

FROM INFORMATION EXPERTS TO EXPERT EDUCATORS? ACADEMIC
LIBRARIANS' EXPERIENCES WITH PERSPECTIVE
TRANSFORMATION AND THEIR
TEACHING IDENTITIES

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For Chris and Theo.

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Amanda Kathryn-Nichols Hess

ABSTRACT

FROM INFORMATION EXPERTS TO EXPERT EDUCATORS? ACADEMIC LIBRARIANS' EXPERIENCES WITH PERSPECTIVE TRANSFORMATION AND THEIR TEACHING IDENTITIES

by

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As information formats, needs, and access change, post-secondary students need to be prepared to make sense of the morass of content they encounter – for academic, professional, and personal purposes. Academic librarians can serve a key role in meeting these needs, especially if they see themselves as educators. In this research, I sought to examine whether academic librarians reported experiencing the phenomenon of perspective transformation around their senses of themselves as professionals; I particularly examined whether they reported developing an identity as an educator. In this sequential explanatory mixed methods study, participants responded to a modified validated survey instrument; I then conducted follow-up interviews with a small sub-set of these respondents to further understand their experiences. From these data, I assert that academic librarians report having such experiences, and I argue that they can develop teaching identities as part of their professional self-concept. From this basic understanding, I also examined what factors influenced academic librarians' experiences in this transformation process; they indicated that different kinds of interpersonal

relationships and hands-on experiences were key to shaping how they viewed themselves as educators. I used more advanced statistical analysis through one-way analyses of variance (ANOVA) and linear regression to further consider whether relationships existed between demographic variables and the factors that academic librarians reported as influences in their perspective transformation processes. The areas where these statistically significant relationships exist offer jumping-off points for future researchers interested in exploring academic librarians' transformative experiences around teaching.

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LIST OF ABBREVIATIONS

AAC&U	American Association of Colleges and Universities
AAHE	American Association for Higher Education
AAUP	American Association of University Professors
ACRL	Association of College and Research Libraries
ALA	American Library Association
CIC	Council of Independent Colleges

CHAPTER ONE

INTRODUCTION

In November 2016, the Oxford Dictionaries crowned “post-truth” their international word of the year (Schuessler, 2016). This term, which is defined as “relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief,” (Oxford Dictionaries, first paragraph), spiked in usage in reference to both the US presidential election and European Union referendum in the United Kingdom. In fact, Oxford Dictionaries asserted that its usage rose over 2,000 percent in 2016 (Schuessler, 2016). This term – and its connection to key world events – sheds distinct light on our current information environment, where it is acceptable for public figures to claim “fake news” in response to both truly inaccurate information and unflattering-but-accurate reports.

While social media sites such as Facebook and internet giants including Google seek to stem the spread of incorrect information (Bridge, 2017; Wakabayashi & Isaac, 2017; Wingfield, Isaac, & Benner, 2016), a more critical concern is how to ensure that individuals can identify fact from fallacy. To that end, educational entities are working to help their students learn how to make sense of information in this new landscape (Pasquantonio, 2016; Turner, 2016). As colleges and universities prepare their learners to enter 21st century adult life, what resources are available to equip them for this post-truth world?

One resource is academic librarians. In higher education, these information professionals helped students develop essential critical thinking skills – such as evaluating information for accuracy, relevancy, and bias – long before “post-truth” was in vogue. While they have always helped students, faculty, and staff to find relevant information in print books, journals, and encyclopedias, the digital age heightened the importance of academic librarians’ instructional responsibilities. The explosion of information available online and easily accessible through tools like Google have made academic librarians and their work increasingly relevant in the 21st century. However, there is no standardized system or set of resources to ensure they know how to effectively provide this kind of instructional support.

In my research, I focused on this gap in academic librarians’ knowledge and experiences. More specifically, I examined whether they transform their perspectives and practices to see themselves – and indeed, become – effective postsecondary educators. To best conceptualize my work, I need to first explain who these information professionals are and how their instructional work differs from other postsecondary instructors. This foundational knowledge grounds my research and highlights its importance.

Academic Librarianship, Defined

Professionally, the term “academic librarian” refers to a librarian working at a college or university. This umbrella term includes librarians who work at community colleges, technical institutions, four-year colleges, comprehensive institutions, and research/doctoral universities. Like other librarians, academic librarians are a part of the American Library Association (ALA) and specifically fall under the umbrella of its

Association of College and Research Libraries (ACRL) division. These organizations provide guidance on academic librarians' roles and work.

Academic Librarians' Roles in Higher Education

Across academic institutions, academic librarians may fit into different organizational groups in campus hierarchies. While the ACRL (2011a, 2012) has advocated for faculty status for academic librarians based on their unique scholarly and instructional contributions to postsecondary environments, they can be considered faculty members, administrative staff, or in a distinct category between these two arms of university work (Association of College and Research Libraries [ACRL], 2011b, 2011c). Because their role is inconsistent across institutions, academic librarians' work responsibilities can also vary considerably from environment to environment. For instance, librarians working at a large research institution may be involved in producing empirical scholarship, while their counterparts working at a two-year college may be more engaged in reference and reader's advisory services.

Information Literacy as an Instructional Area

Across institutions, though, academic librarians engage in information literacy instruction. This concept has been defined by the ALA as knowing "how knowledge is organized, how to find information, and how to use information in such a way that others can learn from them" (American Library Association [ALA], 1989). Students at research-heavy and teaching-focused institutions alike need to understand how to search for, find, ethically use, and synthesize information for academic and professional purposes, and academic librarians provide these learning experiences.

Instructional format. Generally, academic librarians engage in information literacy instruction in collaboration with subject area faculty members and embedded into a course experience. Scholars have demonstrated that this kind of situated instruction is the most relevant information literacy instruction because it is related to a specific research need, such as a research assignment (see, for instance: Baker, 2006; Hsieh & Holden, 2010; Kimok & Heller-Ross, 2008). These instructional sessions, then, address the information literacy skills students need for a particular course or field, such as finding specific types of research in discipline-specific resources, understanding the scholarly conventions of a subject area, or using an academic library's resources more generally.

While academic librarians may most often ground information literacy instruction in subject area courses, they are increasingly developing and offering credit-bearing courses focused on this concept (see, for instance: Hollister, 2011; Mayer & Bowles-Terry, 2013; Nichols Hess & Greer, 2016). Several factors have contributed to this newer teaching role. First, information literacy has gained traction as an essential instructional area; the American Association for Higher Education (AAHE), Council of Independent Colleges (CIC), and American Association of Colleges and Universities (AAC&U) have all recognized information literacy as a critical area of students' understanding (American Association of Colleges and Universities [AAC&U], 2013; ALA, 2004; ACRL, 2000). This broader recognition has then trickled down to integration into institutions' general or liberal education curricula (see, for instance: University at Albany, 2014; University of Arizona, 2010; University of Connecticut, n.d.). Second, online learning options (i.e., learning management systems) have advanced in ways that have allowed academic

librarians to build fully-online courses (LeMire, 2016; Mery, Newby, & Peng, 2012). These courses may address an institution's general or liberal education requirements (Nichols Hess & Greer, 2016), fulfill elective credit (Manuel, 2002), or even be situated within an academic major (Daugman, McCall, & McMahon, 2011).

The ACRL and instructional standards. Whether course-embedded or freestanding, academic librarians have sought to structure their information literacy instruction in consistent and measurable ways. The ACRL has acknowledged the importance of academic librarians' teaching responsibilities by creating guiding documents these librarians could use to structure their information literacy instruction. In 2000, the ACRL first approved a set of information literacy instructional standards for use in higher education. The *Information Literacy Competency Standards for Higher Education* included five standards and accompanying performance indicators and outcomes, and it provided academic librarians with a skeleton around which to construct information literacy instruction sessions. These standards stated that information literate postsecondary students can:

- Determine the nature and extent of information needed;
- Access needed information effectively and efficiently;
- Evaluate information and its sources critically, and incorporates selected information into their knowledge bases and value systems;
- Use information effectively to accomplish specific tasks; and

- Understand many of the economic, legal, and social issues surrounding information use, and access and use information ethically and legally (ACRL, 2000).

The *Standards'* accompanying performance indicators and outcomes gave academic librarians guidance on instruction and assessment best practices.

Following the organization's adoption of these standards, both the AAHE and the CIC endorsed the *Information Literacy Competency Standards* (ACRL, 2006). From these endorsements, information literacy has been built into colleges and universities' curricula across the country (ACRL, 2006). These core standards also inspired the creation of discipline-specific guidelines in areas including science, technology, English, art, music, and education (ACRL, 2006). These discipline-specific documents contextualized what information literacy for students in specific subject areas, which often have unique needs in seeking and using information.

Revising the *Standards*. In 2012, an ACRL task force recommended the *Standards* be reviewed and revised, due in part to the changing nature of information landscape (ACRL, 2015). As a result, the *Framework for Information Literacy for Higher Education* was crafted and officially adopted by the ACRL in 2015. The ACRL described this new resource as “one of the constellation of information literacy documents” academic librarians should use in informing their instructional practices (ACRL, 2015, p. 1). The authors of this document created this framework in response to “the rapidly changing higher education environment, along with the dynamic and often uncertain information ecosystem in which” both faculty and students live and work

(ACRL, 2015, p. 2). While the *Standards* were more discrete and fixed, the *Framework* marked a more fluid, dynamic, and flexible way to consider information literacy in the 21st century.

In the *Framework*, the authors enumerated six information literacy frames. These frames are seen as the “core ideas within... [the] knowledge domain [of information literacy] that can extend learning for students” (ACRL, 2015, p. 2). Rather than asking academic librarians to impart knowledge around standards, these frames represented key concepts academic librarians want students to understand as they progress through postsecondary education. The *Framework* (ACRL, 2015) also reconceptualized what information literacy meant, noting that it was “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is processed and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (p. 3). This new definition represented a departure from what information literacy meant in the *Standards*. Based on the *Framework*, information literacy focused on ways of thinking about and understanding information, rather than a set of processes learners needed to follow to find and use information. Understanding this definition of information literacy in consort with the ACRL’s (2000) prior conceptualization of the field helps to understand the myriad concepts academic librarians teach to students at the undergraduate and graduate levels, generally in discipline-situated contexts.

The *Framework* presented a shift in how academic librarians needed to think about instruction. It moved away from “standards, learning outcomes, or any prescriptive enumeration of skills” and toward “a cluster of interconnected core concepts, with

flexible options for implementation” (ACRL, 2015, p. 2). The new *Framework* guidelines asserted that students in higher education who are developing their information literacy skills and knowledge should understand that:

- Authority is constructed and contextual;
- Information creation [is] a process;
- Information has value;
- Research as [a process of] inquiry;
- Scholarship [is a] conversation; and
- Searching as [a process of] strategic exploration (ACRL, 2015, p. 2).

These six frames represent dispositions, or ways of thinking, about how information is created, organized, retrieved, and used to make new information. They also ask learners to more intentionally consider their roles in each of these activities. These shifts represented fundamental changes from how the *Standards* made sense of information literacy and approached the role of learners in the discipline.

Information literacy instruction with the *Standards* and the *Framework*. On the surface, the terminology of the information frames differs from the standards of finding, evaluating, and using information ethically (ACRL, 2000). More significantly, though, the *Framework* asked academic librarians to shift how they design and assess information literacy instruction. While the ACRL (2000) *Standards* provided specific performance indicators and outcomes, the *Framework*'s (2015) knowledge practices and dispositions indicated that, “each library and its partners on campus will need to... [design their own] learning outcomes” (ACRL, 2015, p. 2). For academic librarians

without formal training in pedagogy, instructional design, or assessment, this shifted responsibility of designing learning outcomes could be daunting.

Initially, the ACRL asserted that the *Framework* and *Standards* documents were not mutually exclusive. In 2015, the *Standards* became one of a set of guiding documents for teaching information literacy rather than academic librarians' single source of instructional design and assessment (Williams, 2015). However, this document was officially rescinded by the ACRL's leadership in June 2016 (ACRL Board of Directors, 2016), and this action was met with both support and shock (see, for instance: Bombaro, 2016; Farkas, 2016; Hinchliffe, 2016; Jackman, & Weiner, 2016; Wilkinson, 2016). This step forced academic librarians to grapple with integrating this new approach to information literacy into their everyday practices. While some have found this process intuitive, others have not. For all academic librarians, though, this professional change coupled with the current information landscape provides an opportunity to carefully and constructively consider how they approach their work as instructors.

Instructional Issues for Academic Librarians

Despite the instructional role academic librarians play at institutions and the increased disciplinary integration advocated by the *Framework*, several issues affect how they develop and hone their teaching skills. At the root of these issues is librarians' educational backgrounds: The ALA has maintained that a Master's degree the terminal degree for academic librarians (ACRL, 2011d). This distinction from other postsecondary educators is relevant for several reasons. First, it means that academic librarians rarely (if ever) have the opportunity to teach as part of their graduate education experience. While

discipline faculty may find these experiences insufficient to fully prepare them to be effective educators, academic librarians do not even have these experiences to draw on in establishing a teaching identity. At the same time, academic librarians are not required to have educational or practical training in pedagogy, either through coursework or practicum experiences. Because of these factors, academic librarians must develop the skills and dispositions necessary to design learning interactions on their own (see, for instance: Bailey, Jr., 2010; Corral, 2010; Sare, Bales, & Neville, 2012; Sproles, Johnson, & Farison, 2008). However, because of their varying status at colleges and universities, academic librarians may not have the same access to teaching support mechanisms on a college or university campus.

To address their lack of teaching experience or knowledge, academic librarians may choose to educate themselves in a variety of ways. Some may engage in programs within their own library or institutional setting (see, for instance: Nichols Hess, 2014; Shamchuk, 2015; Young & Vilelle, 2011). Others may choose to seek additional training in formal or informal ways outside of these settings through resources such as additional degrees (see, for instance: Ferguson, 2016), conference/professional meeting participation (see, for instance: Flatley & Weber, 2004), or online learning opportunities (see, for instance: Gruber, 2008). Regardless of the format, though, academic librarians have different professional learning needs from other postsecondary educators because they may not teach credit-bearing courses, and their instruction is most often integrated into *another* subject area.

Research Significance

As an academic librarian, I am interested in how my peers address these issues and pursue instructional effectiveness for several reasons. First, although (or perhaps because) I have formal pedagogical training and was a K-12 educator, I constantly seek to improve my own teaching practices. In doing so, though, I have found a dearth of literature focused specifically on academic librarians and how they develop their identities as educators. I have also felt the impact of this lack of scholarship as someone who provides professional learning opportunities for other academic librarians. Although the ACRL (2011b) offers *Guidelines for Instruction Programs in Academic Libraries*, there are no best practices for enacting these practices and equipping academic librarians to be effective educators. In my research, then, I have specifically investigated two questions: Do academic librarians undergo a process by which they transform from seeing themselves as disciplinary experts in information access, retrieval, and management to thinking of themselves as postsecondary educators? And second, if they undergo such perspective transformation, what experiences or influences help academic librarians work through this process?

My research can impact both academic librarianship and the scholarship of teaching and learning more broadly. First, understanding the kinds of professional learning opportunities that most effectively impact academic librarians' practices may help individual librarians to more fully consider their own pedagogical needs and engage in targeted learning experiences more effectively. Also, academic librarians who design or provide professional learning opportunities for their colleagues may find this scholarship useful because it can help identify the most meaningful faculty development

experiences for equipping both new and experienced librarians to teach information literacy. Moreover, those involved in graduate-level library education may also find this research significant because it could impact how issues of pedagogy are addressed in formal coursework. While my primary goal has been to develop meaningful scholarship for my own discipline, the research I have conducted may also provide scholars in other disciplines with insights into how adults' perspectives change in relation to their work as educators. Therefore, considering what factors play roles in academic librarians' perspective transformations about their roles as educators may affect academic librarianship at individual, institutional, and professional levels.

