5	8	8
Public: No FW	1	1	0	1	1	0
Private: No FW	1	1	2	1	0	1

Note. "Public: FW" indicates public institution deans or non-deans who have read the

Framework. "Private: FW" indicates private institution deans or non-deans who have read the Framework. "Public: No FW" indicates public institution deans or non-deans who have not read the Framework. "Private: No FW" indicates private institution deans or non-deans who have not read the framework.

31/160 (19%) came from the Middle States region; 27 (17%) came from New England; 32 (20%) came from North Central; 22 (14%) came from Northwest; 29 (18%) came from Southern; 19 (12%) came from Western. For the multiple regression, regions that did not use the term "Information Literacy" in their accreditation guidelines were coded as 0; regions that did use the term IL in their accreditation guidelines were coded as 1. Of the 138 participants who read the framework, 69 (50%) came from regions that did not use IL in their guidelines; 69 (50%) came from regions that did use the term IL in their guidelines.

Sample description by IVs. Out of the 160 participants who completed surveys without missing data, 12 (8%) worked at institution that offered an ALA accredited program of science; 135 (84%) currently used the Information Literacy Competency Standards for Higher Education; 19 (12%) worked at an institution with membership in the Association of Research Libraries (ARL); 113 (71%) were members of the Association of College and Research Libraries (ACRL; see Table 4 for a sample summary of deans and non-deans who completed surveys without missing data by IVs 2, 5, 6 and 7).

Table 4

Sample by Independent Variables 2, 5, 6, and 7

	IV 2: ALASci	IV 5: ILStands	IV 6: ARLMemb	IV 7: ACRLMemb
Deans				
Yes	3	34	5	33
No	41	10	39	11
Non-deans				
Yes	9	101	14	80
No	107	15	102	36

Note. This table includes data from participants who have not read the Framework.

Out of the 138 participants who read the Framework, and thus were included in the multiple regression, 11 (29%; 2 deans and 9 non-deans) worked at an institution that offered an ALA accredited program of science; 121 (88%; 28 deans and 93 non-deans) currently used the Information Literacy Competency Standards for Higher Education; 16 (12%; 2 deans and 14 non-deans) worked at an institution with membership in the ARL; 101 (73%; 25 deans and 76 non-deans) were members of the ACRL. In summary, the majority of respondents came from institutions that did not offer an ALA accredited program of science, currently used the IL Competency Standards, did not work at institutions with an ARL membership, and were members of the ACRL.

Out of the 160 participants who completed surveys without missing data, 125 (78%) worked at institutions where the majority of IL instruction was offered in the context of "one-shot" sessions; 11 (7%) offered IL in the context of an orientation for incoming first-year students; 11 (7%) offered IL in the context of both one-shot sessions and orientation; 13 (8%) offered IL in the context of a credit-bearing general education requirement.

Table 5 provides a sample summary of deans and non-deans who completed surveys without missing data by IV 4.

Table 5

Sample by Independent Variable 4

		IV 4: LibPracs
Deans		
One-shot		33
Orientation		4
One-shot and Orientation		1
Credit-bearing		6
Non-Deans		
One-shot		92
Orientation		7
One-shot and Orientation		10
Credit-bearing		7

Note. This table includes data from participants who have not read the Framework.

Out of the 138 participants who read the Framework, and thus were included in the multiple regression, 107 (78%; 23 deans and 84 non-deans) worked at institutions where the majority of IL instruction was offered in the context of one-shot sessions; 10 (7%; 3 deans and 7 non-deans) offered IL in the context of an orientation for incoming first-year students; 10 (7%; 1 dean and 9 non-deans); 11 (8%; 5 deans and 6 non-deans) offered IL in the context of a credit-bearing general education requirement. It is clear that the majority of IL instruction—in the institutions where these surveys originated—was offered in the context of one-shot sessions.

Descriptive statistics. There has been considerable controversy in the literature about how to analyze Likert scales. Jamieson (2004), the author of a widely-quoted article, argued that Likert scales are ordinal, that is, "the intervals between values can not

be presumed equal" (p. 1217). Therefore, means, standard deviations, and parametric tests (e.g., correlations, ANOVAs, multiple regressions) are inappropriate, only the median and mode should be given in descriptive statistics, and only nonparametric tests (e.g., chi square) should be used. Other researchers, like Carifio and Perla (2008), reasoned that while Likert *questions* may be ordinal, Likert *scales* that are summed over many items can be considered as interval and analyzed as such. Then there are researchers like Norman (2010) who stated that if "numbers [on a Likert scale] are reasonably distributed, we can make inferences about their means, differences, or whatever" (p. 629). Norman argued for the *robustness* of parametric tests, or the degree to which a test will provide the correct answer even when there are violations of assumptions. Norman also recently confirmed the results of Havlicek and Peterson's (1976) simulation study with theoretical distributions. Havlicek and Peterson concluded that "the Pearson r is insensitive to rather extreme violations of the basic assumptions of normality and the type of scale" (p. 1332). In due respect to all camps, I presented the mean, standard deviation (SD), mode and median for both individual Likert questions and scales in the following tables and figures. Mean is the average score; SD is the square root of the variance, or the mean of squares of deviations from the mean; mode is the number that appears most frequently in a number set; and median is the middle value in a number set.

Table 6 presents descriptive statistics for three Likert scales in the survey—Likert questions that are summed over several items.

Table 6

Likert Scale Totals Measuring Perceived Level of Impact

	Mean	SD	Mode	Median
Total Perceived Level of Impact (Assertions and Suggestions)				
Deans	27.31	4.90	30.00	28.00
Non-deans	25.91	8.37	25.00	27.00
Total Perceived Level of Impact (Assertions)				
Deans	18.47	3.51	20.00	18.50
Non-deans	17.39	5.68	22.00	18.00
Total Perceived Level of Impact (Suggestions)				
Deans	8.84	1.76	8.00	9.00
Non-deans	8.52	3.01	8.00	9.00

The first scale in Table 6 sums six of the Likert questions; it does not include question 21 on the Framework's overall impact. Possible high for this total scale of Likert questions is 49). The second scale sums all of the assertions, or statements of belief. There were four assertion Likert questions. Possible high for the assertion scale of Likert questions is 28. An example of an assertion in the Framework is: "The Framework redefines the boundaries of what librarians teach" (Association of College and Research Libraries, January, 2015, p. 14). The third scale sums all of the suggestions, or ideas presented for consideration. There were two suggestion Likert questions. Possible high for the suggestion scale is 14. An example of a suggestion in the Framework is: "The Framework encourages thinking about how librarians, faculty, and others can address core or portal concepts" (Association of College and Research Libraries, January, 2015, p. 14).

Table 7 presents descriptive statistics for each question on the survey.

Table 7

Survey Question Responses

	Mean	SD	Mode	Median
Deans				
Question 9 (Likert)	4.78	1.18	5.00	5.00
Question 10 (Likert)	4.72	1.05	5.00	5.00
Question 11 (Likert)	4.25	1.24	4.00	4.00
Question 12 (Likert)	4.72	0.92	5.00	5.00
Question 13 (Yes/No)	1.78	0.42	2.00	2.00
Question 14 (Yes/No)	1.53	0.51	2.00	2.00
Question 15 (Likert)	4.16	0.99	4.00	4.00
Question 16 (Yes/No)	1.75	0.44	2.00	2.00
Question 17 (Yes/No)	1.72	0.46	2.00	2.00
Question 18 (Yes/No)	1.63	0.49	2.00	2.00
Question 19 (Likert)	4.69	1.03	5.00	5.00
Question 20 (Yes/No)	1.47	0.51	1.00	1.00
Question 21 (Likert)	4.97	0.96	4.00	5.00
Non-deans				
Question 9 (Likert)	4.40	1.56	5.00	5.00
Question 10 (Likert)	4.29	1.51	5.00	4.50
Question 11 (Likert)	4.10	1.61	5.00	4.00
Question 12 (Likert)	4.59	1.65	6.00	5.00
Question 13 (Yes/No)	1.79	0.41	2.00	2.00
Question 14 (Yes/No)	1.64	0.48	2.00	2.00
Question 15 (Likert)	4.37	1.61	4.00	4.50
Question 16 (Yes/No)	1.75	0.44	2.00	2.00
Question 17 (Yes/No)	1.75	0.44	2.00	2.00
Question 18 (Yes/No)	1.60	0.49	2.00	2.00
Question 19 (Likert)	4.15	1.64	4.00	4.00
Question 20 (Yes/No)	1.50	0.50	1.00	1.50
Question 21 (Likert)	4.14	1.51	5.00	4.00

There were seven Likert and six Yes/No questions on the survey. Each Likert question asked participants to "indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will..." Question 21 asked participants to "indicate the

overall extent (1 being the lowest, 7 being the highest) you think the Framework will impact library practices at your institution." Yes/No questions on the survey all started with: "Do you think the Framework will..." A "No" answer was scored as "1" and a "Yes" answer was scored as "2." The following Figures (3 through 28) present response summaries and response percentages for each question asked in the survey.

Question 9 asked participants to "indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to redesign instruction sessions, assignments, courses, and curricula at your institution."

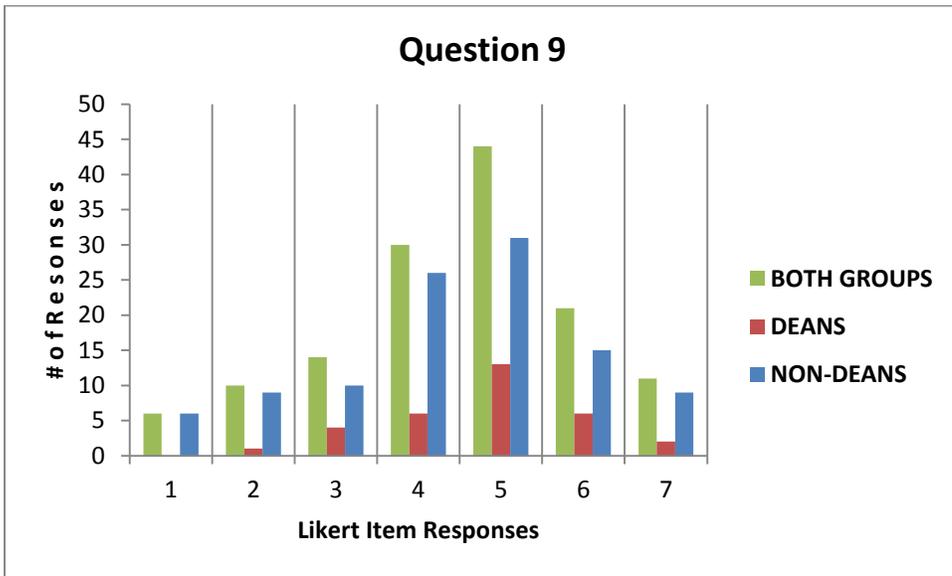


Figure 3. Response summary for deans, non-deans, and both groups for Question 9.

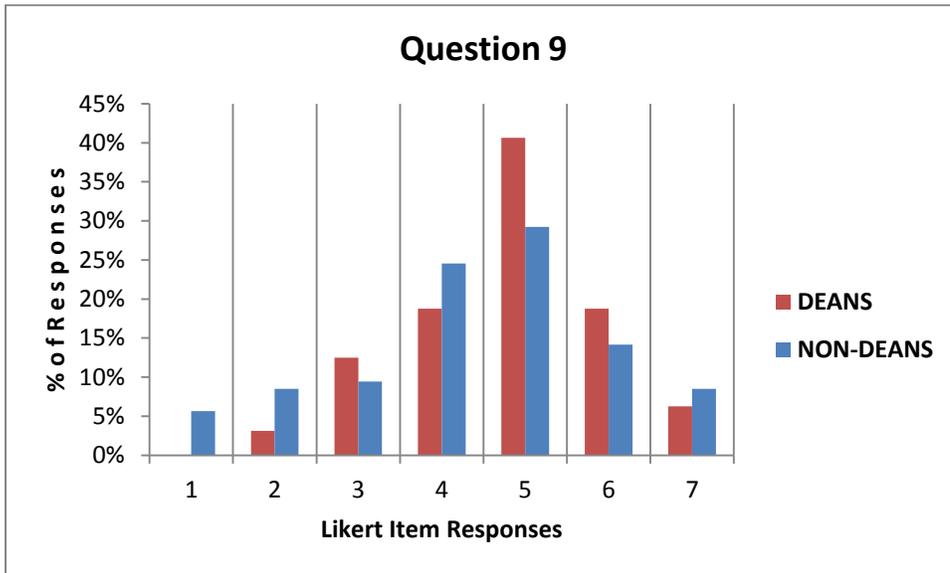


Figure 4. Percentages of responses for deans and non-deans for Question 9.

Question 10 asked participants to "indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to connect information with student success initiatives at your institution."

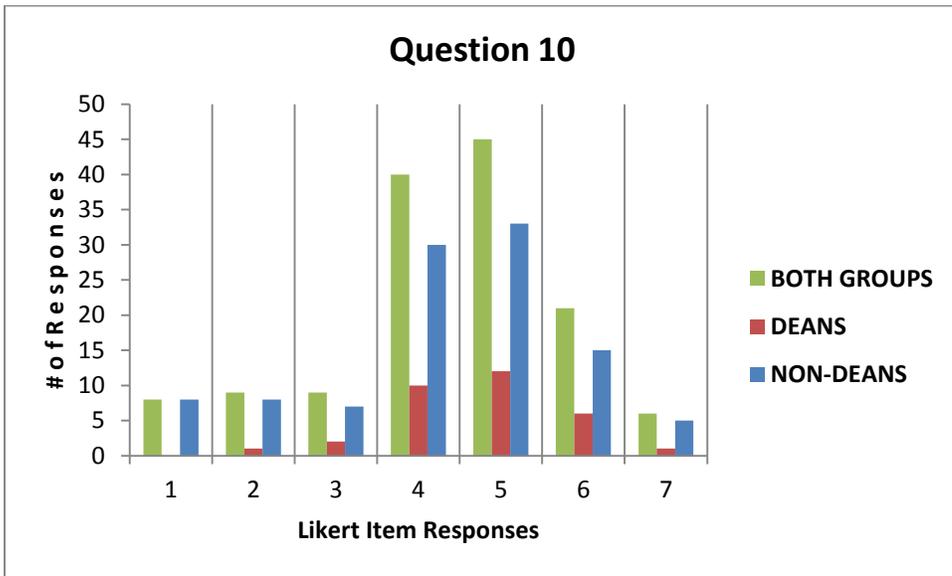


Figure 5. Response summary for deans, non-deans, and both groups for Question 10.

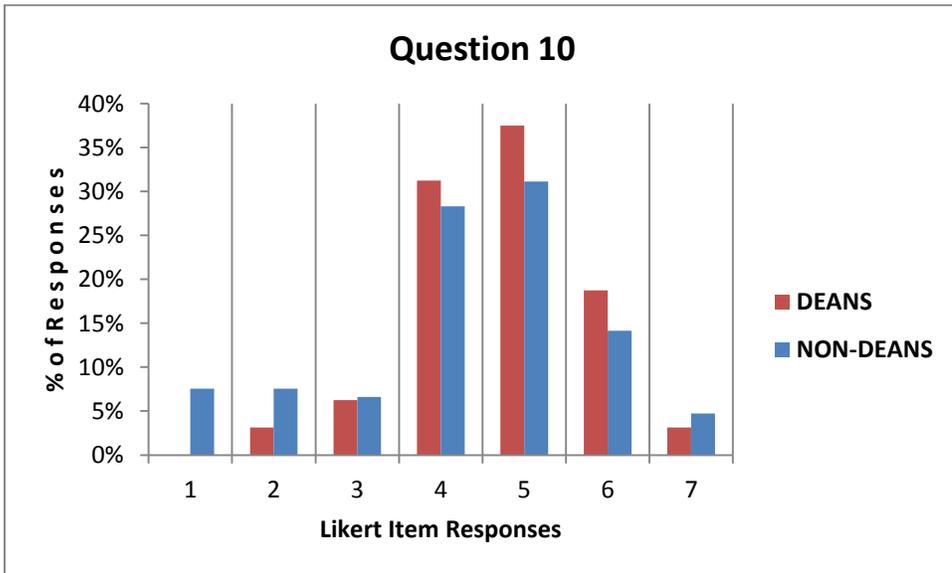


Figure 6. Percentages of responses for deans and non-deans for Question 10.

Question 11 asked participants to " indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to collaborate on pedagogical research and involve students in that research at your institution."

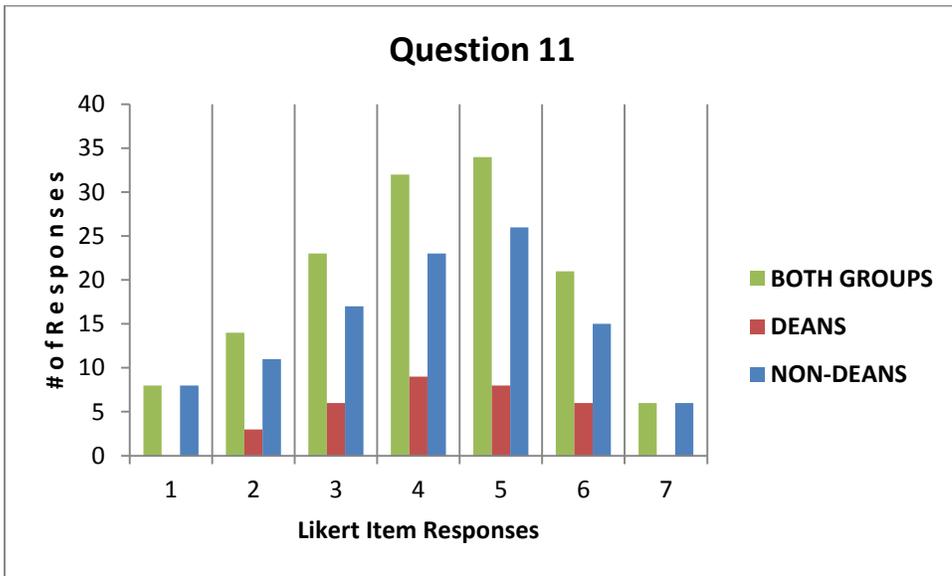


Figure 7. Response summary for deans, non-deans, and both groups for Question 11.

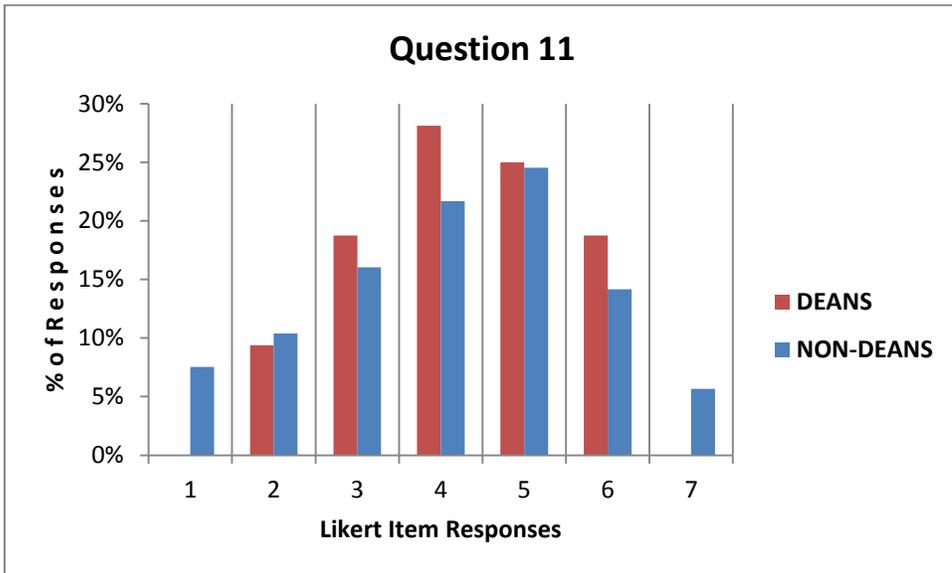


Figure 8. Percentages of responses for deans and non-deans for Question 11.

Question 12 asked participants to "indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to create wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning at your institution."

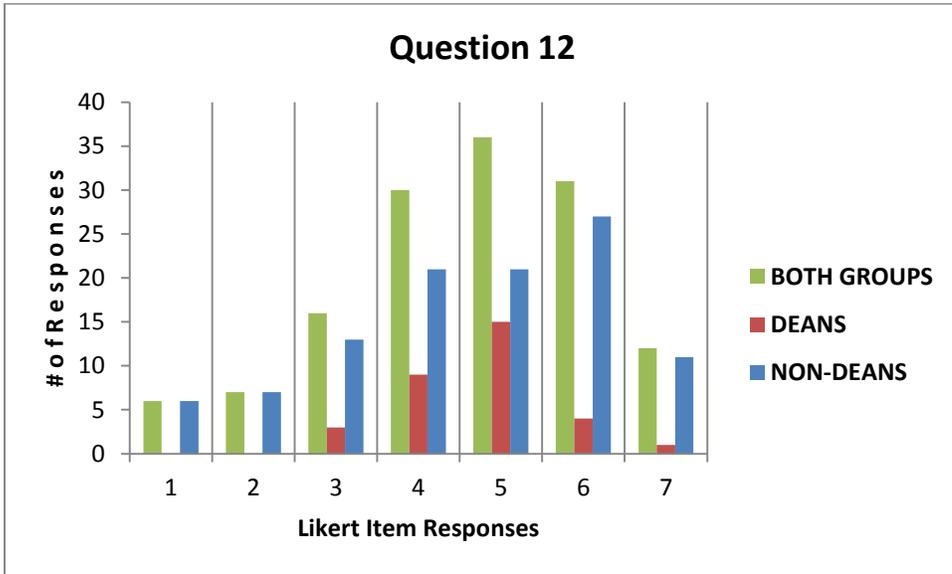


Figure 9. Response summary for deans, non-deans, and both groups for Question 12.

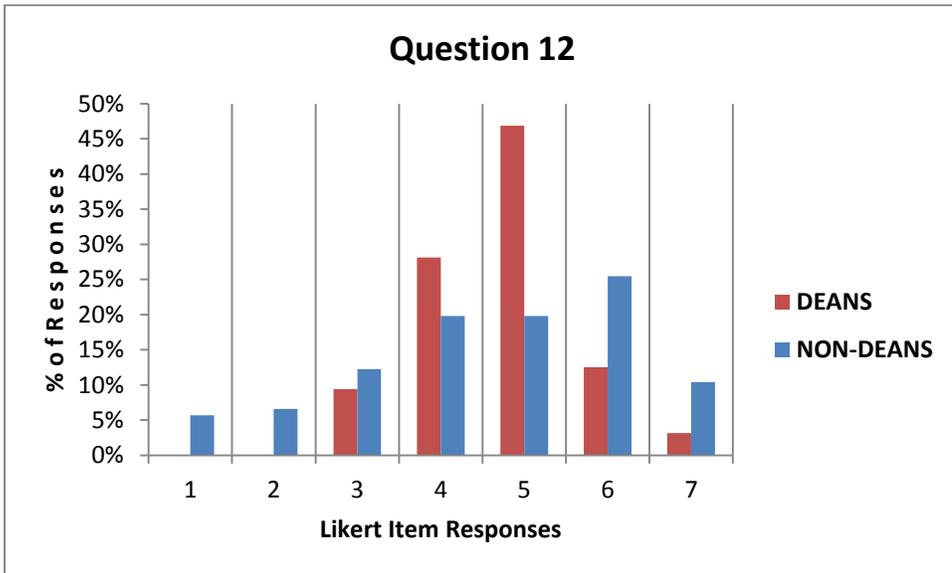


Figure 10. Percentages of responses for deans and non-deans for Question 12.

Question 13 asked participants to respond with either a yes or no answer to "Do you think the Framework will guide the development of information literacy at your institution?"

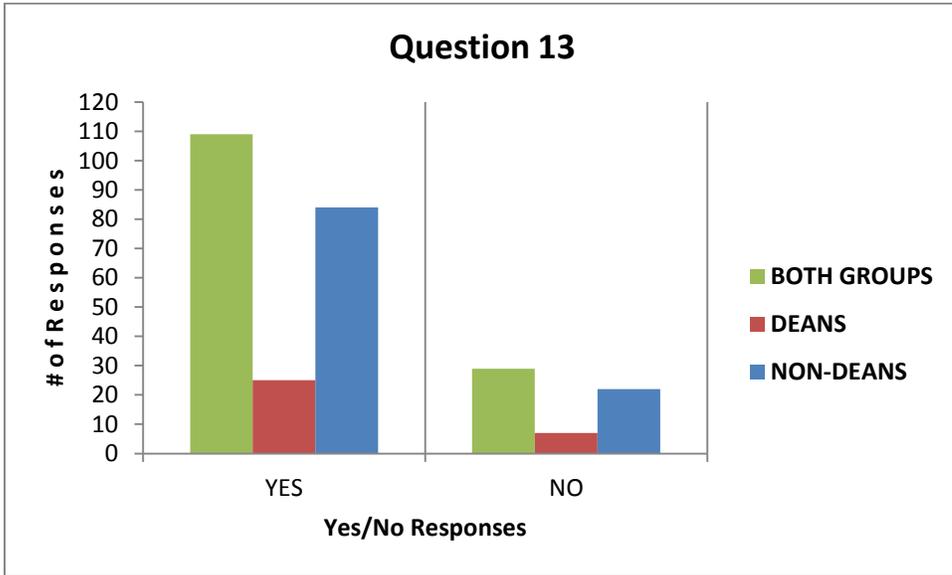


Figure 11. Response summary for deans, non-deans, and both groups for Question 13.

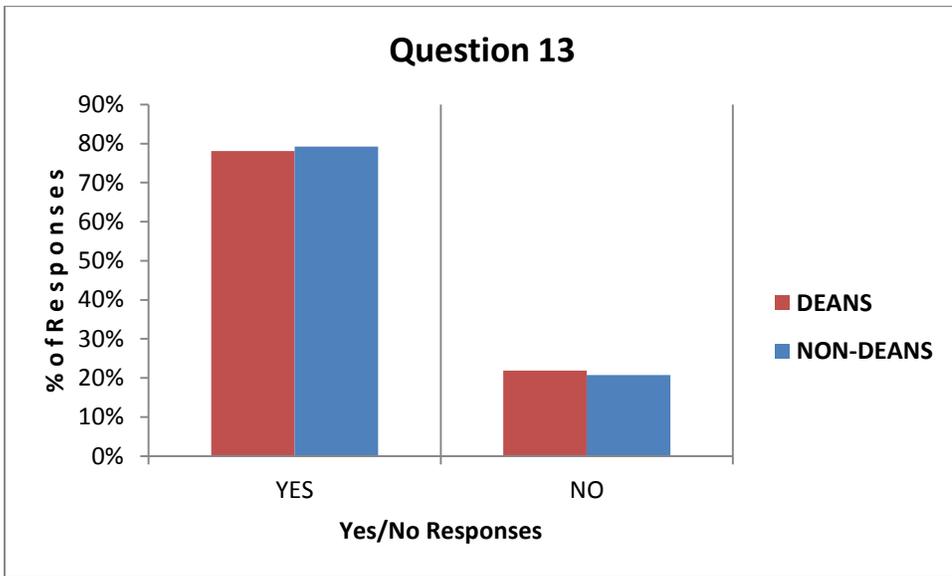


Figure 12. Percentages of responses for deans and non-deans for Question 13.

Question 14 asked participants to respond with either a yes or no answer to "Do you think the Framework will promote discussion about the nature of key concepts in information in general education and disciplinary studies at your institution?"

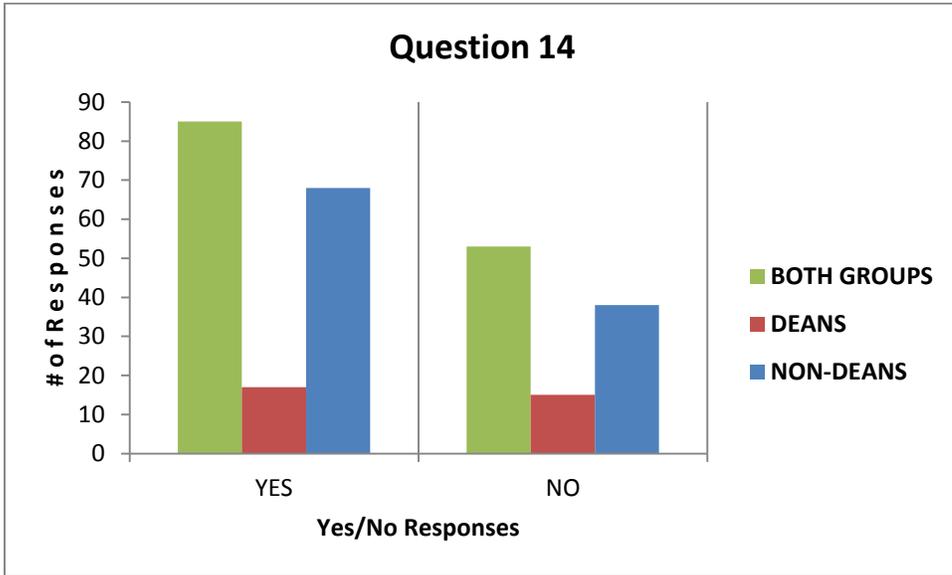


Figure 13. Response summary for deans, non-deans, and both groups for Question 14.

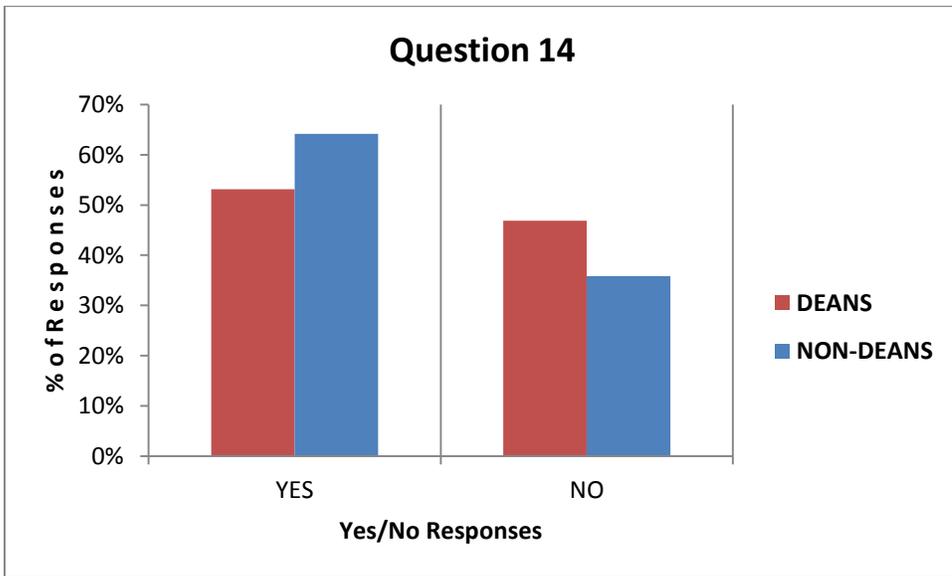


Figure 14. Percentages of responses for deans and non-deans for Question 14.

Question 15 asked participants to "indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage thinking about how librarians, faculty, and others can address core or portal concepts and associated elements in the information field at your institution."

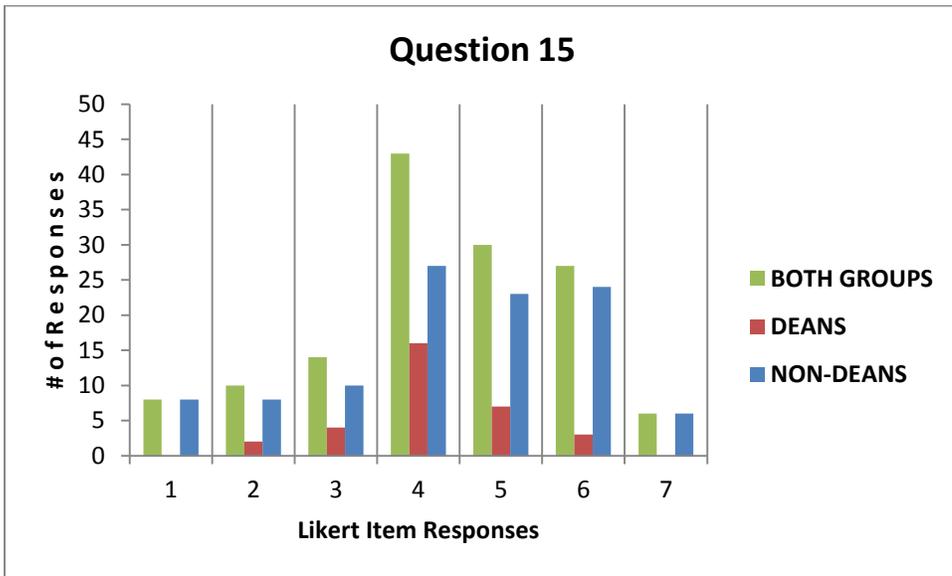


Figure 15. Response summary for deans, non-deans, and both groups for Question 15.

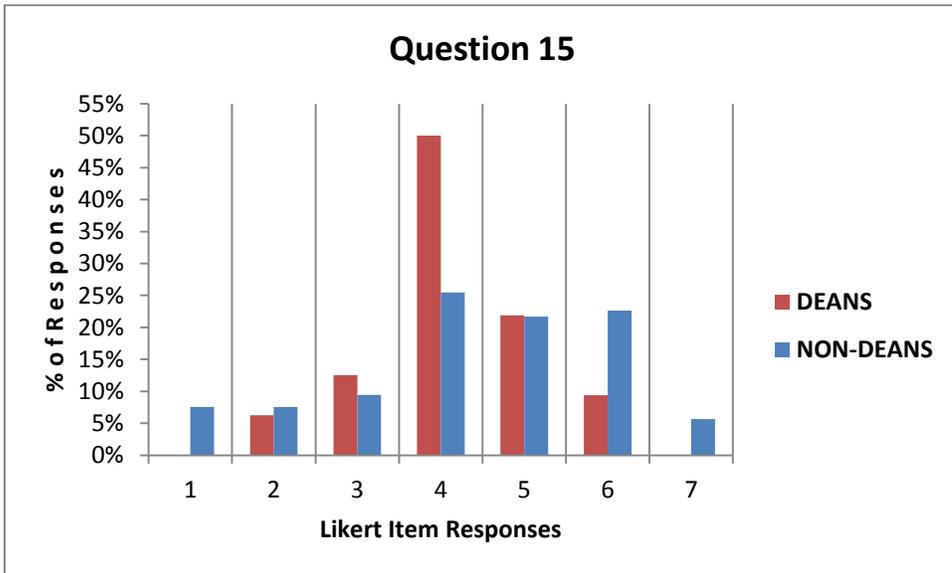


Figure 16. Percentages of responses for deans and non-deans for Question 15.

Question 16 asked participants to respond with either a yes or no answer to "Do you think the Framework will help librarians contextualize and integrate information literacy for your institution?"

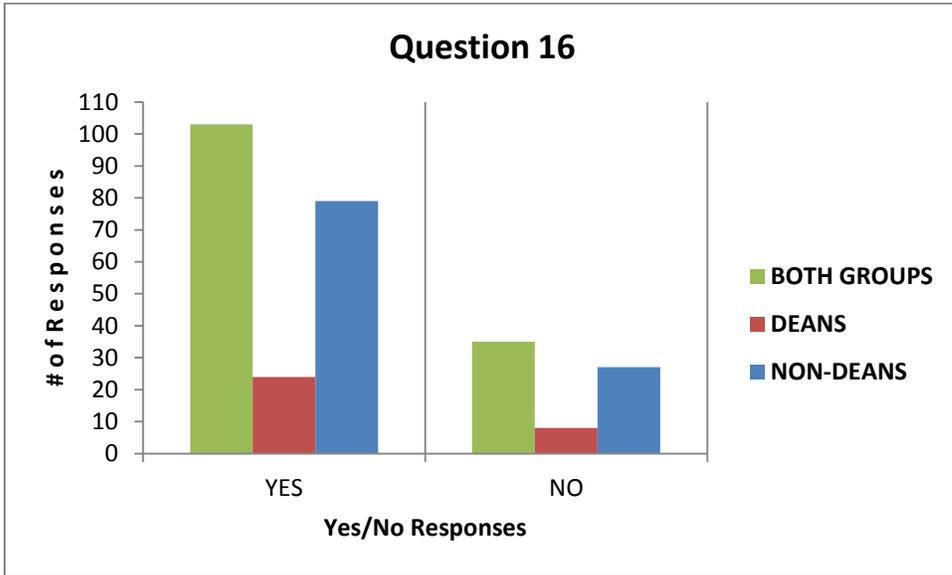


Figure 17. Response summary for deans, non-deans, and both groups for Question 16.

