

# Engaging Graduate Students in Research and Scholarly Life Cycle Practices: Localized Modeling of Scholarly Communication for Alignment with Strategic Initiatives

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## Introduction

Librarians have for some time been vocal about the fact that the scholarly communication business cycle, essential as it is to the function of an academic library, is not economically sustainable. Academic and research libraries have been quick to rise to the challenge of integrating scholarly communication into library operations and connecting these efforts to broader institutional goals. As we surpass more than a decade of effort, significant problems continue to reshape the landscape of scholarly communication. Developing scholarly research skills continues to be of paramount need and remains strongly related to success as a research scholar. Reexamining areas of need and identifying likely paths for collaboration can be beneficial to determining value and impact in this ever-changing environment. As academic institutions struggle to adapt, librarians should leverage their expertise to advocate for positive change. This paper examines the graduate student's place in the campus research and scholarly lifecycle expectations and practices to identify gaps, form partnerships, and find solutions.

The research and scholarship life cycle is “the creation, publication, discovery and dissemination of scholarly research.” Managing this scholarly record requires conducting effective literature searches, managing reference information, understanding modes of publication, and demonstrating productivity as a researcher.<sup>1</sup> In support of these goals, Andrea Ketchum suggests that a more effective approach would be for libraries to focus not on the product of scholarly communication but rather on its process.<sup>2</sup> This localized model will identify not only needs but also institutional stakeholders positioned to fill those needs, which in turn will assist the library to “demonstrate alignment with and impact on institutional outcomes.”<sup>3</sup> Resources and services can be mapped to research tasks and institutional needs, and librarians can engage with faculty and graduate students alike to build collaborative relationships across departments. In this paper we outline the process of designing a strategic plan, the elements of that plan, its implementation, and the results. The steps include reviewing the institution's latest strategic plan, research class syllabi, and library statistical data, as well as consultations with the graduate school, a citation analysis of recent theses and dissertations, and outreach to the various departments and individual advisors. We identified three burning questions to address:

1. What skills, tools, and guidance do students need to conduct effective literature searches that are expected by their academic disciplines?
2. How can students efficiently and effectively manage data and other information reducing preparation time?
3. What do our students need to understand about copyright, both as consumers and creators of knowledge?

Through planning strategically, libraries can demonstrate value to the community and institution they serve as being able to support all aspects of the scholarly research life cycle and research community needs.

## Literature Review

The levels of adoption have significantly varied by institution.<sup>4</sup> Traditional scholarly communication services include information access, hosting and managing content, outreach and educational activities.<sup>5</sup> Carpenter, Graybill, Offord and Piorun describe the role of the library as proactive in the life cycle of scholarly

publishing maintaining relationships with external publishers and peer review institutions to manage the scholarly output of the research community.<sup>6</sup> Outreach and education are ongoing with librarians customizing skills to each academic area.<sup>7</sup> Tancheva, Gessner, Tang, Eldermire, Furnas, Branchini, Steinhart, and Foster make the distinction between information searching and research (i.e., asking questions, synthesizing, and creative problem solving). They state the importance of self-management and recognizing the fluid nature of research activity—the broader context that requires moving from one activity to another often non-linear in nature.<sup>8</sup> Vaughan et al., call attention to the ubiquity of information, constant connectivity, and the availability of a variety of media that allow multiple points of entry in the research process and the growing need for creative ways of support.<sup>9</sup> Fowler, Stemper, and Persily (2005) offer a framework for planning and starting a scholarly communication program. They identify five phases: establish structure, build knowledge, scan environment, go public, and evaluate program. Planning and implementation, generic tools to adapt locally with Creative Commons Licensing, and implementation examples guide direction.<sup>10</sup> Building a culture of scholarly communication and readiness of stakeholders to adopt measures are common challenges and viewed as the first step towards adapting scholarly communication with a need to keep efforts ongoing.<sup>11</sup>

## Statement of Need

The Graduate School has undertaken a strategic mission to improve the quality of graduate student scholarly writing. At the same time, the university has identified a need to reduce the length of time it takes graduate students to complete their studies and receive their degree. The library is a key stakeholder in both of these efforts. However, the library is currently understaffed, having undergone over a 50% reduction in professional librarians in the past five years. This is the most significant drop in the workforce since World War II. When coupled with the increase in online learning as well as ongoing budgetary cuts, finding more effective and efficient methods of meeting students' research needs is critical. Through an analysis of recent scholarly output and collaboration with colleagues across campus, we can first identify problems, gaps, and objectives that need attention, and secondly, we can determine how to target our efforts and maximize our results.