Transformative Learning Theory

In seeking to explore these questions, I have used transformative learning theory to make sense of how academic librarians may come to identify as educators in addition to their roles as information professionals. Developed by Jack Mezirow, this approach to adult learning considers how individuals reconcile the roles and views prescribed to them by social or cultural structures with how they see themselves and their place in their world. As academic librarians' roles change and involve increasing teaching responsibilities, this particular approach to adult learning can help to conceptualize how librarians may change their perspectives about their work and hone their personas as educators.

Jack Mezirow pioneered the notion of adult learning as transformation by asserting that adults seek to understand and make meaning of their experiences (Mezirow, 2000). If they are unable to do so in a satisfactory way, they may rely on

traditional, often un-evaluated ideas, authority figures' perspectives, or projection or rationalization to make sense of the world around them (Mezirow, 2000) For Mezirow, relying on these external influences means that adult learners do not make meaning within the dimensions of understanding and awareness in which they exist (Mezirow, 2000). Transformative learning, then, is a process of individuation: it centers on establishing one's own identity based on biographical, cultural, and social situations, and it orients how one sees the world in these environments. Reflection and discourse with others are key to establish these individual identities and to engage in what Mezirow (1978) called perspective transformation.

Historical Development and Foundational Theories

Mezirow was influenced by the work of philosophers Jürgen Habermas and Paulo Freire in constructing his approach to adult learning. In exploring how transformation occurs, Mezirow used Habermas's (1968/1972, 1981/1984) theories about learning domains and communication. And Freire's (1968/1970) work on conscientization informed how Mezirow constructed his notions of reflection and perspective transformation.

Habermas's critical and communicative theories. Jürgen Habermas, a German philosopher, wrote about critical theory, communication, and learning domains. These areas of his work influenced how Mezirow addressed transformation in adult learning.

In *Knowledge and Human Interests* (1968/1972), Habermas argued that human knowledge existed and was developed in three domains. First, the technical learning domain represents where individuals engaged in rote learning. Like behavioral learning

theory, learning in the technical domain involves regular and consistent feedback to modify or validate performance. In the practical learning domain, individuals learn the cultural norms and expectations of the society in which they live. Here, learning was interaction-based and communication-focused. Rather than understanding processes and observable events as in the technical domain, Habermas's practical domain involves understanding behavior, language, interactions, and establishing basic cause-effect understandings from this knowledge. While the practical domain focuses on relationships between individuals, Habermas's emancipatory learning domain emphasizes how individuals relate to themselves. In this domain, individuals engaged in introspection and self-reflection to understand why they act, feel, behave, or believe (Finlayson, 2004). For Mezirow (1981), emancipatory actions represented transformation, and he argued that transformative learning occurred in this domain.

Mezirow also drew on Habermas's (1981/1984) communicative theory in constructing the concept of discourse in transformative learning. In *The Theory of Communicative Action*, Habermas (1981/1984) argued that, in communicating with each other, individuals sought common and shared understandings. More specifically, if something can be asserted as true, all individuals in a discussion should be able to agree on its validity (Finlayson, 2004). However, this validity cannot be truly ascertained unless these dialogues have willing, sincere, and equal participants who use logic and rationality to reach the consensus decision. Habermas (1981/1984) called these dialogues ideally prosecuted discourses. Mezirow drew heavily on this idea in identifying structures that helped adults transform their personal perspectives.

Freire's conscientization. Although his work existed in more of a social action context, Paulo Freire's critical theory around conscientization also shaped Mezirow's work on transformation theory. In his work, Freire argued that individuals experience habituation, or the un-considered or unspoken processes undertaken to maintain their lives. Habituation can lead to maintaining a status quo – even if the situation is oppressive or harmful (Montero, 2014). Habituation can also be ideological in nature, and individuals can internalize and fail to question perspectives and circumstances that are harmful to them. From this habituation, Freire argued that naturalization can occur. In this process, individuals see attitudes, beliefs, behavior, and systems as essential and representing the very nature of their society (Montero, 2014). Again, individuals may naturalize constructs used to diminish their quality of life or value as individuals in a society. These ways of thinking and seeing the world have parallels in two of Mezirow's structures, habits of mind and frames of reference; he asserted that these internal mental scaffolds also often go unconsidered. These components of our mindsets represent “the way things are” because of cultural norms, an authority figure, or an unexamined internal perspective.

In seeking to combat habituation and naturalization, Freire (1968/1970) developed the notion of conscientization. This term refers to an individual's ability to develop a critical awareness about the contradictions in social, economic, or political conditions so that he or she can take action with others against oppression in society. Freire's conscientization is inherently political: individuals engaged in resisting habituation and naturalization need to not only change their internal thought processes and perceptions, but they must also cast off the oppressive societal structures that form these thoughts and

belief systems in the first place. Conscientization as an idea and process shaped how Mezirow approached perspective transformation. Just as individuals identify the contradictions that exist in the social, political, or cultural aspects of life, individuals engaging in critical reflection must explore where contradictions exist between societal norms and experienced reality.

Transformative Learning Theory's Core Tenets

With these philosophical orientations as a foundation, Mezirow developed his approach to how adults learn and make meaning. Transformative learning theory is grounded in the idea that, for adults, learning can be an intentional cognitive process wherein critical thinking and reflection transform mindsets, worldviews, or guiding perspectives. While Mezirow's theory has developed over time – both through his own work (see, for instance: Mezirow, 1978, 1981, 1991, 1994, 1997, 2000) and through the work of others (see, for instance: Cranton, 1994; Cranton & Roy, 2003; Dirkx, 1997, 2001a, 2001b, 2006; Dirkx, Mezirow & Cranton, 2006; Grabove, 1997; Gunnlaugson, 2005, 2008; Illeris, 2004; Kitchenham, 2008; Kucukaydin & Cranton, 2013; Malkki, 2010; Taylor, 1997, 1998, 2008; Taylor & Cranton, 2012) – the core pieces in the transformation process have remained relatively stable.

First, it is important to re-emphasize that transformative learning theory is an *adult* learning theory. Mezirow noted that adults have to restructure how we conceive of the world and make sense of the ideas and individuals around us in ways that children and adolescents do not (Mezirow, 1978). As they develop the metacognitive skills to assess how they make meaning of their world, adults are often forced to move away from

a solely self-focused perspective they held in childhood or adolescence. In trying on others' perspectives or seeing experiences from others' points of view, adults work through a decentralization process (Bruner, 1973). In this process, they first feel alienated from roles that have been prescribed to them by others or society. Adults then reframe their place in reality as they see and experience it, and they must reintegrate into their society based on the new roles they established for themselves (Mezirow, 1978). This process forms the core of Mezirow's understanding of transformation in adult learning.

Within this process, though, transformation can happen in different ways. Mezirow (1978) noted that epochal life events – such as marriage, divorce, becoming a parent, new employment, retirement, or death of loved ones – may initiate an individual's transformative process. Also, though, transformation may occur as an incremental process, in which life experiences build and force an adult learner to critically reflect on his or her perceptions or beliefs. Both kinds of events force adults to consider their roles, their reality, and their desired outcomes. In his various writings on perspective transformation, Mezirow identified several cognitive structures that are involved in this process; the relationships between these components can be seen in Figure 1.1.

Meaning perspectives. In his earliest works on transformative learning, Mezirow used the term “meaning perspective” to refer to structures of learners' assumptions that they use to make sense of new information (Mezirow, 1978). These perspectives are fixed and have shaped by many factors, including cultural, societal, economic, political, religious, and ethical expectations. These components give shape to how adult learners conceptualize themselves as individuals, and they also frame how adults relate to others.

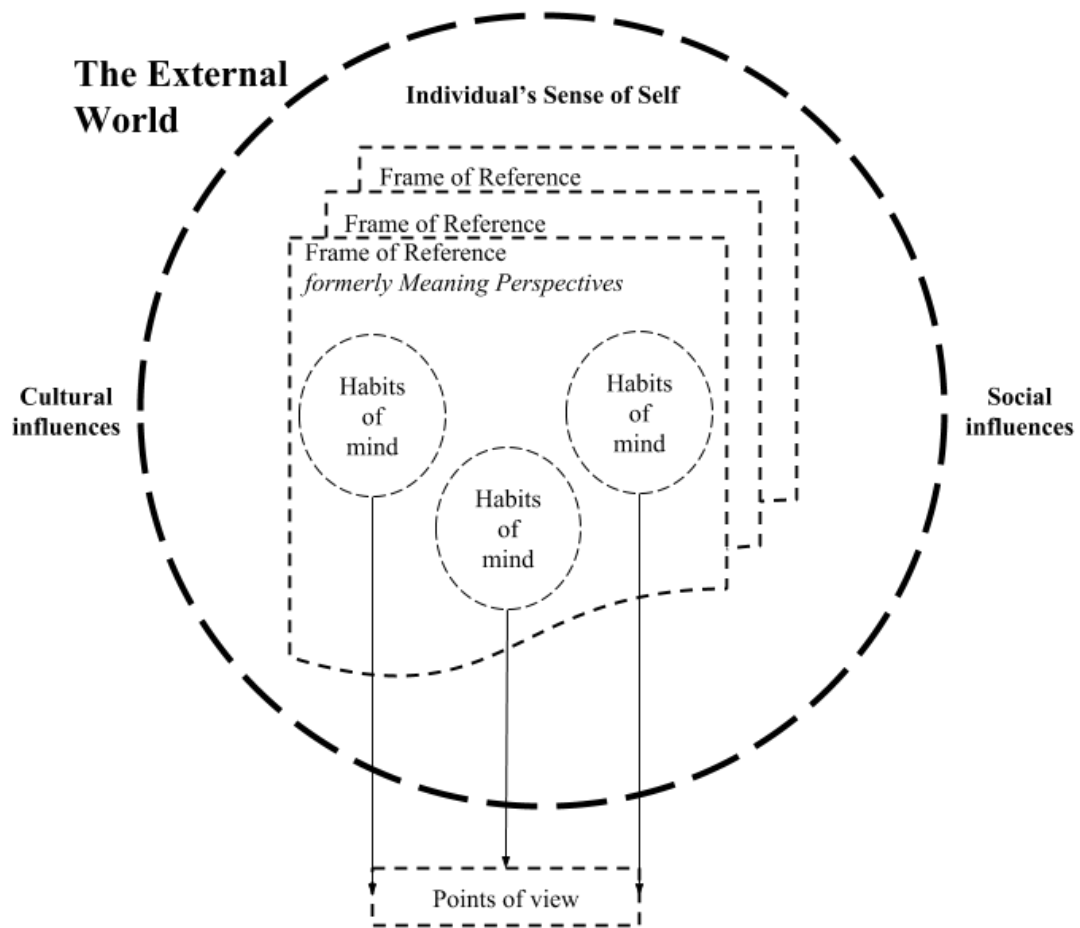


Figure 1.1. This diagram represents the different components involved in perspective transformation. The lines in the figure are dotted to represent each piece's permeability – that is, they can be affected and shaped by outside influences, internal reflection, or other factors along the road to transformation.

Frames of reference. In his later works, Mezirow renamed “meaning perspectives” as “frames of reference” (Mezirow, 2000). Frames of reference, as he defined them, are “the structure of assumptions and expectations through which we filter sense impressions” (Mezirow, 2000). Adults’ thoughts, feelings, and actions are shaped by these frames, and these constructs are built by how individuals interpret their experiences. Mezirow (2000) asserted that “repetitive affective experience outside of [individuals’] awareness” (p. 16) helps to make these frames. As with meaning perspectives, frames of reference are also informed by external worldviews – for instance, the cultural, social, economic, and political environs in which a person lives.

Habits of mind. Mezirow (2000) noted that frames of reference are made up of habits of mind and points of view. Habits of mind are the sets of assumptions that adults have – what he called the “broad, generalized, orienting predispositions” that filter how adults interpret their experiences (Mezirow, 2000, p. 17). These substructures within frames of reference can take several forms. They may be sociocultural and relating to social customs, societal norms, or how language is used; they may also be moral-ethical and relate to how adults’ consciences guide their decision-making. Habits of mind can also be psychological and address ideas such as self-concept, personality, or emotional response patterns. Aesthetic habits of mind deal with individuals’ tastes, attitudes, and judgments about forms of expression (e.g. beauty, humor). Philosophical habits of mind focus on personal religious, spiritual, or world views. Adults also hold epistemic habits of mind, which govern their preferred learning modes and ability to focus on concrete or

abstract information (Mezirow, 2000). By transforming these habits of mind through intentionally reshaping their perspectives, adults can redefine their frames of reference.

Points of view and meaning schemes. While habits of mind are internal cognitive structures, points of view are outward-facing: They represent how these personal views are expressed to others. Mezirow (2000) asserted that these are constructed of groups of “meaning schemes,” which are sets of expectations, attitudes, and feelings that affect how individuals see cause-effect relationships (p. 18). From these meaning schemes, individuals make the arbitrary and often unconscious decisions about how events will unfold, what another person will be like, and how they themselves should be as individuals (Mezirow, 2000). These structures inform adults’ seemingly automatic actions that occur when they do not engage in personal reflection or a critique of their perspectives. Mezirow (2000) argued that while individuals cannot try on, or really even fully understand, others’ habits of mind, they can try on others’ points of view. Through this process, individuals can transform their *own* points of view by seeing as another sees.

Reflection. Mezirow argued for two intentional activities that can lead adults to self-examine their perspectives and worldviews. First, he noted that transformation can occur as a result of either critical reflection of assumptions or critical self-reflection of assumptions (Mezirow, 1998, 2000). Critical reflection of assumptions is not unique to adult learning but Mezirow (1998) asserted that engaging in this process with adult learners can lead to the introduction of “a different order of abstraction... with major potential for effecting a change” in established frames of reference (p. 186). Moreover,

Mezirow (1998) saw this practice as a way for individuals to free themselves from the assumptions they hold, but have not self-constructed, about the world.

Critical reflection of assumptions. In the critical reflection of assumptions process, Mezirow (1998a) believed that adult learners can analyze an issue or text through an objective reframing process. This process involves critiquing the assumptions that underlie the content of, or process of addressing, an issue. For instance, consider the topic of grading; Mezirow (2000) used this example to illustrate how adults can analyze both the content and process components of an issue. As educators consider how to assess learners' work and determine grades, these adults may find they need to critically reflect on how value is determined and indicated; how assignments are created, and whether they align with learning goals or objectives; and what the overall system of instructor-assigned grades means within the context of a broader learning environment. Addressing the content of this issue involves "critically examining the validity of... concepts, beliefs, feelings, or actions being communicated" (Mezirow, 1998, p. 192), which Mezirow called narrative critical reflection on assumptions. Through this kind of reflection, the educators in this instance could critically review the course syllabi, rubrics, and assignments to identify the underlying attitudes and beliefs being expressed in these resources. From this reflection process, they could then determine if these values authentically and accurately reflected their own values around grading and assessment. If these value sets did not align, the educators would need to restructure the values in the grading documents or in their own ethos around the issue.

The other approach to objective reframing involves what Mezirow (1998) called “problem-posing” (p. 192). This process involves what is called action critical reflection of assumptions: It asks individuals to consider how their own assumptions in defining a problem affect how it can be solved. In the example of educators considering how to fairly give grades to students, the instructors may pause in their assessment process to consider how they conceptualize the issue of “grading.” For instance, is the problem of fairly grading student work defined by the need to achieve a normal distribution of scores? If the educators can identify what structures form the basis around which they seek to solve the issue, they can identify new perspectives in how to address the problem that may not be confined to their prior assumptions.