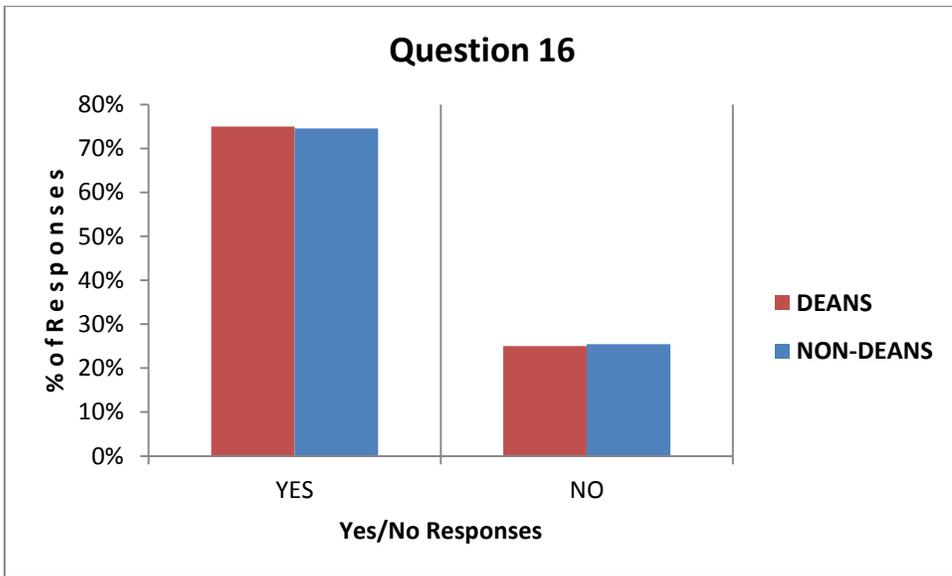


Figure 18. Percentages of responses for deans and non-deans for Question 16.

Question 17 asked participants to respond with either a yes or no answer to "Do you think the Framework will encourage a deeper understanding of what knowledge practices and dispositions an information-literate student should develop at your institution?"

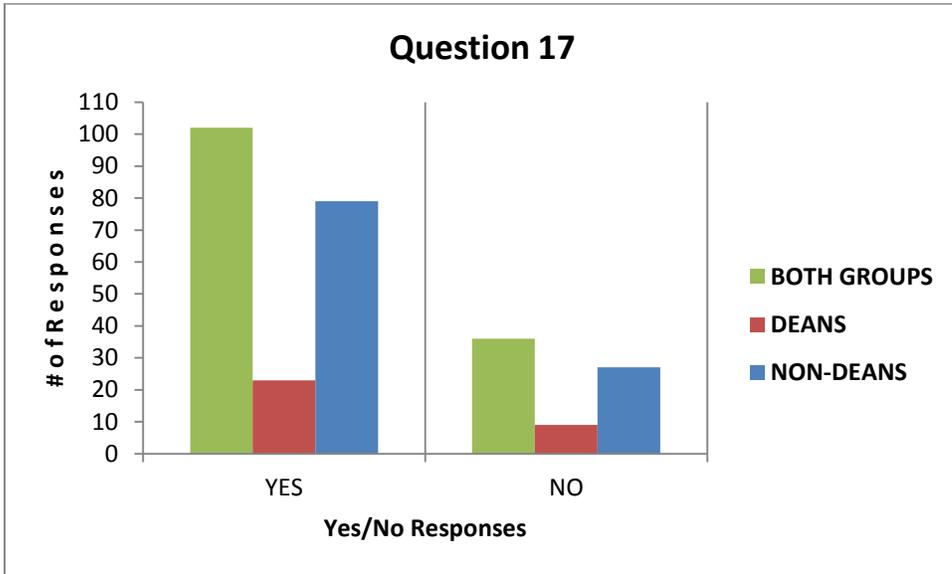


Figure 19. Response summary for deans, non-deans, and both groups for Question 17.

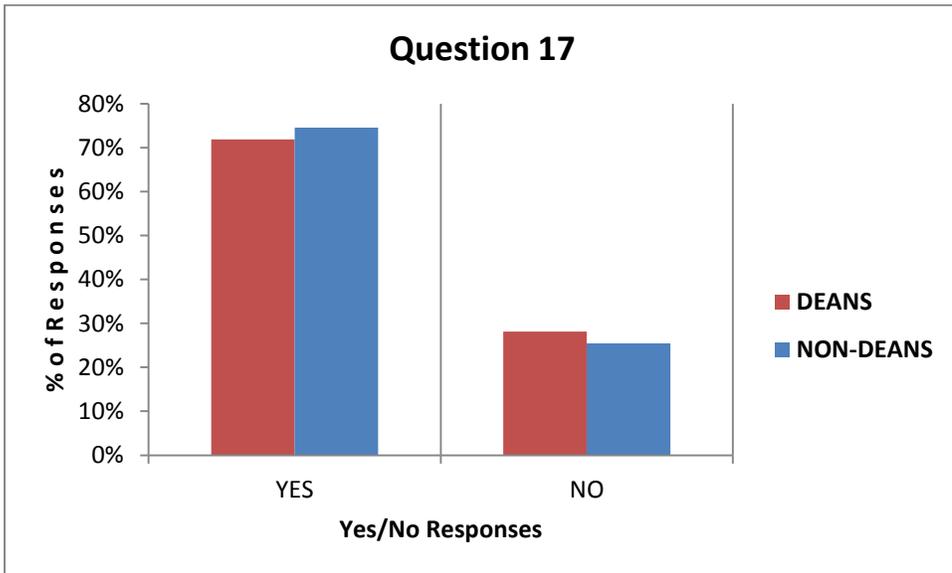


Figure 20. Percentages of responses for deans and non-deans for Question 17.

Question 18 asked participants to respond with either a yes or no answer to "Do you think the Framework will encourage the library community at your institution to develop resources such as curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames?"

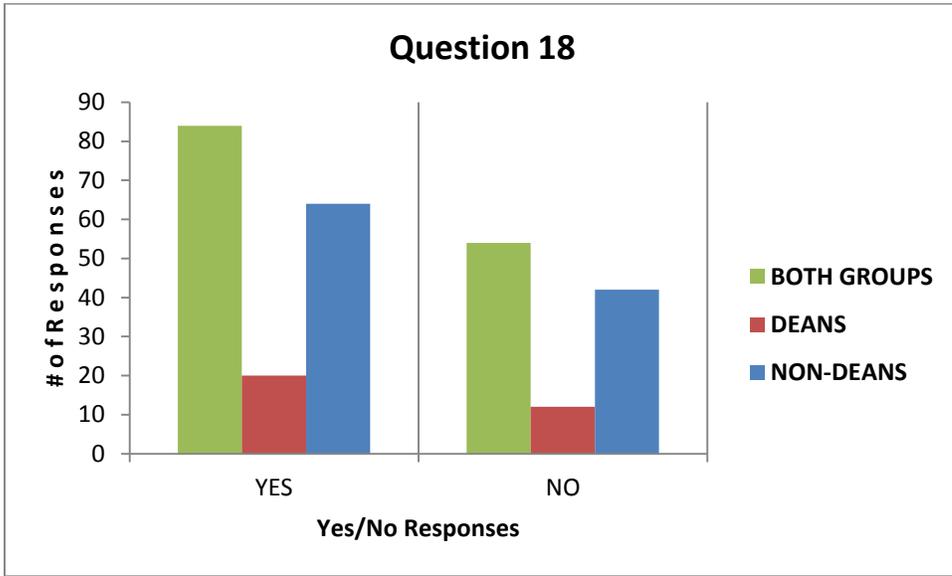


Figure 21. Response summary for deans, non-deans, and both groups for Question 18.

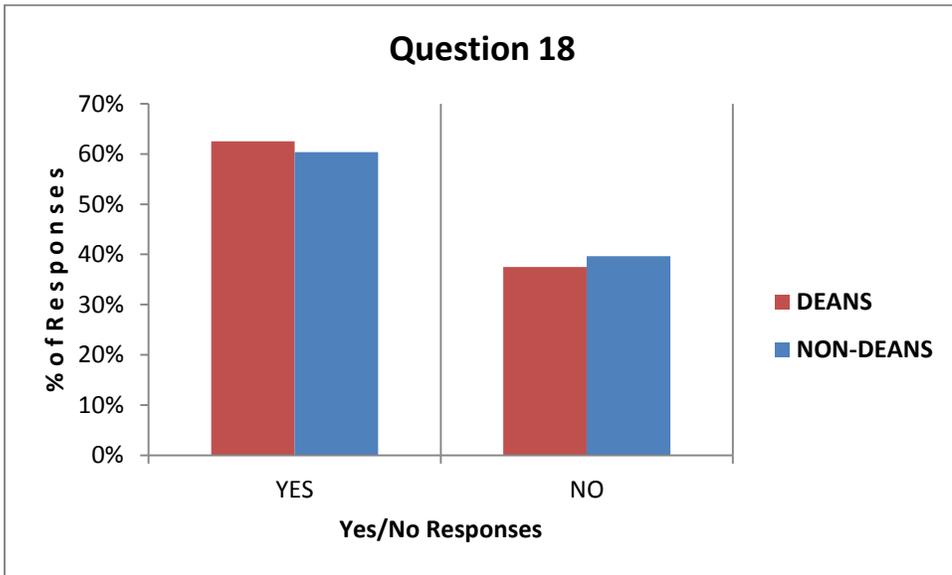


Figure 22. Percentages of responses for deans and non-deans for Question 18.

Question 19 asked participants to "indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage librarians to work with faculty, departmental or college curriculum committees, instructional designers, staff from centers for teaching and learning, and others to design information literacy programs in a holistic way at your institution."

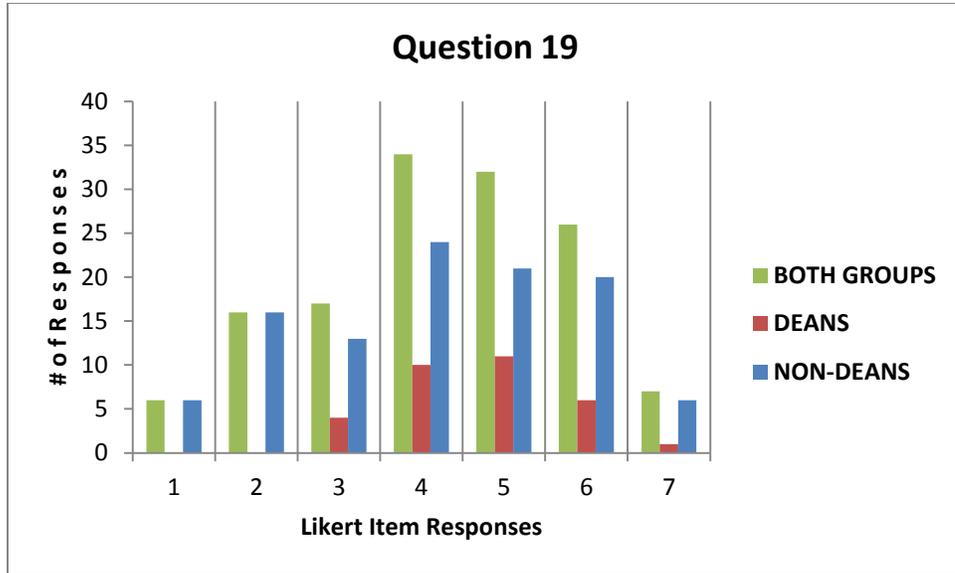


Figure 23. Response summary for deans, non-deans, and both groups for Question 19.

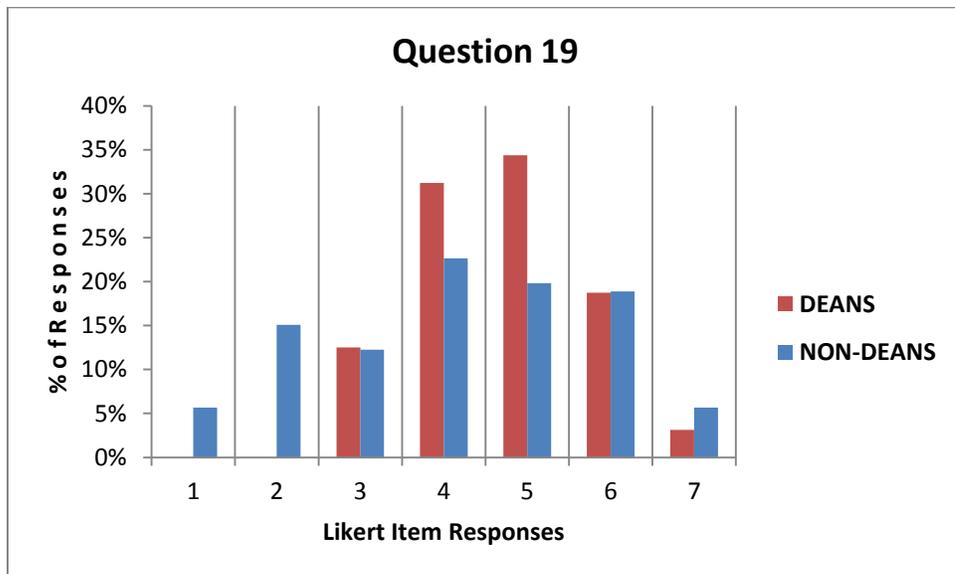


Figure 24. Percentages of responses for deans and non-deans for Question 19.

Question 20 asked participants to respond with either a yes or no answer to "Do you think the Framework will redefine the boundaries of what librarians teach and how they conceptualize the study of information literacy within the curricula at your institution?"

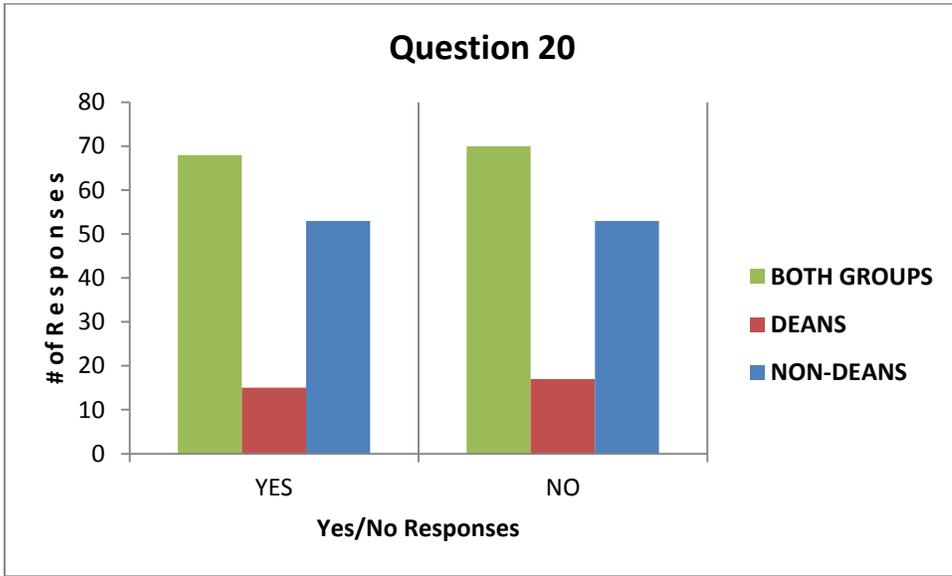


Figure 25. Response summary for deans, non-deans, and both groups for Question 20.

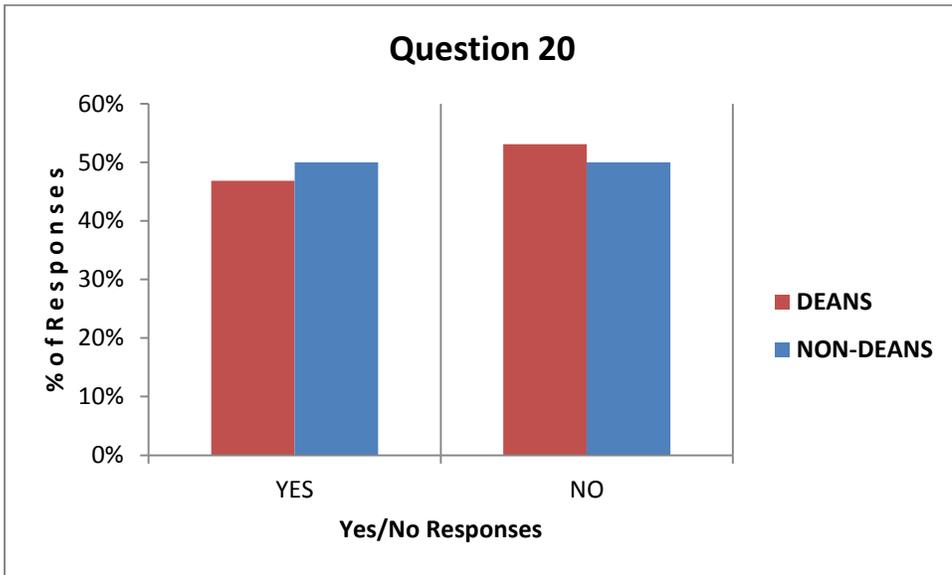


Figure 26. Percentages of responses for deans and non-deans for Question 20.

Question 21 asked participants to "indicate the overall extent (1 being the lowest, 7 being the highest) you think the Framework will impact library practices at your institution."

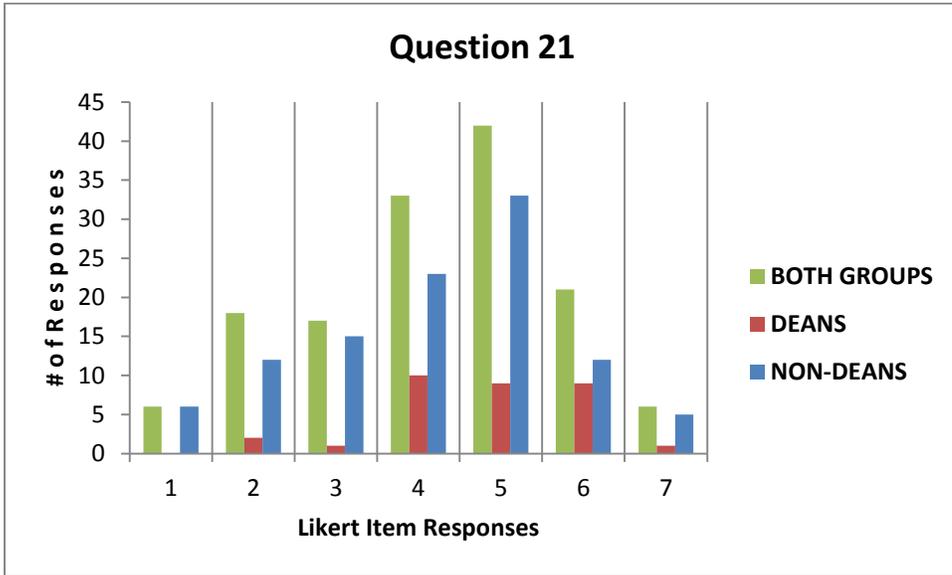


Figure 27. Response summary for deans, non-deans, and both groups for Question 21.

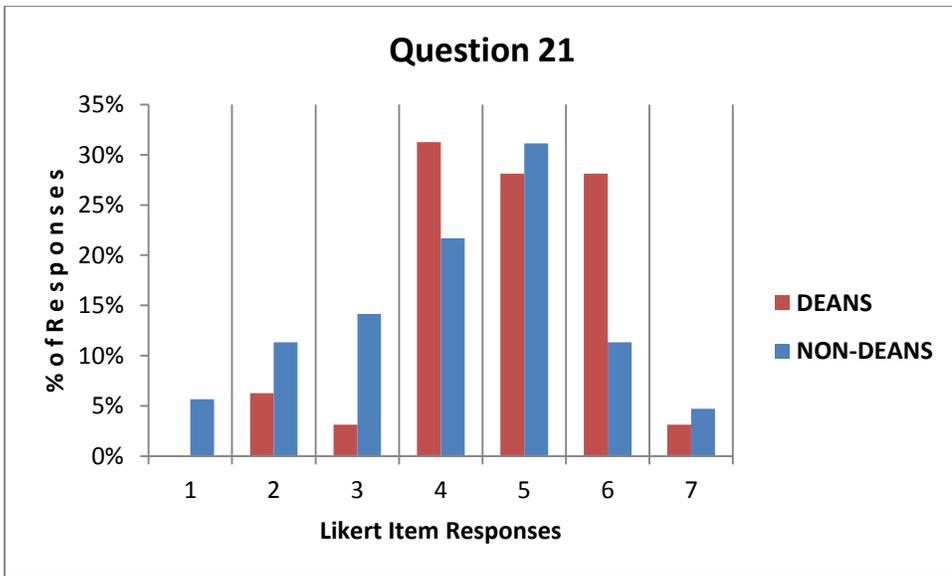


Figure 28. Percentages of responses for deans and non-deans for Question 21.

Correlations. Bivariate correlations between the independent variables and the dependent variable were calculated (Table 8).

Table 8

Bivariate Correlations

	ProfPos	ALALSci	ILRegAcc	LibPracs	ILStands	ARLMemb	ACRLMemb	PercImp
ProfPos	1							
ALALSci	.035	1						
ILRegAcc	.034	.080	1					
LibPracs	-.099	-.087	-.101	1				
ILStands	.003	.029	-.066	.042	1			
ARLMemb	.092	.311**	.045	-.080	-.071	1		
ACRLMemb	-.061	.118	.147	-.072	.072	.015	1	
PercImp	-.185*	-.095	-.069	-.017	.029	-.087	-.059	1

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Two IVs were significantly correlated with each other: ARLMemb and ALALSci ($r = .311$; $p < .01$). Those institutions with an ARL membership were more likely to also have an accredited ALA program of study in Library Science. One IV was significantly correlated with the outcome variable: Professional position in the library setting or ProfPos ($r = -.185$; $p < .05$). This correlation is negative because the dean position was given a value of one and the non-dean position was given a value of two; so, the dean position (with a lower numerical value) was negatively correlated with higher perceived impact of the Framework on library praxes. ALALSci, or whether or not the institution offers an ALA accredited program of study in Library Science, was the next variable most highly correlated with PercImp, or the perceived impact of the Framework on

library praxes ($r = -.095$; $p > .05$). This is also a negative correlation because institutions without a library science program were given a value of zero, while institutions with a library science program were given a value of one; so, institutions without a library science program (with a lower numerical value) were negatively correlated with higher perceived impact of the Framework on library praxes.

Multiple regression. A stepwise multiple regression using forward selection was conducted to determine whether or not using the seven IVs (listed at the beginning of this chapter) significantly predicted participant answers to Question 21 on the survey about the *overall* impact of the Framework on library praxes [PercImp]. ProfPos was the *only* independent variable that was significantly correlated with PercImp ($r = -.185$; $p < .05$) and so was entered into the analysis. However, this correlation, while significant, was still very small, indicating a very weak linear relationship. Regression results indicated that ProfPos significantly predicted perceived impact of the Framework on library praxes, $R^2 = .034$, $R^2_{\text{adj}} = .027$, $F(1, 136) = 4.853$, $p < .03$, but it only accounted for *a very small amount of the variance*—3.4%—in perceived impact of the Framework. Thus, the multiple regression did not answer the second research question (the best predictor variables for the perceived level of impact on library praxes that the Framework will have) and, as such, was dropped from the analysis.

Summary of Quantitative Results

A representative sample was randomly selected from the population of academic librarians. Participants were recruited equally from both public and private institutions and from six accreditation regions. The majority of the participants came from institutions that did not offer an ALA accredited program of science, currently used the

IL Competency Standards, did not work at institutions with an ARL membership, were members of the ACRL, and worked at institutions where IL instruction was mainly offered in the context of one-shot sessions.

Descriptive statistics for Questions 9 through 20 showed that the level of impact chosen most frequently (i.e., the mode) was moderate to moderately high (i.e., a "4" or a "5") for the Likert questions and "Yes" for the Yes/No questions. The significant correlation between profession position and the Framework's perceived impact (Question 21) indicated that deans are more likely to give the Framework a higher level of overall impact than non-deans. On average, deans gave the Framework a moderately high rating on level of overall impact, and non-deans gave the Framework a moderate rating of overall impact. However, if the entire sample is included, the average participant perceived the Framework to have a moderately high level of impact on their library praxes.

Chapter Five

Qualitative Results

*I came to a high place of darkness and light
The dividing line ran through the center of town...*
—Bob Dylan

*You say goodbye and I say hello
Hello hello
I don't know why you say goodbye, I say hello*
—John Lennon and Paul McCartney

*I'm up on the tightwire
one side's ice and one is fire
it's a circus game with you and me
I'm up on the tightrope
one side's hate and one is hope
but the top hat on my head is all you see
And the wire seems to be
the only place for me...*
—Leon Russell

In this chapter, I will address the qualitative research question posed for this study:

How do academic library deans, assessment librarians, and instructional librarians explain their perceptions of the level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?

Qualitative data consisted of answers to Question 22. While this question was open-ended in the sense that participants were free to say what they wanted about the Framework, it was bounded by the question preceding it. Question 21 asked participants to indicate the level of overall impact the Framework would have on library praxes at their institution. Question 22 then asked participants to explain and provide examples of why they selected that particular level. Placing the question at the end of the survey may

have primed participants to use the words and concepts of the Framework and/or the survey in their answers to Question 22. For example, one participant wrote: "How would you assess a student's ability to 'understand that many disciplines have acknowledged authorities in the sense of well-known scholars and publications?' This problem is rampant in the Framework whether the focus is on *knowledge practices or dispositions* [emphasis mine]." The exact words "knowledge practices or dispositions" can be found in Question 17 of the survey, as well as in the Framework. So, it can be surmised that this participant was either very well-acquainted with the Framework or had been primed to use the specific language that s/he chose to use for Question 22. Further examples of how participant responses echo specific words and phrases from the Framework and/or the survey are provided in Chapter Six.

The story of this qualitative data is one of characters without names, without sexes, and without ages. It is a simple story of academic librarians—of deans and non-deans. All we really know about these characters is that they must have had some interest in the Framework, or they would not have taken the time to answer the survey. The quantitative story in Chapter Four was rather dry—a story of numerical values and correlations. Perhaps the reader will allow me to move away from those numbers, at least for a little while, and concentrate instead on words. It stands to reason, considering that the qualitative data was, simply put, words. These were words written by characters without names, without faces, without sex, and without age. Much like the bones an archaeologist meticulously dusts off, the words used by the participants to answer the last survey question were the artifacts that I examined and analyzed.

Content Analysis

The process of content analysis—of searching for meaning in qualitative data (Merriam, 2009)—is similar to the analysis of a poem.

so much depends
upon

a red wheel
barrow

glazed with rain
water

beside the white
chickens

—William Carlos Williams

A "simple" poem like this can be interpreted in an endless variety of ways. It could be presented to a panel of scholars who have devoted their entire careers to the interpretation of poetry and, after discussing it for hours on end, may or may not end up agreeing on its meaning. The poem could be presented to children who, much like the scholars, may have completely different responses to it. Someone could read and reread this poem over the course of a lifespan, interpreting it differently each time.

Perhaps a resolution to this question of the poem's meaning could be achieved if William Carlos Williams was alive and able to dialogue with his readers. However, even if Williams was still with us, he may not agree with anyone's interpretation, as the work of a poet is so very personal. The reality is that he is dead and unable to either agree or disagree with his readers' differing interpretations. The poem remains, nevertheless, as a disembodied message from the poet. It will likely continue to be a source of lively discussion for centuries to come.

The participants in this study are all, hopefully, alive and well. Their responses are, nonetheless, disembodied. From across the United States, from institutions large and small, public and private, their responses reflected thoughts and opinions tapped out on keyboards connected to computers and sent through the ether to a disembodied researcher. My analysis of their responses was like a séance of sorts, but not in a morbid sense. It was necessary for me to raise these voices from the disembodied bare text, to converse with them, and hear them talking to each other in order for me to better understand the meaning of their responses.

The conversation begins. Open coding is a process described by Merriam (2009) as "having a conversation with the data, asking questions of it, making comments to it, and so on" (p. 178). Granted, a conversation with the data would eventually occur. But, like any other conversation, someone had to be the initiator. In this case, I initiated the conversation by emailing invitations to potential participants who worked at institutions that had been randomly selected for this study.

Because I am aware of the oftentimes seemingly cold and impersonal nature of email correspondence, I carefully worded the invitation to impart, as best as possible, a high level of collegiality, friendliness, openness, and trustworthiness. The invitation included an introduction of myself as a doctoral student, investigating the impact that the Framework may have on academic library practices. I provided specific contact information for myself, as well as the Office of the Institutional Review Board, in the event that participants had any questions regarding the study. I assured potential participants that this would be an anonymous survey and any identifying data would be kept completely confidential. The invitation also contained information about how the

results of the study would be used in my dissertation and possible future publications. Knowing that the potential participants were fellow librarians, I attempted to engage them through the prospect of a shared interest; I indicated that the findings from this project would, hopefully, inform academic librarians and other stakeholders about how the Framework may influence academic library practices.

Unlike celebratory invitations to birthdays, weddings, graduations, etc., that one might still find, even today, in their home mailbox, email invitations designed to recruit participants to take an online survey are often immediately deleted, saved for another time, lost in junk mail, seen as a burden, or simply forgotten in the rush of the day's activities. Being aware of these pitfalls is essential when wording the subject line for a survey on which so much depends. The subject line I ended up using was informed by my knowledge that academic librarians across the United States probably had a great deal of familiarity with, and interest in, information literacy. I also knew that academic librarians would be inclined to help a student pursue scholarly goals. So, my subject line was: "Please Help Me Complete My Dissertation: Information Literacy Survey." I wanted the subject line to grab their attention so that they would actually open the email and read my invitation. I knew that if the email was opened, it would create an opportunity for me to "break the ice" and begin the conversation.

The conversation develops. The conversation began as an invitation to take the Framework for Information Literacy Survey. However, at this point in the process, it was only a one-sided conversation. That is to say, I opened the conversation but potential participants had to click the link provided in my email to accept my invitation. The only way I knew that the conversation was going to become two-sided was by going to the

survey site to see if any new surveys had been completed. Every day, I checked my email to see if anyone had contacted me and then I checked the survey site to see if I had any new surveys. It was a constant, day-to-day process. Sometimes I would see that someone had begun a survey, but had then stopped at a certain point before completing all the questions. Sometimes I got an email from a potential participant, asking me about my deadline and if they could fill out the survey the next day. It was very rare that I got any emails and I never got any phone calls. There was very little interaction between myself and the participants, beyond whether or not they had completed the survey. This whole process lasted about six weeks—of sending out invitations and then seeing if they wanted to continue the conversation by completing the survey. When I finally reached my sample size, I stopped sending invitations, closed the survey, and was ready to begin looking at their side of the conversation.

The dangling conversation.

*It's a still life water color,
Of a now late afternoon,
As the sun shines through the curtain lace
And shadows wash the room.
And we sit and drink our coffee
Couched in our indifference,
Like shells upon the shore
You can hear the ocean roar
In the dangling conversation
And the superficial sighs,
The borders of our lives.*

—Paul Simon and Art Garfunkel

I thought that once I had finished data collection and the quantitative analysis was complete, I could finally find out what participants thought of the Framework. While I looked forward to reading words instead of crunching numbers, I did not realize initially that I was approaching the qualitative data in the same way that I had approached the

quantitative data. I checked and rechecked my data to make sure that I had entered it correctly. I went back to the survey site to see if the identifying information matched the quantitative answers and the qualitative responses. I counted and recounted my qualitative responses to make sure that I had not left any out. This quantitative approach continued throughout the coding process (see Appendix E for the quantitative approach to the qualitative data); I was preoccupied with tallying up and counting the number of responses for each theme. How many deans said this? What percentage of non-deans said that?

Then it gradually dawned on me that I was not conversing with the data, as Merriam (2009) recommended, during the process of open coding. This was not a conversation or a "meeting of the minds"; this was more like Simon and Garfunkel's dangling conversation. There was no give-and-take here; the participants' responses were just a bunch of answers to a question, each one dangling in the spreadsheets I had so carefully constructed and checked many times for accuracy. Simon and Garfunkel's phrase "couched in our indifference" described me as a researcher at this point.

I began to realize that there needed to be a shift or transition from the quantitative way of looking at things—from the impersonal world of proliferating numbers, lengthy equations and sterile statistical tests, from the third person point of view where the researcher is an objective observer, far removed from the data. This realization or transformation was not a "top-of-the-mountain," "struck-by-lightning" experience of sudden insight. It was a gradual realization, one that continued throughout the qualitative analysis. Unlike my distant stance during the quantitative analysis, I slowly began to understand that I needed to immerse myself into the data. I had to separate myself from

the sterile statistical world and immerse myself in the very personal world of words and sentences. I had to leave the black-and-white world of Dorothy's Kansas and plunge into the colorful Land of Oz, with its poetry, song, and rich detail.

I thought about Simon and Garfunkel's lines, "Like shells upon the shore, you can hear the ocean roar." I recognized that all of my participants were like shells upon the shore. To interact with a shell, a person has to hold it up to their ear, listen carefully, and then they can hear the ocean roar. I realized that, up until now in the data analysis, I had not been listening carefully to the participants—that this was a dangling conversation because I was not personally involved.

Listening to the participants. To understand how I could have a conversation with the data, I went back to Merriam (2009):

The process begins with reading...the first document collected in the study. As you read..., you jot down notes, comments, observations, and queries in the margins. These notations are next to bits of data that strike you as interesting, potentially relevant, or important to your study. Think of yourself as having a conversation with the data, asking questions of it, making comments to it, and so on. This process of making notations next to bits of data that strike you as potentially relevant for answering your research questions is also called *coding*.
(p. 178)

And so I began my conversation with the data with a simple, symbolic response to the participant's answers. I put pluses and minuses after each response to indicate if it was positive or negative about the Framework's impact. For example, the first response I coded was a plus: "The framework has already impacted how I work with the first year

writing faculty and how the library fits into their curriculum and outcomes." The next response I read was a minus: "The institution does not have much appetite for requirements and standards when it comes to IL." I continued until I had assigned a plus or minus to each of the responses.

Development of themes. "After working through the entire transcript in this manner, you go back over your marginal notes and comments (codes) and try to group those comments and notes that seem to go together" (Merriam, 2009, p. 179). During my next reading, I examined the responses more closely, looking for similarities and dissimilarities. I began to group the participant's answers, creating codes or themes to organize them.

The germination of many of the themes came directly out of the participant's actual responses. This is also known as *in-vivo coding*, or the practice of coding a short excerpt with a word or phrase from the data. For example, the code "jargon" came from one participant's use of the word. "The framework uses a lot of education jargon. I am still trying to make sense of the document and jargon, so I can imagine the difficult time a non-education faculty member will have." Other respondents used words or phrases similar to jargon (e.g., "wordy overblown document," "the language used in the Framework alienated many librarians," and "It's just a bunch of words that make no sense to most people") and so their excerpts were also coded as "jargon."