## History of Institution

Texas A&M University-Commerce was founded by William L. Mayo in 1889 as East Texas Normal College and functioned as a private teachers' college until 1917, when it was acquired by the State of Texas and was renamed East Texas State Teachers College. In 1935, master's programs were inaugurated, prompting a name change to East Texas State Teachers College. This was followed by the first doctoral program in 1962, at which time the university was renamed East Texas State University. In 1996, the university joined the Texas A&M system and acquired its current name.

TAMUC is located in a rural community sixty miles northeast of the DFW metropolis and has an enrollment of just over 12,000 students, approximately 38% of which are graduate students. Graduate programs are offered in 24 academic departments with more than 40 major areas of study. In addition to 38 master's degree programs, six doctoral degrees are offered, including Counseling (PhD); Educational Psychology (PhD); Educational Administration (EdD); English (PhD); Higher Education (EdD); and Supervision, Curriculum, and Instruction (EdD).

Over the last 20 years, the library at TAMUC has continued to shift from print to electronic resources and communication. In 2006, the library instituted its first digital collection, and in 2008, a digital collections librarian was hired. In 2013, the Faculty Pub was initiated to give faculty the opportunity to share their research and publications with each other as well as graduate students. A proposal was submitted at the end of 2013 to establish a scholarly communication initiative, noting that the nature of scholarly communication was undergoing significant change, that students as well as faculty required new skills to adapt to this change, and that the library was in a unique position to fill this void. For various reasons, library administration did not feel we could move forward with a comprehensive approach. Since that time, efforts have been focused toward identifying and building campus-wide support for scholarly communication needs. Most recently, a series of citation analyses have been conducted on TAMUC theses and dissertations

to determine strengths and weaknesses. The results have been useful both for the library in terms of research instruction and collection development as well as for the graduate school.

One of the purposes of an academic library is to teach students information literacy through the utilization of various library resources. Traditionally, this has been done through library instruction. During these sessions, students are shown how to use library databases or print resources. Instruction librarians at James G. Gee Library have provided library instructions through the years to educate students in the use of library resources, including identifying, locating, and utilizing information. Librarians generally got verbal or written feedback from instructors and students, which indicated the effectiveness of the library instruction. Beginning in 2003, instruction librarians measured the success of library instruction using various statistical tools, including a pre-test/post-test, online survey, and individual outreach to classroom faculty. In 2010, the library began using an online reporting tool to keep track of interactions, including reference queries. In 2012, the reference librarians began using an online tool to field queries via email and text messaging. Approximately 50% of all interactions since electronic data began to be collected in 2010 have emanated from graduate students, with 20% from undergraduates, 10% from faculty, staff, alumni, and the community, and 20% unassigned.

### University Strategic Plan + Library Strategic Plan

The university's strategic plan addresses goals in seven domains: Student Success, Scholarship, Service, Stewardship, Diversity, Globalization, and Communication. The library currently analyzes its effectiveness through alignment with the university strategic plan in the areas of collections, facilities, instruction, outreach, and services. In regard to scholarly communication, the library focuses on collections and instruction as its foundational contributions.

This project seeks to make a more quantifiable connection to another goal in the strategic plan in the area of student success: "The university will recruit, admit, and assist academically qualified undergraduate and graduate students who are capable of graduating on time by 2020." A strategy outlined to reach this goal is: "Reduce average time to graduation by 2% by 2020, by increasing average student credit hour enrollments each semester and establishing time-to-graduation targets by college, department, and program."

The identification of problems, gaps, and objectives, leading into our collaboration with the various departments and with the graduate school, is expected to meet this relatively modest goal of a 2% reduction in time to graduation. These efforts will start in a select department and then branch out to other academic departments.