Critical self-reflection of assumptions. While critical reflection of assumptions involves looking outward, critical self-reflection of assumptions focuses inward. While Mezirow (1998) considered critical reflection of assumptions as objective reframing, critical self-reflection of assumptions is a subjective reframing process and focuses on an individual’s understanding. In this activity, an individual learner needs to critique the very premises on which she or he has built his or her understanding of problems or ideas (Mezirow, 1998). Individuals must use rationality to engage in these reflective activities, which Mezirow (1998) called an individual’s ability to “assess reasons logically” while reflecting “critically... to achieve the best foreseeable consequences of an action” (p. 187). Through a rational approach, adult learners can most effectively reflect on and critique their own biases, expectations, and values.

As with critical reflection of assumptions, critical self-reflection can take several shapes. The process of narrative critical self-reflection involves applying the narrative approach to critical reflection to an individual's own assumptions, beliefs, feelings, or perspectives. Systemic critical self-reflection involves reflecting on one's assumptions as they relate to existing systems (e.g. religious, social, bureaucratic) in an individual's life. In turn, organizational critical self-reflection explores the underlying assumptions that exist in a workplace and how these have impacted an individual's thoughts and action in the environment. Moral-ethical critical self-reflection revolves around critiquing the norms that an individual uses to make ethical decisions. Through therapeutic critical self-reflection, individuals explore the assumptions they have that shape their feelings. And epistemic critical self-reflection "involves making explicit one's process of epistemic cognition" (Mezirow, 1998, p. 195). In this process, an individual reflects on what assumptions have structured her or his frames of reference, why these frames have taken shape as they have, and what consequences have resulted because he or she thought in these ways.

Discourse. Critical discourse is the other activity Mezirow advocated as a part of the transformation process. Generally, Mezirow (1985) believed that individuals seek to understand each other through dialogue and discussion; these mechanisms can help an individual determine if information presented is factual, valid, and useful to her or his understanding. As individuals encounter communicated information, they make decisions about how to incorporate that into their frames of reference.

Mezirow's construct of discourse, though, differs from everyday dialogue. He asserted that in discourse, adults "focus on content and attempt to justify beliefs by giving and defending reasons and by examining the evidence for and against competing viewpoints" (Mezirow, 1994, p. 225). For true discourse to occur, Mezirow (1985, 1994, 2000, 2003) argued that several conditions must be met. First, participants need to approach the discourse with a willingness to seek understanding and agreement with others about ideas or issues. To do this, they must agree to accept the result of the discourse as valid until new information, arguments, or evidence are available that could result in a better judgment. All discourse participants must have complete and accurate information about the subject to be discussed. These participants must also be free from self-deceptions and external coercions that would influence how they understand the information and situation at hand. Participants need to be open to seeing alternative points of view, and should be able to assess others' arguments objectively by weighing the evidence presented. They need to possess both an awareness of the context in which the ideas discussed exist and a self-awareness of their own assumptions around the ideas. And, participants within a true discourse need to have opportunities to participate in the various roles equally. Of course, Mezirow (1994) noted that these conditions are rarely, if ever, met. However, in working to create or modify frames of reference so they are more accurate, discriminating, and flexible, adult learners seeking transformation need to strive to construct these kinds of discourses. Doing so may help them to more accurately understand their world and their place in it.

Types of Learning or Transformation

When engaging in critical reflection or discourse around habits of mind or frames of reference, Mezirow (1997) asserted that these kinds of transformative learning actions can result in several different kinds of learning. First, an individual may use information and experiences to elaborate on her or his existing viewpoint. Alternately, he or she may use knowledge to establish a new point of view or to transform a point of view. Most difficult, though, is when an individual must become aware and critically reflective of her or his biases toward other groups. This kind of learning is emancipatory for adult learners.

Phases of Perspective Transformation

From these key ideas, Mezirow identified transformative phases or stages that adults work through as their perspectives shift. They are:

1. The disorienting dilemma;
2. Self-examination;
3. A critical assessment of roles;
4. Recognition that others experience similar issues;
5. Exploration of options for behavior or action;
6. Development of a plan of action;
7. Acquisition of the necessary knowledge and skills;
8. Trying on of new roles and integration of feedback into practices/actions;
9. Development of competence and confidence in new roles/relationships; and

10. Reintegration into society with a changed perspective (Mezirow, 1981, 1994, 2000).

While he asserted that phases are ordered, they do not necessarily represent a linear progression (Mezirow, 1981). The process of transforming perspectives involves regression, failure, compromise, and stalling out (Mezirow, 1981). That is, an adult who critically reflects on a meaning perspective or frame of reference may find that, after making progress, she or he falls back into old ways of thinking or even abandons transformative learning for a time. Transformation, then, can be a lengthy and ongoing process.

Critiques and Ongoing Development of Transformative Learning Theory

Since its initial development, the notion of transformative learning has become a dominant learning theory for adult educators. In fact, Edward W. Taylor (2008) suggested that it has supplanted andragogy as the overarching theory that guides all practitioners' and theorists' thinking about how adults learn and change. Despite – or perhaps because of – this dominance, scholars have critiqued transformative learning theory in from both psychological and philosophical stances. Some (Clark & Wilson, 1991; Merriam, 2004) focused their critique on Mezirow's overemphasis on rationality in transformation. Perhaps in response to this criticism, several researchers (Arends, 2014; Dirkx, 1997, 2000, 2001a, 2001b, 2006; Tennant, 1993, 1994) identified affective dimensions involved in transformative learning that Mezirow seemed not to consider. Still others (Collard & Law, 1989; Cunningham, 1992; Hart, 1990; Inglis, 1997; Pietrykowski, 1996) asserted that Mezirow failed to consider issues of critical theory and

power in developing his learning theory. And at the broadest level of criticism, Michael Newman (2012, 2014) questioned whether transformative learning really constituted a theory at all or if it simply addressed good teaching practices. These divergent, and occasionally dissenting, perspectives offer adult educators the opportunity to identify where transformative learning theory may fail to address learning issues in their realities.

As Mezirow and other transformative learning scholars have responded to these varied critiques of perspective transformation, a more fully-formed theory has emerged. Mezirow (1996) asserted that critical theory was implicit in transformative learning and that perspective transformation sought to liberate individuals from unexamined power structures. Moreover, he claimed that culture and the affective environment were essential to perspective transformation, because both “critical reflection and... discourse are manifestations of the culture” (Mezirow, 1991, p. 191). And other scholars have considered Newman’s claims about whether transformative learning theory represents a valid theoretical framework. Taylor (1997), Valerie Grabove (1997), and Patricia Cranton and Merv Roy (2003) examined transformative learning in light of the scholarship and criticism and found that a holistic view could represent the different facets of adults’ learning experiences. They asserted that transformative learning theory presented both a rational way of conceptualizing adults’ learning and an affective entry point to understand the creative, intuitive, and emotional processes these adults work through as they shift their habits of mind and frames of reference.

Applying Transformative Learning Theory to Academic Librarians

This broader understanding of transformative learning can be useful in considering how academic librarians develop their approaches to teaching, and more specifically, how they think of themselves as educators. This kind of a perspective transformation can exist in both personal and professional realms and may therefore represent both the rational and affective strands of transformative learning (Grabove, 1997). Developing an identity as an educator can be a rational and analytical process, built through critical discourse with others; it can also be more affectively-driven and honed through personal reflection and critical introspection.

In particular, Mezirow's (1981, 1994, 2000) transformational phases can be helpful to understand how academic librarians may develop an identity as an instructor in both rational and emotional ways. While transformative learning theory has been used to examine academic faculty's professional learning (see, for instance: King, 2004; Samaras et al., 2014), scholars have not specifically considered academic librarians' perspective transformations around their instructional identities. My research, then, sought to understand how academic librarians have changed their frames of reference to shift from considering themselves as disciplinary experts in information to thinking of themselves as educators. My use of transformative learning theory offers a novel application of Mezirow's work. It also adds a new dimension to the library literature about whether librarians engage in transformative learning while honing identities as educators.

CHAPTER TWO

LITERATURE REVIEW: DEVELOPING TEACHING IDENTITIES IN HIGHER EDUCATION

While I specifically focused my research on how academic librarians transform their perspectives and practices to see themselves as postsecondary educators, very little scholarship exists on this particular topic. Therefore, I sought to understand the phenomenon of perspective transformation through a broader review of the literature: That is, how do postsecondary educators shift their self-perceptions to construct instructional identities? Doing so allowed me to both better understand this phenomenon and to identify themes I could explore in greater depth with academic librarians.

Instruction in Higher Education

My literature review is framed by the existing scholarly tradition of considering postsecondary educators' teaching practices as an important component of their work. Faculty members who teach both undergraduate and graduate students are affected by instructional quality, because the caliber of their instruction directly impacts student success (Chickering & Gamson, 1987). However, in his seminal critique on the status of scholarship and teaching in higher education, Ernest Boyer (1990) argued that higher education instruction was often subjugated by a drive for research. Rather than see these factors of faculty work as opposing, though, he believed that any consideration of faculty scholarship needed to include four dimensions: research, practice, synthesis, and

teaching. For Boyer (1990), these four areas and their interplay represented an academic's work, and so faculty needed to more fully consider how they could form connections between their research and teaching responsibilities.

Faculty members may find this relationship hard to examine, though. While they are qualified as experts in a discipline, faculty may not be experts – or have any knowledge – in designing instruction, assessing student performance, or ensuring that students attain the requisite disciplinary knowledge in their courses. Mechanisms for developing faculty knowledge and skills in these areas are inconsistent at best. For instance, professors may shape their instruction based on training in teaching from their graduate education, or they may engage in professional learning opportunities about instruction at their institution or professional conferences. They may also be self-taught, or teach others as they were taught. Furthermore, faculty members may not consider instruction in their classrooms at all. While some academic institutions may have resources in place to encourage quality instruction (e.g. tenure and promotion guidelines, offices of teaching excellence, teaching mentorship programs), these, too, are haphazard.

While a one-size-fits-all approach may not be appropriate to universally develop academic faculty's teaching acumen, it is relevant to consider the factors that help these individuals shift from disciplinary training and expertise to pedagogical knowledge and skills. Doing so can help me to more fully explore academic librarians' experiences with perspective transformation around teaching practices.

Definition of Terms

In exploring the issues of pedagogical knowledge and skill in higher education, I need to first explain several terms I use. First, I employ *academic faculty*, *faculty member*, *professor*, and *instructor* interchangeably. These terms refer to a full-time, tenure-track or tenured teacher at a college or university. While there are myriad issues about part-time and adjunct instructors in 21st century higher education, I focused my research on those individuals who have full-time employment and whose work responsibilities include research, teaching, and service. Also, I used the term *institution* to refer to colleges and universities, although those more specific terms may also be used to describe higher educational environments where appropriate.

I refer to the learning opportunities that faculty members engage in around their teaching knowledge and skills as *faculty development*, *professional development*, and *professional learning*. These terms are frequently used interchangeably in the literature and carry the same meaning (Ouellett, 2010). All of these phrases refer to opportunities for faculty members to build their knowledge of, and skills in, teaching and learning. In discussing instructional strategies, I use the terms *pedagogy* and *pedagogical*, which is used throughout the literature to refer to faculty members' teaching practices. And finally, I referred to the result of a faculty member's perspective transformation around her or his teaching as his or her *teaching identity*, *instructional identity*, or *pedagogical persona*. Practically, these three terms indicate the shift academic faculty make from seeing themselves as disciplinary experts to considering themselves as educators in addition to their subject-matter knowledge. These three terms convey the same meaning and I use them interchangeably to avoid repetition. In my usage, the term *persona* is

meant to connote a component of an individual's character outwardly presented; it should not be confused with the idea of *personas* found in literature on instructional – and especially web – design.

Information Retrieval Process

In all cases, these terms I use arose directly from my review of the extant literature on how academic faculty develop pedagogical skill and knowledge. In searching for this information, I primarily used ERIC and Oakland University Libraries' discovery tool, Library OneSearch. While searching ERIC allowed me to concentrate my research in education-focused journals, Library OneSearch searches many of the Libraries' different online and print resources at one time. These respective resources helped me to uncover a wide swath of research on how faculty members develop their teaching identities. I specifically searched for empirical articles using various combinations of the following categories of terms. First, I looked for scholarship focused on *faculty development*, *professional development*, or *professional learning*. I limited these resources to those addressing *academic faculty*, *higher education faculty*, *discipline faculty*, or *college professors*; there is considerable research on pedagogical development for K-12 teachers, but this information is not relevant to my research. It was also critical that the scholarship consider *pedagogic identity*, *teaching identity*, or *instructional identity*, particularly through the theoretical lens of *transformation* or *transformative learning*.

Focus Area: Academic Librarians

While I am interested in how academic faculty shift from disciplinary training to pedagogical knowledge more broadly, I did attempt to specifically focus on how this topic may be applied to academic librarians. As I searched for information on perspective transformation and postsecondary educators' teaching identities, I paid particular attention to research that considered how academic librarians transform their library-based expertise into a teaching identity. As such, I included the term *academic librarians* in place of *faculty* in some of my searches of ERIC and Library OneSearch.

Literature Review

In synthesizing the resulting literature, I identified several core concepts that impact how academic faculty transform their discipline knowledge into individualized teaching identities. They need to engage in reflection about their practices, knowledge, and perceptions to create pedagogical personas. Faculty must also shift their thinking about the classroom environment as a teacher-centered space to a student-centered space. Moreover, they need to accept and incorporate others' feedback in their actions and ways of thinking. And in these different facets of faculty members' perspective transformation, institutional environments and technology play influential and often overarching roles. These concepts interchange with each other as faculty members' teaching identities develop.

The Role of Reflection

The role of reflection is prominent throughout the literature on how discipline faculty develop their identities as educators. In this process, reflection can take many

forms: It may involve what Jack Mezirow (1998) called critical reflection of assumptions, where broader structures, policies, or constructs of a discipline – or indeed, of instruction more generally – are assessed and re-evaluated. More often, though, this reflective work involves Mezirow’s (1998) critical self-reflection of assumptions, which asks individuals to look inward and consider their own frames of reference, habits of mind, and assumptions that guide their work. This kind of reflection can help academics better understand and develop their pedagogical skills and knowledge.

In their work on teaching and authenticity, Patricia Cranton and Ellen Carusetta (2004) considered how discipline faculty created meaningful and genuine teaching presence in their classrooms. In their estimation, those faculty members who engage in reflection to cultivate their instructional abilities constitute “adult learners [who are] engaged in developmental and potentially transformative activities” (Cranton & Carusetta, 2004, p. 5). To better understand how this specific group of adult learners conceptualized their own learning, Cranton and Carusetta designed a qualitative grounded theory research study where they worked with 22 faculty members at three Canadian universities over a three-year period. These individuals, selected as part of a purposive sample, were either recommended to the researchers as authentic teachers or were specifically recruited by the researchers because of their perceived authenticity in their teaching practices. In this study, Cranton and Carusetta collected data from observations, interviews, and focus groups to determine how these faculty became authentic in their teaching, how they developed their own teaching styles, and how they engaged in ongoing learning about teaching and pedagogy.

From these data, Cranton and Carusetta (2004) argued that faculty members developed authenticity in five categories related to their teaching. At the most fundamental level, these authentic educators knew themselves: They used self-reflection to develop an awareness of their teaching and personal identities. From this personal reflection, they developed meaningful and genuine understandings of others around them, specifically students and their needs. These two categories of authenticity allowed for these faculty members to build meaningful relationships, especially with students. In this category, Cranton and Carusetta asserted that faculty members reflected on how to engage students with the course content most effectively while also considering the power dynamics in the student-teacher interchange. More broadly, though, these authentic educators considered how the context affected their teaching, including the course content, class size, student demographics, departmental politics, institutional support, and broader community environment. The researchers found that these factors were critical to how these authentic educators developed their teaching identities. And finally, critical reflection informed how these faculty members considered their roles as teachers in their disciplines in overarching ways. According to Cranton and Carusetta, when these educators critically reflected on themselves as educators, the other individuals in their classrooms, the educational relationships that developed as a result of the teaching-learning interchange, and the context in which their teaching occurred, they were more likely to be developing an authentic teaching persona.