Seeing qualitative responses as dialogue. There were some responses that puzzled me because the meaning of the participant's words was unclear. For example, this participant wrote:

I think the librarians at my institution, as well as elsewhere, have long known information literacy doesn't need to be taught in the very structured Standards and that the Framework is really just describing the sea [of] change of thinking about these things that has already occurred.

I wondered what this participant was saying about the Standards and the Framework. Were they criticizing the "very structured Standards" and implying that the Framework needed to replace the Standards? What exactly was the "sea [of] change of thinking" that the Framework described?

It was at this point in the analysis that I began to become frustrated. To see into the hearts and minds of academic librarians looked like it was going to be impossible due to the non-personal and non-interactive nature of the communication. One of the limitations of this study was the inability to do member checking. Because of the protocol, I could not follow up with the participants on their responses—to ask them, "Is this what you were saying?"

So, I felt as if there was no way to communicate with these disembodied voices. The conversation had begun with my invitation; it became a two-sided conversation when participants completed surveys; it developed as I interacted with the data, reading and coding their responses, but now—because I could not go outside the confines of the study to further contact these people—I felt like the conversation had come to a dead halt.

Once again, the conversation seemed to be dangling. Just like the blinking text cursor on my computer screen as I read and reread the data, the responses seemed to be waiting for me to interact with them. And just like the last words someone said in a conversation often repeat themselves over and over in the mind, taking on ever-deeper

layers of meaning, I began to hear the many voices of the participants. Their voices, at this point, were like cobweb whispers in the corners of my mind that I could barely hear.

I decided it was time to go back to the responses. The first time I had read them, it seemed like all the participants were expressing either like or dislike of the Framework. During this reading, I began to wonder—is the data really as dichotomous as this? When I reread the participants responses, they were not just positive or negative comments about the Framework's impact; many seemed to contain both positive and negative statements. I also began to realize that this was not the best way to analyze them—as stand-alone responses. These people had answered the survey because they were interested in the topic and had probably already participated in conversations with their colleagues about the Framework. The sentences they wrote in their answers to Question 22 were most likely very similar to opinions they had already voiced to other librarians. They participated in the survey, taking the time to write out their thoughts, because they knew their words might possibly be read by other librarians someday. They wanted to contribute to the national conversation among academic librarians about the Framework.

So, I started to read the responses aloud (to the chagrin of my wife who woke up to hear her husband talking to the computer on many a late evening or early morning). I discovered when I read them aloud, the responses took on the quality of a dialogue in a face-to-face environment—like students in a class, discussing an important concept. Or like professionals in a lounge, talking during a coffee break, discussing this thing called the Framework.

Then I began to rearrange the participant's responses in relation to each other. Here was where the séance truly began. I raised these disembodied voices from the white

screen of my computer into a virtual chat room so that the participants could begin to converse with each other. Arranging their responses in this manner allowed me to become a part of the conversation, almost as if I were a moderator, facilitating a forum or discussion. Now I could see there were two groups of participants; one group was having a discussion about the advantages of the Framework, and one was conversing about the Framework's challenges. I went from one group to the other, listening to the conversation and pointing out to the participants that some of them were discussing some of the same advantages or challenges. After a while, the conversation seemed to, once more, grind to a dead halt. There did not seem to be anything else to say.

It felt like something was still dangling, something was still missing. I could look at my coding now and see the large themes and subthemes that had emerged. I could explain why some responses were coded as advantages and why some were coded as challenges. But what did it all mean? What was the data really saying? How does a qualitative researcher know when to stop the analysis? I thought the process would be over when thematic analysis was complete. But something was still missing—the biggest theme of all.

Once again I read the responses aloud, now arranged as an ongoing dialogue between librarians. Something new began to emerge. I started to notice opposing ideas and themes. I became aware that some of the librarians were saying exactly the opposite of each other. I perceived also that some of the participants spoke of *both* advantages and challenges, and not just one or the other.

And that is when the dialectic occurred to me. I remembered that when I taught Honors English to ninth graders years ago, I had often discussed the dialectic with my

class. In every story, in every poem, and in every play that I had read and talked about to my students, the dialectic was there. I assigned Bob Dylan's song "Isis" to my class, asking them to find and discuss the dialectic in his lyrics; "I came to a high place of darkness and light..." I used the dialectic to explain the tragic relationship of *Romeo and Juliet*. This theme appears throughout classic literature, even in the simple poem of "Jack and Jill." Things contain opposites—both between individuals and within them. Everything contains conflict. These were concepts with which I was very familiar.

The definition of the word dialogue is "a discussion or series of discussions that two groups or countries have in order to end a disagreement" (www.merriam-webster.com, n.d.). Thus the use of the word "dialogue" implies disagreement, or the dialectic. So, if I created a dialogue between participants, then there must be a dialectic. Ultimately the synthesis of the qualitative data brought me to an understanding of the overall thematic pattern in my qualitative data—the discovery of the dialectic.

The dialectic. The dialectic is the "tension or opposition between two interacting forces or elements" (www.merriam-webster.com, n.d.). The dialectical process is most commonly attributed to Georg Wilhelm Friedrich Hegel, an eighteenth-century philosopher of the Enlightenment. For Hegel, the progression of human thought and consciousness depended upon the dialectic—a philosophical process of investigating opposing ideas wherein first the thesis (a statement or theory) arises, and then the antithesis—which contradicts the thesis—follows. Tension between the two ideas is resolved by way of synthesis, which is then contradicted by another thesis, and the process continues until the final truth is realized (Morrell, 2008).

The dialectic in the qualitative data can be seen in the two overarching themes

that emerged in my analysis: *Advantages* and *Challenges* of the Framework. Figure 29 illustrates a balance between these two themes in the amount of participant responses. 73 of the responses referred to perceived *Advantages* of the Framework, and 77 of the responses referred to perceived *Challenges* of the Framework.

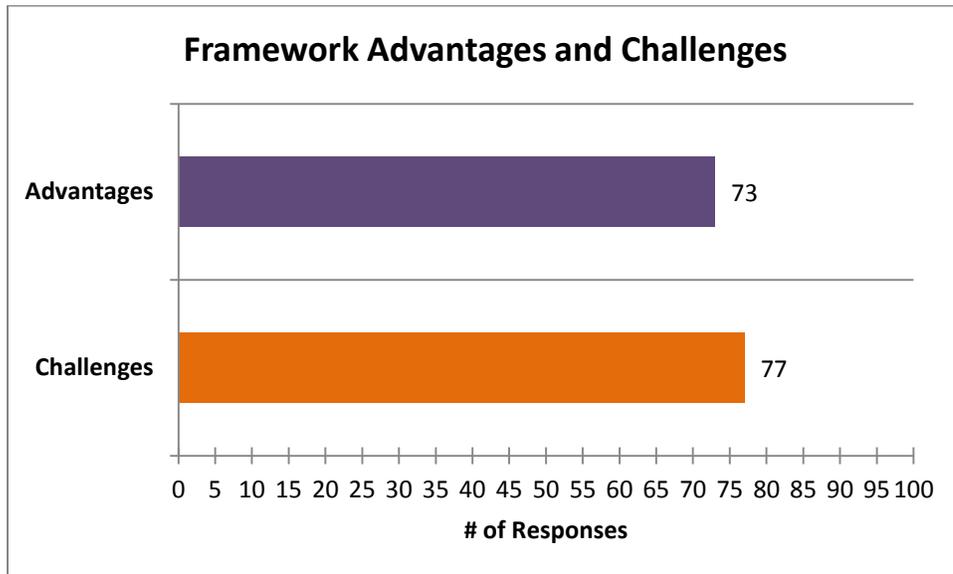


Figure 29. Perceived Advantages and Challenges of the Framework.

Figure 30 presents the number of deans and non-deans who perceived *Advantages* and *Challenges* in the Framework. 57 non-deans and 16 deans wrote about *Advantages*, while 59 non-deans and 18 deans wrote about *Challenges*. Here again there is a balance between both the total numbers of each group (57 and 59; 16 and 18). Yet, it is not a perfect balance; both groups wrote a little bit more about the *Challenges* of the Framework than the *Advantages*.

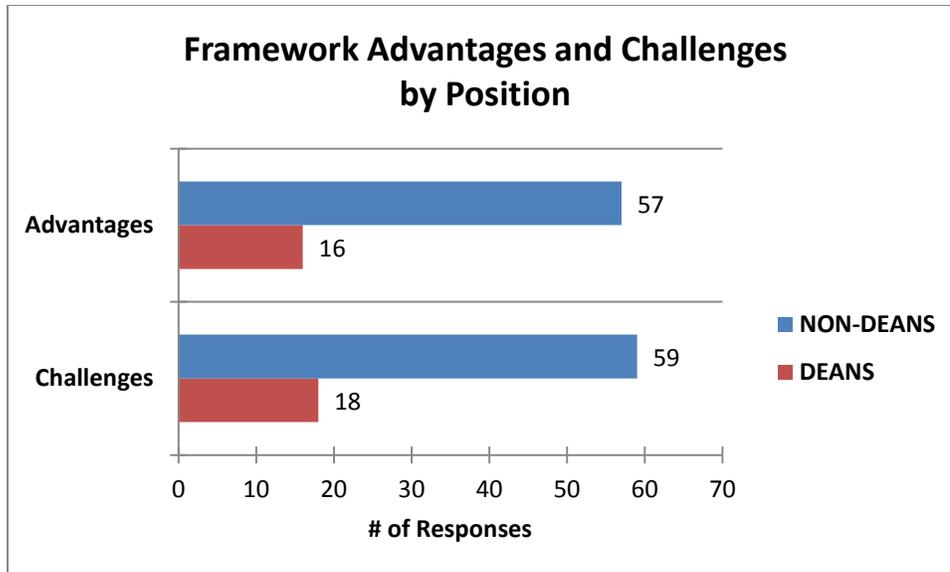


Figure 30. Perceived Advantages and Challenges of the Framework according to library position.

Perhaps one explanation of why there was a roughly equal division of responses about advantages and challenges was because the survey did not ask the participant if they *liked* the Framework or if they were *satisfied* with it—it just asked benign questions about its potential impact. Social desirability bias, or a participant's effort to answer questions the way they think others would answer or possibly the way they think others would *want* them to answer (Cozby, 2009) was not much of a limitation in this study. Maybe participants felt they could answer honestly because they were assured that their responses would remain anonymous, allowing them to freely express an opinion about their own rating.

Thematic exemplars of the dialectic in responses. After coding all of the responses, I noticed the total number of *Advantage* responses and *Challenge* responses (see Figures 29 and 30). I did not have 150 participants, so some of their answers must have contained *both* advantages and challenges. This was more than a simple

dichotomy—a static polarization or division between two opposing groups. Responses that contained *both* advantages and challenges represented the dialectic.

In China, the concept of the dialect is known as yin-yang, and is graphically represented by the familiar yin-yang symbol wherein the dark contains a small circle of light, and the light contains a small circle of dark. The two opposing forces are balanced, complementary, and interconnected (see Figure 31).

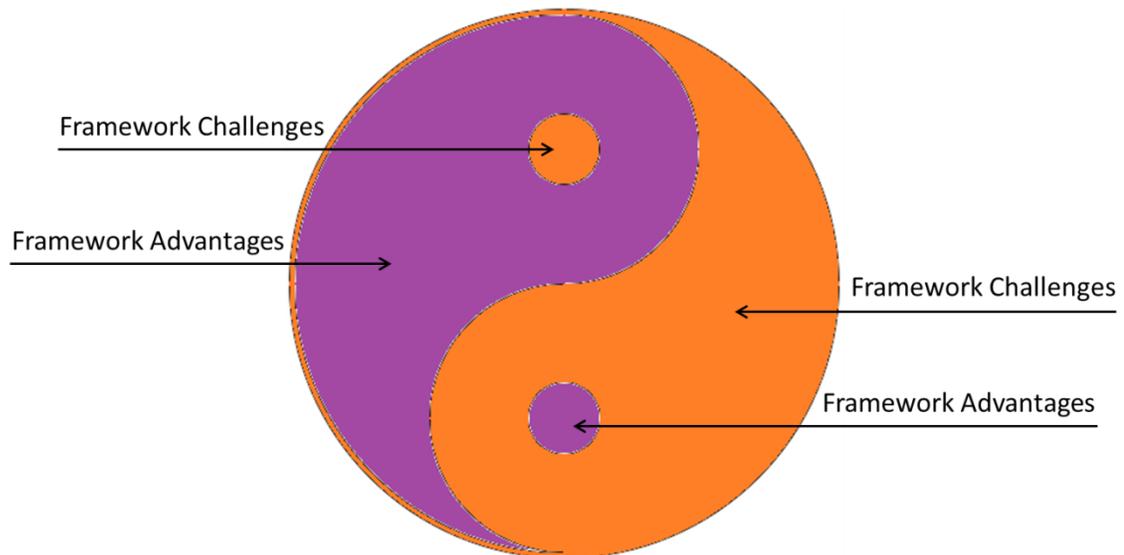


Figure 31. Yin-yang as representation of the dialectic.

Here are two examples of responses that contain the yin-yang; they reference both advantages and challenges of the Framework. One person wrote: "The recent well-publicized critiques of the framework have led some of my colleagues to be skeptical about the framework's utility, though we did use it to redesign the course objectives for our credit bearing IL course." This excerpt was coded as the *Advantage* theme *Helps Academic Librarians Design IL Instruction/Programs* and as the *Challenge* theme *Lack of Commitment from Academic Librarians*. The tension between opposing sides of the yin-yang is balanced in this response because there is one advantage and one challenge.

Another person wrote:

The framework repositions information literacy as transferable skills. Most of our faculty are not aware of the many topics we teach, presuming that we only cover "how to search." The new framework enables faculty to envision research as a critical thinking process rather than a set of procedural tasks. That being said, our library developed an instructional program that follows the new framework a few years ago, so it may not change our instructional approach as much as it will legitimize our instructional approach.

This excerpt was coded with three *Advantage* themes (*Conceptual Lens*, *Supporting Philosophy*, and *Currently Integrating*) and one *Challenge* theme (*IL is Separate from Disciplines*). So, in this response, there is a small circle of *Challenge* within the larger spiral of *Advantages*.

The end of the analysis. I began this analysis with simple plus and minus symbols, and I ended the analysis with the yin-yang symbol. While the dialectic and the yin-yang provided the closure I needed for the analysis, it also created the vehicle needed to present the findings. Like the lines in William Butler Yeats' poem, "The Second Coming":

Turning and turning in the widening gyre
The falcon cannot hear the falconer,
Things fall apart; the centre cannot hold.

The yin-yang symbol can be considered a design of two interlocking spirals. In Yeats' poem, the center of the gyre or spiral "cannot hold." It curves in toward the center point until it can go no further, and then it begins to spiral out. So too did my analysis. I proceeded with the coding until I reached a synthesis—the one, overarching thematic

pattern in my data was the dialectic. Now that I have reached that point, I will begin to spiral out again, like the arms of the Milky Way galaxy, presenting the star clusters or themes along the way as I return to the infinity of the universe.

The Findings

Up until this point in the séance, I had raised the participants' voices from the computer screen so that they could talk first with me and then with each other. Now it is time for the participants' voices to be heard by the reader. It is time for the reader to hear the voices that spoke most loudly to me. The remainder of this chapter is a presentation of findings, the themes I discovered in the analysis along with exemplars of the theme—an entire response or an excerpt from a response that I chose because it laid the foundation for the building of the theme. Each *Advantage* theme is juxtaposed with one or more *Challenge* themes. In other words, after the presentation of each *Advantage* theme and its exemplars, I will present one or more *Challenge* counter themes. This gives the reader a front row seat, as it were, to listen as the participants speak to one another about the Framework. (See Appendix E for numbers and percentages of deans and non-deans whose excerpts were coded with specific themes.)

Advantage: Helps academic librarians design IL instruction/programs.

Imagine yourself, reader, sinking into your virtual seat, a comfortable one with velveteen cushions and armrests. Put your feet up on the footstool in front of you. Now, listen to the participants. Under the cloak of anonymity, their voices all sound alike. Their names, their ages, their sex, and their positions cannot be determined. Every voice is of equal weight, of equal merit. Only their message, presented in the black-and-white silence of the computer screen, can be heard in your imagination on the pages that follow.

You will also hear my voice as the moderator who introduces, explains, illuminates, and connects the voices with each other. Sometimes, in order to enhance the feeling of being in a conversation, I will refer to gestures that I imagine the participants to be making, such as nodding or shaking their heads. I will also place them in the imaginary setting of a cafeteria, where the librarians sit around tables and talk to each other while they drink coffee or eat their lunch. Since this is a cafeteria big enough to seat 138 people, there is also a microphone set up for participants who want to address the whole group.

The first voice I introduce to you is talking about two theoretical constructs that are important in the field of information literacy. One of them is a key conceptual element of the Framework. This voice tells us that *threshold concepts* are helping their institution redesign an orientation course, "Folks interested and involved in redesigning our first year experience course are all about threshold concepts. They want to include 'critical information literacy' into this curriculum, and using the Framework as a way to do this work makes sense."

Critical information literacy is the second theoretical concept mentioned by this participant. This is an approach that examines the underlying power structures of the production of information (Matthews & Swanson, 2015). The term *critical information literacy* is not specifically referenced in the Framework. However, in an interview about the value of critical IL, Troy Swanson, a member of the ACRL Task Force, stated his opinion that the Framework is more "in line with critical practice than most other definitions of IL" (para. 16). Apparently, as evidenced by this participant's response, there are institutions using the Framework to integrate critical pedagogy into their IL

curriculum.

A chorus of voices now join in with this participant, intoning that the Framework has helped redesign their curriculum and plan their instruction. As the chorus ends, one voice can be heard saying clearly, "The faculty in the library department at my institution are already rethinking their approaches to instruction based on their exploration of the Framework. This will continue to happen going forward."

Challenge: Fundamental skills first. In contrast to the many voices who said the Framework helped with the design of IL programs, three voices now speak, expressing the idea that fundamental skills need to be addressed *before* the Framework can be implemented into IL instruction. The first voice says simply, "Since my library mostly teaches 'one-shot' sessions, we only have time to cover the most basic concepts about using the library." In "one-shot" sessions, as discussed in Chapter Two, the librarian is little more than an assistant to the course instructor, a visitor who seldom gets to see how students apply the skills they are attempting to teach. Within these limitations (e.g., time constraints and the librarian's primary role as guest lecturer), it is difficult for librarians to develop a comprehensive program for IL.

Now listen to a voice that expresses the idea that undergraduates are not ready to understand the abstractions of the Framework:

The Framework is an abstract concept, and you have to be fairly adept as a researcher before you can understand the abstraction. An undergraduate is not going to connect with the concepts of the framework. So, what do you have to do in order to help them make that connection? You have to help them learn the

fundamental research skills before they will be able to think of research at a higher level.

And a third voice also speaks to the concern that librarians are spending most of their time trying to get students to master fundamental research skills:

Individual librarians may find a few receptive faculty to work on a broader integration of the framework and its threshold concepts, etc., but most of the librarians are still trying to get our students to the most basic level of info lit. I don't think the framework will have much impact here.

While few in numbers, these three voices are strong, articulating a very practical argument against the Framework's potential impact. Librarians, especially those who spend the majority of their time teaching "one-shot" sessions, are struggling to teach students simple research skills, such as how to find and use the databases their library provides.

Challenge: Difficulty with "one-shot" instruction. Two voices now queue up to the microphone, both wanting to add to the discussion of another challenge. How can they implement the Framework into "one-shot" sessions, where, due to time limitations, library instruction is usually restricted to the *hows* of using research tools, rather than on the *whys* of using them. The first librarian echoes what other voices have already said about the need to address fundamental skills first, "I think that our librarians will use the new Framework to guide our instruction practices, but the nature of our instruction (one shots) means that most instruction is still skill-based." The second voice speaks about feeling a little overwhelmed by the challenge of integrating the Framework into their one-shots:

We are not yet sure how we could use the Framework to support our one-shot instruction sessions. The Framework is a little overwhelming and intimidating, so I am unsure that it will really be embraced or change how we do our one-shot classes.

Challenge: Minimal impact on instruction. Unlike the last voice, who sounds willing to try integrating the Framework into their one-shot sessions, but unsure as to exactly how to do this, the next voices do not communicate either a willingness to implement the Framework or an optimism that it will have anything but a minimal impact on instruction. "The Framework is really of very little use at our institution," says one voice. Another voice chimes in, "I think it will impact some librarians, but I don't think the institution, in general, cares at all about information literacy." A third voice seems a little more reflective, "Initial conversations with my colleagues, as well as my in-depth reading and thinking about the Framework, do indicate it has some potential to adjust some instruction, but overall not with all librarians or not in large ways." A last voice speaks about how the Framework promoted the value of IL and their institution was currently integrating it into their library practices, "but will not significantly change them."

Advantage: Encourages discussion. Now, listen as these people speak about another advantage of the Framework. In contrast to those who said they thought the Framework would have a minimal impact on instruction, this voice says, "The Framework will have some influence on directing the discussion of and in planning for information literacy instruction." Other voices now begin to speak of the Framework's usefulness in encouraging conversations on how to interpret and integrate the

Framework. "The Framework helps us talk with faculty and students about the complexities of information and the skills needed to navigate an information-laden world," says one voice. Nodding in agreement with this participant, another voice adds, "The Framework offers worthwhile discussion points and serves as a useful document to contextualize the foundation of what we are talking about when we talk about information literacy."

Challenge: Translating theory into practice. While the last two people spoke, other participants shook their heads, disagreeing with the idea that the Framework helped them talk with faculty and students about IL. "The framework is very theoretical and hard to explain to faculty in a 'sound bite' which is about all they have time to listen to," says this voice. The next voice both agrees and disagrees with the idea that the Framework encourages discussion, revealing the dialectic in their response, "While the Framework and its underlying theories are excellent discussion topics for professional librarians and disciplinary faculty, they do not translate information literacy concepts to students any better than the standards already do." These librarians are expressing a common theme—one of the challenges of implementing the Framework is that it is difficult to translate theory into practice. A last voice speaks to this theme, saying that the Framework "is great idealistic theory but does not seem to translate effectively into actual instruction."

Advantage: Supports academic librarian collaboration with discipline faculty. Ignoring these voices of dissent, other librarians want to return to the previous theme of how the Framework was useful in encouraging discussion with discipline faculty. They disagreed with the idea that the Framework's language was too theoretical to explain. This voice says the Framework "enlivens librarian discussions about what

we're doing. Gives us an opportunity to discuss IL on campus in a language that some departmental faculty are familiar with." Another voice also speaks about how the the helpfulness of the Framework language—in contrast to the Standards—was useful in supporting collaboration with discipline faculty:

The Framework gives us language to talk about information literacy beyond the standards which were almost more of a process - if you do step one, step two, and so on, you are information literate.

One last voice speaks with enthusiasm about how the Framework had made it possible for them to share ideas with discipline faculty:

It's already made an impact, we've designed our curriculum around it, and we use it in our assessment practices, and it came at a time when the University as a whole was working on these things, so librarians have been invited to speak to other faculty about how we are using this framework, and those talks have been well received.

Challenge: Collaboration between academic librarians and discipline faculty.

Other voices want to join the conversation now. These voices are not sure how much the Framework will impact their institution because it would depend on collaboration between academic librarians and discipline faculty. "I think the Framework has the potential to transform information literacy instruction, but the incorporation at the institution will depend on the willingness and openness of teaching faculty," says one voice. Agreeing with this person, another participant says, "The overall extent of impact directly ties to whether or not librarians make it their top priority when working with teaching faculty."

Challenge: Lack of collaboration. While these last voices were unsure about future collaboration between academic librarians and discipline faculty, the next librarian expresses a feeling of marginality at their institution—a perception that information literacy is not considered an important part of the curriculum and that librarians are seen as secondary or peripheral. That sense of marginality can be heard by this participant, "It's not easy to engage faculty in discussions about information literacy because many perceive it as an education fad, or they are trying to cover content and don't see librarians as partners with their curriculum." The next person also speaks about a lack of collaboration with faculty, but for a different reason (perhaps a reason best described as too much on all of our plates):

Pitched as a tool for helping librarians collaborate with faculty, I think the FW [Framework] fails to account for the difficulties many of us have in getting faculty to work with us, not because of the failure of our imagination, but because of the intense demands on teaching faculty, librarians, administrators, and others in a struggling higher ed institution.

Challenge: Disinterested in Framework. Other participants stand now, hoping to add their voices to this thread of conversation about the difficulty of working with discipline faculty and about the feeling of marginality they share. "I don't think the institution, in general, cares at all about information literacy," laments one person. Another voice says the Framework would impact their own instruction and assessment practices, but they did not think it was valued by their librarian colleagues. "Nor do I believe that the university administration or majority of faculty will appreciate the significance or potential impact of the Framework," this person concludes.

Another voice agrees that discipline faculty are disinterested in the Framework because they were busy doing other things:

With multiple planning and assessment strategies going on all over campus our ability to engage faculty in looking at, or thinking about, the framework will, in my opinion, be very limited. They may impact our development of hybrid learning materials but I am not sure we'll get much traction from anyone outside the library.

Challenge: Not committed to Framework. This topic of conversation—the challenge of working with discipline faculty—seems to have struck a chord in many of the participants. Now many of them are speaking about discipline faculty's lack of commitment to the Framework. One voice says that, while the Framework was useful in helping academic librarians think about IL, it would have less of an impact on faculty. "I am not sure the extent to which faculty will embrace the framework itself; rather it will impact how librarians think and work with faculty." Another voice doubts the commitment of their institution to the Framework. "Applying the Framework means adopting change. There is still a lot of resistance to change within this organization."

Challenge: Framework not understood. Adding to the conversation about discipline faculty, other voices now talk about the Framework not being understood by colleagues outside of the library. The first person says that the Framework will encourage discussion among academic librarians, enhancing their thinking, "but it is not necessary to bring it directly to others at our institution. It will only confuse them." Another person agrees that the Framework would be difficult to explain to the faculty:

I think the way the framework is formatted does not easily translate into 'library

practices' in a way that the faculty will understand. Due to the lack of concretes, we are going to spend most of the conversation around the new framework trying to defend the library's place in the curriculum and any new practices the framework inspires.

Advantage: Promotes value of IL. In opposition to those who thought that faculty would not understand the Framework, other voices now interrupt, needing to describe a different perspective. "The language is more transparent to faculty and other non-librarian stakeholders," is the proclamation of one. Another person, responding to and agreeing with the previous librarian, says, "I think the Framework is a powerful document that brings information literacy instruction out of the library and back into the campus more widely, as it was always meant to exist." A third person also speaks about how the Framework helps them promote the value of IL when communicating with discipline faculty. "...Librarians have been invited to speak to other faculty about how we are using this framework, and those talks have been well received."

Challenge: Unfamiliar with Framework. This conversational thread about the challenges of working with discipline faculty is like a long stanza in a poem, a stanza that includes many lines about faculty's lack of collaboration with librarians, and their disinterest in, lack of commitment to, and their understanding of (or lack of understanding) the Framework. There are a couple more lines in this stanza. Two voices speak now about the faculty being unfamiliar with the Framework. "It is a useful document, but really doesn't change anything for us, and is not known among any of the non-librarian communities with which we interact," the first voice begins. The next voice joins in:

Our faculty and administration have no idea what this Framework is and are not interested in librarians being more involved with the curriculum than we already are. They have other priorities.

Challenge: IL is separate from disciplines. Now that the stanza has ended, a chorus of voices begin speaking about IL being viewed as separate from other disciplines by faculty members. The minor tones of this chorus create feelings of melancholy and loneliness as librarians voice a common feeling of marginality; they speak about how discipline faculty think of IL as separate from the disciplines in which they are immersed. "The institution does not have much appetite for requirements and standards when it comes to IL," says one voice.

Another person begins speaking on a very positive note, "I think the Framework is a huge leap forward for library instruction and I think it will open doors and start conversations with our disciplinary collaborators." After this burst of enthusiasm, the dialectic is revealed as the response continues, "But in general library instruction is still seen as moot or quaint by many faculty."

Other participants chime in, many of whom had already spoken about discipline's lack of interest, commitment, and familiarity with the Framework. A new voice adds, "Faculty are uniformly reluctant to turn over any part of their curriculum to librarians to design or teach."

The chorus concludes with the words of a participant who thinks the Framework has several advantages, including its supporting philosophy for a new vision of IL. "The new Framework enables faculty to envision research as a critical thinking process rather than a set of procedural tasks." However, the voice continues, a significant

challenge to the implementation of the Framework's concepts outside of the library is that "most of our faculty are not aware of the many topics we teach, presuming that we only cover 'how to search.'"

Advantage: Helps academic librarians think about IL. Some of the participants became restless during the long verse about discipline faculty, jiggling their feet and tapping their fingers as they waited for the chorus to end. Now they rise to their feet, eager to speak about how the Framework helps academic librarians think about IL. "Many of my colleagues are already rethinking practice based on the Framework," says one person. The next two people stand up together; one voice says the Framework is "shifting how we think about this topic" and the other says it will "lead to long-term thinking about information literacy." Another participant, referring back to the challenge of working with discipline faculty, says slowly, "I think the framework will have more impact on how librarians think about information literacy and how they introduce the subject with faculty." Then the voice repeats a sentence it said earlier, "I am not sure the extent to which faculty will embrace the framework itself; rather it will impact how librarians think and work with faculty."

A fifth participant wants to contribute to this conversational thread and explain the overall level of impact they gave the Framework:

Some may be ready to embrace a new way of thinking about information literacy, which is how I think of the Framework. Those who embrace it will make changes and that will impact library practices at our institution; however, some may not and so I can give it only a 5.

Challenge: Lack of commitment from academic librarians. This last participant, while saying that some of their colleagues may be "ready to embrace a new way of thinking," also indicated that "some may not." People begin to nod at the last part of this sentence, and raise their hands because they also want to speak to a lack of commitment from academic librarians. "We have many librarians who resist change and don't want to understand the effectiveness and purpose of the Framework to help in collaborative efforts with 'subject-specific' teaching faculty (and vice-versa)," says one librarian, passing a cup of coffee to the person who has come to sit next to them. Taking the styrofoam cup, this next person adds, "The recent well-publicized critiques of the framework have led some of my colleagues to be skeptical about the framework's utility, though we did use it to redesign the course objectives for our credit bearing IL course."

Challenge: Pedagogy differs among academic librarians. Skepticism from academic librarians about the Framework's usefulness may be due to differing pedagogical practices. As coffee is poured and passed around a table, participants become more comfortable in talking about some of the differences between themselves and their colleagues. "I think that for my personal use (my subject specialties, online learners, etc.) it will have a big impact," says one participant, stirring artificial cream into their cup. "However, our librarians have a lot of latitude in how they handle instruction, and many are happy with the way they have always done things." Another participant smiles, nodding their head, and then speaks, echoing the same idea:

Librarians at my institution are faculty and free to teach utilizing whatever pedagogy they are comfortable with. A few of us are using the frames, as we had

used the standards, but most are still doing BI [bibliographic instruction] sessions...we do what we can with what we have.

Advantage: Promotes value of library. There is a short break in the conversation as people get up to stretch their legs and someone starts to make more coffee. It is clear that there are many librarians who see advantages in implementing the Framework, and there are many who see challenges. One voice begins to speak quickly and enthusiastically about how the Framework has helped them promote the value of the library:

Our library has recently completed a comprehensive library renovation project that includes the construction of two large, very high-tech active learning classrooms. Those classrooms were planned to address new ideas and practices consistent with standards created in ACRL's newest Framework, and I think that they—along with the guidelines of the Framework itself—will be absolutely transformational in the ways that we teach our students to obtain information.

Another person, not as enthusiastic or as voluble as the first person, but agreeing with the idea that the Framework helps to promote the library, says this about the Framework's impact:

We'll see a minor shift in practices, but have been advancing many of the concepts in the frames for quite a while. Primary benefit will be in promoting the value of information literacy and the library with faculty and administrators.

Challenge: Library not valued. While some participants said the Framework was useful for enhancing the library's value on their campus, other voices now want to talk about how the library is *not* valued at their institution, thereby reducing the impact of

the Framework. The first voice returns to the earlier conversation on the difficulty of collaborating with discipline faculty because they need to be committed to the library and see it as a valuable part of their institution:

The success of such initiative depends on the level of faculty's commitment, image of the library, and value they place on the library. The way I see it, most libraries don't work at the partnership level with faculty. We are seen as mere service providers and collaborators. Some libraries do work on the embedment level. For this to work, faculty need to be engaged as partners. Ours certainly don't do that, and obviously, is our fault and lack of commitment towards the partnership approach.

The next person is ambivalent about the Framework's impact. They explain the "4" they gave as the Framework's overall level of impact in this way:

I know that the Framework will affect how some individual librarians teach (me being one of them), but I don't think that it will prompt any shift in the larger conversation on our campus. People don't pay enough attention to the library/librarians for that to happen. So, that's why I put it in the middle.

Advantage: Higher level of understanding. Talking about the challenges of the Framework stimulates the opposite or dialectical point of view in other participants. Unlike the previous voice that said the Framework will probably not "prompt any shift in the larger conversation on our campus," the next voice is effusive in its praise for the Framework's impact on IL instruction and discussion:

The move away from 'bullet point' learning outcomes and toward a richer conceptual understanding of the context in which information literacy

operates is a huge step forward. As an example, I can now show students results from a single Google Scholar search that illustrate the 'back and forth' of research replication and the notion of 'scholarship of conversation' to show more richly the function of a scholarly research study and where it fits in to advance human understanding. There was no room in the former competencies to have this type of rich discussion.

The voice that follows agrees that the Framework will enrich higher levels of understanding, but is more conservative about its impact on library practices. "I think the framework is a good disciplinary document but it mostly help[s] higher level understandings of what we do, not really change[s] the amount or level of what we are already doing."

Challenge: Complexity. Six participants shake their heads during the speeches of the last two voices. Another person begins to speak now, repeating what they said earlier because they wish to agree with the former voices and also disagree:

While the Framework and its underlying theory are excellent discussion topics for professional librarians and disciplinary faculty, they do not translate information literacy concepts to students any better than the standards already do. The Framework is an abstract concept, and you have to be fairly adept as a researcher before you can understand the abstraction.

Normally, repeating sentences in a conversation is annoying, but repetition is sometimes necessary in this dialogue because it allows the participants (and the reader!) to reflect more deeply upon the speaker's words and to think of the words in a different context. The next speaker agrees with this voice, "This [the Framework] is all too complex." One

person, after spilling their powdered cream and sweeping it up into their hand, and tossing it in a trashcan, draws a conclusion to this topic. "No matter what structure ACRL develops, librarians overall will struggle with it until they have learned and internalized pedagogy and educational theory."

Advantage: Currently integrating. Again a reflective silence settles in on the group. Somebody gets up and pulls some water bottles out of a refrigerator in the nearby kitchen, coming back to the cafeteria and passing the bottles around. Someone else laughs about the desiccated sweet rolls on the tables. Eventually, a soft whispering can be heard around the table as heads bend together to talk about the integration of the Framework at their institution. One person comes up to the microphone and says to the whole group, "The Framework has already impacted how I work with the first year writing faculty and how the library fits into their curriculum and outcomes." Another person speaks simply and directly, "I'm in charge of instruction and I will implement it." Someone else says that librarians at their institution were already using the Framework as a guide for developing one-shot sessions and assessments. Two or three tables of librarians seem to be nodding their heads in agreement; they are currently integrating the Framework. One voice adds that since they had already implemented much of Framework, "there will not be much future impact."

A last voice brings a new term into the conversation. "We are using the Framework as a tool for scaffolding online lessons to teach metaliteracy skills across multiple institutions." Here is another reference to an important idea or conceptual lens of the Framework—*metaliteracy*—or the emphasis on the individual as an information producer.

Challenge: Not using it. One person is bold enough to speak now in contradiction to the many voices who spoke about how they were integrating the Framework. This voice says they are not using the Framework at their institution. "My impression here is that we don't really make decisions based on the Framework—that is, we don't have copies of it up to refer to, and we don't use it in making decisions about our teaching."