### Methodology

To better understand graduate students' needs, a purposeful and targeted approach was seen as useful. Given the history of the university and its long-standing roots in teacher education, a single department from the College of Education and Human Services was deemed appropriate and a natural starting point. Over 90% of students enrolled in a doctoral program are in the COEHS, and the selected department has a mid-level graduation rate. This will allow a focus on improvement that builds on existing successes before moving on to slower-moving departments. Programs include one undergraduate, four masters, and one doctoral program (one of the largest and the first doctorate offered by the university in 1962). An initial review was conducted of citation analysis of theses and dissertations, reference questions and graduate student consultations to understand issues they are seeking help in, and faculty authorship and research output to determine what topics faculty are writing about. From this analysis, questions were created for a scholarly communication reference interview to be disseminated to faculty of the department. The importance of developing scholarly communication skills that match what faculty expect of themselves and from each other can prove to be helpful in identifying scholarly expectations and graduate student needs.

### The Process: Review & Analysis

Data were drawn from four citation analysis projects conducted over the past few years, providing direction for review and analysis. These studies involved:

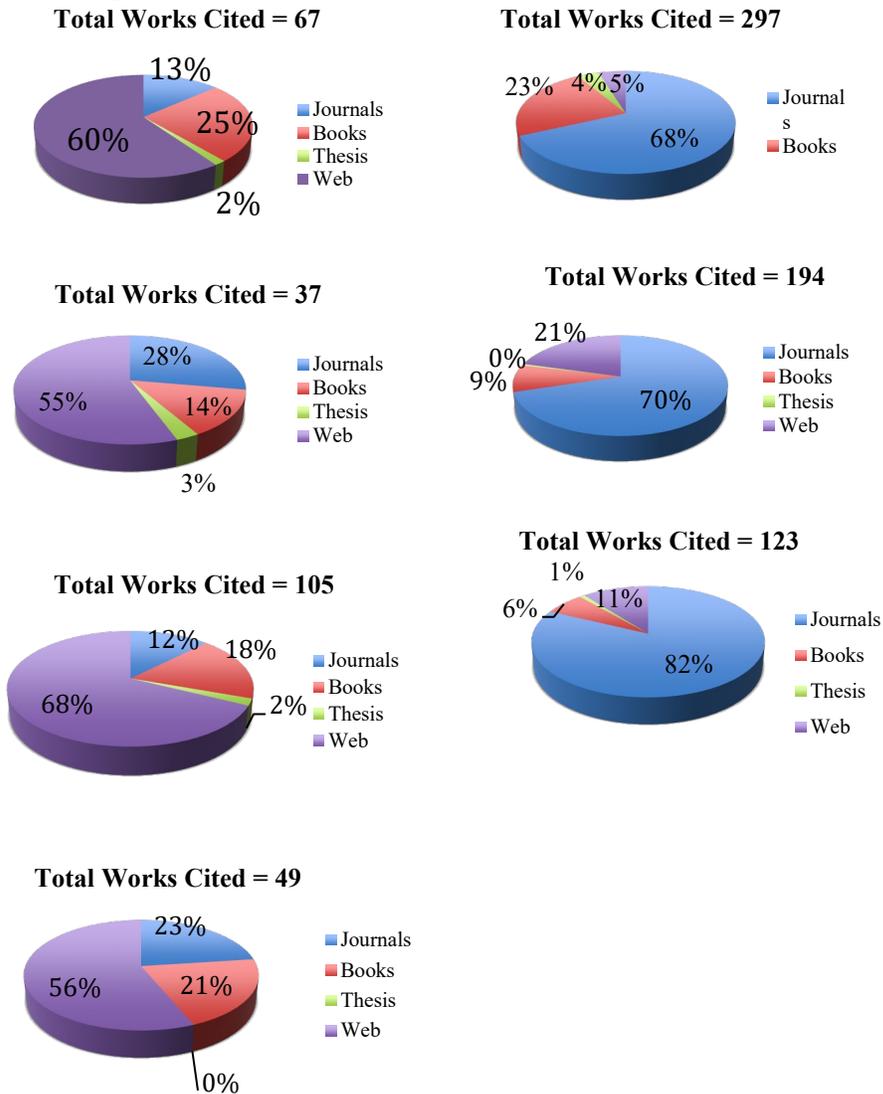
- The 1,852 Internet sources cited in the 100 dissertations in all disciplines completed in the 2013 calendar year at TAMUC. This figure represents 19% of the total number of citations.
- All 1,613 sources cited in the 38 STEM master's theses completed in the 2015 to 2016 calendar years at TAMUC. Computer science was the only discipline that did not have a majority of cited sources from journals. Computer science sources were more evenly drawn from journals, the World Wide Web, and conference reports. Mathematics, along with computer science, showed a higher rate of citations from books than did the other three disciplines.
- The 1,210 sources, including dissertations, theses, monographs, and peer-reviewed journals, that cited 451 ETSU and TAMUC theses and dissertations completed between 1967 and 2017. Cited theses and dissertations represent 15% of the overall total produced by students at the institution over the 50-year period, with 74% of the citations coming from the education disciplines, 12% from counseling, 7% from counseling, 3% from English, and the remainder from other disciplines.
- The 4,806 sources cited in the 59 theses and dissertations completed in the 2016–2017 academic year at TAMUC.