Similarly, Patricia A. Post (2011) examined the stages higher education faculty work through to as they strive to become better educators. In her consideration of twelve university professors, she operated under four critical assumptions about these

individuals: They acted as adult learners in the process of developing as teachers; they had been hired for their discipline knowledge rather than their instructional prowess; they could in fact learn to teach, and that their academic departments assumed these individuals would develop these skills over time; and they saw teaching as a set of skills and a way of thinking that would develop over the life of their academic careers. From these understandings, Post conducted phenomenological interviews to identify how these faculty members' different types of learning helped them develop teaching identities.

From these interviews, Post (2011) identified seven stages that faculty members worked through to develop as educators. In the first three stages – Warming, Forming, and Informing – reflection did not play a central role but still shaped how they thought about teaching as a practice. Their socialization in school during the Warming phase, their trial-and-error as graduate instructors in the Forming phase, and their focus on information sharing as a new faculty member in the Informing phase shaped how they initially saw themselves as teachers in higher education. However, Post asserted that a Storming phase, during which “a disturbance of the normal condition of the environment” (p. 29), prompted discipline faculty to rethink their roles as teachers. Often, these disturbances involved a conflict between teaching and research, or a critical assessment of one's teaching by students, or even internal conflicts. As a result of this Storming phase, then, individuals may reflect on their teaching practices and their role as an educator.

Following the Storming phase, Post (2011) found that faculty members engaged in teaching that was informed by reflection in different ways. At the Performing phase, she asserted that faculty shaped their teaching practices by factors such as class size,

student demographics, and the subject matter taught. In these cases, faculty members engaged in critical reflection of assumptions around their teaching. In the Reforming phase, though, they began to more critically self-reflect on their own assumptions with greater focuses on student engagement, student learning, and how their own practices could be restructured to meet those needs. In the Reforming phase, Post found that faculty members focused on learning rather than teaching. And finally, Post found that faculty's increased awareness to, and reflection on, their pedagogical work led to a Transforming phase. At this stage, faculty members were more acutely aware of their own knowledge and perceptions about teaching and learning, including the ethical issues (i.e., power structures) related to the higher education classroom. Moreover, they were able to share their knowledge with others and help other faculty members develop their own pedagogical skills and practices.

Since reflection is a component of teaching identity that needs to be developed, some faculty development programs target junior faculty members to create this disposition early on. For instance, Lynn C. Koch and her colleagues (2002) examined the impact of a professional development program focused on helping junior faculty develop their knowledge of the scholarship of teaching and learning and use this knowledge in their classrooms. At the most basic level, they asserted that “[s]cholarly teaching requires a systematic process of inquiry into one’s own teaching practices and students’ learning” (Koch et al., 2002, p. 84). This individual inquiry process directly shapes how a faculty member considers herself or himself as an educator in the context of his or her discipline.

Koch et al. (2002) used a qualitative case study to more closely examine the impact of this professional development program offered as part of the Ohio Teaching

Enhancement Program for Junior Faculty. Through this approach, they could consider participants' individual experiences as part of the broader program, and they used individuals' specific and personalized teaching projects as data sources. Each participant began the program with a specific need or problem to resolve, and Koch et al. saw reflection as an important part of this first step. In beginning their participation, junior faculty members had to ask themselves, "What is the problem I face, and what are the necessary steps needed to address [it]" (Koch et al., 2002, p. 87)? This initial reflection required critical assessment of both individuals' subject areas and personal skills. From this problem identification, Koch et al. identified that junior faculty developed ways to respond to these issues by: Gathering resources that could help identify solutions; setting goals and objectives for both their work on their projects and the resulting learning interactions; and engaging in consistent evaluation and assessment to determine if their work responded to the initial problem or need adequately.

Both critical reflection of assumptions and critical self-reflection of assumptions are evident in these steps. Reviewing ways to address an issue involves both reflecting on what these say about an academic discipline, students' needs, and a faculty member's perceptions on learning. Setting goals and objectives, both for one's own work and for others' engagement in a learning interaction, forces a faculty member to use his or her knowledge of her or his own skills and the skills of his or her potential students to delineate reasonable outcomes. And self-assessment is an inherently reflective process, because the faculty member must consider whether her or his work fits within a broader academic discipline and addresses his or her value system.

While reflection can impact teaching identity broadly, it can also play a role in influencing specific aspects of faculty members' pedagogical personas. For instance, Elizabeth Niehaus and Letitia Williams (2016) considered reflection in faculty development opportunities on redesigning curriculum to strengthen its international focus. While they specifically sought to determine how "one faculty development initiative influenced participants' perspectives on internationalization and how those perspectives have in turn played a role in faculty members' engagement in international curriculum transformation" (Niehaus & Williams, 2016, p. 60), they identified the critical role reflection played in the process. Using a qualitative case study, they collected data through interviews with 15 program participants, observations, and document analysis. Triangulating these data allowed the researchers to identify the key themes and areas of perspective transformation the faculty members who participated in the initiative.

According to Niehaus and Williams (2016), the faculty participants experienced transformation in their teaching, their research practices, and in their own sense of personal and professional beliefs. Reflection – both embodied as critical reflection of assumptions and critical self-reflection of assumptions – was a central component in each area of transformation. Niehaus and Williams reported that, as a result of the professional development program on internationalizing curriculum, faculty participants engaged in more reflective pedagogical practices, integrated new teaching strategies into their courses, and revisited the kinds of materials they used to teach their subject area content. While not specifically connected to faculty members' teaching practices, the researchers also found that reflection influenced their approaches to research, both in how they viewed their own research and scholarship more generally in their discipline.

Separating research perceptions from teaching, though, presents a false dichotomy, because how faculty members think about scholarship in their subject area impacts how their teaching takes shape. For instance, how a faculty member thinks about scholarship in her or his discipline can impact the kinds of materials he or she uses in her or his teaching. Ultimately, Niehaus and Williams (2016) found that this professional development program led to faculty members being more reflective about their personal and professional beliefs, specifically as they related to culture and their perceptions of internationalization. Reflection, then, is important for both the general development of faculty members' attitudes about teaching and the specific honing of pedagogical practices.

Focusing on Student Learning

Faculty members shifting their focus from instructional practices to student learning is another important component of how discipline experts develop teaching identities. This kind of shift may happen as part of a perspective transformation (Mezirow, 1978). As Post (2011) found, beginning faculty may focus more on informing students – sharing necessary disciplinary information. However, as academic faculty develop their pedagogical personas, they become more aware of students' needs, interests, and own identities in the context of their classrooms. As they hone their practices around meeting students' needs and engaging them as individuals, faculty members may shift away from a lecture-heavy model of instruction and move toward more constructivist or learner-centered classroom paradigms.

Researchers have explored this shift in several ways. Nadine McHenry, Donna Ziegenfuss, Andrea Martin, and Annalisa Castaldo (2009) investigated the impact of a program that paired faculty members with student learning assistants in redesigning course content and pedagogical strategies. This structure specifically helped faculty change their paradigms through student input and guidance. They noted that while a teaching-focused paradigm looks inward and involves a teacher focused on teaching, a learner-focused paradigm involves an educator focusing on students and what they are learning. For many faculty members, this refocusing can represent a significant shift in practice.

McHenry et al. (2009) used a qualitative pilot study to consider how two faculty members – one in Chemistry and one in English – worked with students and pedagogy coaches from their university's School of Education to refocus their teaching on student learning. This pilot study had three parts, and data were collected from both faculty members and student learning assistants throughout these phases: A pre-semester phase, in which the faculty member designed new course content with the learning assistants and pedagogy coaches; the course implementation phase, in which the faculty member taught the course and learning assistants acted as observers in the courses; and the post-course phase, in which the faculty members and learning assistants reflected on their experiences.

From these data, McHenry et al. (2009) identified several themes related to how faculty members shifted their teaching paradigms to be more learner-centered. First, their interaction with the learning assistants and pedagogy coaches helped them to develop increased knowledge about pedagogy and course design. They also saw new

interdisciplinary connections between their subject area and other scholarly fields. Perhaps most importantly, though, the faculty members reported on developing new understandings of course design and teaching processes. McHenry et al. asserted that faculty members saw the importance in considering student engagement and satisfaction while still ensuring that students attained the desired learning objectives. From this new focus, McHenry et al. found that faculty members developed as instructors and felt more confident in their teaching practices. In shifting their practices to focus more on student learning, the faculty members in this study honed their teaching identities.

Similarly, Melinda Malik (2015) investigated how a professional learning program for academic librarians helped them to consider adult learners' needs in new ways. She argued that the needs of adult learners, and graduate students in particular, have unique learning challenges and, as such, it was "important that librarians receive training to develop programs and services that meet students' need [*sic*] and support their educational goals" (Malik, 2015, p. 50). In her research, Malik assessed the impact of a targeted professional development program that provided readings, reflection opportunities, and two workshops on adult learning theories to academic librarians. She used qualitative narrative research methods to analyze pre- and post-program reflective essays from four academic librarians at a small private liberal arts college in New England who had participated in the program.

Through her data analysis, Malik (2015) identified two central themes related to the program's impact on teaching identity. First, the academic librarians felt they were already incorporating adult learning strategies into their teaching, often without knowing it. She asserted that librarians' hands-on experiences as teachers and as learners helped

them to identify these practices independently and meaningfully integrate them into their learning interactions. Perhaps more relevantly, though, Malik found that participants felt that the adult learning theory they had learned about through their professional development program “could be effectively used with other campus populations” (p. 55) in their instructional work. In this professional learning program, then, academic librarians married their new knowledge of adult learning theories with a focus on student learning. Their reflection and consideration of other learners’ needs, interests, and experiences allowed them to see applications in their pedagogy outside of graduate education environments.

Indirectly developing student-focused teaching identities. While McHenry et al. (2009) and Malik (2015) specifically examined professional development programs that sought to increase faculty’s focus on student learning, other faculty members have engaged in teaching-centric professional programs and experienced a focus on student learning as an unintended outcome. Jay R. Dee and Cheryl J. Daly (2009) found such a result in their exploration of a consortium model for faculty development. In their research, these scholars reported on how a faculty learning center that provided development programs for seven colleges transformed faculty’s teaching practices. In assessing this center’s impact, they used qualitative case study methods with a purposive sample of faculty who had participated in a seminar series. Dee and Daly used semi-structured interviews with 40 faculty members at seven different institutions to understand why they participated in the seminar series and the growth and development

they experienced as a result of their participation. From these interviews, the researchers identified three broad themes related to faculty's experience in the seminars.

Dee and Daly (2009) found that, as a result of their participation, faculty members developed an increased awareness of, and focus on, students and their learning. Importantly, this outcome impacted the other two themes they identified as results from the seminar series: Change in pedagogical practices and development as a leader/change agent. Because faculty members' participation in the seminar series had shaped their awareness of students and their learning, Dee and Daly found that they were more apt to tailor their pedagogical strategies to address students' needs. In fact, all of the participants in the seminars reported that they experienced at least some level of pedagogical change as a result of their participation; eight individuals even believed that they had experienced transformative shifts in their practices. Moreover, faculty members indicated that their participation in the seminars made them more aware of student diversity in their classrooms. This new focus related to how they saw their roles as change agents on their campus, which involved developing a deeper understanding of the power dynamics at play. Faculty members surveyed also indicated that, as a result of their seminar participation, they felt compelled to share their experiences and new knowledge with others. Their increased understanding of students, then, did not stop with them. By sharing their experiences with others, these faculty participants may have influenced colleagues' pedagogical approaches and increased their consideration of students' role in the learning process.

Considering students at the center of one's teaching identity may also include incorporating different or specific pedagogical approaches. Don Haviland and Diane

Rodriguez-Kiino (2009) focused their research on how a faculty development program on culturally responsive pedagogy impacted faculty members' use of this approach with Latinas. Culturally responsive pedagogy “*capitalizes* on cultural differences to generate intellectual creativity and classroom strengths to shape a transformative empowering learning experience” (Haviland & Rodriguez-Kiino, 2009, p. 201). As college campuses become more diverse and adult learners seek to incorporate their life experiences into their academic pursuits, these researchers asserted that using culturally responsive pedagogy can create more authentic and meaningful learning environments. However, this approach may represent a pedagogical departure for faculty members who have sought to maintain what they (often incorrectly) see as a culturally-neutral learning environment.

Haviland and Rodriguez-Kiino (2009) used a mixed methods case study to evaluate the effect of a program designed to help faculty integrate culturally responsive pedagogy in their teaching. In this program, participants engaged in a six-week online course and a three-day intensive summer institute that focused on increasing their awareness of Latina culture and the challenges Latina students faced. The researchers collected data from both faculty and students to understand the impact of the program on faculty members' teaching. They held two rounds of interviews with faculty members who had participated in the program, observed these faculty members in action, and analyzed teaching artifacts from the professional development program (e.g. syllabi, course documents, textbooks, tests). Haviland and Rodriguez-Kiino also administered a student engagement survey based on the National Student Satisfaction and Engagement

questionnaire to evaluate students' engagement in the classrooms where faculty members had learned about culturally responsive pedagogy.

While Haviland and Rodriguez-Kiino (2009) did not see the shifts in practice they had hoped for, they did find that the program influenced participating faculty members' attitudes about students and their culture in the learning environment. Moreover, they found that there was a statistically significant positive difference in students' engagement with others, their communities, and their instructors on content other than coursework in those classrooms where faculty had undergone training around culturally responsive pedagogy. While the researchers had hoped to see larger-scale changes, the student data implied that faculty members' shifted attitudes did result in more student-centered pedagogy and learning environment design.

Similarly, Claire H. Major and Betsy Palmer (2006) studied how faculty members' participation in a Project-Based Learning (PBL) development program affected their pedagogy and attitudes about student learning. They specifically framed their research with the concept of pedagogical content knowledge, which involves transforming content area knowledge into "a form that has practical application in teaching" (Major & Palmer, 2006, p. 621). The researchers sought to determine if faculty members had developed pedagogical content knowledge as a result of the PBL-focused program. Major and Palmer used a qualitative case study to explore this topic. In their case study, they primarily collected data from semi-structured interviews with 31 faculty members who had participated in the PBL initiative. They also collected secondary data by analyzing course portfolios these faculty members had created as part of the faculty development program.

Major and Palmer (2006) found that faculty members had shifted from content knowledge to pedagogical content knowledge as a result of their participation in the PBL program. What was especially important to these researchers, though, was what facilitated this knowledge creation process and the results of this new knowledge. While institutional conditions – such as having time, mentorship, or support as part of an institution’s culture – helped to foster the shift from pure content knowledge to pedagogical content knowledge, Major and Palmer found that participants demonstrated an increased focus on student learning as a result of their experiences. As a result of this shift, faculty members reconsidered both their roles and students’ roles in their learning experiences. Faculty members also spoke to a greater awareness of pedagogical strategies and approaches, as well as a more intentional instructional design focus in their teaching. As a result of their PBL experiences, Major and Palmer found that faculty members used these changed perspectives in concrete ways. They shifted their teaching practices in the classroom; they changed their conversations around teaching and learning with their colleagues; and they approached their scholarship in different ways. These actions demonstrate a focus on student learning, and they suggest that faculty members developed new, revised, or more meaningful teaching identities in the process.

The Importance of Interpersonal Connections

As faculty members engage in reflection and focus their teaching through the lens of student learning, their interpersonal connections with colleagues and mentors are essential. Through these relationships, individuals can enact the components of transformative learning, such as engaging in critical discourse, examining their own self-

assumptions, and exploring other perspectives or ways of thinking (Mezirow, 1998, 2000). In some instances, these relationships develop within discipline-specific professional development offerings. In other situations, cross-disciplinary partnerships and dialogue help faculty members engage in personal perspective transformation. The scholarship on this part of faculty's teaching identities is largely narrative, because faculty members share their first-hand experiences and how these professional learning environments have shaped their pedagogical personas.