Challenge: Takes time. Another voice speaks up to support the previous voice and explains that they were not using the Framework because its implementation would take time:

My institution is slow to catch on to any form of change. We spend a lot of time talking about things before we actually make any attempt at implementing something. We talked about the Framework as a group of instruction librarians about 7 months ago, but then never spoke of it again as a group.

Advantage: Standards coexisting. Again, there is a pause as participants search their minds for other ways that the Framework may or may not impact their practice. Some of the participants are signaling me over to their table, letting me know that they have been waiting patiently to discuss a very hot topic—can the Framework coexist with the 2000 standards? This issue—whether or not to sunset the Standards—has been a controversial one. Some ACRL Board members wanted to sunset the Standards immediately, while other Board members wanted to wait and give institutions time to adopt the Framework. People now get up from their seats to talk about how the Standards were coexisting with the Framework in their programs. The first person says, "We are currently using both the Framework and the earlier Standards..." After a long swallow

from a water bottle, a second voice says, "We are presently reviewing our current IL program to incorporate all/part of the Framework along with the old ACRL standards into the program." A third voice expresses the opinion that the Framework should not "replace the old Standards outrightly." Instead, the voice continues, "the Frames will serve as an enhanced 'layer' that provides better context surrounding the ACRL IL Standards from 2000."

Challenge: Currently teaching Standards. As the preceding people talked about how they thought the Framework could coexist with the Standards, a number of participants seem to be whispering amongst themselves. When I bend down to hear what they are saying, I hear one voice saying quietly to the librarian next to them:

The Standards have been the standard for info lit at our institution since 2009.

There is no reason to rock the boat. The librarians will use the ideas in the framework to enhance their thinking, but it is not necessary to bring it directly to others at our institution. It will only confuse them.

Their companion whispered back about how they thought the Framework encouraged discussion. "However, I do not think that we will do away with many of the lessons developed out of the Standards, nor do I think the Framework and the Standards are necessarily contradictory documents."

Challenge: Assessments based on Standards. Noticing that I was listening to their conversation, the participants talking about the Standards begin to speak in louder voices. One person talks about several advantages of the Framework, including helping academic librarians design IL programs and think about IL. But their institution had already adopted IL Student Learning Outcomes based on the Standards and their faculty

had embraced them. However, the person adds, the Framework "can help us shape our future policy progress...It will take time and is a process not just flipping a switch."

Challenge: Standards preferred over Framework. Two people step up to the microphone, willing to share their thoughts with the whole group. They say they prefer the Standards over the Framework. The first voice says, "The Framework is really of very little use at our institution. The 2000 Standards resonated more with our library faculty and with our partner faculty members in the departments." A second person also has a strong opinion about the Standards. This librarian says that their IL goals were based on the Standards and had been part of their curriculum since 2006, expressing a preference for the "well-written outcomes" of the Standards:

So while we talk about the Framework at our institution because there is a lot of talk beyond at conferences and such, the usefulness of the Framework at an institution that concentrates on assessment of student learning of information literacy outcomes is little to none.

Advantage: Will affect overall curriculum. Two faces register disbelief at the last two people's statements that the Framework was "of very little use" at their institution. These new voices want to talk about how the Framework will affect their overall curriculum. "We have created institutional outcomes based on the Framework. These are likely to become implemented across the curriculum, which is a change to library practices at our institution thus far," says the first librarian. Giving a fresh roll to this first person, a second person says, "The frameworks provide a different, big picture of contextualizing the work we already do. It will allow us to integrate ourselves further into the curriculum..."

Challenge: Does not affect overall curriculum. In response to the last two participant's views, another group of people rise to their feet; they do *not* think that the Framework will affect the overall curriculum. One person states that they think the Framework will help design IL instruction, but "the larger conversation about integrating information literacy concepts across the curriculum is a long-term effort that the framework will not change." The second voice agrees with the first—things were going to stay the same because "practices are so ingrained within the library department and we don't have much influence on curriculum." A third person also had little hope for change. "We are an extremely top heavy institution and as such have very few young librarians at our institution. Until the guard changes, I don't think much will change."

Challenge: Does not affect current practices. Elaborating on this theme that not much was going to change at their institution, a chorus of sixteen begins to intone how the Framework does not affect current practices. Sometimes a solo voice speaks out over the chorus. "It will take more than the Framework to impact library practices at my institution," says one person. Another person also thinks the Framework will have little impact. "Most of us will continue to teach practical search strategies and introduce library tools and concepts just as we did before." A third librarian tells us they are busy building an IL program, but did not rule out the possibility that the Framework would have impact later on down the road:

We are at the beginning of building a comprehensive information literacy program at [name of institution] so the process is a bit slow going. We are enhancing the current staff with new librarians who have experience with heavy teaching loads and are very familiar with the framework, so as we gain some

ground with fostering stronger teaching relationships with our faculty, the framework is taking a bit of a backseat. We first need to assess what has been taught in the past year or so before we can begin to establish common goals (like for the freshmen writing course) or look into course mapping. All in time.

Other participants wait for the chorus to end, wanting to dialogue with each other about why the Framework was not currently being used at their institution. "I think that the librarians at my university will take a while to assimilate the framework concepts into their own teaching," says one librarian to another sitting across the table. Someone is popping popcorn in the kitchen's microwave. "The framework is good but I think that librarians may have a difficult time developing concrete experience and having the confidence to move outside the 2000 definitions," offers the second person. A third person in this dialogue offers their input. "We are a small school and [the] library is understaffed. We can be aware of the Framework and communicate it but whether or not we'll have the funding or staff to make major changes is doubtful."

Challenge: Does not offer anything new. There are a lot of people sitting around this table, participating in the conversation about why their institution was not using the Framework. Many of them are saying that the Framework does not offer anything new. "The Framework is not that different from what we already do. Librarians at this institution are full members of the faculty and there is already a good level of collaboration on research and instruction," says one of these people. Echoing the word "holistic" from Question 19 in the survey, another person agrees with the first speaker:

Since we already had developed a holistic information literacy program at our institution we do not think the framework will impact our practices because we

have been able to create great collaboration within our institution that maybe others have not.

Advantage: Conceptual lens. The aroma of scorched popcorn wafts out over the crowd. Some wrinkle their noses in disgust; others make jokes about the ubiquitous smell of burned popcorn in work settings. Then another participant stands up to address the room, proposing a new topic: Another advantage of the Framework is that it can serve as a conceptual lens that provides potential to change the way information literacy is interpreted and taught. Turning away from their private conversations, participants begin to speak. "The language is more transparent to faculty and other non-librarian stakeholders," says one person again, adding, "It's easier to use e.g. 'scholarship as a conversation' as a metaphor that faculty will understand, and thus see value in." Another person chimes in, "It is in a language that is clear and easy to implement." Voices begin to whisper again; sometimes the words *threshold concepts* and *metaliteracy* can be heard. One librarian clears their throat and speaks to the surrounding participants:

The framework resonates with the faculty in our Writing & Rhetoric program. It closely mirrors their own framework. In subject areas, the Framework will help librarians find the various 'thresholds' students must cross to be information literate in their chosen area of study.

Heads nod and people start talking with excitement about how the conceptual lens of the Framework had caused a paradigm shift in their practice. "We've started examining our work in light of Concepts instead of Tool Use," pipes up one voice. Another enthusiastic librarian joins in:

I have already introduced the framework to my faculty. It is in language that is

clear and easy to implement. Many said they could or already did include IL in their coursework...the framework would make it easier to know which concepts should be included.

A third person contributes a more reserved and ambivalent viewpoint. "It will open the eyes for the librarians. I can't promise it will with faculty."

Advantage: Supporting philosophy. Two people put their hands up to indicate they want to add something to the current topic—that the Framework is a supporting philosophy for their current conceptual lens. One person speaks up. "...It may not change our instructional approach as much as it will legitimize our instructional approach." Smiling in agreement the other person says, "I think the Framework provides a lot of possibilities for new directions that librarians can take this. It's a tool they can use and a supporting philosophy."

Challenge: Nebulous. After the words "transparent" and "clear" were used to describe the Framework's language, a surge of muttering arose around the room. Since this happened while other librarians were still speaking about the Framework as a conceptual lens, the mutterers got some dirty looks and an admonishment to wait their turn. Now, I tell these people that they can speak, and they do so, telling us they think the language of the Framework is *not* clear or transparent, but nebulous, or certain to be interpreted in multiple ways. I interrupt the speaker to tell the reader that "nebulous" is one of Wiggin and McTighe's (2005) three problems with content standards. Then I nod at the person I interrupted, who resumes:

Many of my colleagues are already rethinking practice based on the Framework. At the same time, it gums up the work of assessment, giving us almost nothing

concrete to report on/back to our Dean in the tightening race for resources at my university.

I ask the reader to note the dialectic in this person's statement. They acknowledge that the Framework will help them redesign IL programs and think about IL, but it makes the process of assessment more difficult.

I notice another participant nearby who seems to be deep in thought. I ask them if they would like to say anything about why the Framework may not be useful for assessment. Rising slowly from their chair, this librarian speaks deliberately and clearly:

A major objection to the Framework is that the outcomes and proficiencies are poorly written. They are not written for assessment activities. For example, what outcome would you be able to assess from the following: Understand that many disciplines have acknowledged authorities in the sense of well-known scholars and publications that are widely considered standard. How would you assess a student's ability to 'understand that many disciplines have acknowledged authorities in the sense of well-known scholars and publications?' This problem is rampant in the Framework whether the focus is on knowledge practices or dispositions. I really hate to say this, but the entire Framework seems to have been developed without any context of the previously well-written outcomes that many institutions embedded within the university curriculum.

Challenge: Overload problem. In the silence that ensues after the last person stops speaking, I ask the participants if anyone has anything to say about Wiggin and McTighe's (2005) second problem with content standards—the overload problem—the large number of content standards exceeds the amount of time needed to study them. One

person asks if they can repeat what they said earlier. "Sure," I say. "Feel free." And they repeat, "The Framework is a little overwhelming and intimidating, so I am unsure that it will really be embraced or change how we do our one-shot classes."

Challenge: Goldilocks problem. "And does anyone have anything to say about the Goldilocks problem, the third of Wiggin and McTighe's (2005) problems?" I ask. I explain this problem briefly. "Just like Goldilocks and the beds and chairs of the three bears, some standards are too big while others are too small." One person raises their hand and states, "The Framework is a nice bit of guidance, but is too broad to cause a re-think and overhaul of information literacy teaching that we have been doing for some time now."

Challenge: Jargon. I sense that you, the reader, are getting a little restless. I tell the participants it is almost time to wrap up the discussion. "Is there something else to say about the language of the Framework?" I ask. Several of the participants nod, indicating they would like to speak. "The framework uses a lot of education jargon. I am still trying to make sense of the document and jargon, so I can imagine the difficult time a non-education faculty member will have." I respond to this person by reminiscing about how the ACRL had wanted to avoid using jargon in the Framework. "When the ACRL decided that the Standards needed to be extensively revised (Association of College and Research Libraries, June, 2012, p. 1), they recommended that 'the Standards must be articulated in readily comprehensible terms that do not include library jargon,'" I say.

Three people tell me they think the ACRL was not successful in this goal. "The language used in the Framework alienated many librarians. Good concept, poor execution," the first person remarks. Another one says, "We'll use the Framework

because it is the new model. I don't really like it though. It is a wordy overblown document that looks impressive but isn't."

And the last person closes our dialogue with the following:

It's just a bunch of words that make no sense to most people. If you have to attend workshops and seminars and training sessions just to be able to understand what the document is supposed to do, it is a failure.

Summary of Most Frequent Themes

*As truth is gathered, I rearrange,
Inside out, outside in, inside out, outside in,
Perpetual change.*

—Jon Anderson and Chris Squire

In Chapter Four, we saw the quantitative data from the "outside in." In this chapter, I attempted to help you, the reader, hear the voices of the participants from "inside out" by rearranging the qualitative responses as a dialogue. There are, no doubt, an infinite amount of ways to assemble the responses I gathered, but I chose this particular arrangement so that the theme of the dialectic, of "perpetual change" and interchange between opposing ideas, could be seen.

But now it is time for our voices to go back to their places in Appendix D, assuming once again the context of their position and their participant numbers. They will speak again in Chapters Six, but this time it will be to the quantitative data. As participants leave the cafeteria, nodding to each other and saying goodbye for now, I would like to summarize the major themes of our conversation.

Many of the participants thought that the Framework was especially useful in helping academic librarians design IL instruction/programs and they were currently integrating the Framework. Implementation concerns about collaboration

between academic librarians and discipline faculty and issues regarding discipline faculty's apparent perception that IL is separate from other disciplines were perceived as significant challenges. It is hoped that this dialogue will contribute to the dialectical process—the discussion of opposing ideas that may bring about a synthesis of thought regarding the Framework.

Chapter Six

Merging of Quantitative and Qualitative Results

In this chapter, the participants will be speaking—not to me, not to each other, not to the reader—but to the quantitative results. I will enable this conversation to happen by merging the quantitative and qualitative results. I will place the quantitative results and relevant qualitative themes for each of the survey questions (Questions 9 through 21) side by side in order to compare and contrast the results. At the close of this chapter, I will discuss the quantitative and qualitative results regarding one-shot instruction and the Standards. Because of their conclusive nature, the summary of the merged results is included in Chapter Seven.

Cresswell and Plano Clark (2011) suggested that quantitative and qualitative data can be merged in several ways—one of which is to report the results together in the discussion of a study and another of which is to use tables or figures that display the results side by side. Both of these methods will be used, beginning with tables that summarize the quantitative data for each survey question along with relevant qualitative themes. This type of mixed methods data analysis is used to evaluate whether or not the quantitative and qualitative results are convergent or divergent with respect to the research questions (Ivankova, 2014). Merging of findings also provides a deeper layer of insight and understanding and aids in the interpretation of the results (Morales, 2012).

In Tables 10 through 22, the quantitative results for each survey question (Questions 9 through 21) appear on the left side of each table. The question appears first, followed by a figure (also included in Chapter Four) displaying the percentage of

responses for each question for deans and non-deans. The mean, standard deviation (SD), mode, and median is included after the figure. On the right side of each table are themes relevant to the question. For example, Question 9 asks the participant to rate the extent that they think the Framework "will open the way for librarians, faculty, and other institutional partners to redesign instruction sessions, assignments, courses, and curricula at your institution." A theme from the qualitative data that is relevant to this question is *Advantage: Helps Academic Librarians Design Information Literacy Instruction/Programs*. The number of dean and non-dean responses that were coded as the theme is then given. Finally, exemplars of the theme are provided—an entire response or an excerpt from the response that exemplifies the theme—along with the subject's position, participant number, and the Likert rating given by the participant for that particular question. I chose exemplars that resonated with survey questions, and used them to further illustrate how a participant's qualitative response corresponded to or contrasted with the quantitative results of the survey question. In some cases, a participant's response appeared to correspond to a specific question, however, their answer to the survey question was the opposite of what would have been expected given their qualitative response. Many of the exemplars appeared in Chapter Five; however, additional exemplars have been included in this chapter to further illustrate the association between the themes and the survey questions.

Advantage and *Challenge* themes are given for each survey question. In some cases, additional phrases have been added to the *Advantage* and *Challenge* themes listed in the table. For example, in Chapter Five, one of the *Challenge* themes is *Minimal Impact on Instruction*. In Table 10, the phrase "the Framework will have" was added to

the theme (*The Framework Will Have Minimal Impact on Instruction*) for purposes of clarity.

Table 22 contains the quantitative data for Question 21 (the overall impact of the Framework on library practices). Unlike the tables preceding Table 22, qualitative responses on the right side are presented in the order of Likert ratings participants gave (except for "1" because only non-deans gave the Framework this rating). The discussion that follows Table 22 will help to answer the second research question of this study:

- 2. What are the best predictor variables for the perceived level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*

For purposes of interpretation, a "1" rating on the Likert scale is interpreted in this chapter as "very low impact"; a "2" is "low impact"; a "3" as "moderately low impact"; a "4" as "moderate impact"; a "5" as "moderately high impact"; a "6" as "high impact"; a "7" as "very high impact."

After each table, I will compare and contrast the quantitative and qualitative findings for each question, and how they help to answer the following research questions:

- 1. What level of impact on academic library praxes do library deans, assessment librarians, and instructional librarians perceive that the Framework for Information Literacy for Higher Education will have?*
- 3. How do academic library deans, assessment librarians, and instructional librarians explain their perceptions of the level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*

After all tables have been discussed, the quantitative and qualitative results concerning one-shot instruction and the Standards will be addressed.

Table 10 displays the descriptive statistics for Question 9 and the corresponding qualitative themes.

Table 10

Comparing and Contrasting Question 9 Quantitative Results to Qualitative Response Themes

Question 9: Quantitative Results	Qualitative Response Themes with Exemplars																										
<p>Question 9: Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to redesign instruction sessions, assignments, courses, and curricula at your institution.</p> <table border="1"> <thead> <tr> <th>Likert Item Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>5</td> </tr> <tr> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>3</td> <td>12</td> <td>9</td> </tr> <tr> <td>4</td> <td>18</td> <td>25</td> </tr> <tr> <td>5</td> <td>40</td> <td>28</td> </tr> <tr> <td>6</td> <td>18</td> <td>12</td> </tr> <tr> <td>7</td> <td>5</td> <td>8</td> </tr> </tbody> </table> <table border="0"> <tr> <td style="vertical-align: top;"> <p><u>Deans</u> Mean: 4.78 SD: 1.18 Mode: 5.00 Median: 5.00</p> </td> <td style="vertical-align: top;"> <p><u>Non-deans</u> Mean: 4.40 SD: 1.56 Mode: 5.00 Median: 5.00</p> </td> </tr> </table>	Likert Item Response	DEANS (%)	NON-DEANS (%)	1	0	5	2	3	8	3	12	9	4	18	25	5	40	28	6	18	12	7	5	8	<p><u>Deans</u> Mean: 4.78 SD: 1.18 Mode: 5.00 Median: 5.00</p>	<p><u>Non-deans</u> Mean: 4.40 SD: 1.56 Mode: 5.00 Median: 5.00</p>	<p>Advantage: The Framework Helps Academic Librarians Design Information Literacy Instruction/Programs (7 Deans, 18 Non-deans)</p> <p>"We completely redesigned the required, one-credit course librarians teach at our institution based on the Framework." (Dean participant #127: gave Question 9 a "7")</p> <p>"Folks interested and involved in redesigning our first year experience course are all about threshold concepts. They want to include 'critical information literacy' into this curriculum, and using the Framework as a way to do this work makes sense." (Non-dean participant #71: gave question 9 a "5")</p> <p>Challenge: The Framework Will Have Minimal Impact on Instruction (3 Deans, 4 Non-deans)</p> <p>"We are already heavily invested in the assessment of learning with regard to Information Literacy. I'm not sure it [the Framework] is likely to have much impact." (Dean participant #42: gave Question 9 a "5")</p> <p>"It [the Framework] has some potential to adjust some instruction, but overall not with all librarians or not in large ways." (Non-dean participant #28: gave question 9 a "4")</p>
Likert Item Response	DEANS (%)	NON-DEANS (%)																									
1	0	5																									
2	3	8																									
3	12	9																									
4	18	25																									
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7	5	8																									
<p><u>Deans</u> Mean: 4.78 SD: 1.18 Mode: 5.00 Median: 5.00</p>	<p><u>Non-deans</u> Mean: 4.40 SD: 1.56 Mode: 5.00 Median: 5.00</p>																										

Question 9: Redesigning IL Instruction

The mean for the deans is a little higher than the mean for the non-deans in this question, indicating that, on average, deans perceived that the Framework would have more impact on redesigning instruction sessions, assignments, courses, and curricula at their institution than non-deans did. Six non-deans gave a very low Likert rating ("1") to this question; there were no deans who gave a very low rating on this question. This pattern continues throughout the Likert questions; deans never gave an impact rating of "1" to any of the Likert questions. However, the mode for Question 9 (the number that appears most frequently in a number set) for both groups was moderately high ("5") so there is not a great deal of discrepancy between the groups on this issue.

Looking at the theme *Advantage: The Framework Helps Academic Librarians Design Information Literacy Instruction/Programs* and its opposite theme *Challenge: The Framework Will Have Minimal Impact on Instruction*, there were more participants who thought the Framework *would* have an impact on IL instruction/programs than those who thought it would have *minimal* impact on instruction. This is consistent with the quantitative results. Dean participant #127, who said they "completely redesigned" an IL course based on the Framework, gave both Question 9 and Question 21 a very high Likert rating ("7")—which is consistent with their qualitative response. Non-dean participant #28, who thought the Framework would affect "some instruction" but not "in large ways," gave Question 9 a moderate Likert rating ("4") and a moderately low rating ("3") for overall impact in Question 21. Dean participant #42 gave a moderately high rating ("5") to Question 9, but was doubtful that the Framework would have much impact. The rest of Dean participant #42's response (not included in Table 9) specifies

that the Framework might not have much *future* impact because their institution was already "using both the Framework and the earlier Standards to do many of the things you ask about in previous questions." Thus, the quantitative and qualitative results for Question 9 indicate that most participants (both deans and non-deans) think that the Framework will have a moderately high impact on redesigning IL instruction.

The following table (Table 11) displays the descriptive statistics for Question 10 and the corresponding qualitative themes.

Table 11

Comparing and Contrasting Question 10 Quantitative Results to Qualitative Response Themes

Question 10: Quantitative Results	Qualitative Response Themes with Exemplars																										
<p>Question 10: Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to connect information with student success initiatives at your institution.</p> <table border="1"> <caption>Question 10 Quantitative Results Data</caption> <thead> <tr> <th>Likert Item Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>8</td> </tr> <tr> <td>2</td> <td>3</td> <td>7</td> </tr> <tr> <td>3</td> <td>6</td> <td>6</td> </tr> <tr> <td>4</td> <td>31</td> <td>28</td> </tr> <tr> <td>5</td> <td>38</td> <td>32</td> </tr> <tr> <td>6</td> <td>18</td> <td>14</td> </tr> <tr> <td>7</td> <td>3</td> <td>4</td> </tr> </tbody> </table> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><u>Deans</u> Mean: 4.72 SD: 1.05 Mode: 5.00 Median: 5.00</p> </td> <td style="width: 50%; vertical-align: top;"> <p><u>Non-deans</u> Mean: 4.29 SD: 1.51 Mode: 5.00 Median: 4.50</p> </td> </tr> </table>	Likert Item Response	DEANS (%)	NON-DEANS (%)	1	0	8	2	3	7	3	6	6	4	31	28	5	38	32	6	18	14	7	3	4	<p><u>Deans</u> Mean: 4.72 SD: 1.05 Mode: 5.00 Median: 5.00</p>	<p><u>Non-deans</u> Mean: 4.29 SD: 1.51 Mode: 5.00 Median: 4.50</p>	<p>Advantage: <i>The Framework Promotes Value of Information Literacy</i> (3 Deans, 7 Non-deans)</p> <p>"I think the Framework is a powerful document that brings information literacy instruction out of the library and back into the campus more widely, as it was always meant to exist." (Non-dean participant #44: gave Question 10 a "5")</p> <p>Challenge: <i>Fundamental Skills First</i> (1 Dean, 2 Non-deans)</p> <p>"The Framework is an abstract concept, and you have to be fairly adept as a researcher before you can understand the abstraction. An undergraduate is not going to connect with the concepts of the Framework. So what do you have to do in order to help them make that connection? You have to help them learn the fundamental research skills before they will be able to think of research at a higher level. The cognitive threshold theory on which the Framework is based was intended to explain the moment one understands a pivotal concept within a discipline. Information Literacy is not a standalone discipline. Information Literacy over-arches all the disciplines. We want our students to be information literate in their discipline." (Non-dean participant #66: gave Question 10 a "2")</p>
Likert Item Response	DEANS (%)	NON-DEANS (%)																									
1	0	8																									
2	3	7																									
3	6	6																									
4	31	28																									
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<p><u>Deans</u> Mean: 4.72 SD: 1.05 Mode: 5.00 Median: 5.00</p>	<p><u>Non-deans</u> Mean: 4.29 SD: 1.51 Mode: 5.00 Median: 4.50</p>																										

Question 10: Student Success Initiatives

This is the third lowest mean for the non-deans' ratings of Likert questions indicating that, on average, non-deans tended to believe that the Framework would have less impact on connecting information with student success initiatives at their institutions than it might have on issues discussed in the other survey questions. However, deans on average still thought that the Framework would have a moderately high impact (the deans' mean rounded up to "5") on student success initiatives.

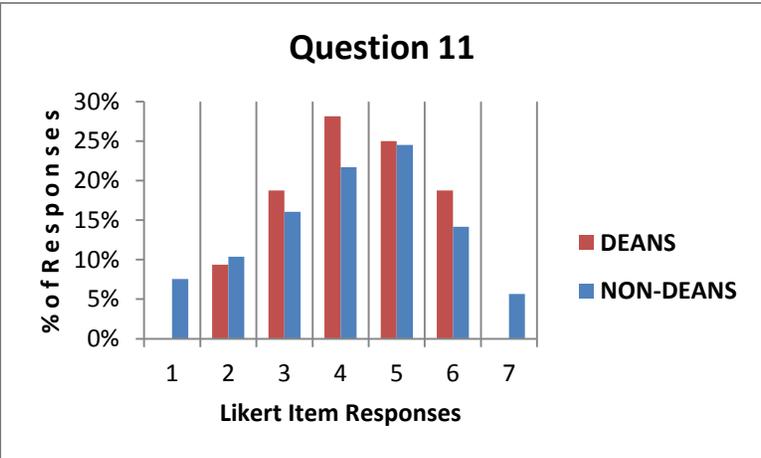
While the phrase "student success initiatives" did not appear in the participants' responses, there were two themes that related to the increase of student success at the institutional level: *Advantage: The Framework Promotes Value of Information Literacy* and *Challenge: Fundamental Skills First*. As stated in Chapter Two, research has shown that IL is important in student retention and academic success, allowing students to become "independent seekers of truth" (Breivik, 1991, p. 87). Given that IL is important to student success, as Non-dean participant #44 stated, the Framework is powerful because it brings IL instruction "out of the library and back into the campus more widely, as it was always meant to exist." This participant gave a moderately high rating ("5") for Question 10 and a high overall impact ("6") for Question 21, which is consistent with their qualitative response. Non-dean participant #66 did not think that undergraduates would "connect with the concepts of the Framework" because it was too abstract, and fundamental research skills needed to be taught first. Non-dean participant #66 gave a low Likert rating ("2") for this question and a very low overall impact ("1") for Question 21, which is consistent with their qualitative response. Thus, there is somewhat of a contradiction between the quantitative and qualitative data for Question 10 here. The

quantitative data indicates that participants thought the Framework would have a moderately high impact on student success initiatives, while the qualitative data's lack of themes directly related to student success initiatives suggests that this issue may not be as important to participants as other issues discussed in the Framework.

The next table (Table 12) displays the descriptive statistics for Question 11 and the corresponding qualitative themes.

Table 12

Comparing and Contrasting Question 11 Quantitative Results to Qualitative Response Themes

Question 11: Quantitative Results	Qualitative Response Themes with Exemplars										
<p>Question 11: Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to collaborate on pedagogical research and involve students in that research at your institution.</p>  <table border="1" data-bbox="373 1101 892 1279"> <thead> <tr> <th><u>Deans</u></th> <th><u>Non-deans</u></th> </tr> </thead> <tbody> <tr> <td>Mean: 4.25</td> <td>Mean: 4.10</td> </tr> <tr> <td>SD: 1.24</td> <td>SD: 1.61</td> </tr> <tr> <td>Mode: 4.00</td> <td>Mode: 5.00</td> </tr> <tr> <td>Median: 4.00</td> <td>Median: 4.00</td> </tr> </tbody> </table>	<u>Deans</u>	<u>Non-deans</u>	Mean: 4.25	Mean: 4.10	SD: 1.24	SD: 1.61	Mode: 4.00	Mode: 5.00	Median: 4.00	Median: 4.00	<p>Advantage: The Framework Supports Academic Librarian Collaboration with Discipline Faculty (1 Dean, 11 Non-deans)</p> <p>"We are looking for ways to be more involved in the research process for our institution and help with information literacy understanding across the curriculum. I have already introduced the Framework to my faculty. It is in language that is clear and easy to implement. Many said they could or already did include IL in their coursework...the Framework would make it easier to know which concepts should be included." (Non-dean participant #85: gave Question 11 a "5")</p> <p>"Colleagues and I have already shared the Framework with a number of faculty members, and the concepts work extremely well with developing critical thinking, being able to aggregate information, produce research, as well as assist students after they leave the university." (Non-dean participant #38: gave Question 11 a "7")</p> <p>Challenge: Lack of Collaboration (0 Dean, 2 Non-Deans)</p> <p>"Pitched as a tool for helping librarians collaborate with faculty, I think the FW fails to account for the difficulties many of us have in getting faculty to work with us..." (Non-dean participant #89: gave Question 11 a "2")</p>
<u>Deans</u>	<u>Non-deans</u>										
Mean: 4.25	Mean: 4.10										
SD: 1.24	SD: 1.61										
Mode: 4.00	Mode: 5.00										
Median: 4.00	Median: 4.00										

Question 11: Collaboration on Pedagogical Research

This is one of the two Likert questions where the dean's mode is lower than the non-dean's mode. Twenty-eight percent of the deans thought that the Framework would have a moderate impact ("4") on collaboration on pedagogical research and involving students in that research at their institution, and 25% of the non-deans thought it would have a moderately high impact ("5") on this issue. This is consistent with the amount of non-deans whose response was coded as *Advantage: The Framework Supports Academic Librarian Collaboration with Discipline Faculty* (1 Dean, 11 Non-deans). Non-dean participant #85 wrote that the Framework's concepts "work extremely well" in producing research, and they had already shared the Framework with faculty. This non-dean's ratings were consistent with their qualitative response, giving Question 11 a very high rating ("7") and their overall impact rating for Question 21 was high ("6"). Also consistent with the quantitative data was the small amount of participants whose responses were coded *Challenge: Lack of Collaboration* (0 Dean, 2 Non-deans). Non-dean participant #89 did not think the Framework accounted for the difficulty that academic librarians had "in getting faculty to work with us...because of the intense demands on teaching faculty, librarians, administrators, and others in a struggling higher ed institution." This participant gave a low impact ("2") for Question 11 and a moderately low impact ("3") for overall impact. Accordingly, the quantitative and qualitative results for Question 11 indicate that the issue of collaboration on pedagogical research is more important to non-deans, who also think the Framework will have a greater impact on collaboration than non-deans.

What follows is Table 13 displaying the descriptive statistics for Question 12 and the corresponding qualitative themes.

Table 13

Comparing and Contrasting Question 12 Quantitative Results to Qualitative Response Themes

Question 12: Quantitative Results	Qualitative Response Themes with Exemplars																										
<p>Question 12: Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to create wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning at your institution.</p> <table border="1"> <caption>Question 12: Likert Item Responses Data</caption> <thead> <tr> <th>Likert Item Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>5</td> </tr> <tr> <td>2</td> <td>0</td> <td>5</td> </tr> <tr> <td>3</td> <td>10</td> <td>10</td> </tr> <tr> <td>4</td> <td>25</td> <td>20</td> </tr> <tr> <td>5</td> <td>48</td> <td>20</td> </tr> <tr> <td>6</td> <td>10</td> <td>28</td> </tr> <tr> <td>7</td> <td>5</td> <td>10</td> </tr> </tbody> </table> <table border="0"> <tr> <td data-bbox="373 1133 556 1315"> <u>Deans</u> Mean: 4.72 SD: 0.92 Mode: 5.00 Median: 5.00 </td> <td data-bbox="709 1133 892 1315"> <u>Non-deans</u> Mean: 4.59 SD: 1.65 Mode: 6.00 Median: 5.00 </td> </tr> </table>	Likert Item Response	DEANS (%)	NON-DEANS (%)	1	0	5	2	0	5	3	10	10	4	25	20	5	48	20	6	10	28	7	5	10	<u>Deans</u> Mean: 4.72 SD: 0.92 Mode: 5.00 Median: 5.00	<u>Non-deans</u> Mean: 4.59 SD: 1.65 Mode: 6.00 Median: 5.00	<p>Advantage: <i>The Framework Encourages Discussion</i> (2 Deans, 12 Non-deans)</p> <p>"We've designed our curriculum around it, and we use it in our assessment practices, and it came at a time when the University as a whole was working on these things, so librarians have been invited to speak to other faculty about how we are using this Framework, and those talks have been well received." (Dean participant #134: gave Question 12 a "6")</p> <p>"The Framework gives us language to talk about information literacy beyond the standards which were almost more of a process - if you do step one, step two, and so on, you are information literate. The Framework helps us talk with faculty and students about the complexities of information and the skills needed to navigate an information-laden world." (Non-dean participant #65: gave Question 12 a "7")</p> <p>Challenge: <i>Discipline Faculty Unfamiliar with Framework</i> (1 Dean, 1 Non-dean)</p> <p>"[The Framework] is not known among any of the non-librarian communities with which we interact." (Dean participant #119: gave Question 12 a "4")</p> <p>"Our faculty and administration have no idea what this Framework is and are not interested in librarians being more</p>
Likert Item Response	DEANS (%)	NON-DEANS (%)																									
1	0	5																									
2	0	5																									
3	10	10																									
4	25	20																									
5	48	20																									
6	10	28																									
7	5	10																									
<u>Deans</u> Mean: 4.72 SD: 0.92 Mode: 5.00 Median: 5.00	<u>Non-deans</u> Mean: 4.59 SD: 1.65 Mode: 6.00 Median: 5.00																										

involved with the curriculum than we already are. They have other priorities." (Non-dean participant #35: gave Question 12 a "1")

Challenge: Discipline Faculty Disinterested in the Framework (1 Dean, 3 Non-deans)

"While it [the Framework] will impact how I instruct and assess student learning, I do not believe that all of my librarian colleagues will feel the same. Nor do I believe that the university administration or majority of faculty will appreciate the significance or potential impact of the Framework" (Non-dean participant #12: gave Question 12 a "4")

Question 12: Creating Wider Conversations

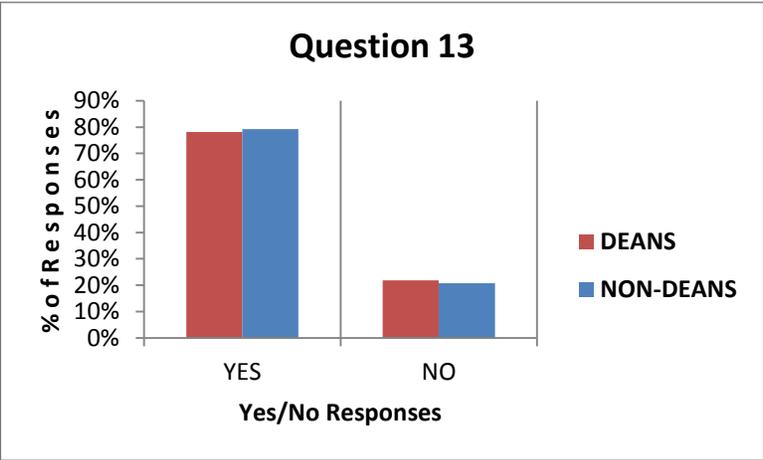
The descriptive statistics for this question are unique in two ways. First, the non-dean's mode is the highest one for all the Likert questions and the dean's standard deviation (SD) is the lowest one for all the Likert questions. A low SD indicates that the deans' ratings were close to the mean—in other words, the deans were the most in agreement on this question. The non-deans' mode suggests that non-deans believed—out of all the issues in the Likert questions—that the Framework would have the most impact on creating wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning at their institution. The qualitative data is consistent with the quantitative data for Question 12. Twelve non-dean responses and only two dean responses were coded as *Advantage: The Framework Encourages Discussion*. Non-dean participant #65 wrote that "the Framework helps us talk with faculty and students about the complexities of information and the skills needed to navigate an information-laden world." This participant gave a very high rating ("7") for both Question 12 and Question 21. A smaller amount of non-dean responses were coded as *Challenge: Discipline Faculty Unfamiliar with Framework* and *Challenge: Discipline Faculty Disinterested in the Framework*. If discipline faculty are not familiar or interested in the Framework, then wider conversations about student learning and assessment will not be created. The complete response of dean participant #119, who gave a moderate rating ("4") on Question 12 and on the overall impact of the Framework, said the Framework's impact "will be modest at best" because it "is not known among any of the non-librarian communities with which we interact." Non-dean participant #12, who gave a moderate rating ("4") to this question and a moderately low ("3") overall impact

for Question 21, did not "believe that the university administration or majority of faculty will appreciate the significance or potential impact of the Framework." Thus, the quantitative and qualitative results for Question 12 indicate that non-deans think the Framework will have a greater impact on creating wider conversations about student learning, scholarship, and assessment than the deans.