These citation analysis projects identified several areas of concern involving the writers of theses and dissertations that should be addressed. These include evidence of a growing acceptance and use of sources from the World Wide Web, a pattern of errors in citation formatting, the occasional use of inappropriate or otherwise questionable sources, and the recognition that TAMUC theses and dissertations were being accessed, read, and cited by an ever-widening array of scholars. The latter was seen as a way to elicit faculty and administration support for developing scholarly communication efforts. Findings from these projects helped identify the direction for review and analysis.

### **Theses and Dissertations Written**

At the department level, review of theses and dissertations written and completed in 2017–2018 revealed what graduate students in the discipline were writing about, and the sources they were using to cite their work. Notably, more than half of the seven dissertations used peer-reviewed scholarly journals as a reference resource. Three out of the seven dissertations relied heavily (50% or more) on web resources, two of the seven dissertations utilized less than 10% of books to support their research work, while the use of thesis and dissertations were 3% or lower across all seven dissertations. The frequent use of web resources, compared to the minimal use of books and theses/dissertations to support research, identify areas that graduate students could greatly benefit with significant and more targeted support. Figure 1 below provides an overview.

**Figure 1 - Types of Works Cited Per Dissertation 2017–2018**



**Reference Questions and Graduate Student Consultations**

Looking at questions graduate students ask via the “Ask-a-Librarian” widget, telephone queries, and face-to-face consultations—especially when they are working on their thesis or dissertation—will identify problem areas and help to pinpoint areas of further need. A review of 500 questions for the year 2017–2018 showed 48% of student queries were about peer review articles and 25% were on “research information.” These included finding material on a research topic, finding information about research designs, and information on IRB protocol. Literature searches (8%), thesis and dissertations (7%), and reference and citation assistance (8%) were areas requiring further attention given that questions about these resources were less than 10%. Questions on plagiarism (0.7%) and writing (1%) were few, indicating this was an area that knowing more about could greatly benefit graduate students and the quality of their research work. Figure 2 and Figure 3 below present details on graduate students’ reference questions. Appendix 1 presents a sample of reference questions asked.



**Figure 4 - Faculty Research Publications**



Research focus is on educational research, community college learning, educational technology, human resource development, and performance training. These areas are representative of the key research interests in the discipline. Basic citation statistics provide insight on article readership and impact; however, a more detailed review is required and is in progress. The library provides access to 80% of these preferred journal publications.

## Implementation

### The Scholarly Communication Reference Interview

To obtain feedback from faculty to understand expectations for graduate students' scholarly lifecycle practices, questions were created for the scholarly communication reference interview from the analysis of the above areas and disseminated via email to junior and senior faculty members in the department (see Appendix B). The option for a follow-up visit with a member of the research team to validate responses was offered; however, not all faculty saw the need to meet for a follow-up interview (two out of the seven faculty did not request to meet). A constant-comparative process established by Glaser and Strauss (1967) was followed to discover salient categories and patterns in these responses. Findings were triangulated and then sorted into relevant categories to identify emerging themes.<sup>13</sup>

Faculty responses were unanimous about the importance of having skills to conduct effective searches listing strategies according to the content of classes taught. Most emphasized the need to know the difference between credible and non-credible sources and having the patience and self-determination to pursue information. Several mentioned the structure of courses being designed for students to learn many of these skills at the same time they acknowledged "synthesis" was not an easy skill to teach. They suggested strategies that they found helpful to manage their own research. All emphasized in no uncertain terms the need to understand copyright and plagiarism and for graduate students to know when they would be in violation, and the penalty that came with the violation. There was recognition of the need to develop effective skills such as self-reliance, dedication, determination, and the importance of understanding the cultural implications of being a scholar. One faculty member summed it up well—"stewardship of the discipline, learn the language and stay up to date"—as skills perceived to be critical for graduate student success. Table 1 provides a summary of faculty responses.