Relationships within disciplinary areas. Intra-disciplinary connections can help faculty develop their teaching identities while grounding conversations in discipline-specific knowledge. Tiffany Gallagher, Shelley Griffin, Darlene Ciuffetelli Parker, Julie Kitchen, and Candace Figg (2011) explored the impact of an informal self-study group on five pre-tenure education faculty members' practices and perceptions. This group of junior faculty met regularly over the course of the academic year for several years, and members engaged in self-study about their teaching practices. Specifically, these self-study efforts focused on examining how the participants' prepared teacher candidates for inservice teaching. Gallagher et al. asserted that all teacher educators must consider how they "effectively instruct teacher candidates to be competent beginning teachers" while also contributing "to the vitality of a responsive teacher education program" (p. 881). These needs were central to the group's self-study, and exploring how they considered these issues was central to their qualitative case study of their experiences.

By analyzing their own personal reflections, presenters' notes, field notes, and discussion transcripts, Gallagher et al. (2011) identified specific ways their self-study

group impacted these junior faculty members. While the tension between tenure and teaching was the central issue faculty members discussed, the researchers noted the value in discussing these challenges and learning from others' experiences in the context of their group. These challenges included issues of teaching, instruction, cultural disconnects within the department, and academic rites of passage (i.e., chairing a committee or task force). Gallagher et al. argued that, through the self-study program, the participants moved together toward a "collective mission as education professors" (p. 888). This professional development structure, then, provided a way for junior faculty members to explore instructional issues and their teaching identity with support and input from trusted others. These individuals provided what the researchers called "authentic conversation" (Gallagher et al., 2011, p. 888), which can help faculty see their role of teacher in different or more meaningful ways.

Similarly, B. J. Eib and Pam Miller (2006) considered how a discipline-grounded faculty learning group could build community in an academic unit. They argued that teaching can seem like an isolated experience, even though it involves regular and ongoing interaction with students. This isolation may result from faculty members' reluctance to share out of a fear of criticism. It may be an indicator that faculty members carry heavy workloads of scholarship, teaching, and service at their institutions and have no time to collaborate. In a historical case study, Eib and Miller reported on one social work department's efforts to reduce this isolation, build community among its faculty members, and improve teaching. This department designed a blended community of practice that used an online learning course and in-person follow-up support to help faculty integrate technology into their teaching. In this community of practice, all

participant (more than 20 faculty in all) worked on their own projects but interacted with their colleagues and facilitators online and in person.

In their review of this case, Eib and Miller (2006) found that participants' teaching projects often did not cross the finish line. In fact, many participants spoke to the need to have more time to practice the skills and use the technology tools they sought to integrate into their teaching. However, participants did speak positively of the interpersonal connections that were created as a result of this community of practice. Moreover, Eib and Miller noted that this community of practice impacted the departmental structure of their institution. As a result of the community that was constructed, the department gained an administrative position to support blended learning. Overall, participants expressed satisfaction in the process, learning, and interpersonal relationships that developed through this program. These kinds of connections may help faculty develop their teaching identities.

While many discipline-specific faculty learning programs focus on content, some researchers argue that process-centric programs are more sustainable long-term. In these kinds of programs, faculty focus on developing self-reflection and interpersonal relationships that can impact their teaching identity rather than the skills, competencies, and attitudes necessary for instruction. Dorene F. Balmer and Boyd F. Richards (2012) considered how one such faculty development program impacted a group of medical faculty members' personal growth as educators. All participants in this program were faculty in Columbia University's College of Physicians and Surgeons. The researchers collected data through observation notes, in-depth unstructured interviews with program

participants, and program documents to conduct an ethnographic examination of this program.

From their analysis, Balmer and Richards (2012) identified three central themes that faculty experienced from their participation at the personal, interpersonal, and institutional levels. First, participants found that a focus on personal reflection and relationships helped them develop their teaching identity and grow individually. Second, participants in the program developed deep interpersonal connections to others around their work as educators. They forged these connections with other faculty members, but they also created these connections with their students. And third, these relationships that developed impacted the institution by reshaping its curriculum in positive, transformative ways. According to Balmer and Richards, the “web of relationships among participants in the process-oriented faculty development program created the opportunity, and the means, to address and reshape powerful norms of institutions” (p. 246). Building relationships between faculty around their teaching identities, then, can transform both individuals’ and institutions’ teaching practices in meaningful ways.

Relationships across disciplinary areas. While a discipline-specific focus may help faculty members to deepen their subject area knowledge and build curricular connections with their colleagues, interdisciplinary development programs may also help faculty members to consider their teaching identity in new ways. Anastasia P. Samaras and her colleagues (2014) explored how teams of diverse subject area faculty could build cross-disciplinary relationships and generate new points of view on teaching. These researchers participated in a faculty learning community that used the self-study methods

to examine their own teaching practices and pedagogical perceptions. Although grounded in the field of education, the self-study methods force individuals to engage in personal reflection and critique, and these researchers asserted it could be effectively used in many disciplines to consider pedagogical practices. In the faculty learning community, twelve participants were grouped into three teams; these teams met over a 16-month period to explore their own self-study topics related to teaching identity and practices. Through a historical case study of the self-study artifacts (e.g. exit slips from meetings, narratives about experiences) and interviews with all participants, Samaras et al. identified the outcomes of faculty members' experiences in the program.

Samaras et al. (2014) found that their historical case study data echoed what the individual participants had experienced in the program. In the self-study experience, participants received cognitive and emotional support for their teaching from their faculty colleagues. Moreover, the participants spoke to developing trust in others and their feedback on teaching practices. These team experiences helped faculty members develop cross-disciplinary understandings about teaching, learning, and students in their courses. Furthermore, Samaras et al. found that individuals' experiences in the self-study learning community had ripple effects. Their interpersonal connections, both in and out of the learning community, affected others' practices and pedagogies. This experience, then, provided a forum for faculty to break down disciplinary boundaries, conceptualize teaching as an art and craft, and interact with others around these topics in rigorous and reflective ways. In this case, connecting with others helped faculty to consider their teaching identities in new or deeper ways.

Feedback for Forging Teaching Identities

Constructive, non-evaluative feedback is an important component in the interpersonal relationships that help faculty develop their teaching identities. Mezirow (2000) saw collecting and integrating feedback as an essential phase in the perspective transformation process. Through critical discourse, adults can gain feedback from others and figure out how to incorporate it into their reshaped habits of mind or ways of thinking. In particular, input from colleagues and more knowledgeable others (e.g. facilitators or instructors) can help faculty members develop new meaning perspectives about their teaching identities.

Feedback from peers. In their experiences, Gallagher et al. (2011) highlighted the impact of feedback on pre-tenure teacher educators' practices as instructors. In this case, they specifically used feedback from peers to inform their teaching practices. In the process of considering their pre-tenure issues in a community of practice, the feedback they received helped them to "learn from the experience of others" (Gallagher et al., 2011, p. 887) and develop their approaches to teaching. Moreover, the connections between the faculty members created a group where they could "converse, share, reflect, explore tensions, and inquire further into their scholarly practices" as educators (Gallagher et al., 2011, p. 888). In this case, feedback from colleagues provided emotional support while highlighting or validating tensions that faculty members felt about their teaching practices. It also offered a means by which faculty members could engage in reflection on their own practices. Input from others can help an individual hold

a mirror up to his or her own work, which can assist faculty members as they hone their teaching identities.

While Gallagher et al.'s (2011) research uncovered how feedback can impact teaching identity in a community of practice, Diane Persellin and Terry Goodrick (2010) specifically sought to examine how this aspect of professional learning impacted faculty members' teaching practices. In their research, they examined whether a summer teaching and learning workshop on microteaching – or small, focused lessons that are recorded and critiqued by peers – influenced faculty members' instructional work. It was important for Persellin and Goodrick to explore whether this strategy-centric professional development program was effective, because they asserted that “both new Ph.D.'s [*sic*] and mid- to late-career faculty have relied upon subject-matter knowledge to be sufficient for effective teaching” (p. 1) rather than integrating pedagogical techniques into their instructional work. In examining whether a program on microteaching impacted teaching practices long-term, Persellin and Goodrick hoped to identify if faculty members felt more comfortable taking instructional risks or engaging in reflection about their practices as a result of their participation.

In exploring this topic, Persellin and Goodrick (2010) used a quantitative survey instrument to identify generalizable outcomes. They contacted all 370 faculty members who had participated in the program, and 206 completed the survey. The instrument itself was composed of demographic questions and 12 Likert-style questions focused on participants' perceptions of their experiences, changes in behaviors as a result of the workshops, and use of workshop materials since completing the learning experiences. The researchers found that 91% of faculty had tried a new teaching technique they had

learned about in the workshop; 87% had taken more teaching risks; 89% were more confident in their teaching; and 93% were more aware or thoughtful of their teaching practices. Persellin and Goodrick asserted that these outcomes indicated that this cross-disciplinary workshop series, in which non-evaluative feedback from peers was central, helped faculty to “learn other professors share the same problems” (p. 10) and develop their identities as educators. Moreover, structuring feedback around a specific pedagogical strategy – in this case, microteaching – helped the faculty members to feel less “isolated and uncomfortable about seeking help with their teaching” (Persellin & Goodrick, 2010, p. 10). Feedback, then, was of ongoing importance for these faculty’s pedagogical personas.

Feedback from supervisors or facilitators. In structures like communities of practice or learning communities, faculty members primarily receive feedback from colleagues on their work as scholars and educators. However, facilitators, instructors, or supervisors can provide non-evaluative feedback on individuals’ instructional practices in other professional development structures and help shape teaching identity. While peer feedback can be valuable and lead to professional development, guidance or critique from more learned others can also lead to meaningful individual growth.

These kinds of programs may be formal classes led by an instructor, or they may be more informal workshops led by a facilitator. Kathleen P. King (2004) considered how adult educators in a structured class environment engaged in transformative learning around their teaching identities. Through her study, she illuminated the importance of feedback for faculty members from program instructors or facilitators. King used a mixed

methods research design to gain the perspectives from both the course's instructor and participants in a program focused on preparing faculty members to address adult learners' needs. She administered the validated Learning Activities Survey instrument with 58 different course participants over the course of four years; from the resulting data, she interviewed the course instructor about her approach in designing and teaching the course with adult educators' needs in mind.

In analyzing these data, King (2004) identified the important role that the course instructor played in crafting and supporting the adult educators' teaching identities. On the Learning Activities Survey, course participants reported that the instructor's support (33%) and personal challenges to them (33%) most influenced their perspective transformation. Moreover, these respondents indicated the activities where they received formal (i.e., graded) or informal (i.e., verbal or nonverbal cues) from the instructor, such as the class discussion and journal assignment, were most effective in guiding their perspective transformation. In her interview, the course instructor echoed the importance of her feedback for adult learners. She indicated that, as they developed their teaching identities, these educators needed feedback to build their confidence as instructors and to feel supported as they experienced perspective transformation. While peer feedback can shape teaching identities, faculty may also benefit from non-evaluative guidance (i.e., not part of the tenure/promotion process) from more learned others in direct instructional roles.

The Role of Institutional Culture and Support

While other factors may help to shape a faculty member's teaching identity, the support an institution provides is an overriding concern throughout the literature. At the most basic level, whether an institution – both at the departmental and university levels – supports professional development around teaching and learning influences faculty members' perspective transformation from disciplinary expert to educator. Institutions' explicit value of teaching affects how – and indeed whether – faculty focus on student learning, interact with each other about instruction, and reflect on their practices. Even at institutions where teaching identities are valued, there is a constant tension between the teaching and scholarship components of faculty members' workloads (Wolverton, 1998). Several researchers have explored how institutional culture impacts how faculty members develop as educators, both at targeted or specific (e.g. cohorts of specific faculty, department-specific programs) and institution-wide levels. Considering the role institutions play can reveal how faculty develop teaching identities in a more holistic way.

Focused support for teaching. Much of the research on faculty development programs focuses on trainings that are: departmental (Gallagher et al., 2011; Eib & Miller, 2006; Malik, 2015); for new or junior faculty (Cooley & De Gagne, 2016; McHenry et al., 2009; Koch et al., 2002); targeted to mid- to late-career faculty (Blakely, 2015; Mignon & Langsam, 1999); grounded in technology use (Vaughan, 2010); focused on specific pedagogical techniques (Haviland & Rodriguez-Kiino, 2009; Major & Palmer, 2006); or based in relationship-building (Balmer & Richards, 2012). Some

researchers have considered how institutions foster – or fail to foster – these kinds of targeted programs, especially for new faculty or at the departmental level.

For instance, Kathleen M. Quinlan and Gerlese S. Akerlind (2000) examined how professional learning situated within academic departments could foster collaboration and help faculty develop their instructional presences. They viewed this approach as the most meaningful in honing teaching identities, because academic subject areas provide “the primary area of identification for faculty,” and there is an “emerging literature on [the] discipline-specific aspects of teaching” (Quinlan & Akerlind, 2000, p. 23). Moreover, considering professional learning around instruction from a department-situated perspective can take into account the different cultures, values, and politics that are unique to each academic unit. Quinlan and Akerlind used qualitative case study research methods to explore how two academic departments worked through professional learning around instruction. Through observations and interviews, these researchers assessed the impact of peer collaborations on faculty members’ teaching identities.

While instructional practices and faculty identities may be grounded in disciplines, Quinlan and Akerlind (2000) did not find that professional development in these units reliably led to changed behaviors or practices. In fact, they determined that the departmental environment, structure, and value system led to a high level of variability in the professional learning’s impact on practices. From their research, Quinlan and Akerlind deduced that those departments with “more highly cohesive and interactive [environments would]... be more willing to share their experiences and practices” (p. 44). One of the departments they examined had this kind of culture in place while the other did not. The researchers, then, asserted that for departmentally-situated and teaching-

focused professional learning initiatives around teaching to be most effective, several conditions needed to be met. First, the department needed to have a collaborative culture in place already. Second, the faculty members needed a specific need or problem to address. Third, faculty members needed to have confidence in their standing in the department, which itself should be decentralized in terms of governance. Fourth, the faculty members needed to be guided by a set of external standards or guidelines that structured their teaching work. Finally, good faculty morale within the department would strongly influence the success of teaching-centric professional learning programs. By ensuring these underlying criteria were met, Quinlan and Akerlind believed that future teaching-centric faculty development could be successful in discipline-specific contexts.

Other researchers have investigated the level of departmental support for faculty developing their teaching identities. In her study of faculty members at American Library Association-accredited graduate programs in library and information sciences, Kate Marek (2009) assessed the support available to faculty members in developing both online courses and their e-teaching personas. She asserted that there was no agreed-upon way to teach effectively online and, as such, faculty members in graduate library programs may not receive adequate support for their online teaching. Marek used a quantitative survey instrument to broadly measure the levels of support these faculty received. She sent the instrument to 883 library and information science faculty; 296 participants completed the survey, which was composed of 16 multiple-choice, yes-no, and open-ended questions.

Marek (2009) found that while vast majority (92%) of library and information science faculty members taught online, there was little consistent support within

departments for developing their online teaching identities. Most consistently, these faculty members reported seeking informal support and training in teaching online from their colleagues (63%). Some (58%) library and information science faculty did receive some support from their institutions through informal workshops provided through the information technology departments. However, Marek argued that this institution-wide support failed to address these faculty members' department- and discipline-specific teaching needs. Moreover, the majority (63%) of these faculty had no support in creating new course content online. To ameliorate these issues and help these faculty members create their teaching identities, Marek believed that they needed a multilayered support model. Departmental or program-specific support lay at the core of such a model, and these kinds of resources could help faculty more effectively establish instructional presences in their disciplines.