Next, Table 14 displays the descriptive statistics for Question 13 and the corresponding qualitative themes.

Table 14

Comparing and Contrasting Question 13 Quantitative Results to Qualitative Response Themes

Question 13: Quantitative Results	Qualitative Response Themes with Exemplars										
<p>Question 13: Do you think the Framework will guide the development of information literacy at your institution?</p>  <table border="1" data-bbox="373 987 890 1170"> <thead> <tr> <th><u>Deans</u></th> <th><u>Non-deans</u></th> </tr> </thead> <tbody> <tr> <td>Mean: 1.78</td> <td>Mean: 1.79</td> </tr> <tr> <td>SD: 0.42</td> <td>SD: 0.41</td> </tr> <tr> <td>Mode: 2.00</td> <td>Mode: 2.00</td> </tr> <tr> <td>Median: 2.00</td> <td>Median: 2.00</td> </tr> </tbody> </table>	<u>Deans</u>	<u>Non-deans</u>	Mean: 1.78	Mean: 1.79	SD: 0.42	SD: 0.41	Mode: 2.00	Mode: 2.00	Median: 2.00	Median: 2.00	<p>Advantage: The Framework Helps Academic Librarians Design Information Literacy Instruction/Programs (7 Deans, 18 Non-deans)</p> <p>"I know we will use the Framework for our instruction and designing our curriculum." (Dean participant #128: answered "Yes" to Question 13)</p> <p>"It's [the Framework] a benchmark for us to redesign and implement our information literacy program in the future." (Dean participant #39: answered "Yes" to Question 13)</p> <p>"We did use it [the Framework] to redesign the course objectives for our credit bearing IL course." (Non-dean participant #43: answered "No" to Question 13)</p> <p>"I do discuss the Frames main concepts in my IL classes with students in the context of life-long learning." (Non-dean participant #8: answered "Yes" to Question 13)</p> <p>Challenge: The Framework Does Not Affect Current Practices (5 Deans, 11 Non-deans)</p> <p>"The Framework is not that different from what we already do." (Dean participant #21: answered "Yes" to Question 13)</p> <p>"Most of us will continue to teach practical search strategies and introduce library tools and concepts just as we did</p>
<u>Deans</u>	<u>Non-deans</u>										
Mean: 1.78	Mean: 1.79										
SD: 0.42	SD: 0.41										
Mode: 2.00	Mode: 2.00										
Median: 2.00	Median: 2.00										

before." (Non-dean participant #19: answered "No" to Question 13)

"Practices are so ingrained within the library department and we don't have much influence on curriculum. I believe things will stay as is despite the new Framework." (Non-dean participant #124: answered "No" to Question 13)

Question 13: Development of IL

The mean for both groups is the highest mean for all of the Yes/No questions indicating that, on average, more participants chose "Yes" on this issue—that the Framework would guide the development of IL at their institution—than on any other Yes/No question. Consistent with the quantitative results for Question 13, 7 dean responses and 18 non-dean responses were coded as *Advantage: The Framework Helps Academic Librarians Design Information Literacy Instruction/Programs*. Dean participant #39, who answered "Yes" to Question 13 and gave a high rating ("6") to the Framework's overall impact, wrote that the Framework was "a benchmark for us to design and implement our information literacy program in the future." However, non-dean participant #43's response was not consistent with their "No" answer to Question 13 and their low rating ("2") of the Framework's overall impact. This participant's complete response explains the contradiction. "The recent well-publicized critiques of the framework have led some of my colleagues to be skeptical about the framework's utility, though we did use it to redesign the course objectives for our credit bearing IL course." This non-dean's answer is a reflection of the dialectic discussed in Chapter Five.

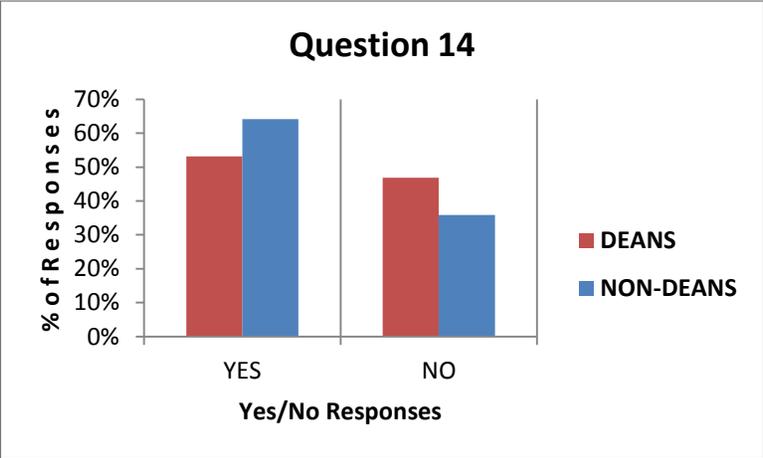
Also consistent with the quantitative data is the percentage of deans and non-deans who chose "No" on this question (22% of the deans and 21% of the non-deans) and the percentage of dean and non-dean responses coded as *Challenge: The Framework Does Not Affect Current Practices* (19% of the deans and 13% of the non-deans). Non-dean participant #124, who answered "No" to Question 13 and gave a moderately low rating ("3") to the Framework's overall impact, described that "practices are so ingrained within the library department and we don't have much influence on curriculum."

However, dean participant #21's response is not consistent with their "Yes" answer to this question and their moderately high rating ("5") of overall impact. Their complete response was: "The Framework is not that different from what we already do. Librarians at this institution are full members of the faculty and there is already a good level of collaboration on research and instruction." This response contradicts the participant's moderately high rating of the Framework's overall impact, perhaps indicating that this dean, while agreeing with the Framework's concepts, feels that they have already "been there, done that." So, the quantitative and qualitative results for Question 13 indicate that a strong majority of participants in both groups think that the Framework will impact development of IL at their institution.

The following table (Table 15) displays the descriptive statistics for Question 14 and the corresponding qualitative themes.

Table 15

Comparing and Contrasting Question 14 Quantitative Results to Qualitative Response Themes

Question 14: Quantitative Results	Qualitative Response Themes with Exemplars										
<p>Question 14: Do you think the Framework will promote discussion about the nature of key concepts in information in general education and disciplinary studies at your institution?</p>  <table border="1" data-bbox="373 1026 890 1205"> <thead> <tr> <th><u>Deans</u></th> <th><u>Non-deans</u></th> </tr> </thead> <tbody> <tr> <td>Mean: 1.53</td> <td>Mean: 1.64</td> </tr> <tr> <td>SD: 0.51</td> <td>SD: 0.48</td> </tr> <tr> <td>Mode: 2.00</td> <td>Mode: 2.00</td> </tr> <tr> <td>Median: 2.00</td> <td>Median: 2.00</td> </tr> </tbody> </table>	<u>Deans</u>	<u>Non-deans</u>	Mean: 1.53	Mean: 1.64	SD: 0.51	SD: 0.48	Mode: 2.00	Mode: 2.00	Median: 2.00	Median: 2.00	<p>Advantage: <i>The Framework Is a Conceptual Lens That Provides Potential to Change the Way Information Literacy Is Interpreted and Taught</i> (4 Deans, 11 Non-deans)</p> <p>"Most of our faculty are not aware of the many topics we teach, presuming that we only cover 'how to search.' The new Framework enables faculty to envision research as a critical thinking process rather than a set of procedural tasks." (Dean participant #62: answered "No" to Question 14)</p> <p>"It [the Framework] will help us to shift the emphasis of our instruction away from tool use and towards bigger concepts." (Non-dean participant #13: answered "Yes" to Question 14)</p> <p>"We've started examining our work in light of Concepts instead of Tool Use." (Non-dean participant #17: answered "Yes" to Question 14)</p> <p>Challenge: <i>Information Literacy Is Separate from the Disciplines</i> (3 Deans, 6 Non-deans)</p> <p>"Just because librarians understand the importance of the Framework for Information Literacy doesn't mean the administration will change their view of the library's role in supporting the curriculum." (Dean participant #59: answered "No" to Question 14)</p> <p>"The institution does not have much appetite for requirements</p>
<u>Deans</u>	<u>Non-deans</u>										
Mean: 1.53	Mean: 1.64										
SD: 0.51	SD: 0.48										
Mode: 2.00	Mode: 2.00										
Median: 2.00	Median: 2.00										

and standards when it comes to IL." (Non-dean participant #81: answered "No" to Question 14)

Question 14: Promote Discussion of Key Concepts

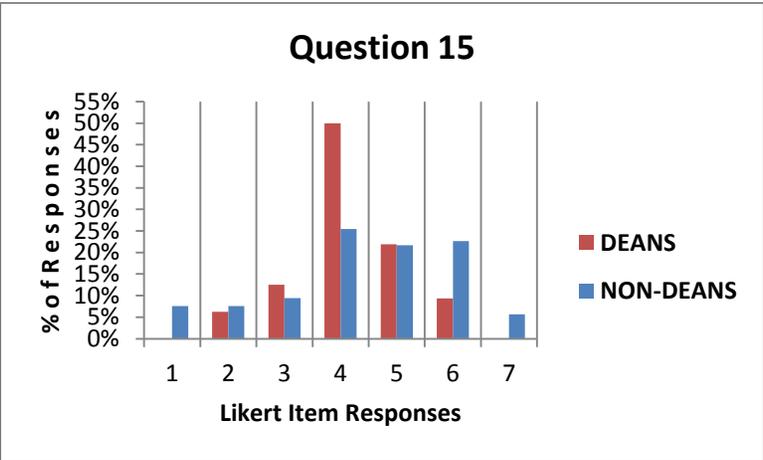
There is much more disagreement on this issue than in the previous question. The results show that 53% of deans and 64% of non-deans think that the Framework will promote discussion of key concepts in information in general education and disciplinary studies at their institution, while 47% of deans and 36% of non-deans think that it will not. The deans are almost evenly divided on the issue, while a greater percentage of non-deans chose "Yes" on this question. This division among deans is reflected in the qualitative themes, where 4 dean responses were coded as *Advantage: The Framework Is a Conceptual Lens That Provides Potential to Change the Way Information Literacy Is Interpreted and Taught* and 3 dean responses were coded as *Challenge: Information Literacy Is Separate from the Disciplines*. Also reflecting the quantitative data for this question, more non-dean responses (11) were coded as an *Advantage* theme than a *Challenge* theme (6 non-deans). Non-dean participant #13, who answered "Yes" to this question and gave a moderately high rating ("5") for the Framework's overall impact, thought the Framework would "help us to shift the emphasis of our instruction away from tool use and towards bigger concepts." However, dean participant #62's response reveals the dialectic in that they answered "No" to this question but thought the Framework "enables faculty to envision research as a critical thinking process rather than a set of procedural tasks." In their complete response, the dean wrote that they had already developed a program based on the Framework so "it may not change our instructional approach as much as it will legitimize our instructional approach." Non-dean participant #81, who answered "No" to Question 4 and, correspondingly, gave a low rating ("2") to the Framework's overall impact, did not think the institution had "much appetite for

requirements and standards when it comes to IL." It may be assumed, then, that the quantitative and qualitative results for Question 14 indicate this issue—the Framework will promote discussion of key concepts—is bone of contention among academic librarians.

Next, Table 16 displays the descriptive statistics for Question 15 and the corresponding qualitative themes.

Table 16

Comparing and Contrasting Question 15 Quantitative Results to Qualitative Response Themes

Question 15: Quantitative Results	Qualitative Response Themes with Exemplars										
<p>Question 15: Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage thinking about how librarians, faculty, and others can address core or portal concepts and associated elements in the information field at your institution.</p>  <table border="1" data-bbox="373 1101 890 1279"> <thead> <tr> <th><u>Deans</u></th> <th><u>Non-deans</u></th> </tr> </thead> <tbody> <tr> <td>Mean: 4.16</td> <td>Mean: 4.37</td> </tr> <tr> <td>SD: 0.99</td> <td>SD: 1.61</td> </tr> <tr> <td>Mode: 4.00</td> <td>Mode: 4.00</td> </tr> <tr> <td>Median: 4.00</td> <td>Median: 4.50</td> </tr> </tbody> </table>	<u>Deans</u>	<u>Non-deans</u>	Mean: 4.16	Mean: 4.37	SD: 0.99	SD: 1.61	Mode: 4.00	Mode: 4.00	Median: 4.00	Median: 4.50	<p>Advantage: <i>The Framework Helps Academic Librarians Think about Information Literacy</i> (0 Dean, 10 Non-deans)</p> <p>"Some may be ready to embrace a new way of thinking about information literacy, which is how I think of the Framework. Those who embrace it will make changes and that will impact library practices at our institution." (Non-dean participant #23: gave Question 15 a "7")</p> <p>"We have written program-level outcomes based on the Framework for our instruction program so I think we have opened the door to shifting how we think about this topic." (Non-dean participant #34: gave Question 15 a "5")</p> <p>Challenge: <i>The Framework Does Not Offer Anything New</i> (1 Dean, 10 Non-deans)</p> <p>"The content of IL is the same. This provides a new POV. Currently librarians at my institution are not willing to change their own POV to the Framework's." (Non-dean participant #100: gave Question 15 a "3")</p> <p>"In a practical sense, the new Framework doesn't offer much new above what we currently are doing." (Non-dean participant #29: gave Question 15 a "2")</p>
<u>Deans</u>	<u>Non-deans</u>										
Mean: 4.16	Mean: 4.37										
SD: 0.99	SD: 1.61										
Mode: 4.00	Mode: 4.00										
Median: 4.00	Median: 4.50										

Question 15: Will Encourage Thinking about Core or Portal Concepts

This is the only Likert question where the mode for both groups is the same *and* the mode is "4" or moderate impact instead of a "5" or moderately high impact. So, overall, both groups do think the Framework will have only a moderate level of impact on encouraging thinking about how to address core or portal concepts at their institution. But, as their lower SD indicates, the deans are more in agreement about this issue than the non-deans. The median (middle number for the number set) for the non-deans shows that half of the non-deans think the Framework will have moderate-very low impact on thinking about core/portal concepts, and half of the non-deans think it will have moderately high-very high impact. The qualitative data is consistent with this division: 10 non-dean responses were coded as *Advantage: The Framework Helps Academic Librarians Think about Information Literacy* and 10 non-dean responses were coded as *Challenge: The Framework Does Not Offer Anything New*. Non-dean participant #23, who gave a very high rating ("7") for Question 15 and a moderately high ("5") impact for Question 21, wrote that Framework was "a new way of thinking about information literacy" and that some would "be ready to embrace" but "some may not." Non-dean participant #29, who gave a low rating ("2") to both Question 15 and 21, expressed the view that "the new Framework doesn't offer much new above what we currently are doing."

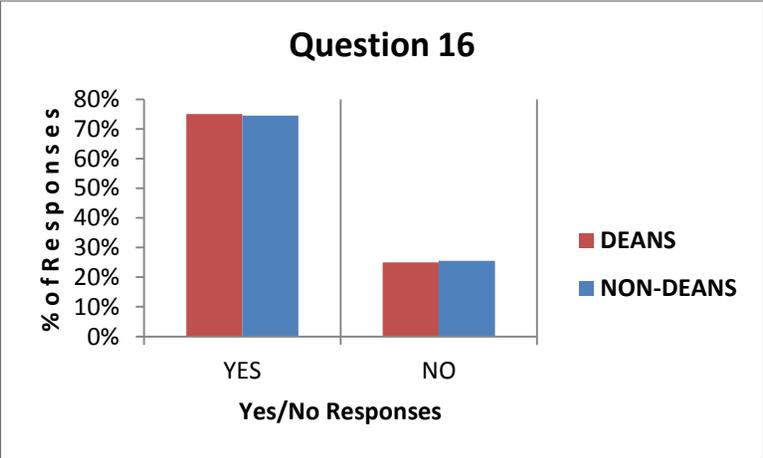
In contrast to the quantitative data for Question 15, which indicates that most deans thought the Framework would have a moderate level of impact on thinking about core or portal concepts, the qualitative data shows that the deans did not have much to say on this issue. Thus, the quantitative results for Question 15 indicate that deans think

the Framework will have a moderate impact on this issue—encourage thinking about core or portal concepts—but the qualitative data indicates that this issue is not necessarily at the forefront of their thinking (at least in this sample). Quantitative and qualitative data indicate that non-deans are divided on this issue.

Table 17 displays the descriptive statistics for Question 16 and the corresponding qualitative themes.

Table 17

Comparing and Contrasting Question 16 Quantitative Results to Qualitative Response Themes

Question 16: Quantitative Results	Qualitative Response Themes with Exemplars										
<p>Question 16: Do you think the Framework will help librarians contextualize and integrate information literacy for your institution?</p>  <table border="1" data-bbox="373 1026 890 1205"> <thead> <tr> <th><u>Deans</u></th> <th><u>Non-deans</u></th> </tr> </thead> <tbody> <tr> <td>Mean: 1.75</td> <td>Mean: 1.75</td> </tr> <tr> <td>SD: 0.44</td> <td>SD: 0.44</td> </tr> <tr> <td>Mode: 2.00</td> <td>Mode: 2.00</td> </tr> <tr> <td>Median: 2.00</td> <td>Median: 2.00</td> </tr> </tbody> </table>	<u>Deans</u>	<u>Non-deans</u>	Mean: 1.75	Mean: 1.75	SD: 0.44	SD: 0.44	Mode: 2.00	Mode: 2.00	Median: 2.00	Median: 2.00	<p>Advantage: The Framework Is Currently Being Integrated (9 Deans, 14 Non-deans)</p> <p>"The Framework already guides library faculty in the development of their courses. So the Framework does impact library practices, but will not significantly change them. But, it will be helpful when discussing instructional assessment and accreditation." (Dean participant #70: answered "Yes" to Question 16)</p> <p>"We are using the Framework as a tool for scaffolding online lessons to teach metaliteracy skills across multiple institutions." (Dean participant #91: answered "Yes" for Question 16)</p> <p>"It [the Framework] will help impact and build our future information literacy practices, but some of the process is already taking place." (Non-dean participant #1: answered "Yes" for Question 16)</p> <p>Challenge: The Framework Is Not Being Used (0 Dean, 2 Non-deans)</p> <p>"We talked about the Framework as a group of instruction librarians about 7 months ago, but then never spoke of it again as a group." (Non-dean participant #138: answered "Yes" for Question 16)</p>
<u>Deans</u>	<u>Non-deans</u>										
Mean: 1.75	Mean: 1.75										
SD: 0.44	SD: 0.44										
Mode: 2.00	Mode: 2.00										
Median: 2.00	Median: 2.00										

"My impression here is that we don't really make decisions based on the Framework--that is, we don't have copies of it up to refer to, and we don't use it in making decisions about our teaching." (Non-dean participant #56: answered "No" for Question 16)

Question 16: Help to Contextualize and Integrate IL

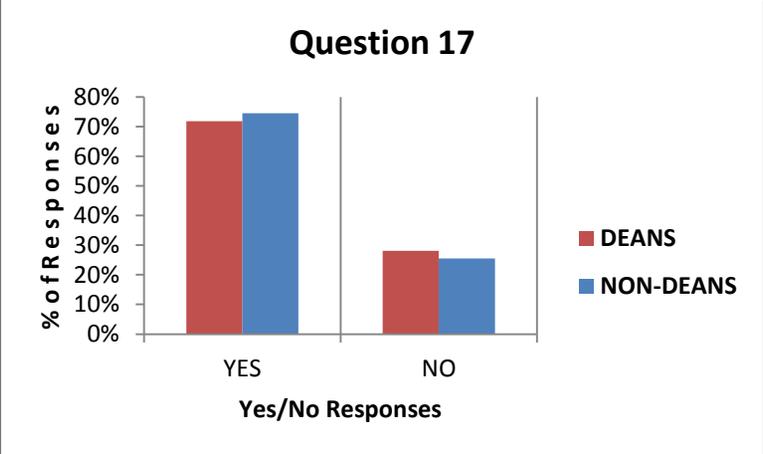
Descriptive statistics for this question show that an equal percentage of deans and non-deans chose "Yes" (75%) and an equal percentage of both groups chose "No" (25%). The qualitative data is consistent with these results, showing that more dean and non-dean responses were coded as *Advantage: The Framework Is Currently Being Integrated* than as *Challenge: The Framework Is Not Being Used*. Dean participant #70 indicates some contradiction within their response. "So the Framework does impact library practices, but will not significantly change them. But, it will be helpful when discussing instructional assessment and accreditation." However, despite the belief that the Framework would not significantly change library practice, this dean answered "Yes" to Question 16 and gave a high rating ("6") to the Framework's overall impact.

No dean responses were coded as *Challenge: The Framework Is Not Being Used*. Non-dean participant #138, who answered "Yes" to Question 16 but gave a moderately low rating ("3") for Question 21, wrote that "we talked about the Framework as a group of instruction librarians about 7 months ago, but then never spoke of it again as a group." Perhaps the contradiction in this non-dean's answer to Question 16 and their qualitative response can be explained as the tension between an *ideal* state (the Framework will impact IL integration) and the existing state of affairs at their institution. Consequently, the quantitative and qualitative results for Question 16 indicate that the majority of the participants agree on this issue—that the Framework will help to contextualize and integrate IL at their institution.

Next, Table 18 displays the descriptive statistics for Question 16 and the corresponding qualitative themes.

Table 18

Comparing and Contrasting Question 17 Quantitative Results to Qualitative Response Themes

Question 17: Quantitative Results	Qualitative Response Themes with Exemplars																			
<p>Question 17: Do you think the Framework will encourage a deeper understanding of what knowledge practices and dispositions an information-literate student should develop at your institution?</p>  <table border="1" data-bbox="310 565 1073 1019"> <caption>Question 17: Quantitative Results</caption> <thead> <tr> <th>Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>YES</td> <td>~72</td> <td>~75</td> </tr> <tr> <td>NO</td> <td>~28</td> <td>~25</td> </tr> </tbody> </table> <table border="0" data-bbox="373 1063 892 1242"> <tr> <td><u>Deans</u></td> <td><u>Non-deans</u></td> </tr> <tr> <td>Mean: 1.72</td> <td>Mean: 1.75</td> </tr> <tr> <td>SD: 0.46</td> <td>SD: 0.44</td> </tr> <tr> <td>Mode: 2.00</td> <td>Mode: 2.00</td> </tr> <tr> <td>Median: 2.00</td> <td>Median: 2.00</td> </tr> </table>	Response	DEANS (%)	NON-DEANS (%)	YES	~72	~75	NO	~28	~25	<u>Deans</u>	<u>Non-deans</u>	Mean: 1.72	Mean: 1.75	SD: 0.46	SD: 0.44	Mode: 2.00	Mode: 2.00	Median: 2.00	Median: 2.00	<p>Advantage: The Framework Creates a Higher Level of Understanding (0 Dean, 2 Non-Deans)</p> <p>"The move away from 'bullet point' learning outcomes and toward a richer conceptual understanding of the context in which information literacy operates is a huge step forward. As an example, I can now show students results from a single Google Scholar search that illustrate the 'back and forth' of research replication and the notion of 'scholarship of conversation' to show more richly the function of a scholarly research study and where it fits in to advance human understanding. There was no room in the former competencies to have this type of rich discussion." (Non-dean participant #121: answered "Yes" to Question 17)</p> <p>Challenge: The Framework Contains Jargon (0 Dean, 4 Non-deans)</p> <p>"The Framework uses a lot of education jargon. I am still trying to make sense of the document and jargon, so I can imagine the difficult time a non-education faculty member will have." (Non-dean participant #14: answered "No" for Question 17)</p> <p>"The language used in the Framework alienated many librarians. Good concept, poor execution." (Non-dean participant #30: answered "Yes" for Question 17)</p>
Response	DEANS (%)	NON-DEANS (%)																		
YES	~72	~75																		
NO	~28	~25																		
<u>Deans</u>	<u>Non-deans</u>																			
Mean: 1.72	Mean: 1.75																			
SD: 0.46	SD: 0.44																			
Mode: 2.00	Mode: 2.00																			
Median: 2.00	Median: 2.00																			

Question 17: Encourage Deeper Understanding of Knowledge Practices and Dispositions

The majority of deans (72%) and non-deans (75%) thought the Framework would encourage a deeper level of understanding of what knowledge practices and dispositions an information-literate student should develop at their institution. Even though most participants answered "Yes" to this question, and the Framework provides a list of knowledge practices and dispositions for each of its six frames, no deans used the terms "knowledge practices" or "dispositions" in their qualitative responses. One non-dean used the terms. Two non-dean responses were coded as *Advantage: The Framework Creates a Higher Level of Understanding*, a theme which echoes the word "understanding" in Question 17. Non-dean participant #121, who answered "Yes" to this question and gave a moderately high rating ("5") for Question 21, wrote that "the move away from 'bullet point' learning outcomes and toward a richer conceptual understanding of the context in which information literacy operates is a huge step forward." This response, while demonstrating that the Framework does create a higher level of understanding, seems to denigrate (or at least, imply that they are not necessary) the "bullet point learning outcomes" provided as knowledge practices and dispositions in the Framework.

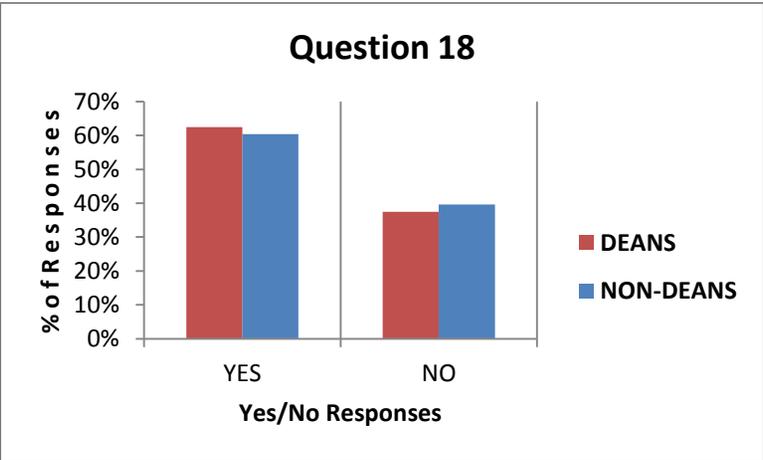
Four non-dean responses were coded as *Challenge: The Framework Contains Jargon*. Instead of encouraging a deeper understanding of IL practices, "the language used in the Framework alienated many librarians," wrote non-dean participant #30. This non-dean's qualitative response contradicts the "Yes" answer to Question 17, but is consistent with their moderately low rating ("3") for the Framework's overall impact. This is explained by the non-dean's last sentence in their response: "Good concept, poor

execution." So, the quantitative results for Question 17 indicate that the majority of the participants agree that the Framework will encourage a deeper understanding of knowledge practices and dispositions, but the qualitative results show that the participants in this sample are not thinking about or using the Framework's knowledge practices or dispositions.

The following table (Table 19) displays the descriptive statistics for Question 18 and the corresponding qualitative themes.

Table 19

Comparing and Contrasting Question 18 Quantitative Results to Qualitative Response Themes

Question 18: Quantitative Results	Qualitative Response Themes with Exemplars																			
<p>Question 18: Do you think the Framework will encourage the library community at your institution to develop resources such as curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames?</p>  <table border="1" data-bbox="310 597 1073 1057"> <caption>Question 18: Quantitative Results</caption> <thead> <tr> <th>Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>YES</td> <td>62</td> <td>60</td> </tr> <tr> <td>NO</td> <td>38</td> <td>40</td> </tr> </tbody> </table> <table border="0" data-bbox="373 1101 890 1279"> <tr> <td><u>Deans</u></td> <td><u>Non-deans</u></td> </tr> <tr> <td>Mean: 1.63</td> <td>Mean: 1.60</td> </tr> <tr> <td>SD: 0.49</td> <td>SD: 0.49</td> </tr> <tr> <td>Mode: 2.00</td> <td>Mode: 2.00</td> </tr> <tr> <td>Median: 2.00</td> <td>Median: 2.00</td> </tr> </table>	Response	DEANS (%)	NON-DEANS (%)	YES	62	60	NO	38	40	<u>Deans</u>	<u>Non-deans</u>	Mean: 1.63	Mean: 1.60	SD: 0.49	SD: 0.49	Mode: 2.00	Mode: 2.00	Median: 2.00	Median: 2.00	<p>Advantage: The Framework Will Affect Overall Curriculum (0 Deans, 2 Non-deans)</p> <p>"We have created institutional outcomes based on the Framework. These are likely to become implemented across the curriculum, which is a change to library practices at our institution thus far." (Non-dean #26: answered "Yes" for Question 18)</p> <p>Challenge: The Framework Does Not Affect Overall Curriculum (0 Deans, 5 Non-deans)</p> <p>"The larger conversation about integrating information literacy concepts across the curriculum is a long-term effort that the Framework will not change." (Non-dean #115: answered "No" for Question 18)</p>
Response	DEANS (%)	NON-DEANS (%)																		
YES	62	60																		
NO	38	40																		
<u>Deans</u>	<u>Non-deans</u>																			
Mean: 1.63	Mean: 1.60																			
SD: 0.49	SD: 0.49																			
Mode: 2.00	Mode: 2.00																			
Median: 2.00	Median: 2.00																			

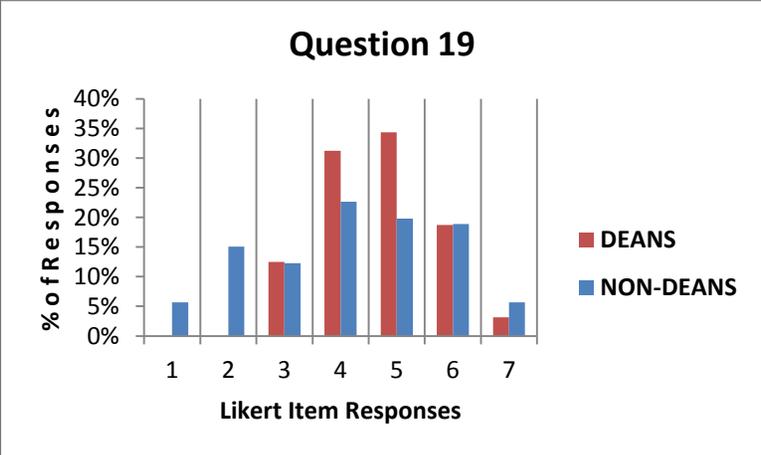
Question 18: Encourage the Development of Resources

In this Yes/No question, there is a greater percentage of deans (38%) and non-deans (40%) who answered "No" and a lower mean than in Question 17, indicating greater disagreement on this issue—that the Framework will encourage the development of resources such as curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames. Even though the six frames are an essential part of the Framework, no deans mention the frames in the qualitative data while the non-deans mention them six times. And, while 63% of the deans and 60% of the non-deans answered "Yes" on this question, there were no dean responses whose answers were coded either *Advantage: The Framework Will Affect Overall Curriculum* or *Challenge: The Framework Does Not Affect Overall Curriculum*. In contrast, two non-dean responses were coded with this table's *Advantage* theme and five non-dean responses were coded with the *Challenge* theme. Non-dean participant #26, who answered "Yes" on Question 18 and gave a high rating ("6") for Question 21, wrote that they had "created institutional outcomes based on the Framework." Non-dean participant #115, who answered "No" for Question 18 and gave a moderately low rating ("3") for the Framework's overall impact thought the opposite: "The larger conversation about integrating information literacy concepts across the curriculum is a long-term effort that the Framework will not change." However, the majority of the participants thought the Framework would encourage the development of curriculum guides, concept maps, and assessment instruments, but only the non-deans discuss this in their responses.

Next, Table 20 displays the descriptive statistics for Question 19 and the corresponding qualitative themes.

Table 20

Comparing and Contrasting Question 19 Quantitative Results to Qualitative Response Themes

Question 19: Quantitative Results	Qualitative Response Themes with Exemplars										
<p>Question 19: Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage librarians to work with faculty, departmental or college curriculum committees, instructional designers, staff from centers for teaching and learning, and others to design information literacy programs in a holistic way at your institution.</p>  <table border="1" data-bbox="373 1177 892 1356"> <thead> <tr> <th>Deans</th> <th>Non-deans</th> </tr> </thead> <tbody> <tr> <td>Mean: 4.69</td> <td>Mean: 4.15</td> </tr> <tr> <td>SD: 1.03</td> <td>SD: 1.64</td> </tr> <tr> <td>Mode: 5.00</td> <td>Mode: 4.00</td> </tr> <tr> <td>Median: 5.00</td> <td>Median: 4.00</td> </tr> </tbody> </table>	Deans	Non-deans	Mean: 4.69	Mean: 4.15	SD: 1.03	SD: 1.64	Mode: 5.00	Mode: 4.00	Median: 5.00	Median: 4.00	<p>Advantage: The Framework Supports Academic Librarian Collaboration with Discipline Faculty (1 Dean, 11 Non-deans)</p> <p>"The Framework has already impacted how I work with the first year writing faculty and how the library fits into their curriculum and outcomes." (Non-dean participant #53: gave Question 19 a "7")</p> <p>"I think the Framework is a huge leap forward for library instruction and I think it will open doors and start conversations with our disciplinary collaborators." (Non-dean participant #131: gave Question 19 a "6")</p> <p>Challenge: Discipline Faculty Not Committed to the Framework (2 Deans, 2 Non-deans)</p> <p>"Applying the Framework means adopting change. There is still a lot of resistance to change within this organization." (Dean participant #4: gave Question 19 a "5")</p> <p>"It [the Framework] will open the eyes for the librarians. I can't promise it will with faculty." (Dean participant #75: gave Question 19 a "6")</p> <p>"I am not sure the extent to which faculty will embrace the Framework itself." (Non-dean participant #83: gave Question 19 a "6")</p>
Deans	Non-deans										
Mean: 4.69	Mean: 4.15										
SD: 1.03	SD: 1.64										
Mode: 5.00	Mode: 4.00										
Median: 5.00	Median: 4.00										

Question 19: Encourage Librarians to Work with Others to Design IL Programs

This is the only question where the deans' mode is higher than the non-dean's mode. The results show that 34% of the deans thought the Framework would have a moderately high impact ("5") on encouraging librarians to work with faculty, departmental or college curriculum committees, instructional designers, staff from centers for teaching and learning, and others to design information literacy programs in a holistic way at their institution, while 23% of non-deans thought it would have only a moderate impact ("4") on this issue. However, even though the quantitative data suggests that the majority of deans answered "Yes" to this question, none of the dean responses were coded with the theme *Advantage: The Framework Supports Academic Librarian Collaboration with Discipline Faculty*. In contrast, 11 non-dean responses were coded with this theme. Non-dean participant #131, who gave a high rating ("6") to both Question 19 and Question 21, wrote "I think the Framework is a huge leap forward for library instruction and I think it will open doors and start conversations with our disciplinary collaborators." However, the remainder of the response indicates a presence of the dialectic, again. "But in general library instruction is still seen as moot or quaint by many faculty." So, while this participant thinks that the Framework supports collaboration with discipline faculty, there is the challenge of how IL is perceived by discipline faculty.