**Table 1 - Scholarly Communication Reference Interview - Faculty Responses**

Questions	Responses
Conducting Effective Searches?	<p>Identify scholarly research, journals and articles; what search engines to use</p> <p>Know when they have found good solid research</p> <p>(a) Identify keywords, (b) Use the keywords for database search, and (c) integrate the searched publications</p> <p>Patience and motivation to locate good, reliable literature</p>
Skills graduate students' lack or have difficulty with?	<p>Limited Internet search skills</p> <p>Identify scholarly research journals and articles</p> <p>Keyword search, used for database search can learn from classes</p> <p>Integrate with publication is a tacit skill difficult to teach</p> <p>Synthesizing literature, write focused literature review paper</p> <p>Determine value of readings acquired</p> <p>Graduate level writing skills</p> <p>Adherence to APA standards</p> <p>Design credible research</p> <p>Integrity, self-reliance, dedication and determination</p>
Manage information, reduce preparation time for research	<p>Plan; Timeliness</p> <p>Take advantage of resources such as writing center</p> <p>Adhere to APA standards</p> <p>Keep a running annotated bibliography</p> <p>Begin research NOW</p> <p>Aim for conference level proceedings</p> <p>Have strategies and a system to keep references</p> <p>Categorize topics of research</p> <p>Depends on the student</p>

Questions	Responses
Evaluate impact of research?	<p>Propose and write a final research proposal involving extensive searches for scholarly peer reviewed sources related to their chosen research topic</p> <p>Critique articles using a rubric with questions; clear research methods used, implications of the research, clear representation of any included samples and populations used, etc.</p> <p>Explain characteristics of important papers; citations</p> <p>Find appropriate literature first to identify big picture of your topic</p> <p>Reputation of journal that the research article is published</p> <p>Look at currently published research article's reference list</p> <p>Search for frequently cited articles and journals published in those articles</p> <p>Challenge their use of weak or irrelevant sources</p> <p>Is it relevant to the discipline?</p> <p>In sum: stewardship of the discipline; learn the language, read the news, and newsletters</p>
Understand Copyright and Plagiarism?	<p>Use quote marks (") and cite for word-for-word content from published sources</p> <p>Know disciplinary actions by the University can be taken against a student for plagiarism</p> <p>Know Copyright material from a published source cannot be used without prior written permission from the author(s).</p> <p>To have a strong foundation and background regarding plagiarism including unintentional plagiarism.</p> <p>To know how to appropriately and professionally cite others' works</p> <p>To understand that plagiarism and copyright infringement is theft, which can end their careers; what constitutes plagiarism; what constitutes copyright infringement; and how to guard against both</p> <p>To understand using someone else's ideas and not giving proper credit is not allowable. Also self-plagiarism is also not allowed.</p> <p>APA style formatting and source-based writing are part of learning how to write any academic papers (including the dissertation) as well as orienting one to the community of scholars. These two exist to help the student become a scholar and doctor.</p>

Questions	Responses
	<p>Many resources and tutorials are available. The information below can prevent unintended mistakes and errors resulting in major consequences.</p>
<p>Criteria used to select a research journal for publication?</p>	<p>Does the content contain in text citations and a list of reference sources at the end of the article or study?</p> <p>Must be Higher Ed, all articles etc must be within 10 years of publication</p> <p>I suggest the SSCI journal list</p> <p>Impact in their field of study, right fit between the topic of the paper and what they look for</p> <p>I usually issue a blanket statement that they should not depend solely on resources that they can access online.</p> <p>Typically, our students will publish with their adviser before venturing on their own to publish original research.</p> <p>*The list of journals below are those we guide students to</p>
<p>Academic Journals to publish in?</p>	<p>I do not limit students to specific academic journals; refer to library</p> <p>Community College Journal of Research and Practice</p> <p>Community College Research and Journal of Blacks in Higher Ed</p> <p>Human Resource Development Quarterly</p> <p>Human Resource Development Review</p> <p>Adult Education Quarterly</p> <p>Journal of College Student Development</p> <p>Review of Higher Education</p> <p>Journal of Higher Education</p> <p>Journal of Diversity in Higher Education</p> <p>College Student Journal</p> <p>Thought and Action (the NEA Higher Education Journal)</p> <p>Review of Higher Education</p> <p>Community College Journal</p> <p>*Review of Research in Education (Publisher—Sage/Affiliation—AERA)</p>