Other scholars have considered the impact of more cohort-specific faculty development programs in developing teaching identity. Mary Ann Shea and Andrew S. Knoedler (1994) looked at how one university supported new faculty members as they developed their teaching identities. Specifically, these researchers considered how a series of workshops led by "a cohort of talented, experienced, and cooperative faculty members" (Shea & Knoedler, 1994, p. 139) from across the institution affected these new faculty members' teaching and pedagogical perspectives. Shea and Knoedler collected focus group and interview data from participants to generate a historical case study on the program's impact.

From their data analysis, Shea and Knoedler (1994) found that this targeted program did indeed help new faculty members establish their teaching identities. Those

faculty members who participated “expressed confidence in their progress as teachers” (Shea & Knoedler, 1994, p. 147) and “emerge[d] from [the] program with knowledge of specific pedagogical theories and tactics” (p. 149) to use in their classrooms. Through this pedagogical exposure and practice, Shea and Knoedler argued that participants developed a sense that “teaching is equally about process and content, and that effective teaching and learning are reciprocal processes” (p. 149). In this case, then, the researchers found that targeting and supporting a specific cohort of faculty members helped them to develop their pedagogical personas.

Institution-wide support for teaching. While targeted programs can help faculty members to develop their teaching identities, how institutions can also create cultures that support teaching and pedagogical personas more broadly. Lanthan D. Camblin, Jr. and Joseph A. Steger (2000) examined how faculty development at one large research university could be refocused to help diverse groups of faculty develop their instructional identities. They specifically considered whether an institution-wide grant program for individual faculty, groups of faculty, and departments focusing on learning and scholarship significantly impacted teaching and research at the university. Camblin, Jr. and Steger used a quantitative survey instrument to collect data from university faculty members and assess this program’s impact; they sent the survey to 1925 individuals and received 338 usable responses.

From participants’ responses, Camblin, Jr. and Steger (2000) found that the faculty development grant program – and the ensuing programs financed by these grants – had enhanced faculty members’ pedagogical skills and changed some aspects of their

teaching. These grants had also resulted in course or curriculum changes at the departmental level, and had fostered cross-disciplinary collaboration around teaching and learning. However, Camblin, Jr. and Steger did note that the majority of respondents – 245 of 338 – had applied for funding through the grant program, and that those who had received funding were more likely to return the survey. Regardless, the researchers asserted that the grant application cycles and the ensuing programs funded by these grants led to “outstanding results in a short number of years... [while] literally affecting hundreds of faculty” (Camblin, Jr. & Steger, 2000, p. 16). This kind of an institution-wide program, then, can help to create an environment where faculty members more consciously consider their pedagogical practices and develop reflective, student-centered teaching identities

Similarly, Susan H. Frost and Daniel Teodorescu (2001) examined how institutions could support faculty members’ teaching and pedagogical practices while seeking to increase their research output. They argued that, for many institutions, teaching initiatives or pushes for faculty to develop teaching identities fail because they do not address underlying cultural issues that impede instructional excellence. While academic administrators see research and teaching as mutually compatible endeavors, faculty members often see them as mutually exclusive. The guidelines for tenure and promotion seem to force this dichotomy to develop because scholarly output may be weighted more heavily than quality instruction. As their institution sought to increase its research focus, Frost and Teodorescu included faculty members in developing structures to simultaneously support both teaching excellence and research endeavors. In their qualitative case study, the researchers used 24 faculty focus groups, comprised of 254

total faculty members, to collect data on faculty members' opinions about how the institution could promote quality instruction.

Frost and Teodorescu (2001) identified several themes from faculty's opinions about what institutional supports could make teaching excellence a reality. The faculty members spoke to the need of making teaching a priority at the institution – without this shift from the top, teaching excellence seemed unattainable. If developing teaching identities and meaningful pedagogical practices were institutional priorities, the faculty members saw several changes that would happen from the top-down. First, the institution would need to improve the teaching evaluation process and use multiple measures to assess an instructor's effectiveness. Also, the institution needed to provide incentives for good teaching, including in tenure and salary decisions. In supporting professional development, faculty members asserted that the institution would see teaching as a multifaceted activity that was interdisciplinary and involved creating a broader campus intellectual community. However, faculty felt it was important that professional development around teaching identities needed to be supported using a bottom-up, decentralized approach. Frost and Teodorescu, then, asserted that helping faculty members shape their teaching identities involved behavioral change, both at the individual and institutional levels; cultural change within and across the institution; and structural change in terms of the institution's systems and supports offered for teaching. If institutions can support these kinds of changes, then, they can help faculty to develop their teaching identities.

Technology in Teaching: A Developing Challenge

As faculty work to develop their personas, the rise of online learning and integrating technology into face-to-face instructional interactions pose new challenges. Even for established faculty who have thoughtfully considered their instructional strategies and role in the classroom, figuring out one's place in technology-rich or digitally-created learning environments can be challenging. These new kinds of instructional interactions can generate Mezirow's (1994) disorienting dilemmas for faculty members around their teaching identities. As such, researchers have explored how faculty members' interactions with technology, both informally and in formal professional development programs, impact how they think of themselves as educators. Better understanding how this dynamic plays out can help faculty members and faculty developers alike to address the diverse technological and teaching needs in 21st century college classrooms and help faculty through perspective transformation.

Integrating technology into pedagogical practices. A number of researchers have considered how faculty members reconcile their own teaching identities with technology use. For instance, David A. Georgina and Myrna R. Olson (2008) explored how faculty members' technology training and competencies impacted their personal pedagogical approaches. They specifically sought to investigate how technology knowledge impacted pedagogical practice while controlling for faculty development. Georgina and Olson used a quantitative survey instrument to measure these variables and specifically focused on faculty in departments or schools of education at doctoral research institutions. In total, 237 participants complete the survey instrument. Based on

their data analysis, the researchers found that participants' self-reported perceptions of their technology skills had strong correlations with their pedagogical, instructional design, and instructional delivery practices. Also, survey respondents cited that a number of influences in how they integrated technology into their teaching, including whether: The institution's infrastructure supported teaching with technology; pedagogical strategies were accessible to students; and the faculty member could train the students adequately in using the new technology tool(s). Georgina and Olson's research suggests, then, that for faculty members who use technology tools and have technology knowledge, these factors shape how they make sense of their pedagogical identities and grapple with disorienting dilemmas in 21st century teaching.

In their study on faculty self-efficacy in online teaching, Brian S. Horvitz, Andrea L. Beach, Mary L. Anderson, and Jiangang Xia (2015) examined the challenges faculty members face in adapting their teaching identities for online educational environments. At a large research university in the midwest United States, these researchers used the Michigan Nurse Educators Sense of Self Efficacy for Online Teaching to collect data from a large number of faculty members who had taught online from 2005-2009. Specifically, Horvitz et al. examined the participants' self-efficacy in teaching online, perceptions of student engagement online, and their online instructional strategies used. The researchers found that this group of faculty felt high levels of self-efficacy in teaching and using online instructional strategies online, but they grappled more with how to engage students in virtual environments. For these faculty, then, they could reconcile their teaching identities with technology but needed to develop pedagogical strategies that could be used online to engage learners.

Because student engagement is a critical factor in online learning, other researchers have also considered how faculty members use pedagogical, content, and technological knowledge to create meaningful student learning environments. For instance, Susan N. Kushner Benson & Cheryl L. Ward (2013) researched how three faculty members exhibited these areas of knowledge in their online teaching. While these researchers asserted that “subject matter knowledge is at the heart of expert teaching,” (Kushner Benson & Ward, 2013, p. 154), they also argued that knowing how to teach, assess student learning, and engage learners is equally important in 21st century postsecondary classrooms. Technology plays a role in each of these processes, and so the researchers sought to examine how three faculty members displayed and employed content knowledge, pedagogical knowledge, and technological knowledge. Importantly, they argued that these knowledge areas do not exist in vacuums but instead inform and shape each other.

Through a qualitative case study, Kushner Benson and Ward (2013) used observation, interview, and content analysis data to create instructor profiles of three faculty members’ content, technological, and pedagogical knowledge. They observed the amount of knowledge each of the faculty members exhibited in each domain, and identified how these knowledge areas overlapped. From this very limited sample, they asserted that faculty members who have greater levels of pedagogical knowledge are more likely to have more meaningful interplay between technological, pedagogical, and content knowledge in their classrooms. Faculty members with greater pedagogical knowledge were more likely to consider where technology created new learning opportunities rather than simply using technology to facilitate existing learning tasks.

Faculty members who have developed a teaching identity with strong pedagogical knowledge, then, may be better equipped to design instruction in technology-rich environments.

Supporting teaching with technology. While it is important to consider what individual factors faculty members may need or encounter in creating a technologically-aware teaching identity, institutions can help support this personal development through targeted faculty development offerings. Several researchers have considered what kinds of workplace scaffolds can help faculty develop these kinds of pedagogical practices. For instance, Cheryl Whitelaw, Myrna Sears, and Katy Campbell (2004) examined how one institution's Academic Technologies Learning unit provided a targeted program to facilitate faculty's online teaching knowledge. Based on a mixed methods study in which researchers collected data through a quantitative survey instrument and semi-structured interviews with program participants, Whitelaw et al. found that the program prompted some participants to engage in perspective shifts. These transformations happened both in pedagogical style and in how they thought about technology in their teaching.

In contrast, Jennifer H. Herman (2012) used quantitative research methods to measure the impact of teaching and learning development units on college and university campuses work to develop faculty members' online teaching identities. This broader research focus specifically examined the kinds of programs offered to online faculty to help them grapple with the realities of teaching and learning online. To collect this data, Herman surveyed non-profit institutions with an established teaching and learning development entities (e.g. centers, offices, staff). She found that these units offered a

wide variety of supports, including printed materials (e.g. books and journals), audio/video content (e.g. DVDs and podcasts), hands-on support (e.g. 1:1 meetings, instructional design consultant sessions, course reviews), and many iterations of workshops (e.g. formal/informal, face-to-face/blended/online). According to Herman, these myriad resources suggested that teaching and learning development units are “offering a variety of opportunities to faculty, so that they can select professional development based on their individual needs or preferences” (p. 103). As faculty members work to develop teaching identities, both for face-to-face and online interactions, these targeted institutional-level resources may help facilitate their perspective transformation.

Conceptual Model

From this literature review and analysis, I developed a conceptual model to reflect my understanding of how the different factors interact to help faculty develop teaching identities (see Figure 2.1). First, per Jack Mezirow’s (1981, 1994, 2000) transformative learning theory, some sort of disorienting dilemma occurs that causes postsecondary educators to question their practices or mindsets around teaching. These dilemmas may occur as a result of external forces – such as feedback from a student, colleague, or supervisor – or internal thought and reflection processes. Even if a faculty member’s disorienting dilemma is prompted by self-reflection on their practices, habits of mind, or attitudes, his or her institution’s culture informs and shapes how, and indeed whether, a teaching identity forms. If a college or university has a culture that values teaching and provides supports for quality instruction, individuals may approach the teaching identity

process with a more open, reflective mindset. For individuals who work at institutions where teaching is *not* a valued part of the culture, though, developing an instructional identity may not happen or may happen more incrementally. In the conceptual model, the dotted lines from the disorienting dilemma and the institutional culture to the first step in the identity development process represent that these inputs can have varying impacts on the process. That is, an unsupportive institutional culture may stymie identity development even if faculty members experience disorienting dilemmas related to their instruction. From this event, there are three critical pieces that shape how faculty's teaching identities form.

Reflection as Central to Developing Teaching Identities

Reflection is the first element faculty members engage in around developing their teaching identities. The importance of thinking critically, whether formally or informally, about attitudes, practices, or habits in instruction is present across the faculty development literature on teaching identities and pedagogical personas. While reflection, and specifically the critical reflection Mezirow (1998, 2000) identified, also exists as an implicit component of each of the other phases of pedagogical persona development, reflection itself is central and a catalyst to the other pieces involved in teaching identity development. This reflection may be on an individual's own beliefs, views, or actions; it can also be focused around external policies, institutional goals, disciplinary expectations, or instructional norms; it may also happen because of outside influences at an institution or a broader cultural shift. When a postsecondary instructor begins the process of developing a teaching identity, thinking carefully about the factors that are

leading to her or his disorientation, discomfort, or mental disconnect is an important first step. From this action, she or he can begin to engage in other activities to further form his or her self-perception and practices.

Primary Identity Development Activities: Shifting Classroom Focus and Developing Relationships

Once a faculty member has begun this reflection process around her or his teaching attitudes, instructional beliefs, or educational habits, he or she then engages in two personally-grounded processes that inform how her or his pedagogical persona develops. These activities involve shifting the central concerns of a classroom away from the instructional practices and toward student learning and developing interpersonal connections that support a faculty member's teaching identity development. These activities may happen in any sequence or even co-occur. In my proposed conceptual model, the dotted line between these pieces represents the potential for interaction and development in tandem. Furthermore, these components of teaching identity development feed back into reflection: While reflection may instigate both a faculty member's thinking and relationship development, her or his actions in these areas then inform how he or she continues to think about her or his role as an educator.

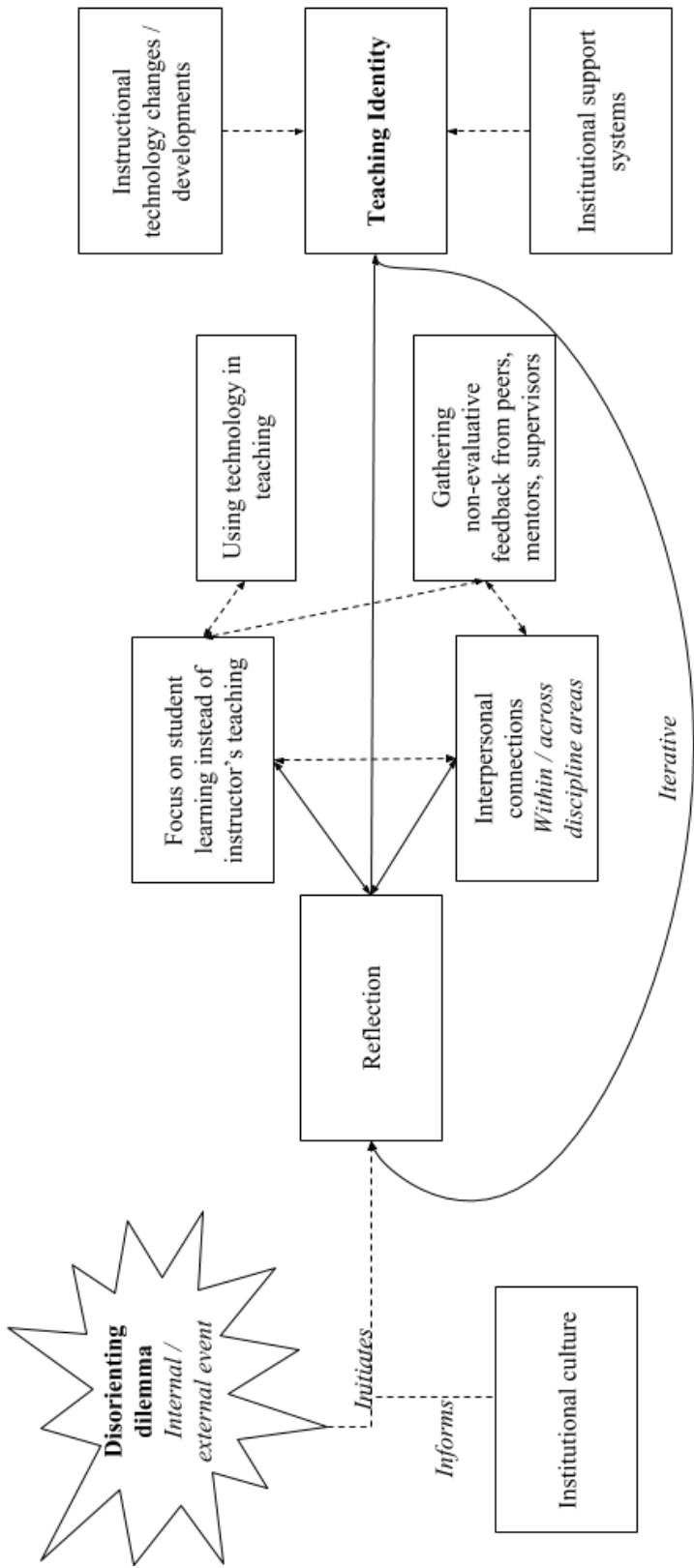


Figure 2.1. The teaching identity conceptual model, which represents how the key factors in faculty's pedagogical persona development interact and inform their individual identity development process.