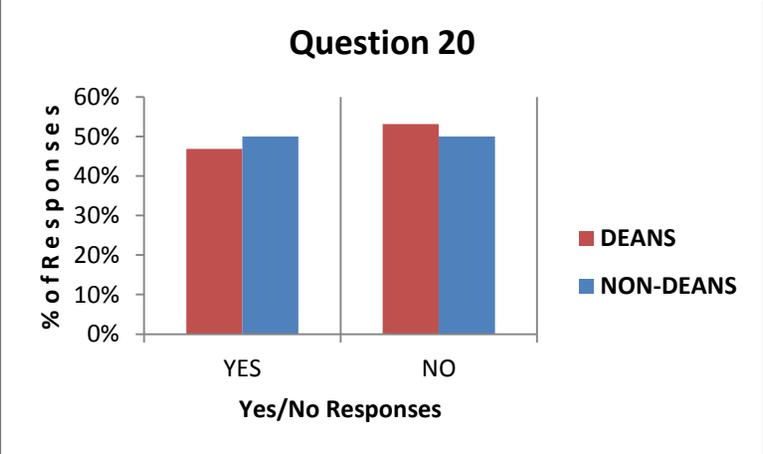
An equal number of dean and non-dean responses were coded as *Challenge: Discipline Faculty Not Committed to the Framework*. Dean participant #4, who gave a moderately high rating ("5") to Question 19 and a moderate rating ("4") to Question 21, wrote that "applying the Framework means adopting change. There is still a lot of

resistance to change within this organization." The quantitative data indicate that the deans think the Framework will have a moderately high impact on collaboration with non-librarians, while the non-deans think it will only have a moderate impact on this issue, but the issue seems to be more important to non-deans because more of them wrote about it in their qualitative responses.

Table 21 displays the descriptive statistics for Question 20 and the corresponding qualitative themes.

Table 21

Comparing and Contrasting Question 20 Quantitative Results to Qualitative Response Themes

Question 20: Quantitative Results	Qualitative Response Themes with Exemplars																			
<p>Question 20: Do you think the Framework will redefine the boundaries of what librarians teach and how they conceptualize the study of information literacy within the curricula at your institution?</p>  <table border="1" data-bbox="310 565 1073 1019"> <caption>Question 20 Quantitative Results</caption> <thead> <tr> <th>Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>YES</td> <td>47</td> <td>50</td> </tr> <tr> <td>NO</td> <td>53</td> <td>50</td> </tr> </tbody> </table> <table data-bbox="373 1063 892 1242"> <tr> <td><u>Deans</u></td> <td><u>Non-deans</u></td> </tr> <tr> <td>Mean: 1.47</td> <td>Mean: 1.50</td> </tr> <tr> <td>SD: 0.51</td> <td>SD: 0.50</td> </tr> <tr> <td>Mode: 1.00</td> <td>Mode: 1.00</td> </tr> <tr> <td>Median: 1.00</td> <td>Median: 1.50</td> </tr> </table>	Response	DEANS (%)	NON-DEANS (%)	YES	47	50	NO	53	50	<u>Deans</u>	<u>Non-deans</u>	Mean: 1.47	Mean: 1.50	SD: 0.51	SD: 0.50	Mode: 1.00	Mode: 1.00	Median: 1.00	Median: 1.50	<p>Advantage: <i>The Framework Helps Academic Librarians Think about Information Literacy</i> (0 Dean, 10 Non-deans)</p> <p>"The faculty in the library department at my institution are already rethinking their approaches to instruction based on their exploration of the Framework. This will continue to happen going forward." (Non-dean participant #96: answered "Yes" for Question 20)</p> <p>Challenge: <i>Lack of Commitment to the Framework by Academic Librarians</i> (1 Dean, 3 Non-deans)</p> <p>"We have many librarians who resist change and don't want to understand the effectiveness and purpose of the Framework to help in collaborative efforts with "subject-specific" teaching faculty (and vice-versa)." (Non-dean participant #112: answered "No" for Question 20)</p>
Response	DEANS (%)	NON-DEANS (%)																		
YES	47	50																		
NO	53	50																		
<u>Deans</u>	<u>Non-deans</u>																			
Mean: 1.47	Mean: 1.50																			
SD: 0.51	SD: 0.50																			
Mode: 1.00	Mode: 1.00																			
Median: 1.00	Median: 1.50																			

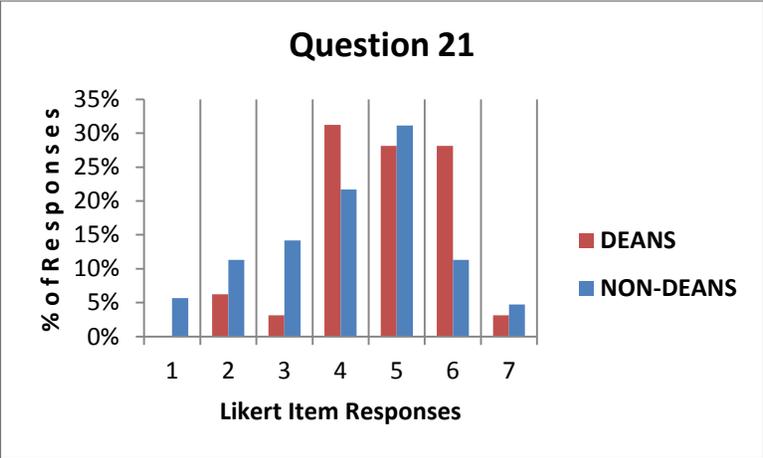
Question 20: Will Redefine the Boundaries of What Librarians Teach and How They Conceptualize the Study of IL

This is the only Yes/No question where the mode is a "1" instead of a "2" and where there is almost an equal split between the "Yes" and "No" answers. Results show that 47% of deans and 50% of non-deans answered "Yes" and 53% of deans and 50% of non-deans answered "No." These results indicate that there is a division of opinion on this issue for the participants of this sample. However, the division is not reflected in the qualitative data. No dean responses and 11 non-dean responses were coded with the theme *Advantage: The Framework Helps Academic Librarians Think about Information Literacy*, while only one dean response and three non-dean responses were coded with the theme *Challenge: Lack of Commitment to the Framework by Academic Librarians*. Non-dean participant #96, who answered "Yes" to Question 20 and gave a very high rating ("7") for Question 21, wrote that "the faculty in the library department at my institution are already rethinking their approaches to instruction based on their exploration of the Framework." In contrast, non-dean participant #112, reflected that "we have many librarians who resist change and don't want to understand the effectiveness and purpose of the Framework to help in collaborative efforts with 'subject-specific' teaching faculty (and vice-versa)." So, the quantitative data for Question 20 indicates this is a controversial issue for academic librarians, but the qualitative data suggests that this issue is not being thought about or discussed much at the present time.

The final table (Table 22) displays the descriptive statistics for Question 21 and the corresponding qualitative themes.

Table 22

Comparing and Contrasting Question 21 Quantitative Results to Qualitative Response Themes

Question 21: Quantitative Results	Qualitative Response Themes with Exemplars																										
<p>Question 21: Please indicate the overall extent (1 being the lowest, 7 being the highest) you think the Framework will impact library practices at your institution.</p>  <table border="1" data-bbox="310 526 1073 984"> <caption>Question 21 Quantitative Results Data</caption> <thead> <tr> <th>Likert Item Response</th> <th>DEANS (%)</th> <th>NON-DEANS (%)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>5</td> </tr> <tr> <td>2</td> <td>5</td> <td>12</td> </tr> <tr> <td>3</td> <td>3</td> <td>14</td> </tr> <tr> <td>4</td> <td>31</td> <td>22</td> </tr> <tr> <td>5</td> <td>28</td> <td>31</td> </tr> <tr> <td>6</td> <td>28</td> <td>12</td> </tr> <tr> <td>7</td> <td>3</td> <td>5</td> </tr> </tbody> </table> <table border="0" data-bbox="373 1029 890 1205"> <tr> <td style="vertical-align: top;"> <p><u>Deans</u> Mean: 4.78 SD: 1.18 Mode: 4.00 Median: 5.00</p> </td> <td style="vertical-align: top;"> <p><u>Non-deans</u> Mean: 4.14 SD: 1.51 Mode: 5.00 Median: 4.00</p> </td> </tr> </table>	Likert Item Response	DEANS (%)	NON-DEANS (%)	1	0	5	2	5	12	3	3	14	4	31	22	5	28	31	6	28	12	7	3	5	<p><u>Deans</u> Mean: 4.78 SD: 1.18 Mode: 4.00 Median: 5.00</p>	<p><u>Non-deans</u> Mean: 4.14 SD: 1.51 Mode: 5.00 Median: 4.00</p>	<p>"The Standards have been the standard for info lit at our institution since 2009. There is no reason to rock the boat. The librarians will use the ideas in the Framework to enhance their thinking, but it is not necessary to bring it directly to others at our institution. It will only confuse them." (Non-dean participant #60; Likert rating given for Question 21 [overall impact] was "1")</p> <p>"The Framework is very theoretical and hard to explain to faculty in a 'sound bite' which is about all they have time to listen to. We are entirely dependent on the faculty for access to their classes, and almost all of our classes are one-shot deals. The previous competency standards were succinct and easy to explain. We were and are still struggling to reach all the students on this campus who need this most basic instruction. The new standards may be useful in the context of libraries that have credit bearing instruction programs where they meet the students multiple times. Our faculty do not want to give up more than one class in a semester for library instruction if that, so the Framework is just too hard to articulate and to incorporate. That being said, it may be that individual librarians may find a few receptive faculty to work on a broader integration of the framework and its threshold concepts, etc., but most of the librarians are still trying to get our students to the most basic level of info lit. I don't think the framework will have much impact here." (Dean participant #137; Likert rating given for Question 21 [overall impact] was "2")</p>
Likert Item Response	DEANS (%)	NON-DEANS (%)																									
1	0	5																									
2	5	12																									
3	3	14																									
4	31	22																									
5	28	31																									
6	28	12																									
7	3	5																									
<p><u>Deans</u> Mean: 4.78 SD: 1.18 Mode: 4.00 Median: 5.00</p>	<p><u>Non-deans</u> Mean: 4.14 SD: 1.51 Mode: 5.00 Median: 4.00</p>																										

"In our broad programming and learning outcomes we don't focus on information literacy at our institution as it is an out-dated mind set and mode of thinking about how we engage with information both at the academic and societal levels. It is unfortunate that ACRL clung to the concept of information literacy when investigating a way to replace the Standards. Also, librarians with master's degrees are not taught to a sufficient level pedagogy and educational theory. No matter what structure ACRL develops, librarians overall will struggle with it until they have learned and internalized pedagogy and educational theory." (Non-dean participant #54; Likert rating for question 21 [overall impact] was "2")

"Our programme is well established, and while we look carefully at it annually, the new Framework is great idealistic theory but does not seem to translate effectively into actual instruction." (Dean participant #74; Likert rating for Question 21 [overall impact] was "3")

"I think it will impact some librarians, but I don't think the institution, in general, cares at all about information literacy." (Non-dean participant #133; Likert rating for Question 21 [overall impact] was "3")

"The institution is fairly large, and we have a lot of competing initiatives. Outreach and engagement being a top priority will naturally help to advance the framework, but the overall extent of impact directly ties to whether or not librarians make it their top priority when working with teaching faculty." (Dean participant #95; Likert rating given for Question 21 [overall impact] was "4")

"It will take more than the Framework to impact library

practices at my institution." (Non-dean participant #31; Likert rating given for Question 21 [overall impact] was "4")

"I think that the librarians at my university will take a while to assimilate the Framework concepts into their own teaching." (Dean participant #64; Likert rating given for Question 21 [overall impact] was "5")

"Librarians at my institution are faculty and free to teach utilizing whatever pedagogy they are comfortable with. A few of us are using the frames, as we had used the standards, but most are still doing BI [bibliographic instruction] sessions...we do what we can with what we have." (Non-dean participant #76; Likert rating given for Question 21 [overall impact] was "5")

"The Framework already guides library faculty in the development of their courses. So the Framework does impact library practices, but will not significantly change them. But, it will be helpful when discussing instructional assessment and accreditation." (Dean participant #70; Likert rating given for Question 21 [overall impact] was "6")

"The language is more transparent to faculty and other non-librarian stakeholders. It's [the Framework] easier to use e.g. "scholarship as a conversation" as a metaphor that faculty will understand, and thus see value in." (Non-dean participant #57; Likert rating given for Question 21 [overall impact] was "6")

"We completely redesigned the required, one-credit course librarians teach at our institution based on the Framework." (Dean participant #127; Likert rating given for Question 21

"The Framework has already impacted how I work with the first year writing faculty and how the library fits into their curriculum and outcomes." (Non-dean #53; Likert rating given for Question 21 [overall impact] was "7")

Question 21: Overall Impact

Questions 9 through 20 answered the first research question about levels of impact for *specific issues* discussed in the Framework. In addition, quantitative results gleaned from Question 21 can be used to answer the first research question about the level of *overall* impact of the Framework:

1. *What level of impact on academic library praxes do library deans, assessment librarians, and instructional librarians perceive that the Framework for Information Literacy for Higher Education will have?*

Qualitative responses to Question 22, an open-ended question asking participants to explain and provide examples of why they thought the Framework would have an impact on library praxes at their institution, were coded and themes were used to answer the third research question:

3. *How do academic library deans, assessment librarians, and instructional librarians explain their perceptions of the level of impact on academic library praxes that the Framework for Information Literacy for Higher Education will have?*

Unlike the tables preceding Table 22, the right side provides exemplars of qualitative responses in the order of Likert ratings participants gave.

In Question 21, the mean for the deans is 4.78 and the mean for the non-deans is 4.14. If these means are rounded off to the nearest whole number, the mean for the deans is "5" (moderately high impact) and the mean for the non-deans is "4" (moderate impact). The grand mean (the mean of both means) is 4.46 or "5" if it is rounded off. So, the answer to the first research question is that, on average, academic librarians in this

sample perceived that the Framework would have a moderately high level of impact on their library praxes.

While the quantitative results indicate that the average participant perceived that the Framework had a moderately high level of impact on their library praxes, the qualitative results suggest that participants perceived an almost equal amount of Framework *Advantages* (73 responses were coded with *Advantage* themes) and *Challenges* (77 responses were coded with *Challenge* themes). 57 non-deans (66%) and 16 deans (62%) wrote about *Advantages*, while 59 non-deans (67%) and 18 deans (69%) wrote about *Challenges*. Looking through the exemplars of each level of Likert rating, a progressive change from *Challenges* to *Advantages* can be seen. Non-dean participant #60, who gave the Framework a very low level ("1") of overall impact, wrote:

The Standards have been the standard for info lit at our institution since 2009.

There is no reason to rock the boat. The librarians will use the ideas in the Framework to enhance their thinking, but it is not necessary to bring it directly to others at our institution. It will only confuse them.

Dean participant #31, who gave the Framework a moderate level ("4") of overall impact, had a more "middle-of-the-road" response: "The overall extent of impact directly ties to whether or not librarians make it their top priority when working with teaching faculty."

Dean participant #127, who gave the Framework a very high level ("7") of overall impact, wrote that "we completely redesigned the required, one-credit course librarians teach at our institution based on the Framework." So, the quantitative results for Question 21 demonstrate that the average participants perceived the Framework to have a moderately high level of impact on library praxes; this moderately high level of impact

(as opposed to a low or high level of impact) is explained in the qualitative responses as being due to an almost equal amount of Framework *Advantages* and *Challenges*.

"One-shot" Instruction

Out of the 160 participants who completed surveys without missing data, 125 (78%) worked at institutions where the majority of IL instruction was offered in the context of "one-shot" sessions; 11 (7%) offered IL in the context of an orientation for incoming first-year students; 11 (7%) offered IL in the context of both one-shot sessions and orientation; 13 (8%) offered IL in the context of a credit-bearing general education requirement. Out of the 138 participants who read the Framework, 107 (78%) worked at institutions where the majority of IL instruction was offered in the context of one-shot sessions; 10 (7%) offered IL in the context of an orientation for incoming first-year students; 10 (7%); 11 (8%) offered IL in the context of a credit-bearing general education requirement. It is clear that the majority of IL instruction in this sample was offered in the context of one-shot sessions.

In one-shot sessions, as discussed in Chapter Two, the librarian is little more than an assistant to the course instructor, a visitor who seldom gets to see how students apply the skills they are attempting to teach. Within these limitations (e.g., time constraints and the librarian's primary role as guest lecturer), it is difficult for librarians to develop a comprehensive program for IL. The Framework recognized that many academic librarians were currently meeting with students in one-shot sessions and that these were important in an IL program if there was a systematic integration of them into the curriculum. But the Framework (Association of College and Research Libraries, January, 2015) stated:

It is important for librarians and teaching faculty to understand that the Framework is not designed to be implemented in a single information literacy session in a student's academic career; it is intended to be developmentally and systematically integrated into the student's academic program at a variety of levels. This may take considerable time to implement fully in many institutions. (p. 15)

In the qualitative responses, the term "one-shot" is used seven times, once by a dean and six times by non-deans. Non-dean participant #101 wrote that librarians at their institution were already using the Framework as a guide for developing one-shot sessions and assessment. One of the Framework *Challenge* themes was *Difficulty with "one-shot" instruction*. Six participants (5 non-deans or 6% and one dean or 4%) wrote about the challenge of implementing the Framework with "one-shot" sessions, where, due to time limitations, library instruction is usually restricted to the *hows* of using research tools, rather than on the *whys* of using them. Non-dean participant #86's response stated that they only had time to cover basic concepts about library use because they offered the majority of IL instruction in the form of "one-shot" sessions. Non-dean participant #32 wrote:

We are not yet sure how we could use the Framework to support our one-shot instruction sessions. The Framework is a little overwhelming and intimidating, so I am unsure that it will really be embraced or change how we do our one-shot classes.

So, while the quantitative results demonstrate that the majority of IL instruction in this sample was offered in the context of one-shot sessions, the qualitative results show that

only a small percentage of respondents in this study (4%) wrote about the challenge of implementing the Framework with one-shots.

The Standards

Out of the 160 participants who completed surveys without missing data, 135 (84%) currently used the Information Literacy Competency Standards for Higher Education. Out of the 138 participants who read the Framework, 121 (88%) currently used the Information Literacy Competency Standards for Higher Education, indicating that the majority of institutions represented by this sample were currently using the Standards.

One of the *Advantage* themes was *Standards Coexisting*. Five participants (4 non-deans or 5% and 1 dean or 4%) expressed the belief that the Framework can coexist with the 2000 standards. This issue—whether or not to sunset the Standards—has been controversial. Some ACRL Board members wanted to sunset the Standards immediately, while other Board members wanted to wait and give institutions time to adopt the Framework. Dean participant #42 gave the Framework a "4" in terms of overall impact because their institution was already using both the Framework and the Standards. Non-dean participant #41 said they were presently trying "to incorporate all/part of the Framework along with the old ACRL standards" into their IL program. Non-dean participant #109 did not think the Framework should replace the Standards. Instead, "the Frames will serve as an enhanced 'layer' that provides better context surrounding the ACRL IL Standards from 2000."

One of *Challenges* themes was *Standards Issues* and it had three grandchild

codes (See Appendix E for explanation of grandchild codes): *Currently Teaching Standards, Assessments Based on Standards, Standards Preferred over Framework*. Nine participants (8 non-deans or 9% and 1 dean or 4%), wrote that they were currently teaching the Standards. Non-dean participant #102 did "not think that we will do away with many of the lessons developed out of the Standards, nor do I think the Framework and the Standards are necessarily contradictory documents." Three non-deans (3%) wrote about basing their assessments on the Standards, and two non-deans (2%) preferred the Standards over the Framework. Non-dean participant #16 said, "The Framework is really of very little use at our institution. The 2000 Standards resonated more with our library faculty and with our partner faculty members in the departments."

It can be surmised, then, that while the majority of the institutions represented in this sample are currently using the Standards, none of the participants expressed the specific opinion that the Framework should outright replace the Standards.

Chapter Seven

Discussion and Conclusion

In this chapter, I will first summarize the study goals, methods, and the results of the qualitative and quantitative data analysis, discuss the implications of the results and lessons I learned during the process of conducting this research, address the limitations of this study and future research directions, and conclude with some final thoughts.

Summary of Study Goals

Information literacy (IL) is a survival skill that keeps us from drowning in the daily flood of information from social media, television, radio, the Internet, and more traditional sources of information. Anyone with access to the Internet, a minimal amount of literacy skills, and the ability to tap out words on a Google search can find information within seconds. However, the emphasis in our information society has changed from simply finding information to more critical evaluation and selection. From the vast array of information available at our fingertips, evaluation and selection involves understanding how, when, and what to select and then how to use it appropriately (Marshall, 2006).

The IL Competency Standards for Higher Education have had an enormous impact on the development of IL as a disciplinary science, serving to promote discussions about IL as an instrument of educational reform and have made it possible for colleges, universities, and regional accrediting bodies to incorporate IL as a necessary learning outcome. The Framework for Information Literacy for Higher Education, written after the ACRL IL Competency Standards Review Force recommended that the Standards "should be extensively revised" (Association of College and Research Libraries, June,

2012, p. 1), was accepted by the ACRL Board in February, 2015. The ACRL recognized that "the effect of any changes to the ILCSHE [the Standards] would be significant, both within the library profession and in higher education more broadly (Association of College and Research Libraries, January, 2015, p. 4). This led to the first problem statement for this study:

- *The significant effects (i.e., impact) of changes to the IL Competency Standards for Higher Education on the library profession and in higher education **have yet to be determined.***

Although there are a variety of non-empirical surveys, open forums and blogs about the Framework, there remained a need to more rigorously study the perceptions of academic librarians regarding the Framework. This led to the second problem statement:

- *The perceptions of academic librarians regarding the level of impact that the Framework for Information Literacy for Higher Education will have on academic library praxes **have yet to be studied.***

The purpose of this study was not to evaluate the Framework itself or the implementation of the Framework. This study was designed to investigate the perceived level of impact (or the significant effects) that the Framework could have on academic library and higher education praxes. The significance of this study is this: Just as the Standards have influenced or otherwise generated educational reform, the Framework will also be important in educational reform. Just how much it may impact, change or influence the field of IL depends in part on understanding the perceptions of those most affected by the change.

This study was intended to offer a contribution to the available literature about

how the new Framework may serve to influence the ways academic libraries function in delivering information literacy instruction. A content analysis of IL papers submitted to the journal, *Communications in Information Literacy*, between the years 2007-2013, found that common reviewer criticisms were: (a) poor presentation and development of ideas, (b) the lack of significant contribution or scientific validity, (c) problems in methodology, and (d) the anecdotal (e.g., non-empirical) nature of the articles (Hollister, 2014). I hope this study will make a significant and empirical contribution to the library and information science literature. This study may also be of interest to stakeholders who are looking at ways that IL is defined, promoted, and taught in higher education academic libraries. The results of this study could serve to initiate and illuminate conversations around the Framework and how to approach possible implementation.

Summary of Methods

After selecting participants using a stratified, random sampling method, 138 academic librarians (32 deans and 106 non-deans) were surveyed from public and private institutions. The institutions spanned across six accrediting regions recognized by the Council for Higher Education Accreditation. Participants completed a 22-item survey designed to elicit their perceptions of the Framework's impact. Qualitative data consisted of answers to an open-ended question on the survey that asked participants to explain and provide examples of why they thought the Framework will have an impact on the library praxes at their institution.

Summary of Merged Quantitative and Qualitative Results

Participants were recruited equally from both public and private institutions and from six accreditation regions. Descriptive statistics and corresponding qualitative themes

from survey Questions 9 through 20 suggest that, on average, participants agreed that the Framework will have impact on redesigning IL instruction, the development of IL at their institution, and the contextualization and integration of IL. The merged data also indicates there may be differences of opinion between deans and non-deans on the amount of impact the Framework will have on creating wider conversations about student learning, scholarship, and assessment. The merged data also points to the following issues as possibly being controversial amongst academic librarians (deans and non-deans, alike): whether or not the Framework will promote discussion of key concepts, encourage thinking about core or portal concepts, redefine the boundaries of what librarians teach and how they conceptualize the study of IL, and how much it will impact collaboration with non-librarians. The qualitative data suggests that the Framework's impact on the development of curriculum guides, concept maps, and assessment instruments may be more important to non-deans than to deans and that student success initiatives, knowledge practices, dispositions, and frames may not be at the forefront of academic librarians' thinking.

The majority of institutions represented in this sample offer IL instruction mainly in the context of one-shot sessions and are currently using the Standards. Qualitative data indicates that only a small percentage of participants in this study wrote about the challenge of implementing the Framework with one-shot sessions, and none of the participants expressed the opinion that the Framework should replace the Standards.

The descriptive statistics from Question 21 and the results of the correlation analysis indicate that deans are more likely to give the Framework a higher level of overall impact than non-deans. On average, deans gave the Framework a moderately high

rating on level of overall impact, and non-deans gave the Framework a moderate rating of overall impact. However, if the entire sample is included, the average participant perceived the Framework to have a moderately high level of impact on their library praxes. This moderately high level of impact (as opposed to a low or high level of impact) is explained in the qualitative responses as being due to an almost equal amount of Framework *Advantages* and *Challenges*.

Implications

A year ago, when the first three chapters of this dissertation were written, the Framework was filed as one of many documents "among the constellation of documents used by information literacy practitioners" (Williams, 2015). A year later, it appears that the Framework is now not just a member of a constellation of IL documents. At its ALA Midwinter meeting on January 11, 2016, the ACRL Board adopted the Framework in order to "clarify the misunderstanding by members regarding the parliamentary action to file at Midwinter 2105" (Association of College and Research Libraries, January, 2016, p. 7). The Board will also be deciding what the future holds for the current Information Literacy Competency Standards for Higher Education at the upcoming ALA Annual Conference in June of 2016.

Additionally, a reference to the Framework appears in the New Media Consortium's most recent Horizon Report. The New Media Consortium (NMC) is an international consortium of more than 250 colleges, universities, and other organizations devoted to the exploration and development of new media and technologies. According to the NMC's 2016 Horizon Report, the ACRL's Framework "has established a set of interconnected core concepts to help campuses better organize ideas about information,

research, and scholarship into a comprehensive whole" (Johnson et al., 2016, p. 20). This has had a rippling effect on how the Framework is seen by not just academic librarians, but also to discipline faculty who read the Horizon Report to "keep up" with the latest trends and future directions media and technology are taking in higher education. At the very least, mention of the Framework in the Horizon Report will bring it to the attention of those who may yet to have even heard about it.

In Chapter One, I wrote about certain points of contention that were recognized and voiced by ACRL board members during the Board Directors' meetings I and II, that took place on Saturday, January 31st, and Monday, February 2, 2015 (Payne, 2015, January 31; Payne, 2015, February 2). Some of the most relevant controversial issues were the differing opinions from key stakeholders. The varying opinions of what should or should not be included in the Framework posed a number of challenges. Conflicting opinions in regards to the Standards coexisting (or not coexisting) with the Framework were also voiced by many librarians and stakeholders. Because there exists a level of controversy around the Framework, I concluded in the "Background of the Study" section of Chapter One that there is a need to study it further. This still holds true as the Framework continues to gain momentum throughout academia. Indeed, there is plenty of fertile ground for more research of the Framework's interpretation, integration, and implementation.

The quantitative results of this study indicate that deans had a tendency to rate the Framework's impact as higher than non-deans on specific issues (e.g., the redesign of IL instruction and student success initiatives) as well as on its overall impact. And the deans—unlike the non-deans—never gave a very low impact rating ("1") to any of the

seven Likert questions. This points to what was written earlier in the literature review—that organizational positionality impacts worker satisfaction which ultimately impacts job stress and perceived organizational readiness for change, or "organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes" (Armenakis et al., 1993, p. 681). Evidence of job stress appears in this non-dean's response, who gave the Framework an overall impact of "1":

It's just a bunch of words that make no sense to most people. If you have to attend workshops and seminars and training sessions just to be able to understand what the document is supposed to do, it is a failure. I teach 85-90 "one-shot" sessions per year, and the framework is not useful to me at all. I don't know anyone who hasn't expressed frustration with trying to force it to be of some use.

A non-dean who gave the Framework an overall impact of "3" said, "As a coordinator, it is a problematic document at best, and looks to make my work life much more difficult for the next decade, until the next round of hot new things becomes the professional standard."

This last quote reminds me of my experience as a teacher in K-12. Administrators were always telling teachers about some "new and improved" way to do things. They often mandated us to attend workshops and training sessions and then evaluated us on our incorporation of the "hot new thing" into our lesson plans. For example, when the standards-based education reform movement began in the nineties, administrators asked us to write our daily objectives on the board for students. Like a good employee, I wrote

my objectives on the chalkboard every day, until I realized that the language of the objectives made no sense to students. So, instead of writing objectives on the board, I wrote the daily agenda instead—this communicated the daily "objectives" in a way that was meaningful to students.

Deans wishing to implement the Framework at their institution need to realize that their employees may have differing perspectives of the Framework. Some—as in this study—may be very enthusiastic about implementing the Framework. Others may be more reluctant to embrace it because they have seen a lot of "hot, new things" come and go. These reluctant employees may also be a valuable source for ideas about how to integrate the Framework's concepts into their present IL program.

The qualitative results of this study demonstrated the presence of the dialectic. That is, just as there were differences of opinion in the ACRL Board of Directors' meetings in 2015, there were also differences of opinion in the qualitative responses of the participants in this survey. Some of these differences may originate from the Framework itself, due to some of its own internal contradictions (Seale, 2016). For example, the Framework rejects the Standards, asserting that "it is based on a cluster of interconnected core concepts, with flexible options for implementation, rather than on a set of standards, learning outcomes, or any prescriptive enumeration of skills" (p. 2). However, within each frame, there is a list of knowledge practices and dispositions:

The lists of knowledge practices and dispositions, which are actions and behaviours performed by individual learners, are quite lengthy and detailed. Despite the extensive verbiage in the Framework's introduction, the knowledge practices and dispositions appear as standards, learning outcomes, and

prescriptive enumerations of skills. If the knowledge practices and dispositions are not intended to be prescriptive, why are they necessary? If they are not intended to be exhaustive, why are there so many of them, and why are they so carefully and specifically articulated? The rhetoric of the Framework ultimately forces it to function as a standard....Moreover, it is a wholesale replacement of the Standards (which acknowledges its standardness). (p. 84)

The internal contradictions of the Framework may contribute to the differences of opinions held by respondents of this survey; some wrote that the *Standards* were *Coexisting* with the Framework while others wrote that the *Standards* were *Preferred over the Framework*. This is the tension of the dialectic discussed in Chapter Five. It is hoped that the presentation of the participants' perceptions of the Framework's assertions and suggestions and the qualitative *Advantage* and *Challenge* themes will contribute to the ongoing discussion of opposing ideas in order to bring about a synthesis of thought regarding the Framework.

When I began writing the proposal for this research, the Framework had not yet been adopted by the ACRL Board of Directors. After a year from proposal to defense, the "Big So What" (as one of my colleagues phrased it) is about the Standards. Sunsetting the Framework will be decided at the annual ALA conference this June (2016). My study results indicated that 88% of the participants were currently using the Standards. Only one participant indicated that they preferred the Framework over the Standards. "While our formal instruction and assessment model was built on the standards, our instruction and teaching efforts emphasize concepts that are defined in the Framework. It serves as a better description of what we already do." Five participants expressed the belief that the

Framework can coexist with the 2000 Standards, and three preferred the Standards over the Framework. Based on my findings, I will make this prediction: the ACRL Board of Directors will decide not to sunset the Standards.

Lessons Learned

There are a couple of things that I will do differently when conducting another study. First, I will never offer "other" as a choice to a question on a survey—at least not as an answer to a question that I am using as a variable for a quantitative analysis. The category of "other" has no meaningful "weight." That is, what weight (or score) does one assign the answer "other" that has meaning in relation to the construct of organizational positionality? In my survey, the answer "dean" was weighed as "1," the answer "assessment librarian" was weighed as "2," and the answer "instruction librarian" was weighed as "3." These weights made sense because they represented the participant's position within the hierarchy. However, weighing "other" as "4" made no sense because it implied that those who chose "4" were at the lowest position in the hierarchy.

I have also learned to be more careful when defining critical terms in a study. I used the ACRL's (n.d.) descriptions of academic library positions when defining the roles of deans, assessment librarians, and instruction librarians. Since no definition of assessment librarians was provided, I used the ACRL position description for "Head of Reference and Instruction—Reference Level II" for assessment librarians and "Reference and Instruction Librarian—Reference Level I" for instruction librarians. "Reference Level II" implied a higher place in the hierarchy than "Reference Level I." Definitions of the two positions differed in these ways: The "Head of Reference and Instruction" description included the phrases "provides continuing education on pedagogy for all

teaching librarians," and "position may include Information Literacy/Instructional Design responsibilities" while the "Reference and Instruction Librarian" description did not include those two phrases. The "Head of Reference and Instruction" description also included the phrase "generally this individual has 3-5 years of experience" while the "Reference and Instruction Librarian" "has 0-1 year of experience."

In my original proposal, I included the phrase "Head of Reference and Instruction" in the description of the assessment librarian. One of my committee members commented that "Head of Reference" is not necessarily synonymous with "assessment librarian," so, I took out the phrase. During the recruitment phase, I searched websites, organizational charts, and staff listings for assessment librarians, and not Heads of Reference (it should be noted that only one person who chose "other" described themselves as a Head of Reference). Perhaps I could have avoided some of the difficulties I had trying to decide which category (assessment or instruction librarian) to place the 22 participants who self-identified as "other" if I had done some things differently. First of all, I should not have used "other" as an answer, and secondly, I needed to locate and use a definition specifically for assessment librarians.

Limitations

In addition to the limitations previously discussed in Chapter One, an additional limitation of this study is that deans and non-deans were not equally represented. Of the 138 survey respondents who had read the Framework, 32 (23%) were deans, and 106 (77%) were non-deans. If this study is replicated, researchers should attempt to collect data from an equal amount of deans and non-deans.

Future Research Directions

The findings from this study help to contribute to "a big picture" of academic librarians' perceptions of the Framework's impact. Future research could explore these findings more in-depth and more holistically. For example, a bounded case study of the Framework's implementation could explore student perceptions of the Framework, academic librarians' presentation of the Framework to administrators and discipline faculty, and instruction librarians' assessment of the six frames at an institution where the Framework is being implemented. Another case study could compare and contrast two institutions: one that has replaced the Standards with the Framework, and another institution that is mapping the Framework to the Standards. Interviews in both case studies could be conducted with key stakeholders—students, academic librarians, and discipline faculty—in order to further illuminate participants' perceptions of the Framework and the impact it has had on information literacy instruction.

Other research could explore the impact of Framework implementation on student outcomes like IL skills, academic performance, and student retention. A follow-up study to this research could explore changes in perceptions over time. Given the same survey, how do the results of the follow-up study compare and contrast to the results of the present study?

Finally, while the single significant correlation was very weak and the R^2 from the multiple regression accounted for only a small amount of the variance, it should be noted that the model was still significant. A replication of this study with larger samples and a more equal proportion of deans and non-deans could determine if these relationships still held true, but with a larger correlation and a greater R^2 .

Conclusion

The Framework for Information Literacy for Higher Education is represented as a significant departure from the Information Literacy Competency Standards for Higher Education. While many of the participants in this study agreed that the Framework would have a moderately high impact on their current library praxes, there was a great deal of disagreement about its challenges and advantages. The ongoing contribution of the Framework rests upon the dialogical interaction of academic librarians, administrators, and discipline faculty who are committed to the improvement of information literacy programs. In order to advance information literacy as an educational reform movement that improves students' lives by enabling them to critically evaluate and select information, academic librarians must continually dialogue with those who disagree with them in the hopes of resolving the conflict of opposing ideas through a reconciliation of their common truths. This can be accomplished through further study and analysis of the Framework and information literacy in general. To that end, we can hope that, in the immortal words of Neil Young:

"Someday,
you'll find
everything you're looking for."