Questions	Responses
	<p>*Research in Higher Education (Springer/AIR)</p> <p>*The Review of Higher Education (The Johns Hopkins University Press/ ASHE)</p> <p>*Journal of Student Affairs Research and Practice (Taylor &amp; Francis /NASPA)</p> <p>*Journal of College Student Development (The Johns Hopkins University Press /ACPA)</p> <p>*The Journal of Higher Education (The Ohio State University Press)</p> <p>*Higher Education Research &amp; Development (Taylor &amp; Francis)</p> <p>*Journal of College Student Retention: Research, Theory, &amp; Practice (Sage)</p> <p>*Community College Review (Sage)</p>
Other Comments?	<p>It would be helpful to record a video clip from searching database to integrating searched articles</p> <p>The more we read well-written articles, the more we know which journals are good</p> <p>Graduate students: every graduate class as a test of their research skills and an opportunity to demonstrate these skills</p> <p>Doctoral students: every class as an opportunity to practice the skills they will use in conducting their dissertation research and writing the dissertation</p>

### Gaps, Partnerships, and Proposed Solutions

Our research uncovered several gaps that should be addressed in order to meet the needs of the students as well as accomplish the goals set by the university. Some of these were already apparent and continue to be integral in the library's work: an understanding of keyword searching, awareness of what resources the library has, how to manage the various database interfaces to access content, and how to adhere to copyright laws and avoid plagiarism. Other issues were less obvious: an increased acceptance and use of Internet sources requires more attention to information literacy skills needed to evaluate resources falling outside the library's collections. The effectiveness of existing instruction and outreach should also be assessed and improved in light of the number of doctoral students who are currently writing their dissertations asking very basic questions about research that they should have mastered much earlier in their studies. Faculty mirror many of these same issues and concerns.

There are also areas of concern that the library is not directly responsible for but for which the library can provide support. Faculty frequently report that doctoral students are not ready and equipped for academic writing. While the library cannot provide writing instruction, librarians can point students to academic writing that is on par with what they are expected to produce. As the graduate school pushes for greater attention to writing quality, there has been some pushback from faculty. Information from the citation

analysis project showing how widely our students are being cited has provided a valuable talking point in working with any reluctance toward what is seen as more institutional oversight. These needs have led to the library seeking out partnerships with the graduate school, the Writing Center, the Office of Academic Technology, and the individual colleges and departments. Solutions are found in a multi-prong approach, including LibGuides, Dissertation Boot Camps, embedding librarians in online courses, and targeted reports to faculty and departments.

## Conclusion

Changes in scholarly communication practices in academic and research libraries are moving fast with all participants engaged in defining the library's role in scholarly communication. A key factor that impacts the success of scholarly communication programs is the skill of bringing together diverse stakeholders to collaborate, an essential skill for libraries that hope to have a role in future scholarly communication practices. While results from the citation analysis studies and the pilot highlight strengths and weaknesses of graduate students' research skills as well as faculty expectations of a single department, it serves to shed light on broader issues areas in need of attention outside library collections (i.e., attention to information literacy, existing instruction and outreach, readiness of stakeholders, and building a culture of scholarly communication). Many of the issues are complex and cannot be fixed with just a one-shot approach, but instead require ongoing effort. While funding and budget constraints will remain, it is vital for librarians to be willing to collaborate and partner with their constituents to identify areas of acute need, target efforts, and maximize results. Only then will they be able to continue to support and meet the needs of their faculty and graduate students to shape a place for themselves in the changing scholarly communication environment.

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## Endnotes

1. "Scholarly Communication Toolkit."
2. Ketchum, "The Research Life Cycle," 80–83.
3. "ACRL Strategic Planning."
4. Lancaster and Beard, "Proposal for a Scholarly Communication Initiative."
5. "Scholarly Communication Toolkit."
6. Carpenter, Graybill, Offord, Jr., and Piorun, "Envisioning the Library's Role," 659–681.
7. See note 5 above.
8. Tancheva et al., "A Day in the Life."
9. Vaughn et al., "Development of the Research Lifecycle," 312.
10. Fowler, Persily, and Stemper, "Developing a Scholarly Communication Program in Your Library."
11. Tancheva et al., "A Day in the Life."
12. Yee, "Cataloging Compared to Descriptive Bibliography," 307–327.
13. Glaser and Strauss, *The Discovery of Grounded Theory*.