Shifting focus to student learning instead of instructional activities. Faculty members make a largely internal mental shift in what they consider at the center of their classroom: Instead of their own instructional practices, student learning becomes their central focus. In current education vernacular, this shift can be called moving from a “sage on the stage” to a “guide on the side” mentality. The latter phrase reflects the idea that students bring important knowledge into the class and that instructors play an essential role in facilitating learning environments where learners’ experiences can connect key disciplinary understandings. While teaching practices are still, and will continue to be, be a component of faculty’s work and instructional preparation, faculty members who have made this shift are not primarily concerned with what they must cover. Instead, their work is more directed by learning outcomes and students’ attainment of those goals.

Building interpersonal connections that support teaching and learning.

Building interpersonal connections is the other primary identity development activity faculty engage in in developing pedagogical personas. They may engage in this relationship-building in formal and informal ways as appropriate for their interests and needs. For instance, one faculty member may seek out campus-level supports, such as centers for teaching excellence, and build connections through workshops or training sessions. Another faculty member may go to conferences – either in her or his discipline area, or focused on the scholarship of teaching and learning – and connect with others around presentation sessions. Still another instructor may build these kinds of

relationships within his or her department, either through structured learning communities or informal conversations with colleagues.

As aforementioned, this activity may precede, follow, or work in tandem with a faculty member's shift in focus to student learning. New interpersonal relationships within a department or across an institution may lead instructors to reconsider the center of their classrooms. Or, from a mental shift about their teaching, faculty may begin to seek ways to construct classrooms where student learning is indeed at the center. While each postsecondary instructor's perspective transformation around teaching is individualized, these two factors – both separately and together – are key to how they develop a sense of themselves as educators.

Secondary Activities in Moving Toward Teaching Identities: Technology and Feedback

From reflection and these two central activities that faculty members engage in to develop their teaching identities, I posit that two additional factors may be part of the perspective transformation process. As professors focus more on student learning rather than their instructional practices, they may use technology more in their teaching. And in addition to building interpersonal relationships that support their instructional practices and teaching identity development, faculty may also seek feedback from others to enhance and inform their work as educators. These components may not be present in all postsecondary educators' teaching identity development; they are influenced by personal, institutional, and situational dynamics. The dotted lines between these secondary elements represent the potential for their interaction with the primary activities in teaching identity development.

Using technology in their teaching practices. From a new or revised emphasis on student learning as the center of a postsecondary classroom, faculty may consider using technology to help support such an environment. When faculty members focus their courses in this way, technology tools or resources are used as means to assist students in attaining course outcomes rather than for the sake of using technology. Depending on instructors' experiences and comfort levels, their technology use may have an emergent, intermediate, or advanced effect on their pedagogy. For instance, an instructor's new focus on students at the center of the classroom might prompt him to use a learning management system to post course documents for students to access any time or engage in discrete online learning tasks. Or, a faculty member may reflect on a particular class learning activity or stuck point that students experience; from this reflection, she may identify technology tools to help students engage with the content or break through disciplinary issues more effectively. And, an instructor with a more advanced technology knowledge may find that he wants to shift a face-to-face course into an all-online environment to better serve students' needs. Using technology in teaching may then inform how faculty members think of student learning in their classrooms, and the form it takes as the central goal of their teaching.

Feedback from others in instruction-centric interpersonal relationships. As faculty construct teaching identities through reflection and relationship-building, feedback is crucial to these components of the process. Non-evaluative feedback – especially from peers or mentors – is particularly valuable to faculty as they figure out how their identities as educators connect with their scholarly expertise. Constructive

guidance is a natural outgrowth from the interpersonal relationships that faculty members develop around teaching practices, and this information can be collected in formal or informal ways. One faculty member may ask a colleague to observe a new instructional strategy in her classroom; another may discuss implementing a strategy with his co-worker over coffee before a class session. Instructors may also consult with a mentor, supervisor, or training facilitator (e.g. presenter at a conference, lead trainer at a campus- or department-wide workshop on teaching strategies) around using specific technology tools in their classrooms. Again, this feedback can be sought and given in a variety of formats, but it is essential that it is non-evaluative and unrelated to faculty's promotion, tenure, or merit standing. It is requested and given to improve instruction, focus on student learning, and develop faculty's identities as educators. This non-evaluative feedback that faculty receive on their instructional practices may inform both their interpersonal relationships and their focus on student learning as the central concern of their teaching.

Forming Teaching Identities

From these factors, then, I argue that academic faculty develop a teaching identity, or a sense of themselves as an educator. This identity is primarily driven by individuals' reflection, but it is informed by their own internal perception of student learning as the center of their classrooms, connections with others around teaching and learning, and the actions they take because of these factors. Importantly, once a faculty develops a teaching identity, he or she will continue to engage in reflection about that personal perspective. This transformation, then, is an iterative and recursive process:

Postsecondary instructors who have developed pedagogical personas re-evaluate their senses of themselves as educators to determine if their beliefs, attitudes, and values align with their actions. If there is a disconnect in these elements, faculty members can revisit their classroom focus, relationships with others, or use of technology and gather feedback from others to shape their perspectives and practices.

External influences on teaching identity development. As with their disorienting dilemmas, though, postsecondary instructors' educational identity development is affected by their institutions' instructional support systems and technology inputs. These factors may both shape how initial teaching identities develop and affect when, and how, faculty reflect on established ideas of themselves as educators. While a faculty member may develop a teaching identity, this identity may be called into question by a technological change, such as having to transform her or his teaching for online learning. At an institutional level, the support systems available to faculty – such as grants to fund teaching innovations, instructional designers who can help construct student-centered learning experiences, and tenure/promotion guidelines – also impact how these identities take shape.

Applications in My Research

I used this conceptual model, and the relationships between its components, as a starting point to explore academic librarians' experiences with perspective transformation in greater depth. As I investigated their experiences in developing instructional practices and teaching identities, I considered where they aligned with, and diverged from, the literature on traditional faculty's pedagogical persona development. Because they have

different educational backgrounds, instructional responsibilities, and support systems, examining academic librarians' unique experiences with the phenomenon of perspective transformation around their identities as educators may offer new insight on whether this model can be applied to other, more non-traditional groups of postsecondary instructors.

CHAPTER THREE

METHODS

Research Questions

From my research on transformative learning theory and the extant literature, I developed two research questions. Initially, I sought to consider if academic librarians shifted from seeing themselves disciplinary experts in information access, retrieval, and management to thinking of themselves as postsecondary educators. However, as I considered the research in the area, developed my preliminary conceptual model, and focused on what I really sought to discover, this primary question evolved and simplified. I was less interested in the first part of my original research question and more invested in the second component. Therefore, a more authentically representative question of my research is, do academic librarians experience the phenomenon of perspective transformation around their views of themselves as educators? From this broader question, my sub-question was, if they undergo such perspective transformation, what experiences or influences help academic librarians work through this process?

Based on my reading of the literature, I posit that faculty's teaching identities seem to begin from a disorienting dilemma that may be informed and shaped by internal or external events, including an institution's culture. Once this dilemma has occurred, faculty engage in personal reflection, which in turn interchanges with the interpersonal connections they develop and how they hone in on student learning in their discipline.

From these central factors, their teaching identities may also be influenced by technology available to their teaching and feedback they receive from others. While each faculty member experiences perspective transformation around teaching differently, these five elements work together to develop their pedagogical personas. While shifting habits of mind and frames of reference are internal processes, the resulting teaching identity is impacted by external forces, including institutional support structures and ongoing technological changes. These inputs, along with faculty members' ongoing personal reflection, mean that teaching identity development is an ongoing and evolving process. From the existing research and with this proposed model in mind, I have specifically examined academic librarians' experiences in perspective transformation around their teaching identities.

Why Consider a Specific Population?

In the broader literature on academic faculty's teaching perspective transformation, many researchers have focused on specific faculty groups. Some have explored how discipline-specific faculty development has shaped professors' teaching identities (see, for instance: Balmer & Richards, 2012; Cooley & De Gagne, 2016; Malik, 2015). Other scholars have examined unique cohorts, such as junior faculty (see, for instance: Gallagher et al., 2011; Koch et al., 2002) or experienced faculty (see, for instance: Blakely, 2015), and how their teaching identities have developed alongside disciplinary expertise. From this research precedent, then, I believe it is informative to consider academic librarians' perspective transformation. This group represents a specific

population of postsecondary instructors with unique needs, experiences, and desired outcomes.

Academic Librarians as a Unique Population

As with other postsecondary instructors, academic librarians are largely expected to independently develop their pedagogical practices. However, as I examined in Chapter 1, full-time academic librarians face different issues than full-time, tenure-track faculty in other disciplines. They attain a Master's degree (ACRL, 2011d), may not have faculty status (ACRL, 2012), and typically situate their teaching within the context of a subject-area course (Baker, 2006; Hsieh & Holden, 2010; Kimok & Heller-Ross, 2008). These factors make academic librarians' experiences and needs distinct from other postsecondary educators.

As an academic librarian with faculty status, I have produced prior scholarship on teaching- and technology-centric professional development for my colleagues (see, for instance: Nichols Hess 2014, 2015, 2016). From my theoretical and research review thus far, I have not found that other scholars have considered my research questions. In fact, many of the researchers who have focused on academic faculty's teaching identity development more generally have examined pieces of the transformative process. These scholars have not developed a holistic, encompassing view of what these individuals experience as they begin to see themselves as teachers. Exploring how perspective transformation occurs for academic librarians helps to both deepen and widen my scholarly impact in this area while also influencing the broader scholarship on faculty's transformative learning experiences.

Methodological Approach: Sequential Explanatory Mixed Methods Research

I used a mixed methods research approach, and specifically a sequential explanatory design, to explore how academic librarians transform from disciplinary experts to educators. According to Jennifer C. Greene, Valerie J. Caracelli, and Wendy F. Graham (1989), mixed methods studies can help researchers to:

- Triangulate data for validity or reliability;
 - Expand inquiry on a research topic by collecting data through multiple methods;
 - Develop ideas through more in-depth or comprehensive study;
 - Complement data from one method to the other to elaborate or illustrate results;
- or
- Initiate new perspectives on a research topic by uncovering contradictions or new perspectives.

While this approach is more labor-intensive than a purely qualitative or quantitative study, it can also present a more complete picture of a research topic while providing both deductive and inductive insights.

By using an exploratory research approach that used sequential explanatory methods, I sought to understand how academic librarians developed pedagogical personas both deductively and inductively (see Figure 3.1). In my case, this tactic helped me build a complementary research design (Greene et al., 1989): Through survey- and interview-based research, I elaborated on data gathered, increased the impact of my research, and capitalized on each method's strengths while minimizing their respective weaknesses.

In my sequential explanatory mixed methods study, I sought to address four considerations: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985) instead of more traditional quantitative issues of validity and reliability. In my research context, credibility involved considering instruments that helped me collect data that could align to illustrate cohesive, credible themes. In working for transferability, I identified data collection tools that allowed me to develop a rich and deep data set from which others could identify transfer personal applications for their scholarship. In thinking about dependability, I developed a logical, documented research process others could follow. And to address confirmability, I ensured my data collection components were linked and could help me gather related information in sequential phases.

Phenomenological Philosophical Approach

In my exploratory research, I used a phenomenological perspective to understand my questions and research data. Because this approach allows researchers to investigate experiences at fundamental human levels (Savin-Baden & Major, 2013), I used it to understand academic librarians' lived experiences around perspective transformation. Specifically, I used a hermeneutic phenomenological lens for several reasons. First, this lens allowed me to expose the taken-for-granted experiences of my participants. Second, a hermeneutic approach allowed me to situate my own knowledge and experiences as a member of the group I studied. This philosophical orientation asked me to acknowledge, rather than exclude, my own assumptions and understandings throughout the research process.

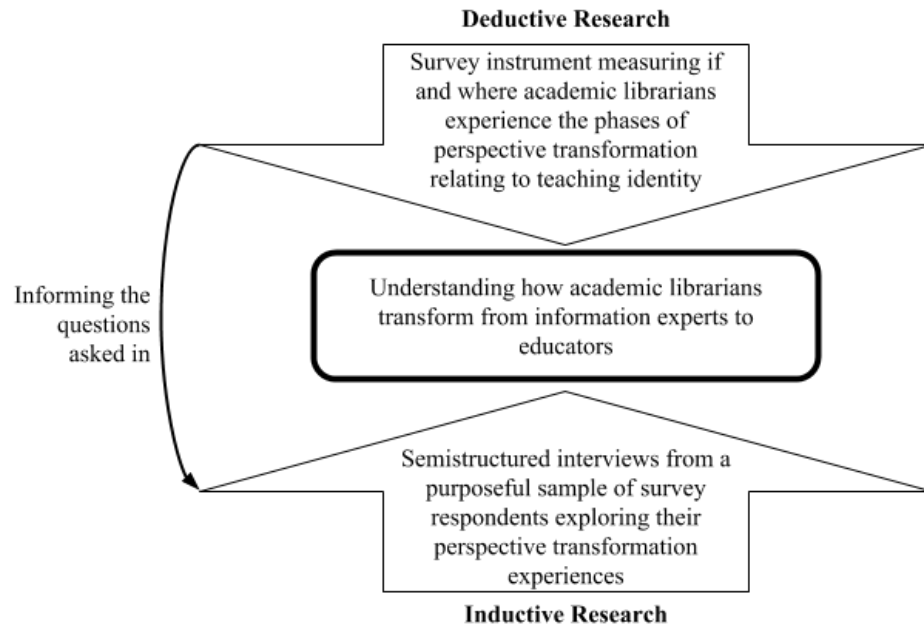


Figure 3.1. This diagram represents my research approach. By using both quantitative survey and qualitative interview data, I sought to understand both the broad factors that influence academic librarians’ perspective transformations while exploring this inherently individual process at a personal level.

Strengths and Weaknesses of Mixed Methods Research

When conducting mixed methods research, scholars may encounter both the strengths and weaknesses associated with the quantitative and qualitative approaches they use. Researchers who collect data through a sequential explanatory study like mine need to seek a “just right” approach: These studies should not be too narrowly focused and therefore have external applicability, and they also should not be too broadly focused so as to subsume individual experiences. If researchers using mixed methods do not consider this methodological tension, they may find that it instead highlights the respective pitfalls of the two approaches. For instance, they may collect unreliable survey

data that they build on in faulty interviewing. Or, they may use a population that is either too small or not representative and fail to identify themes or trends. In designing my research, I worked toward this “just right” approach by first using a largely quantitative survey and then conducting qualitative semi-structured follow-up interviews. These methods offered different, yet complementary strengths while having weaknesses that did not overlap.

Strengths of a quantitative survey method. Through my largely quantitative survey, I gathered a large amount of deductive data from my target population. Other researchers who have used this approach have collected information from large groups that could then be generalized more widely (see, for instance: Gayle, Randall, Langley & Preiss, 2013; Georgina & Olson, 2008; Herman, 2012; Horvitz et al., 2015; Marek, 2009; Persellin & Goodrick, 2010). For my research, this was the primary strength that a quantitative survey offered.