Appendix A**Framework for Information Literacy for Higher Education Survey**

Welcome to My Survey

Thank you for participating in our survey. Your feedback is important.

* 1. Please provide the name of the institution where you work. For example: The University of Colorado, Denver.

* 2. Please choose the title that best describes the position you hold at your library.

- Instruction Librarian
- Assessment Librarian
- Library Dean
- Other (please specify):

* 3. Does your institution offer an American Library Association (ALA) accredited program of studies in Library and Information Science?

- Yes
- No

* 4. Are you a member of the Association of College & Research Libraries (ACRL)?

- Yes
- No

* 5. Are you familiar with the Information Literacy Competency Standards for Higher Education that were approved by the ACRL in January, 2000?

- Yes
- No

* 6. Do you use the ACRL's Information Literacy Competency Standards for Higher Education?

- Yes
- No

* 7. Your library and/or institution offers the majority of information literacy instruction in the context of:

- a credit-bearing general education requirement.
- an orientation for incoming first-year students.
- "one-shot" sessions.
- Other:

* 8. Have you read the January, 2015 version of the ACRL's Framework for Information Literacy for Higher Education (the "Framework")?

- Yes
- No

* 9. Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to redesign instruction sessions, assignments, courses, and curricula at your institution.

- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <input type="radio"/> |

* 10. Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to connect information with student success initiatives at your institution.

- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <input type="radio"/> |

* 11. Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to collaborate on pedagogical research and involve students in that research at your institution.

1	2	3	4	5	6	7
<input type="radio"/>						

* 12. Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will open the way for librarians, faculty, and other institutional partners to create wider conversations about student learning, the scholarship of teaching and learning, and the assessment of learning at your institution.

1	2	3	4	5	6	7
<input type="radio"/>						

* 13. Do you think the Framework will guide the development of information literacy programs at your institution?

- Yes
- No

* 14. Do you think the Framework will promote discussion about the nature of key concepts in information in general education and disciplinary studies at your institution?

- Yes
- No

* 15. Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage thinking about how librarians, faculty, and others can address core or portal concepts and associated elements in the information field at your institution.

1	2	3	4	5	6	7
<input type="radio"/>						

* 16. Do you think the Framework will help librarians contextualize and integrate information literacy for your institution?

- Yes
- No

* 17. Do you think the Framework will encourage a deeper understanding of what knowledge practices and dispositions an information-literate student should develop at your institution?

- Yes
- No

* 18. Do you think the Framework will encourage the library community at your institution to develop resources such as curriculum guides, concept maps, and assessment instruments to supplement the core set of materials in the frames?

- Yes
- No

* 19. Please indicate the extent (1 being the lowest, 7 being the highest) you think the Framework will encourage librarians to work with faculty, departmental or college curriculum committees, instructional designers, staff from centers for teaching and learning, and others to design information literacy programs in a holistic way at your institution.

1	2	3	4	5	6	7
<input type="radio"/>						

* 20. Do you think the Framework will redefine the boundaries of what librarians teach and how they conceptualize the study of information literacy within the curricula at your institution?

- Yes
- No

* 21. Please indicate the overall extent (1 being the lowest, 7 being the highest) you think the Framework will impact library practices at your institution.

1	2	3	4	5	6	7
<input type="radio"/>						

* 22. Please explain why you selected that overall extent of impact and provide examples to support your answer.

Appendix B

Random Sampling Spreadsheet Example

Middle States Commission on Higher Education	
PUBLIC	PRIVATE
Bowie State University	Carnegie Mellon University
The Graduate School and University Center of the City University of New York	Clarkson University
SUNY College of Environmental Science and Forestry	Columbia University
Indiana University of Pennsylvania	Cornell University
Morgan State University	Drexel University
New Jersey Institute of Technology	The George Washington University
The Pennsylvania State University	Hofstra University
Rutgers, The State University of New Jersey	Howard University
SUNY at Albany	Johns Hopkins University
SUNY at Binghamton	Lehigh University
SUNY at Buffalo	The New School
SUNY at Stony Brook	New York University
Temple University	Pace University
University of Delaware	Princeton University
University of Maryland, Baltimore County	Rensselaer Polytechnic Institute
University of Maryland, College Park	Stevens Institute of Technology
University of Pittsburgh	Syracuse University
	Teachers College of Columbia University
	University of Pennsylvania
	University of Rochester
	Widener University
	Wilmington University

Cornell University	
Address:	300 Day Hall Ithaca, NY 14853
Phone:	(607) 255-2000
Fax:	(607) 255-9924
Website:	www.cornell.edu
CEO Name:	Dr. David J. Skorton
CEO Title:	President
CAO Name:	Dr. W. Kent Fuchs
CAO Title:	Provost
ALO Name:	Dr. Marin Clarkberg
ALO Title:	Director, Institutional Research and Planning
Carnegie Classification:	Research - Very High Research Activity
Distance Education Programs:	Fully Approved
Control:	Private (Non-Profit)
Affiliation:	None
Adjusted Enrollment:	22837
Head Count:	22900
First Accredited in:	1921
Reaccredited in:	2011
Last Accredited Method:	Self-Study Review
Next Self Study Review:	2020 - 21
Next Periodic Review:	2016
CHE Staff Liaison:	Dr. Debra G. Klinman
Branch Campuses:	Weill Cornell Medical College and Graduate School of Medical Sciences of Cornell University
Degrees:	Bachelor's, Doctor's - Research/Scholarship, Master's, Doctor's - Professional Practice, Postsecondary Certificate (>=1 year, < 2 years)
Institution Code:	301

Appendix C

Framework for Information Literacy Survey Feedback

Welcome to My Survey

Thank you for participating in our survey. Your feedback is important.

* 1. The Framework for Information Literacy Survey was simple to understand.

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
<input type="radio"/>				

Please add any comments you think might be helpful:

* 2. Approximately how long did it take you to complete the Framework for Information Literacy Survey?

- 5 minutes
- 10 minutes
- 15 minutes
- 20 minutes
- 25 minutes
- Longer than 25 minutes
- I was disqualified after Question #8

Please add any comments you think might be helpful:

* 3. Please rate the Framework for Information Literacy Survey's overall quality of design (1 being the lowest, 7 being the highest).

1	2	3	4	5	6	7
<input type="radio"/>						

Please add any comments you think might be helpful:

4. Please add any comments about the Framework for Information Literacy Survey you think might be helpful.

Appendix D

Complete Responses to Open-ended Question by Participant Number

These are the responses to Question 22 of the survey. Responses are given in their entirety. It should be noted that some participants did not answer Question 22, and those are indicated by "No answer" as the response. Bracketed numbers indicate the rating participants gave for the overall level of impact asked in Question 21.

- Participant #1:
(Non-dean) "It has already prompted some conversations about what we will be doing in changes within those sessions. However, many of those conversations were already in process - so it will help impact and build our future information literacy practices, but some of the process is already taking place." [5]
- Participant #2:
(Non-dean) "The framework resonates with the faculty in our Writing & Rhetoric program. It closely mirrors their own framework. In subject areas, the framework will help librarians find the various 'thresholds' students must cross to be information literate in their chosen area of study." [5]
- Participant #3:
(Non-dean) "We are a consortial library and serve four different institutions." [4]
- Participant #4:
(Dean) "Applying the framework means adopting change. There is still a lot of resistance to change within this organization." [4]
- Participant #5:
(Non-dean) "I know that the Framework will affect how some individual librarians teach (me being one of them), but I don't think that it will prompt any shift in the larger conversation on our campus. People don't pay enough attention to the library/librarians for that to happen. So, that's why I put it in the middle." [4]
- Participant #6:
(Non-dean) "I think my institution bases decisions on the Framework and I don't really see any change in that." [4]

- Participant #7:
(Non-dean) No answer [6]
- Participant #8:
(Non-dean) "The Framework will be discussed and lead to long-term thinking about information literacy. I don't think anything at our institution will change rapidly as it took many years to get the 2000 standards into discussion and implementation. I do discuss the Frames main concepts in my IL classes with students in the context of life-long learning." [4]
- Participant #9:
(Non-dean) No answer. [5]
- Participant #10:
(Non-dean) "About five years ago, the Hesburgh Libraries went through a reorganizational process that essentially "upgraded" our Teaching & Learning Services." [7]
- Participant #11:
(Non-dean) "I'm in charge of instruction and I will implement it." [7]
- Participant #12:
(Non-dean) "While it will impact how I instruct and assess student learning, I do not believe that all of my librarian colleagues will feel the same. Nor do I believe that the university administration or majority of faculty will appreciate the significance or potential impact of the Framework." [3]
- Participant #13:
(Non-dean) "I think the framework will help us to refocus our efforts to implement information literacy instruction. It will help us to shift the emphasis of our instruction away from tool use and towards bigger concepts." [5]
- Participant #14:
(Non-dean) "The framework uses a lot of education jargon. I am still trying to make sense of the document and jargon, so I can imagine the difficult time a non-education faculty member will have." [4]
- Participant #15:
(Non-dean) "While librarians are fully engaged in this conversation here at [name of institution], working on interpreting the framework and integrating it into instruction, our library instruction program will

keep on doing what it does: trying to be as purposeful and proactive as possible but in reality responding to whatever needs come from faculty (who are quite variable in their understanding of information literacy and its place in our curriculum.)" [4]

Participant #16:
(Non-dean) "The Framework is really of very little use at our institution. The 2000 Standards resonated more with our library faculty and with our partner faculty members in the departments. What we are doing still ties into the standards and the framework is a supplement that may or may not be helpful in some areas." [3]

Participant #17:
(Non-dean) "We've started examining our work in light of Concepts instead of Tool Use." [5]

Participant #18:
(Non-dean) No answer. [5]

Participant #19:
(Non-dean) "Most of us will continue to teach practical search strategies and introduce library tools and concepts just as we did before." [2]

Participant #20:
(Dean) "At present, the organization is simply trying to keep up with current demand. This is a temporary situation that should stabilize within 12 months." [4]

Participant #21:
(Dean) "The Framework is not that different from what we already do. Librarians at this institution are full members of the faculty and there is already a good level of collaboration on research and instruction." [5]

Participant #22:
(Non-dean) "It will depend on new leadership in the library as well as new initiatives (buildings, gen ed, and strategic planning) across campus." [4]

Participant #23:
(Non-dean) "Some may be ready to embrace a new way of thinking about information literacy, which is how I think of the Framework. Those who embrace it will make changes and that will impact

library practices at our institution; however, some may not and so I can give it only a 5." [5]

- Participant #24:
(Non-dean) "It's just a bunch of words that make no sense to most people. If you have to attend workshops and seminars and training sessions just to be able to understand what the document is supposed to do, it is a failure. I teach 85-90 'one shot' sessions per year, and the framework is not useful to me at all. I don't know anyone who hasn't expressed frustration with trying to force it to be of some use." [1]
- Participant #25:
(Non-dean) "We'll use the Framework because it is the new model. I don't really like it though. It is a wordy overblown document that looks impressive but isn't." [4]
- Participant #26:
(Non-dean) "We have created institutional outcomes based on the Framework. These are likely to become implemented across the curriculum, which is a change to library practices at our institution thus far." [6]
- Participant #27:
(Non-dean) "Because I don't find that neither the Instruction Librarian nor the Dean of Libraries are interested. Furthermore, this is all too complex. It has to be a two way street. The success of such initiative depends on the level of faculty's commitment, image of the library, and value they place on the library. The way I see it, most libraries don't work at the partnership level with faculty. We are seen as mere service providers and collaborators. Some libraries do work on the embedment level. For this to work, faculty need to be engaged as partners. Ours certainly don't do that, and obviously, is our fault and lack of commitment towards the partnership approach. It looks like you are asking the wrong questions to start off with. I have a feeling that a better approach would be to ask what librarian's think about this 2015 Framework. You are already assuming that libraries are using it." [1]
- Participant #28:
(Non-deans) "Initial conversations with my colleagues, as well as my in-depth reading and thinking about the framework, do indicate it has some potential to adjust some instruction, but overall not a with all librarians or not in large ways." [3]

- Participant #29:
(Non-dean) "In a practical sense, the new framework doesn't offer much new above what we currently are doing." [2]
- Participant #30:
(Non-dean) "The language used in the Framework alienated many librarians. Good concept, poor execution." [3]
- Participant #31:
(Non-dean) "It will take more than the Framework to impact library practices at my institution." [4]
- Participant #32:
(Non-dean) "We are not yet sure how we could use the Framework to support our one-shot instruction sessions. The Framework is a little overwhelming and intimidating, so I am unsure that it will really be embraced or change how we do our one-shot classes." [4]
- Participant #33:
(Non-dean) No answer. [5]
- Participant #34:
(Non-dean) "We have written program-level outcomes based on the framework for our instruction program so I think we have opened the door to shifting how we think about this topic. Time will tell how much is put into practice." [5]
- Participant #35:
(Non-dean) "Our faculty and administration have no idea what this Framework is and are not interested in librarians being more involved with the curriculum than we already are. They have other priorities." [1]
- Participant #36:
(Non-dean) No answer. [5]
- Participant #37:
(Dean) "I think it has great potential, and I know we are familiar with it. However, I am uncertain that our particular institutions will be able to develop this potential. We have a small staff, and it is often difficult for us to work on the big picture." [4]
- Participant #38:
(Non-dean) "Colleagues and I have already shared the framework with a number of faculty members, and the concepts work extremely well with developing critical thinking, being able to aggregate

information, produce research, as well as assist students after they leave the university. Many of these concepts have inspired those in the library to produce research concerning how students gather information and what we can do with the faculty to encourage students to evaluate, aggregate, and produce information." [6]

Participant #39:
(Dean)

"It's a bench mark for us to redesign and implement our information literacy program in the future." [6]

Participant #40:
(Dean)

No answer. [5]

Participant #41:
(Non-dean)

"We are presently reviewing our current IL program to incorporate all/part of the frameworks along with the old ACRL standards into the program." [6]

Participant #42:
(Dean)

"I'm not sure how much impact it will have, as we are currently using both the Framework and the earlier Standards to do many of the things you ask about in previous questions. For example, we are already heavily invested in the assessment of learning with regard to Information Literacy. I'm not sure it is likely to have much impact." [4]

Participant #43:
(Non-dean)

"I think that the librarians at my institution are somewhat skeptical about the overall impact of the framework on information literacy instruction. The recent well-publicized critiques of the framework have led some of my colleagues to be skeptical about the framework's utility, though we did use it to redesign the course objectives for our credit bearing IL course." [2]

Participant #44:
(Non-dean)

"I think the Framework is a powerful document that brings information literacy instruction out of the library and back into the campus more widely, as it was always meant to exist." [6]

Participant #45:
(Non-dean)

"I think the Framework has the potential to transform information literacy instruction but the incorporation at the institution will depend on the willingness and openness of teaching faculty." [4]

- Participant #46:
(Non-dean) "While our formal instruction and assessment model was built on the standards, our instruction and teaching efforts emphasize concepts that are defined in the Framework. It serves as a better description of what we already do." [5]
- Participant #47:
(Non-dean) No answer. [5]
- Participant #48:
(Dean) "The framework is good but I think that librarians may have a difficult time developing concrete experience and having the confidence to move outside the 2000 definitions." [5]
- Participant #49:
(Non-dean) "Not sure yet." [4]
- Participant #50:
(Non-dean) "Framework provides ideas/language that will help librarians do what we already do." [4]
- Participant #51:
(Non-dean) "I think that [name of institution] is very slow to integrate new ideas into the curriculum. We are an extremely top heavy institution and as such have very few young librarians at our institution. Until the guard changes, I don't think much will change." [4]
- Participant #52:
(Non-dean) "Our librarians have no formal connection into the curricular structure of the institution or of departments." [3]
- Participant #53:
(Non-dean) "The framework has already impacted how I work with the first year writing faculty and how the library fits into their curriculum and outcomes." [7]
- Participant #54:
(Non-dean) "In our broad programming and learning outcomes we don't focus on information literacy at our institution as it is an out-dated mind set and mode of thinking about how we engage with information both at the academic and societal levels. It is unfortunate that ACRL clung to the concept of information literacy when investigating a way to replace the standards. Also, librarians with master's degrees are not taught to a sufficient level pedagogy and

educational theory. No matter what structure ACRL develops, librarians overall will struggle with it until they have learned and internalized pedagogy and educational theory." [2]

Participant #55:
(Non-dean) "The Framework will be influential in impacting practice to the extent non-library faculty engage with the standards. If it remains a 'domain' of librarians - then the IL work will not find a wider distribution." [5]

Participant #56:
(Non-dean) "My impression here is that we don't really make decisions based on the Framework--that is, we don't have copies of it up to refer to, and we don't use it in making decisions about our teaching. Individually, though, I think we're all doing somewhat framework-y things on our own--but that's only because the Framework is so open to interpretation and because some of it (like its emphasis on the value of critical thinking and collaboration) is obvious and accepted practice in education." [2]

Participant #57:
(Non-dean) "The language is more transparent to faculty and other non-librarian stakeholders. It's easier to use e.g. 'scholarship as a conversation' as a metaphor that faculty will understand, and thus see value in." [6]

Participant #58:
(Non-dean) "We first need to figure out how we will apply the framework to our instruction and then agree on it. It's not easy to engage faculty in discussions about information literacy because many perceive it as an education fad, or they are trying to cover content and don't see librarians as partners with their curriculum. I think it will have limited impact in the near future." [5]

Participant #59:
(Dean) "Just because librarians understand the importance of the framework for information literacy doesn't mean the administration will change their view of the library's role in supporting the curriculum." [4]

Participant #60:
(Non-dean) "The Standards have been the standard for info lit at our institution since 2009. There is no reason to rock the boat. The librarians will use the ideas in the framework to enhance their thinking, but it is not necessary to bring it directly to others at our institution. It will only confuse them." [1]

- Participant #61:
(Non-dean) "The Framework is a useful way of looking at things and can help us shape our future policy progress as we have already adopted IL SLOs based on the ACRL IL Standards that our faculty have embraced and are required for General Education SLO outcomes and units. It will take time and is a process not just flipping a switch." [4]
- Participant #62:
(Dean) "The framework repositions information literacy as transferable skills. Most of our faculty are not aware of the many topics we teach, presuming that we only cover 'how to search.' The new framework enables faculty to envision research as a critical thinking process rather than a set of procedural tasks. That being said, our library developed an instructional program that follows the new framework a few years ago, so it may not change our instructional approach as much as it will legitimize our instructional approach." [5]
- Participant #63:
(Dean) "Our instruction librarians are currently writing/revising our IL plan and the Framework will influence that; it will also influence an IL OA text currently in beta." [5]
- Participant #64:
(Dean) "I think that the librarians at my university will take a while to assimilate the framework concepts into their own teaching." [5]
- Participant #65:
(Non-dean) "The framework gives us language to talk about information literacy beyond the standards which were almost more of a process - if you do step one, step two, and so on, you are information literate. The Framework helps us talk with faculty and students about the complexities of information and the skills needed to navigate an information-laden world." [7]
- Participant #66:
(Non-dean) "While the Framework and its underlying theory are excellent discussion topics for professional librarians and disciplinary faculty, they do not translate information literacy concepts to students any better than the standards already do. The Framework is an abstract concept, and you have to be fairly adept as a researcher before you can understand the abstraction. An undergraduate is not going to connect with the concepts of the framework. So what do you have to do in order to help them make that connection? You have to help them learn the fundamental research skills before they will be able to think of research at a

higher level. The cognitive threshold theory on which the Framework is based was intended to explain the moment one understands a pivotal concept within a discipline. Information Literacy is not a standalone discipline. Information Literacy over-arches all the disciplines. We want our students to be information literate in their discipline." [1]

Participant #67:
(Non-dean) "I think the Framework provides a lot of possibilities for new directions that librarians can take this. It's a tool they can use and a supporting philosophy." [6]

Participant #68:
(Non-dean) "We are at the beginning of building a comprehensive information literacy program at the University of Rochester so the process is a bit slow going. We are enhancing the current staff with new librarians who have experience with heavy teaching loads and are very familiar with the framework, so as we gain some ground with fostering stronger teaching relationships with our faculty, the framework is taking a bit of a backseat. We first need to assess what has been taught in the past year or so before we can begin to establish common goals (like for the freshmen writing course) or look into course mapping. All in time." [5]

Participant #69:
(Non-dean) No answer. [6]

Participant #70:
(Dean) "The framework already guides Library faculty in the development of their courses. So the framework does impact library practices, but will not significantly change them. But, it will be helpful when discussing instructional assessment and accreditation." [6]

Participant #71:
(Non-dean) "Folks interested and involved in redesigning our first year experience course are all about threshold concepts. They want to include 'critical information literacy' into this curriculum, and using the framework as a way to do this work makes sense." [4]

Participant #72:
(Non-dean) "I think the framework is a good disciplinary document but it mostly help higher level understandings of what we do, not really change the amount or level of what we are already doing." [4]

- Participant #73:
(Dean) No answer. [6]
- Participant #74:
(Dean) "Our programme is well established, and while we look carefully at it annually, the new framework is great idealistic theory but does not seem to translate effectively into actual instruction." [3]
- Participant #75:
(Dean) "It will open the eyes for the librarians. I can't promise it will with faculty." [6]
- Participant #76:
(Non-dean) "Librarians at my institution are faculty and free to teach utilizing whatever pedagogy they are comfortable with. A few of us are using the frames, as we had used the standards, but most are still doing BI sessions...we do what we can with what we have." [5]
- Participant #77:
(Non-dean) "I think the librarians at my institution, as well as elsewhere, have long known information literacy doesn't need to be taught in the very structured Standards and that the Framework is really just describing the sea of change of thinking about these things that has already occurred." [2]
- Participant #78:
(Dean) "I WANT it to work, but I am very afraid it is too ephemeral, hard to pin down, difficult to work with and talk about. It will be a real challenge but it is an opportunity to make needed changes. Not sure whether to trumpet it as a big huge change or quietly make modifications at my institution. The uncertainty and ambiguity is disconcerting, but we'll do what we can with it. Conversations with new librarians about it is tough and even tougher with experienced librarians." [4]
- Participant #79:
(Non-dean) "Faculty are uniformly reluctant to turn over any part of their curriculum to librarians to design or teach. Only small inroads with administrators is likely to change." [4]
- Participant #80:
(Non-dean) "I think the way the framework is formatted does not easily translate into 'library practices' in a way that the faculty will understand. Due to the lack of concretes, we are going to spend most of the conversation around the new framework trying to

defend the library's place in the curriculum and any new practices the framework inspires." [5]

Participant #81:
(Non-dean) "The institution does not have much appetite for requirements and standards when it comes to IL." [2]

Participant #82:
(Non-dean) No answer. [5]

Participant #83:
(Non-dean) "I think the framework will have more impact on how librarians think about information literacy and how they introduce the subject with faculty. I am not sure the extent to which faculty will embrace the framework itself; rather it will impact how librarians think and work with faculty." [5]

Participant #84:
(Dean) No answer. [6]

Participant #85:
(Non-dean) "We are looking for ways to be more involved in the research process for our institution and help with information literacy understanding across the curriculum. I have already introduced the framework to my faculty. It is in language that is clear and easy to implement. Many said they could or already did include IL in their coursework...the framework would make it easier to know which concepts should be included." [5]

Participant #86:
(Non-dean) "Since my library mostly teaches 'one-shot' sessions, we only have time to cover the most basic concepts about using the library." [2]

Participant #87:
(Dean) No answer. [5]

Participant #88:
(Non-dean) "Eventually it will impact our practices since the Frames 'go further' than the current standards." [5]

- Participant #89:
(Non-dean) "Many of my colleagues are already rethinking practice based on the Framework. At the same time, it gums up the work of assessment, giving us almost nothing concrete to report on/back to our Dean in the tightening race for resources at my university. Pitched as a tool for helping librarians collaborate with faculty, I think the FW fails to account for the difficulties many of us have in getting faculty to work with us, not because of the failure of our imagination, but because of the intense demands on teaching faculty, librarians, administrators, and others in a struggling higher ed institution. For some individual librarians, the FW can spark things. As a coordinator, it is a problematic document at best, and looks to make my work life much more difficult for the next decade, until the next round of hot new things becomes the professional standard." [3]
- Participant #90:
(Non-dean) "I think the framework will facilitate better conversations with faculty across disciplines. The more fundamental challenge of bringing the larger institution to adopt a culture of assessment and to think programmatically must happen first." [5]
- Participant #91:
(Dean) "We are using the framework as a tool for scaffolding online lessons to teach metaliteracy skills across multiple institutions." [6]
- Participant #92:
(Non-dean) "I think there are many factors involved in changing library practices. So, overall, it will have an impact, but there are always other forces at work against change." [4]
- Participant #93:
(Dean) No answer. [6]
- Participant #94:
(Dean) No answer. [4]
- Participant #95:
(Dean) "The institution is fairly large, and we have a lot of competing initiatives. Outreach and engagement being a top priority will naturally help to advance the framework, but the overall extent of impact directly ties to whether or not librarians make it their top priority when working with teaching faculty." [4]

- Participant #96:
(Non-dean) "The faculty in the library department at my institution are already rethinking their approaches to instruction based on their exploration of the Framework. This will continue to happen going forward." [7]
- Participant #97:
(Non-dean) "More explicit impact in documentary evidential disciplines, less so in object evidential disciplines. English lit studying Shakespeare will engage more than biology students studying crickets." [5]
- Participant #98:
(Non-dean) "We have already implemented much of the Framework into our information literacy. So it has changed it, but there will be not much future impact." [4]
- Participant #99:
(Dean) "The Framework will have some influence on directing the discussion of and in planning for information literacy instruction." [5]
- Participant #100:
(Non-dean) "The content of IL is the same. This provides a new POV. Currently librarians at my institution are not willing to change their own POV to the framework's. It will provide some language to outreach with faculty -- new conversation piece -- but not a revolutionary one." [3]
- Participant #101:
(Non-dean) "I selected this overall extent because librarians are already using the Framework as a guide for one-shot instruction sessions and assessment practices." [6]
- Participant #102:
(Non-dean) "I think that the Framework offers worthwhile discussion points and serves as a useful document to contextualize the foundation of what we are talking about when we talk about information literacy. However, I do not think that we will do away with many of the lessons developed out of the Standards, nor do I think the Framework and the Standards are necessarily contradictory documents." [3]
- Participant #103:
(Non-dean) "I think that our librarians will use the new framework to guide our instruction practices, but the nature of our instruction (one shots) means that most instruction is still skill-based." [5]

- Participant #104:
(Non-dean) "We have an extensive one shot program, 350 sessions and 2,000 consultations per year. The elements of the earlier standards and the philosophical discussion of the newer framework are implicit in our work without our dwelling or focusing on either." [2]
- Participant #105:
(Non-dean) "Since we already had developed a holistic information literacy program at our institution we do not think the framework will impact our practices because we have been able to create great collaboration within our institution that maybe others have not." [3]
- Participant #106:
(Non-dean) "Our Library is moving in many of the directions outlined in the Framework, but the majority of our present Library faculty will be eligible for retirement in the next five years. The continuation of these initiatives will depend in large part on remaining and new academic librarians at our institution." [4]
- Participant #107:
(Dean) "We are a small school and library is understaffed. We can be aware of the Framework and communicate it but whether or not we'll have the funding or staff to make major changes is doubtful." [5]
- Participant #108:
(Non-dean) "Enlivens librarian discussions about what we're doing. Gives us an opportunity to discuss IL on campus in a language that some departmental faculty are familiar with." [5]
- Participant #109:
(Non-dean) "The Frames will serve as an enhanced 'layer' that provides better context surrounding the ACRL IL Standards from 2000. Although I do not think the Frames should replace the old Standards outrightly." [5]
- Participant #110:
(Non-dean) "At [name of institution], information literacy is one of three foundational goals along with critical thinking and communication (oral and written) that are a part of our university studies goal strands and proficiencies. These are a part of both our general education curriculum and upper division and graduate curriculum. The information literacy goals and proficiencies were based on the ACRL Information Literacy Competency Standards for Higher Education in 2000. They have been a part of our curriculum since

2006. We currently base a major assessment component for our institution on our information literacy proficiencies. A major objection to the Framework is that the outcomes and proficiencies are poorly written. They are not written for assessment activities. For example, what outcome would you be able to assess from the following: Understand that many disciplines have acknowledged authorities in the sense of well-known scholars and publications that are widely considered standard. How would you assess a students ability to 'understand that many disciplines have acknowledged authorities in the sense of well-known scholars and publications?' This problem is rampant in the Framework whether the focus is on knowledge practices or dispositions. I really hate to say this, but the entire Framework seems to have been developed without any context of the previously well-written outcomes that many institutions embedded within the university curriculum. So while we talk about the Framework at our institution because there is a lot of talk beyond at conferences and such, the usefulness of the Framework at an institution that concentrates on assessment of student learning of information literacy outcomes is little to none." [1]

Participant #111:
(Dean) "The framework is an inbred process that has left little room for a grassroots student-faculty-new literary dyad that is needed for a real open conversation on the definition of literacy teaching in the 21st century." [2]

Participant #112:
(Non-dean) "I am an idealist and would like to think that our instructional librarians will keep an open mind to the framework. However, we have many librarians who resist change and don't want to understand the effectiveness and purpose of the framework to help in collaborative efforts with 'subject-specific' teaching faculty (and vice-versa)." [5]

Participant #113:
(Non-dean) "I don't think much will change." [3]

Participant #114:
(Non-dean) No answer. [2]

- Participant #115:
(Non-dean) "I think that the framework will help librarians think more about designing their own assignments and activities, but I think the larger conversation about integrating information literacy concepts across the curriculum is a long-term effort that the framework will not change." [3]
- Participant #116:
(Non-dean) "Some will be more 'on board' than others." [5]
- Participant #117:
(Dean) "With multiple planning and assessment strategies going on all over campus our ability to engage faculty in looking at, or thinking about, the framework will, in my opinion, be very limited. They may impact our development of hybrid learning materials but I am not sure we'll get much traction from anyone outside the library." [4]
- Participant #118:
(Non-dean) "We're moving even further away from teaching databases to teaching lifelong critical thinking approaches to information, and the threshold concepts in the Framework have provided ideas of what those approaches might be. However, our one-shot system is less conducive to developing these sorts of understandings, so it will take some time to figure out how to more fully integrate those into the institution. Also, the information literacy part of our institution's core curriculum was developed based on the standards, and we're still beholden to that, so we can't depart from that too radically. We also need to work within the ideals of our accrediting body." [5]
- Participant #119:
(Dean) "The framework is a nice bit of guidance, but is too broad to cause a re-think and overhaul of information literacy teaching that we have been doing for some time now. It is a useful document, but really doesn't change anything for us, and is not known among any of the non-librarian communities with which we interact. Impact will be modest at best." [4]
- Participant #120:
(Non-dean) "The overall institution will struggle to support these new framework, with too many part time faculty and budgetary cuts." [3]

- Participant #121:
(Non-dean) "The move away from 'bullet point' learning outcomes and toward a richer conceptual understanding of the context in which information literacy operates is a huge step forward. As an example, I can now show students results from a single Google Scholar search that illustrate the 'back and forth' of research replication and the notion of 'scholarship of conversation' to show more richly the function of a scholarly research study and where it fits in to advance human understanding. There was no room in the former competencies to have this type of rich discussion." [5]
- Participant #122:
(Non-dean) No answer. [2]
- Participant #123:
(Non-dean) "My opinion of the Framework is that it is a logical tool for instruction design. I do not perceive it as a radical change in how we do things." [5]
- Participant #124:
(Non-dean) "Practices are so ingrained within the library department and we don't have much influence on curriculum. I believe things will stay as is despite the new framework." [3]
- Participant #125:
(Non-dean) "The framework provides a different, big picture way of contextualizing the work we already do. It will allow us to integrate ourselves further into the curriculum, but the essential methods we use are unlikely to change based on the Framework." [4]
- Participant #126:
(Non-dean) "We'll see a minor shift in practices, but have been advancing many of the concepts in the frames for quite a while. Primary benefit will be in promoting the value of information literacy and the library with faculty and administrators." [2]
- Participant #127:
(Dean) "We completely redesigned the required, one-credit course librarians teach at our institution based on the Framework." [7]
- Participant #128:
(Dean) "I know we will use the framework for our instruction and designing our curriculum." [6]

- Participant #129:
(Non-dean) "I think the framework will help us connect what we do and the needs of the teaching faculty." [6]
- Participant #130:
(Non-dean) "We spent many years educating faculty and working internally with the standards. We are prepared to update and revise that work based on the Framework." [6]
- Participant #131:
(Non-dean) "I think the Framework is a huge leap forward for library instruction and I think it will open doors and start conversations with our disciplinary collaborators, but in general library instruction is still seen as moot or quaint by many faculty. We'll start with our historical partners and work out from there." [6]
- Participant #132:
(Non-dean) "Our library has recently completed a comprehensive library renovation project that includes the construction of two large, very high-tech active learning classrooms. Those classrooms were planned to address new ideas and practices consistent with standards created in ACRL's newest Framework, and I think that they--along with the guidelines of the Framework itself--will be absolutely transformational in the ways that we teach our students to obtain information." [5]
- Participant #133:
(Non-dean) "I think it will impact some librarians, but I don't think the institution, in general, cares at all about information literacy." [3]
- Participant #134:
(Dean) "It's already made an impact, we've designed our curriculum around it, and we use it in our assessment practices, and it came at a time when the University as a whole was working on these things, so librarians have been invited to speak to other faculty about how we are using this framework, and those talks have been well received." [6]
- Participant #135:
(Non-dean) No answer. [5]
- Participant #136:
(Non-dean) "I think that for my personal use (my subject specialties, online learners, etc) it will have a big impact. However, our librarians have a lot of latitude in how they handle instruction, and many are happy with the way they have always done things." [5]

- Participant #137:
(Dean) "The framework is very theoretical and hard to explain to faculty in a 'sound bite' which is about all they have time to listen to. We are entirely dependent on the faculty for access to their classes, and almost all of our classes are one-shot deals. The previous competency standards were succinct and easy to explain. We were and are still struggling to reach all the students on this campus who need this most basic instruction. The new standards may be useful in the context of libraries that have credit bearing instruction programs where they meet the students multiple times. Our faculty do not want to give up more than one class in a semester for library instruction if that, so the framework is just too hard to articulate and to incorporate. That being said, it may be that individual librarians may find a few receptive faculty to work on a broader integration of the framework and its threshold concepts, etc., but most of the librarians are still trying to get our students to the most basic level of info lit. I don't think the framework will have much impact here." [2]
- Participant #138:
(Non-dean) "My institution is slow to catch on the any form of change. We spend a lot of time talking about things before we actually make any attempt at implementing something. We talked about the Framework as a group of instruction librarians about 7 months ago, but then never spoke of it again as a group." [3]

Appendix E

Figures and Tables for Chapter Five

There are three types of codes in the code hierarchy. "Parent" codes represent the overarching and conceptually distinct themes of this study, while "child" codes delineate sub-themes within the larger themes and provide more details about their parent codes. "Grandchild" codes further elaborate the child codes, breaking them into sub-themes and providing the richest level of detail. For example, in the parent code *Advantages* there are three child codes (*Useful*, *Implementation Achievements*, and *Conceptual Lens*), the first two of which have grandchildren codes (e.g., *Encourages Discussion* is a grandchild of *Useful*).

In Chapter Five, there is a pair of figures about the two parent codes—*Advantages* and *Challenges*. In this appendix, there are pairs of figures illustrating data about the *Advantages* child codes, after which come the grandchildren codes for these *Advantage* child codes. In each pair of figures, the total amount of answers for each code is presented in the first figure (purple and/or orange), and, in the next figure, the number of answers by position (deans and non-deans) are presented. For example, in Figure E2, the blue bar next to *Useful* represents the total amount of non-dean answers containing this theme (45) while the red bar underneath represents the total amount of dean answers (10). At the end of this appendix are two tables describing the percentage of responses for child and grandchild codes by position (deans and non-deans).