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## Appendix A

### Reference Questions and Graduate Student Consultations (Sample)

- Is there an easier way to determine if a peer reviewed article in our database is qualitative quantitative or a research review?
- I am an online graduate student of Curriculum and Instruction program. While searching, how do I know that article is peer reviewed?
- I am in the Education Leadership Program and I need to find peer reviewed articles. I have no idea where to even begin.
- I'm in the process of completing my doctoral comps in EDAD. Professor Borgemenke said that we needed to check our work for plagiarism before submission. He said to check with the library on a plagiarism checker like turnitin. Can we get access to this through the library?
- Is there an application or website that I can go to check a paper I am writing for plagiarism?
- I am attempting to search for research articles that are qualitative with a pragmatism approach. Can you give me a starting point because I'm getting stuck?
- Is this peer reviewed article considered a co-relational research?
- Can I access academic journals through the university, even though I am an online student? I'm finding a lot of articles are behind pay walls.
- What are the best databases to research information on Gothic Literature?
- How do I obtain the DOI for articles located in the databases that do not include the DOI?
- How do I cite this source in APA format?
- When I have gathered information from a lit review paper, how do I cite? The original or the lit review?
- I am a doctoral student enrolled for the second semester in EDAD 718. I need help with changing my dissertation topic from qualitative to quantitative. I have written chapter 1 and part of 2 and my information is quantitative but I am having trouble finding a focus for a quantitative topic title. What is the process from the research and instruction center so that I can have assistance. My dissertation chair is very helpful but I wanted some more insight before I submit my chapters and title again.
- I found this title in the online TAMUC card catalog; however, I am unable locate the article itself. How do I go about obtaining this?
- How can I get the most recent 50 dissertations in the area of education leadership/educational administration from TAMUC?
- I am in the process of writing my dissertation and my adviser suggested that I look in the Book, Handbook of Educational Theories for Theoretical Frameworks by Irby, Brown, and Jackson. I live two hours away and am restrained on time. Do you have any suggestions for how I might view this book for a few hours?

- I am at the "treatment of the data" portion of my dissertation and know what I want to do but am not sure how to approach it statistically. Is there someone at the Mesquite campus that can help me figure this out and help me write this portion of the dissertation?
- I need help with APA style. I need to know how to cite an atlas, almanac, and dictionary. Do I write group author if there are 4 authors listed or write all of their names? World Book has no author listed. Is World Book considered to be the author?
- I need assistance finding the percentage of individuals who have a depressive disorder in inpatient psychiatric hospitals. It must be a relatively recent figure.
- I would like help finding info for a Literature Review. I am looking for peer reviewed articles pertaining to public school students internet access at home. Basically I would like to see the impact of schools moving to online textbooks and e-books on their students.
- I am doing a literature review on ways to recruit, keep and motivate volunteers but I am not finding anything. I have tried using words such as volunteer retention, volunteer recruitment and volunteered based agencies. Do you know other phrases I could use or other database I can use?
- I have several questions regarding a Literature Review assignment. I need more understanding of what sources are acceptable and why. Also, I need help on the formatting of the literature review.
- What are some keywords that I can use to find resources in the database regarding my topic? I am conducting a research for a class and I do not know where to start. I would like to study the inclusion of minorities groups in higher education, especially males. I live in Fort Worth and it is complicated to go to Commerce.
- I am hoping to find something about how cell phones have changed reading habits and have impacted the reading stamina of students. I'm hoping you can suggest some keywords that I haven't already used.

**Appendix B:**  
**Scholarly Communication Reference Interview**

1. What skills do graduate students need to conduct effective searches in your discipline or area of expertise?
2. What are some of the skills graduate students lack or have difficulty with in the research classes you teach?
3. How can students effectively manage information reducing preparation time for research?
4. How do you teach your students to evaluate the impact of the research they find?
5. What do students need to understand about copyright and plagiarism?
6. What criteria do you ask students to look for when selecting a journal for research publication?
7. Name 3–5 academic journals in your discipline that you would point your students towards for research or publication?
8. Other Comments