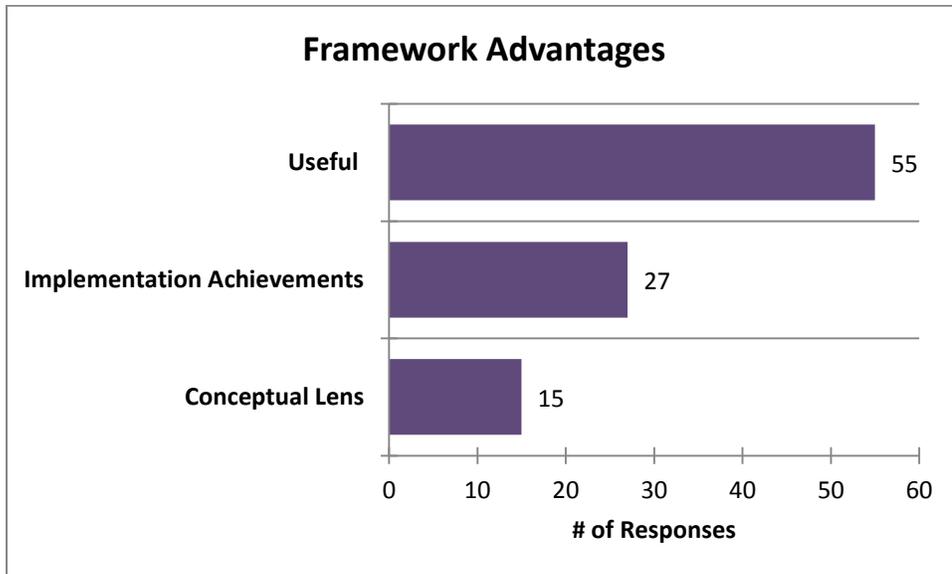


Figure E1. Perceived Advantages of the Framework.

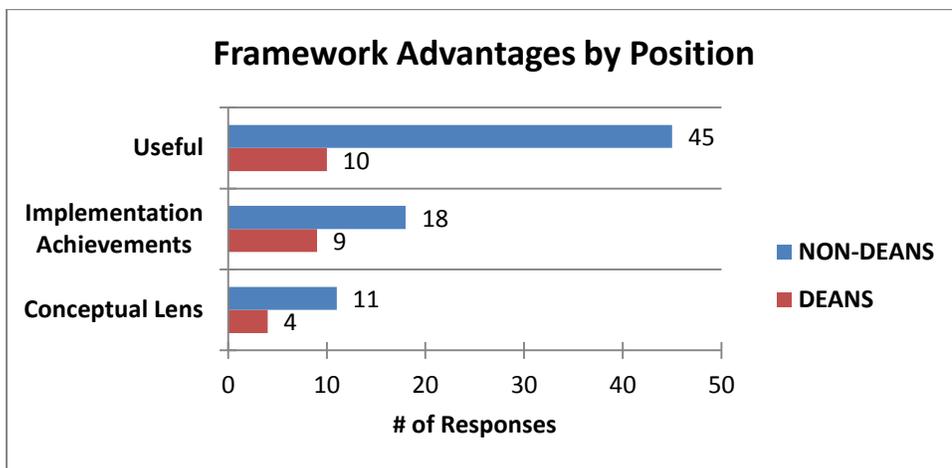


Figure E2. Perceived Advantages of the Framework according to library position.

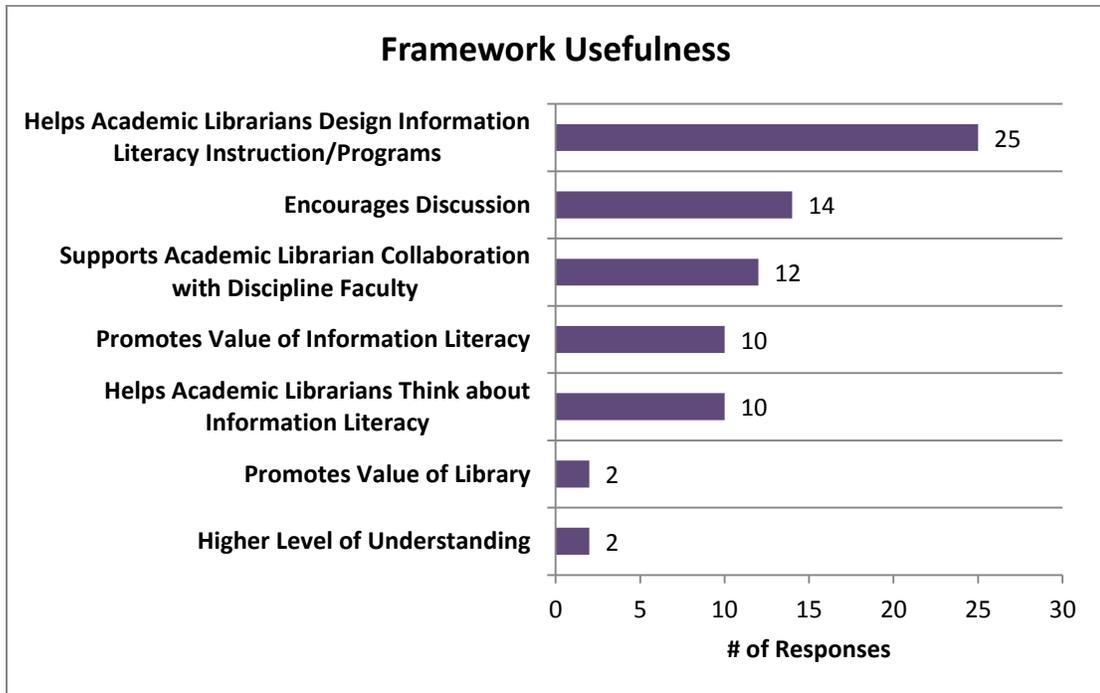


Figure E3. Perceived Usefulness of the Framework.

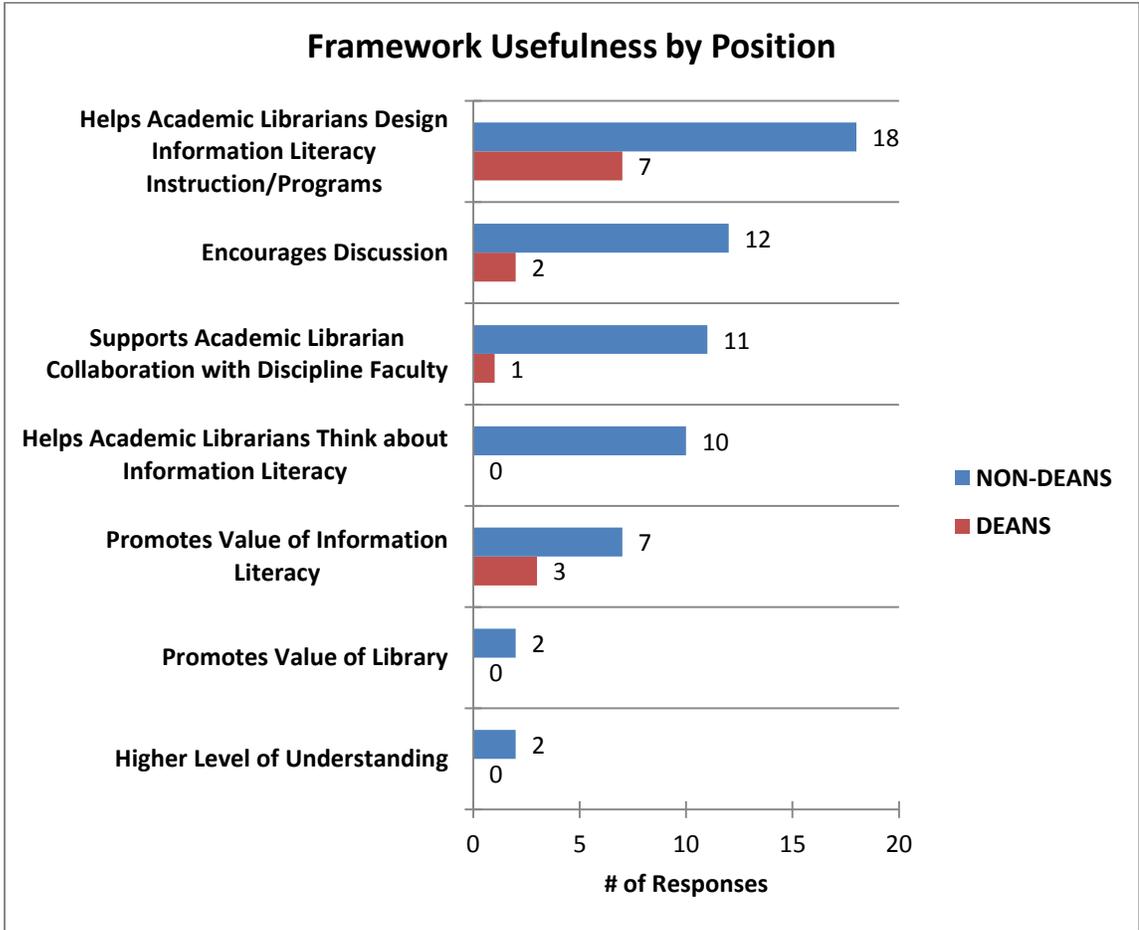


Figure E4. Perceived Usefulness of the Framework according to library position.

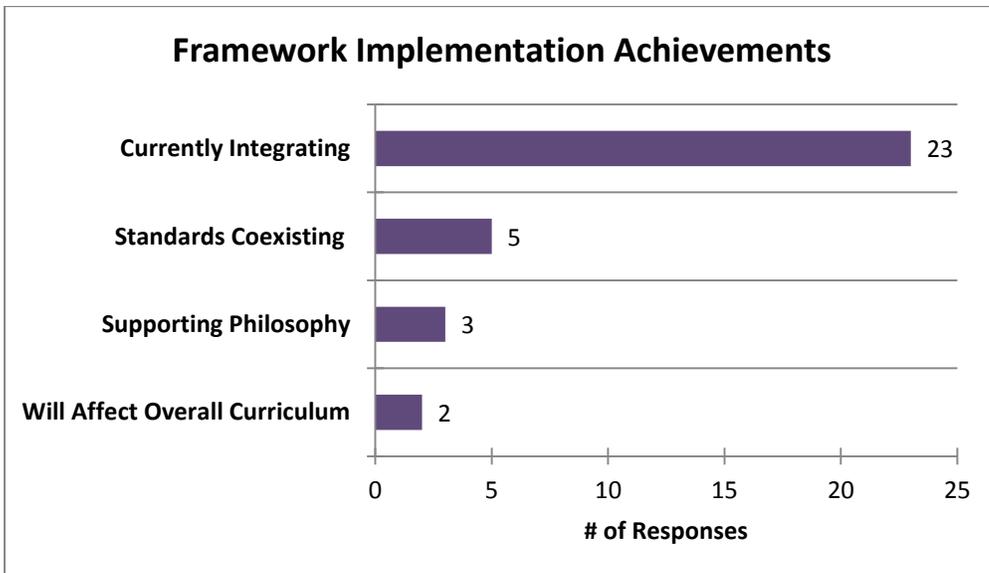


Figure E5. Perceived Implementation of the Framework Achievements.

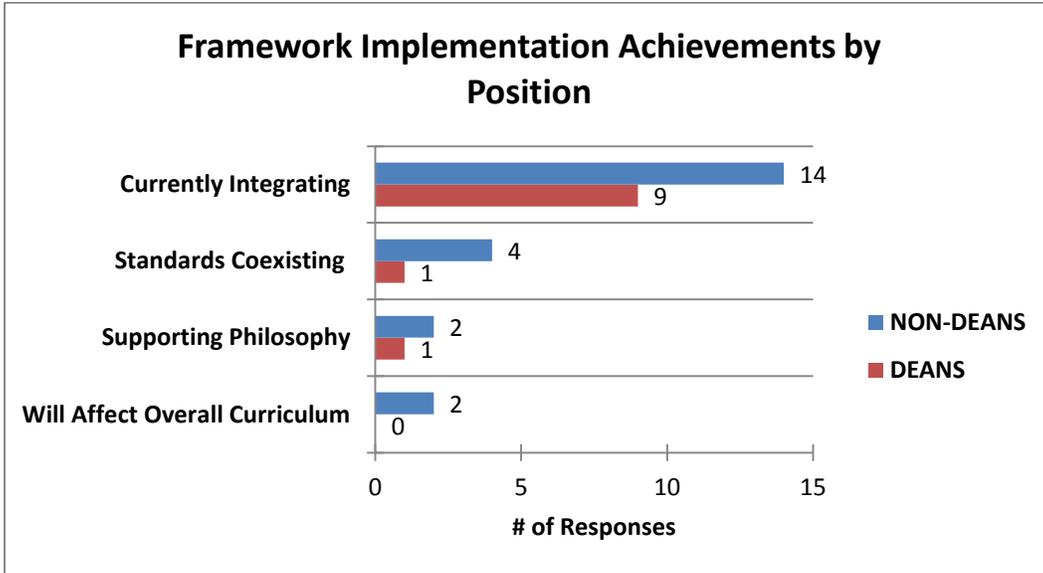


Figure E6. Perceived Implementation of the Framework Achievements according to library position.

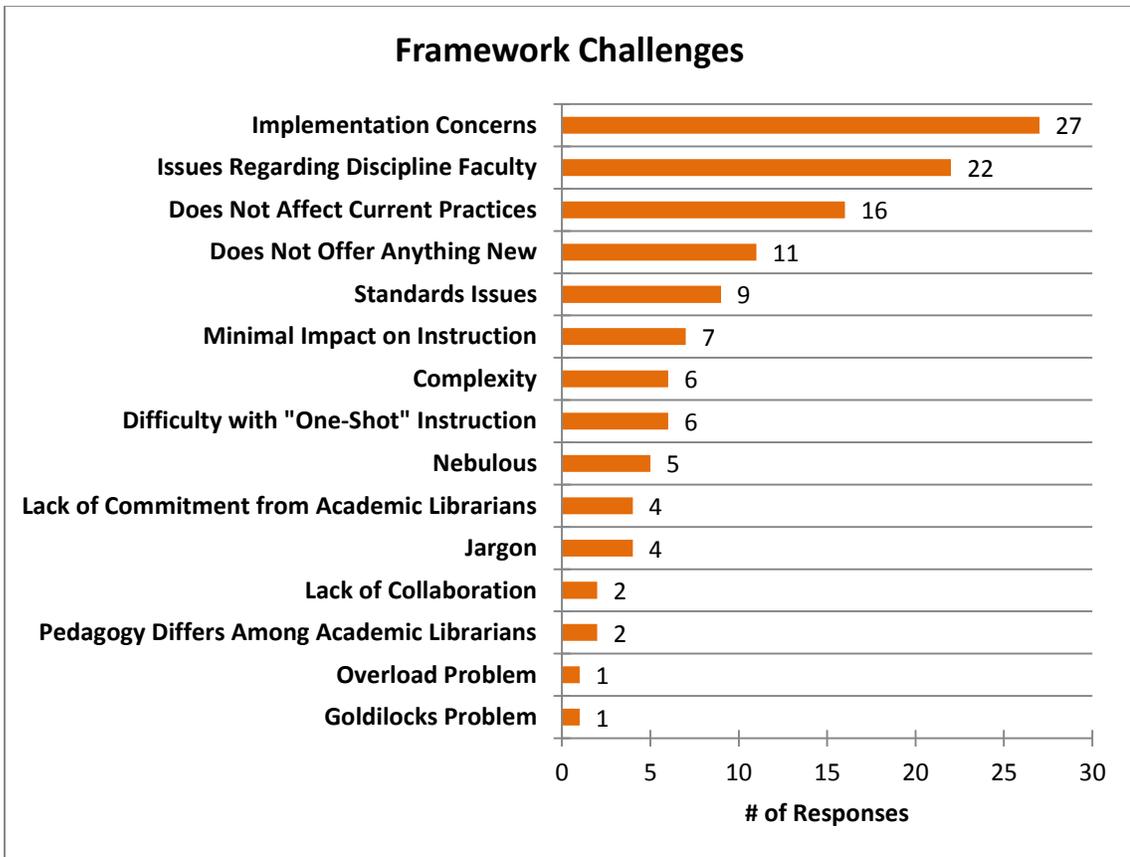


Figure E7. Perceived Challenges of the Framework.

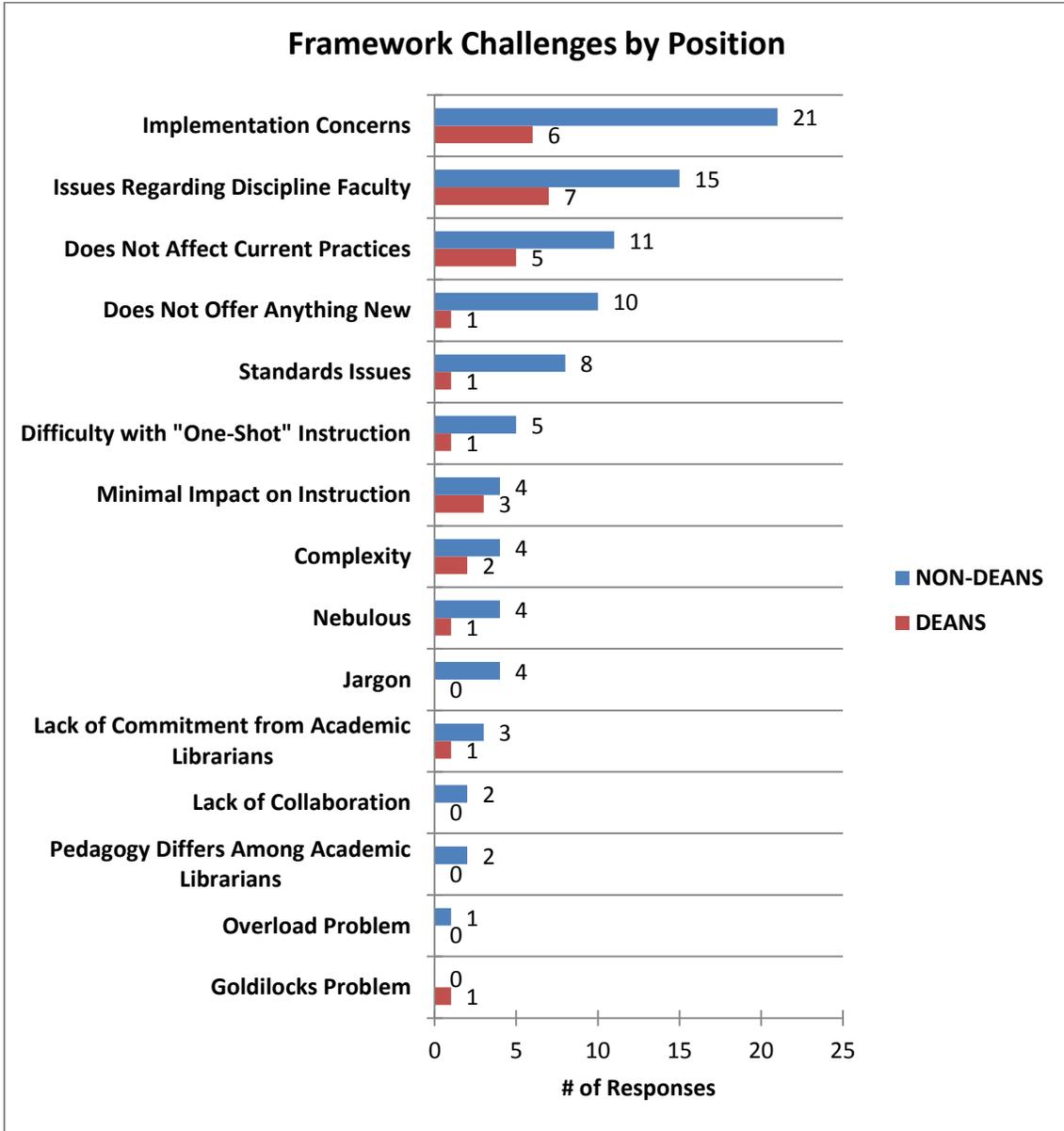


Figure E8. Perceived Challenges of the Framework according to library position.

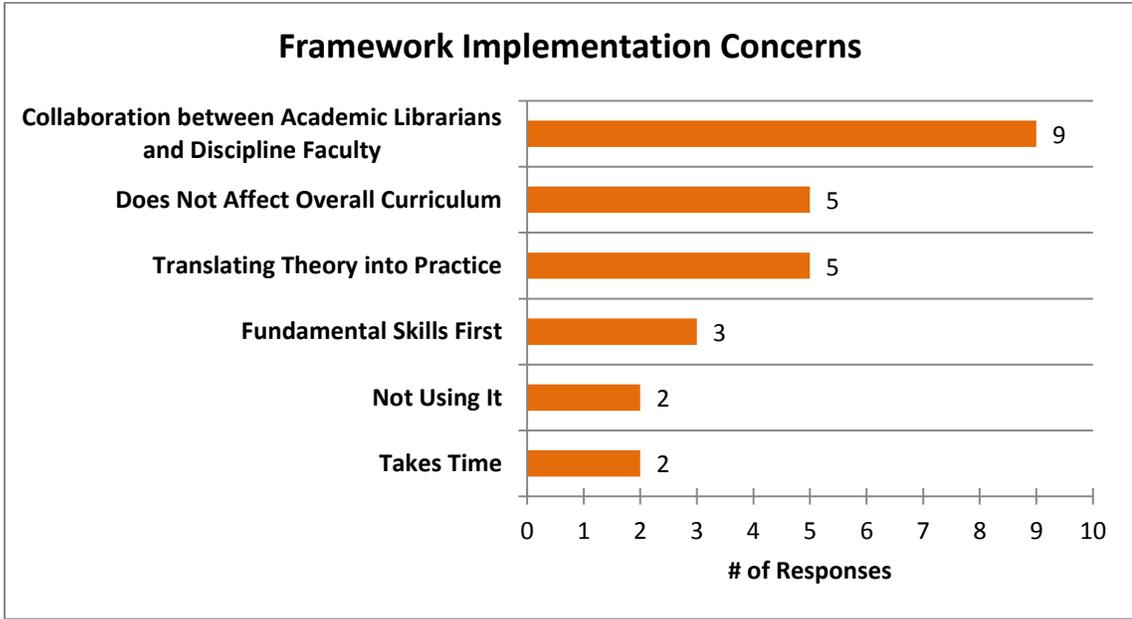


Figure E9. Perceived Implementation of the Framework Concerns.

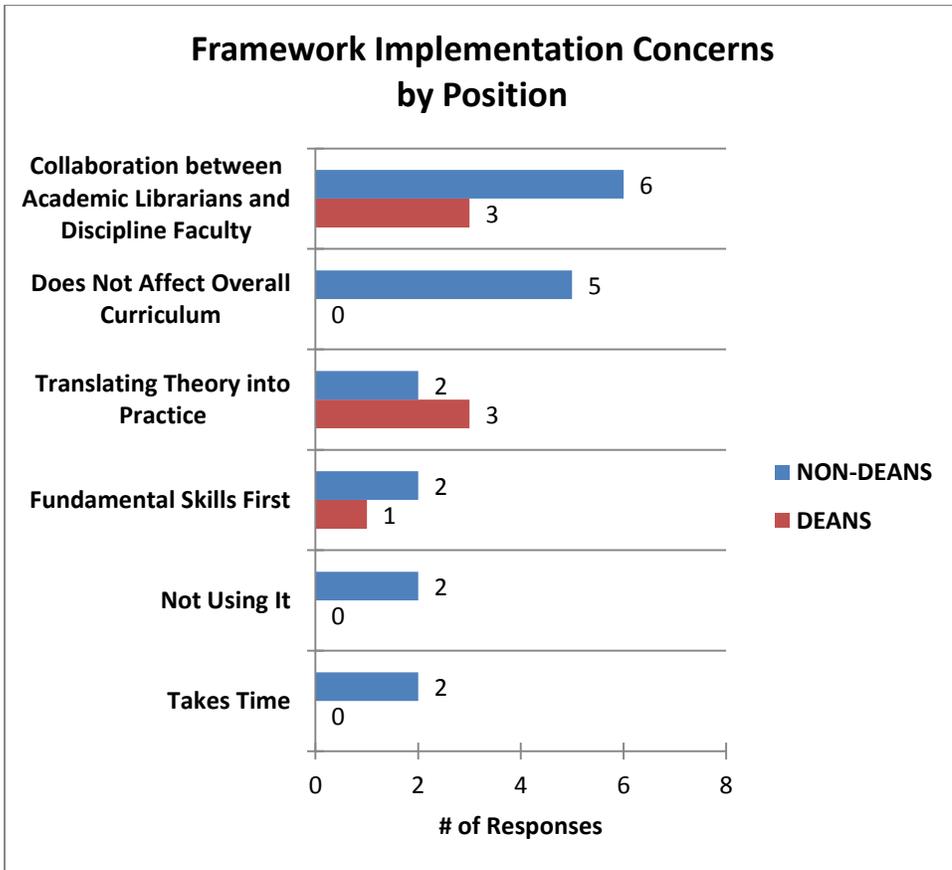


Figure E10. Perceived Implementation of the Framework Concerns according to library position.

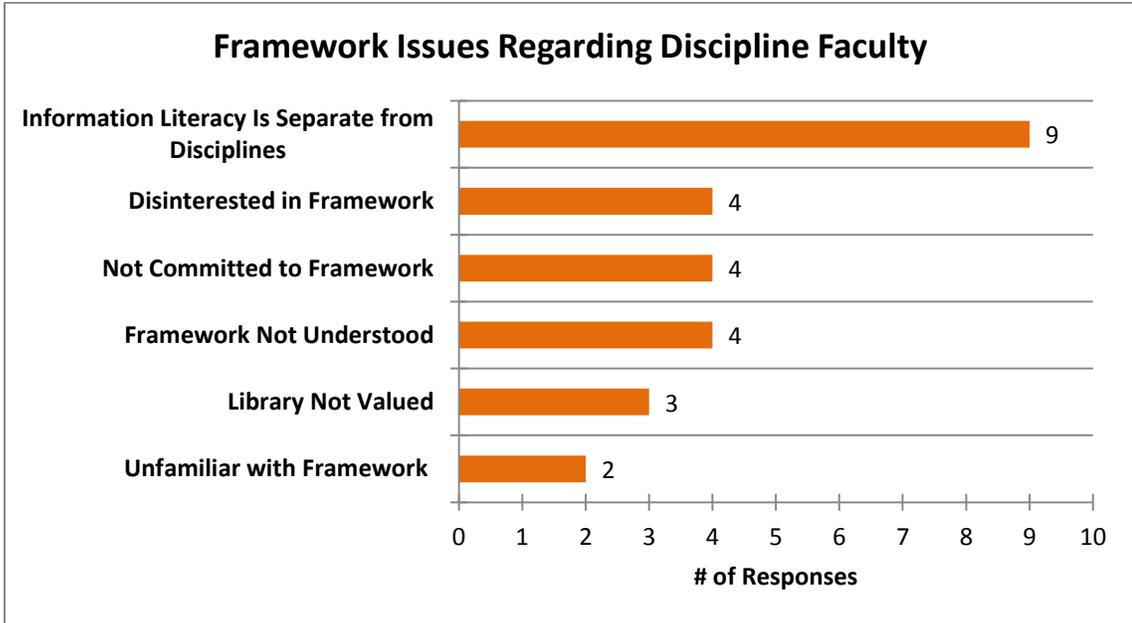


Figure E11. Perceived Issues Regarding Discipline Faculty and the Framework.

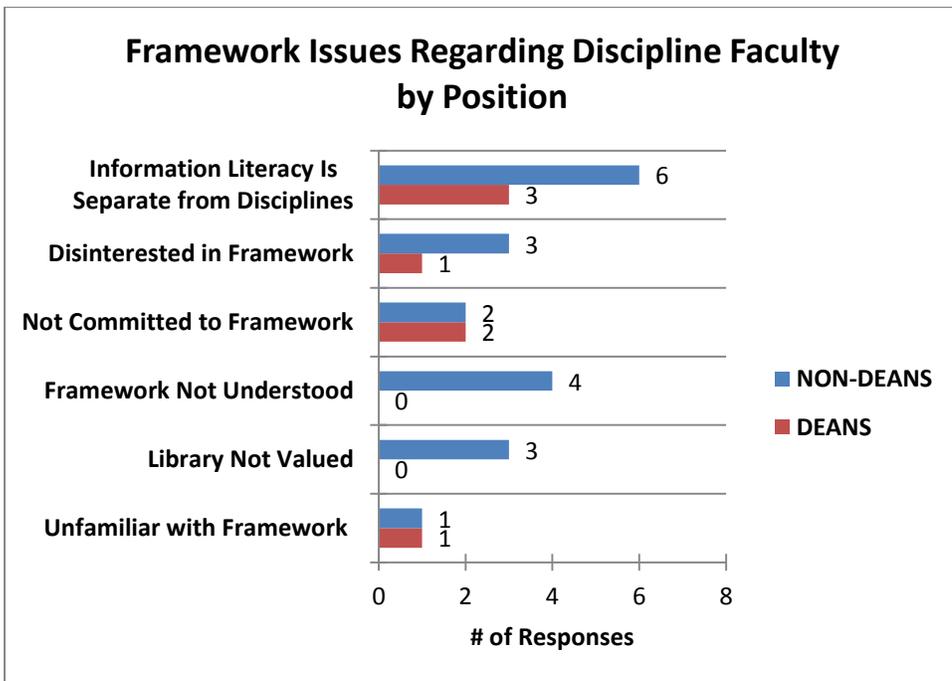


Figure E12. Perceived Issues Regarding Discipline Faculty and the Framework according to library position.

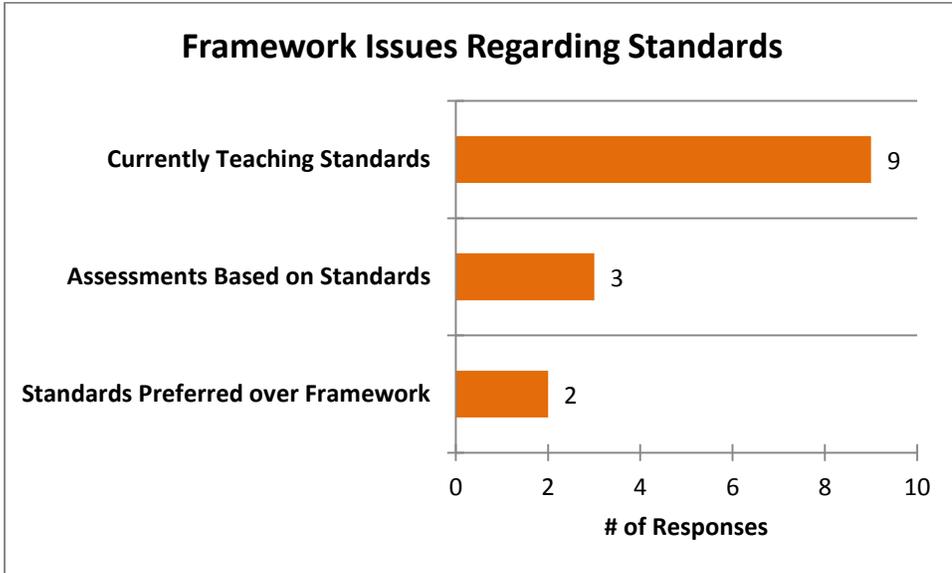


Figure E13. Perceived Issues Regarding Standards and the Framework.

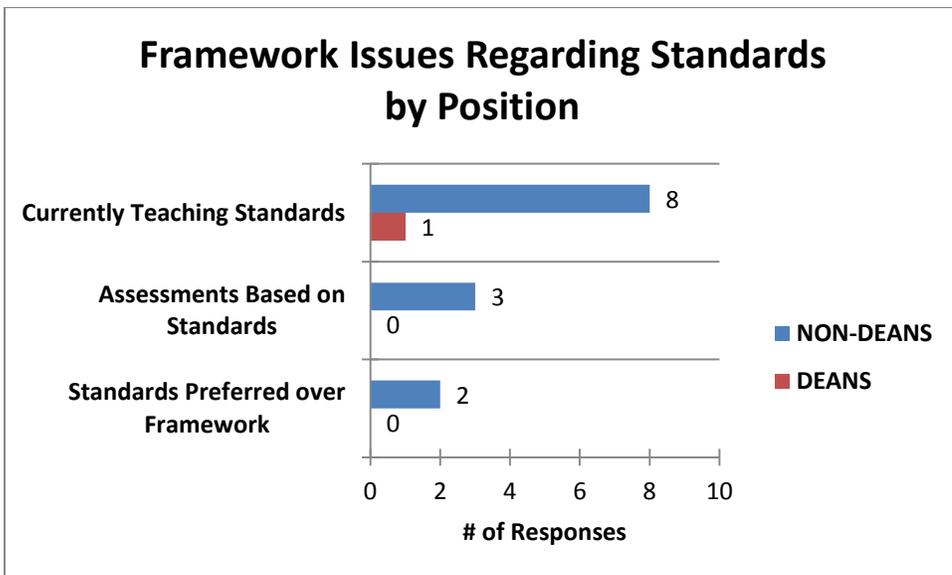


Figure E14. Perceived Issues Regarding Standards and the Framework according to library position.

Table E1

Percentages by Position for Advantage Child and Grandchild Codes

Child Code	Grandchild Code	% of Deans	% of Non-deans
Useful		38%	52%
	Helps Academic Librarians Design Information Literacy Instruction/Programs	27%	21%
	Encourages Discussion	8%	14%
	Supports Academic Librarian Collaboration with Discipline Faculty	13%	4%
	Promotes Value of Information Literacy	12%	8%
	Helps Academic Librarians Think About Information Literacy	15%	0%
	Promotes Value of Library	2%	0%
	Higher Level of Understanding	2%	0%
Implementation Achievements		21%	35%
	Currently Integrating	16%	35%
	Standards Coexisting	5%	4%
	Supporting Philosophy	2%	4%
	Will Affect Overall Curriculum	2%	0%
Conceptual Lens		13%	15%

Table E2

Percentages by Position for Challenge Child and Grandchild Codes

Child Code	Grandchild Code	% of Deans	% of Non-deans
Implementation Concerns		24%	23%
	Collaboration between Academic Librarians and Discipline Faculty	7%	12%
	Does Not Affect Overall Curriculum	6%	0%
	Translating Theory into Practice	2%	12%
	Fundamental Skills First	2%	4%
	Not Using It	2%	0%
	Takes Time	2%	0%
Issues Regarding Discipline Faculty		17%	27%
	Information Literacy Is Separate from Disciplines	7%	12%
	Disinterested in Framework	3%	4%
	Not Committed to Framework	2%	8%
	Framework Not Understood	15%	0%
	Library Not Valued	3%	0%
	Unfamiliar with Framework	1%	4%
Does Not Affect Current Practices		13%	19%
Does Not Offer Anything New		11%	4%
Standards Issues		9%	4%
	Currently Teaching Standards	9%	4%
	Assessments Based on Standards	3%	0%
	Standards Preferred over Framework	2%	0%
Minimal Impact on Instruction		5%	12%
Complexity		5%	8%
Difficulty with "One-Shot" Instruction		6%	4%
Nebulous		5%	4%
Lack of Commitment from Academic Librarians		3%	4%
Jargon		5%	0%
Lack of Collaboration		2%	0%
Pedagogy Differs Among Academic		2%	0%

Librarians			
Overload Problem		1%	0%
Goldilocks Problem		1%	0%

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Footnotes

¹The revised draft minutes of the midwinter ACRL Board of Directors Meeting II, on Monday, February 2, 2015, stated that:

There was some support from the Board for sunsetting the standards immediately, but overall the Board felt that people need additional time to adopt the framework. The Board would like to review sunsetting the standards in eighteen months at Annual Conference 2016. (p. 6)