However, few researchers have explored transformative learning from a quantitative perspective. In his study of the literature on transformative learning, Taylor (1997) noted that researchers primarily used qualitative research methods to understand adult learners’ perspective transformation; subsequent researchers have not deviated from this approach. Similarly, Newman (2012) criticized the scholarship on transformative learning for being too grounded in the retrospective recollections of individuals and not verifiable by external checks. While these scholars made their assessments about the broader body of scholarship on transformative learning theory, the same is true about research focused on faculty members’ perspective transformations from disciplinary

experts to educators. By integrating this particular method into my research approach, then, I sought to address this particular gap in the literature.

Weaknesses of a quantitative survey method. Although a quantitative survey research approach can be applied across disciplines, it presented some weakness for my research when aligned with transformative learning theory. Jack Mezirow (1998) asserted that perspective transformation is an inherently individual process. Therefore, Taylor's (1997) and Newman's (2012) statements that more quantitative research needed to develop around transformative learning missed a crucial point: Because personal transformation is, at its core, a *personal* process, attempting to quantify it could be disingenuous and inaccurate.

Moreover, survey research in general poses some weaknesses in the reliability of the data collected. By selecting this method, I had to trust that participants were truthful in their responses, had accurate memories of their experiences, and were not motivated or biased in their responses (Sullivan, 2009). It was especially challenging to ensure my respondents met these conditions because my instrument collected data on their prior, largely internal, processes in developing a teaching identity or undergoing perspective transformation around their instructional practices. I sought to minimize this weakness by also using qualitative interviews to collect deeper understandings of participants' experiences.

Strengths of a qualitative interview method. Because any kind of perspective transformation is a deeply personal process (Mezirow, 1998), qualitative research methods that focus on the narratives of those who experience it have been most often

employed to understand how faculty develop teaching identities. According to Maggi Savin-Baden and Claire H. Major (2013), interviews are an appropriate data collection method to use when a researcher “wants to probe deeply into a participant’s experiences” (p. 358). As such, researchers investigating faculty’s perspective transformation around their teaching role have frequently used qualitative interviews to collect data (see, for instance: Blakely, 2015; Cranton & Carusetta, 2004; Coleman et al., 2006; Cooley & De Gagne, 2016; Dee & Daly, 2009; Niehaus & Williams, 2016; Ortlieb, Biddix, & Doepker, 2010; Post, 2011). In particular, semi-structured interviews allow both the scholar and participant to move from general to specific in a one-on-one discussion. In using this method, I built on an established scholarly tradition while probing deeply into academic librarians’ experiences in developing pedagogical personas. From this data collection method, I inductively developed themes related to these participants’ perspective transformation processes.

Weaknesses of a qualitative interview method. As aforementioned, Taylor’s (1997) review of research on transformative learning critiqued the field’s overwhelming focus on qualitative research approaches. In my review of the more recent literature on transformative learning, most scholars still use this research philosophy to consider perspective transformation. As such, I did not believe that I could add much to the existing scholarship through qualitative interviews alone. Moreover, selecting this approach would have limited my research population, because interviews and resulting data analysis processes are labor-intensive. This resulting narrower focus would have made my research less applicable to others and less transferable in other contexts.

Maximizing each method's strengths while minimizing their weaknesses. In designing my mixed methods research, then, I selected a design with two methods that could help me collect complementary data. The strengths of quantitative survey research and qualitative interviews – breadth and depth, respectively – allowed me to develop a more holistic understanding of academic librarians' perspective transformation around their teaching identities. These methods' weaknesses, though, did not overlap; instead, their strengths compensated for the gaps that may have otherwise occurred. In selecting an exploratory approach with sequential explanatory study instruments, then, I worked to leverage the strengths of my quantitative and qualitative methods while minimizing the weaknesses I encountered.

Other Mixed Methods Research on Faculty's Perspective Transformation

As aforementioned, most of the scholarship on faculty members' experiences with perspective transformation is qualitative in nature. However, some scholars have conducted similar mixed methods studies to understand these individuals' teaching identity development (see, for instance: Whitelaw et al., 2004; King, 2004). I used this small body of existing work to inform my own scholarship with academic librarians.

Specifically, I used Kathleen P. King's (1997, 2009) Learning Activities Survey and Interview Protocol as starting points to design my own research. King has conducted with these instruments in a variety of settings (see, for instance: King, 2000, 2002, 2003, 2004) and asserted these tools' validity and reliability (King, 2009). While some researchers disagreed with this assessment (Stuckey, Taylor, & Cranton, 2013), many other scholars have adapted her work to consider transformative learning theory with

adult learners in a number of other instructional contexts (see, for instance: Brock, 2010; Caruana, 2011; Kitchenham, 2006; Kumi-Yeboah & James, 2014; Wansick, 2007). I specifically used King's (2004) sequential explanatory mixed methods study on how academic faculty members transform their perspectives about their teaching as a scaffold for my scholarship. In this research, she administered her Learning Activities Survey with five separate groups of faculty members ($n = 58$) over the course of four years. In using this instrument, King sought to determine whether the respondents experienced perspective transformation as part of a formal course designed to develop their teaching identities. King then interviewed the course instructor, and her questions came from her participants' survey data. From these data, King identified the influences, including learning activities and other individuals, to faculty members' perspective transformation. King's mixed methods approach served to expand her understanding of academic faculty's transformative learning experiences. My research with academic librarians followed a similar structure and sought to develop similar understandings.

Research Design

In developing my research study, I worked to identify the study's participants, designed data collection instruments, and implemented analysis procedures. In each phase, I worked to achieve my overarching goal of seeking both broad and deep understandings of academic librarians' perspective transformation around instruction.

Study Participants

Online survey. For the first part of my data collection, I distributed an online survey to collect deductive data from a wide swath of the academic library community. I sent this survey to academic librarians via three library email listservs: acrlframe@lists.ala.org, ili-l@lists.ala.org, and lirt-l@lists.ala.org. Each of these email groups focuses on promoting discussion around information literacy instruction. By sending my survey out only to academic librarians subscribed to these listservs, I targeted individuals who engaged in information literacy instruction as part of their work. Since this criterion was the only qualification individuals needed to meet to complete the survey, I wanted to reach primarily these individuals in the first place. While the survey participants represent a voluntary sample of convenience, this group of professionals provide the most accurate and informative data on their experiences with perspective change around their teaching identities.

In total, 500 individuals participated in this survey. If there was 100 percent overlap between the three listservs I contacted, my total potential pool was 6,157 individuals. If there was no overlap between these three listservs, though, my total potential pool was 8,509 individuals. My response rate, then, is between 5.9-8.1% of my total potential population. The total number of participants represents a population that exceeds a 95 percent confidence level, 0.5 standard deviation, and a confidence interval of +/- 5% ($n = 385$ respondents). However, because I used a phenomenological perspective in my research, I sought to identify broader trends, themes, and issues rather than to develop generalizable results or achieve a representative sample. And since my

research followed a sequential explanatory design, I built on this participant population in the second phase of my data collection process (i.e., qualitative interviews).

Survey participant demographics. As part of my survey instrument, I asked respondents to share information about several demographic categories. While none of these questions were mandatory, the information I collected from those participants who chose to respond provides insight into my sample. Within these demographic questions, there were three distinct categories of information: personal characteristics; educational characteristics; and work characteristics.

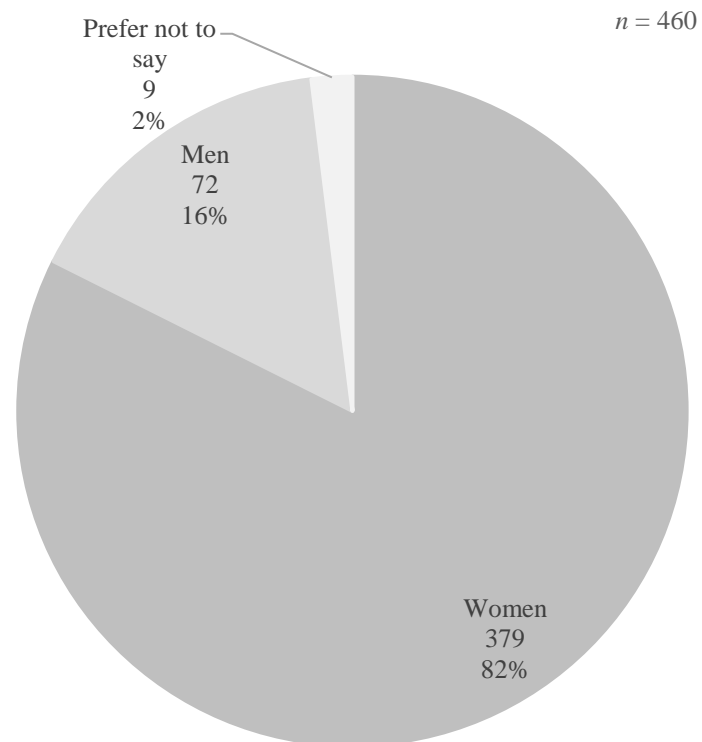


Figure 3.2. Gender distribution of survey participants.

Personal characteristics. Within the demographic category focused on personal characteristics, participants responded to three questions. First, they shared information about their gender. Of those who responded to this question ($n = 460$), 379 identified as women, 72 identified as men, and 9 preferred not to identify their gender (see Figure 3.2). Next, participants shared information about their race or ethnic identity. Of those who responded to this question ($n = 460$), 401 identified as white or Caucasian. Thirteen individuals preferred not to share a racial or ethnic identity, 12 respondents identified as Hispanic or Latinx, eleven respondents identified as Black or African American, eight respondents identified as Asian or Pacific Islander, and two respondents identified as Native American or American Indian. Also, nine participants identified as multiracial and four individuals identified as other (see Figure 3.3). The third question about personal characteristics asked participants to select an age group ($n = 458$). The most commonly selected group was between 25-34 years old, with 137 respondents. The next largest group of participants was aged 35-44, which had 127 respondents, followed by 96 respondents aged 45-54, 76 respondents ages 55-64, and 12 respondents aged 65-74. Nine respondents were under the age of 25, and one respondent was over 75 (see Figure 3.4).

n = 460

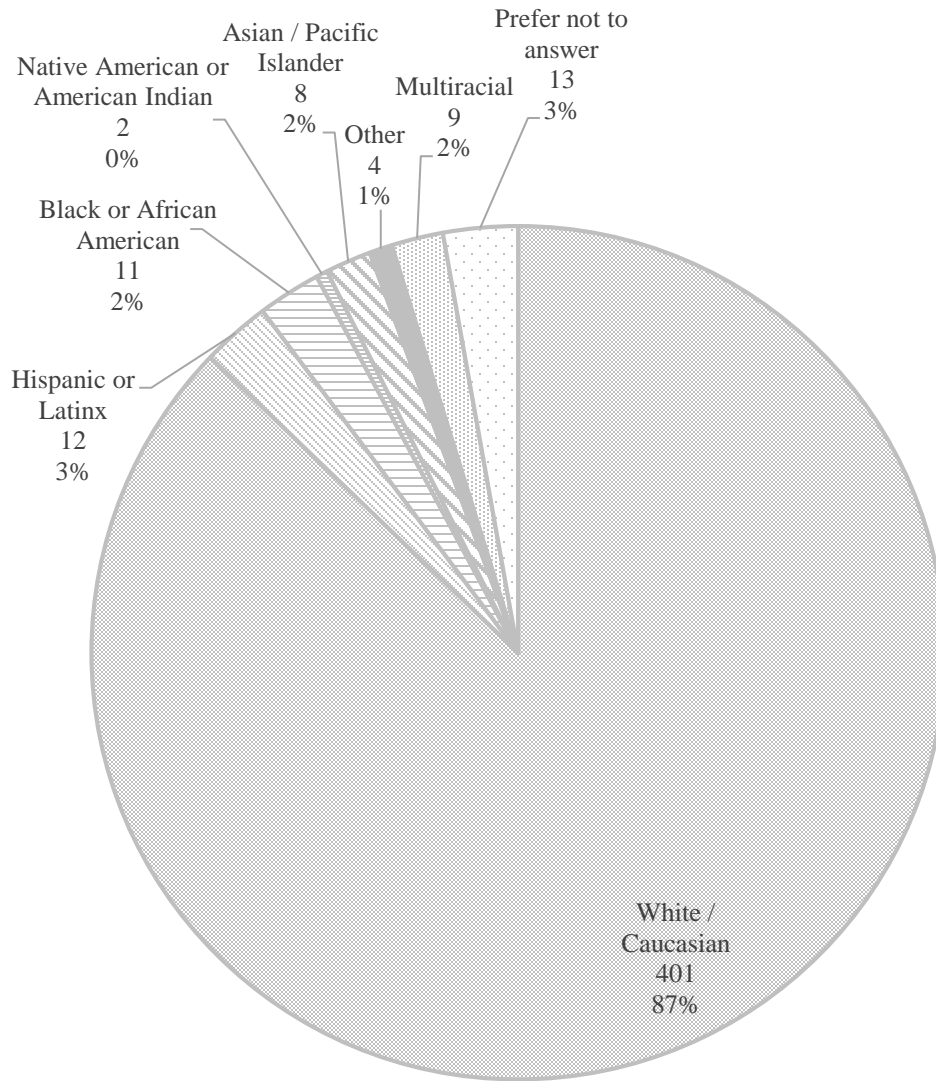


Figure 3.3. Race or ethnicity distribution of survey participants.

n = 458

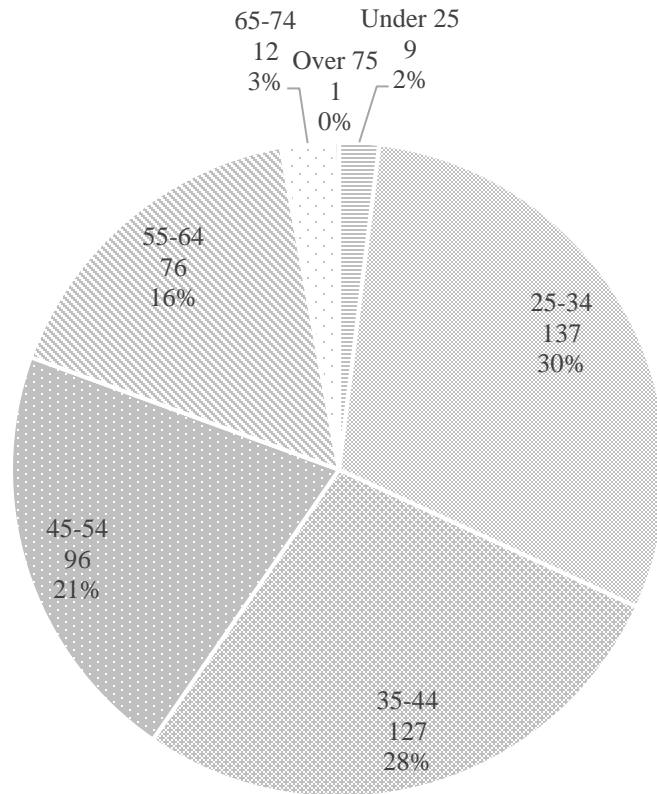


Figure 3.4. Age distribution of survey participants.

Educational characteristics. In the next set of demographic questions, participants shared information about their educational backgrounds and experiences. In terms of education level ($n = 460$), 408 respondents indicated that they held a Master's degree, followed by 32 respondents who had earned a doctorate degree. Eleven respondents had earned a professional degree (e.g. MBA, Ed.S, J.D.), while five held a bachelor's degree

and four participants had some other level of education (see Figure 3.5). A subsequent question asked participants about graduate experience in addition to a Master's degree in library or information science (which is considered the terminal degree for academic librarians) to determine if respondents had pursued additional higher educational opportunities. Of those who chose to respond to the question ($n = 459$), 246 had no additional degree. A number of respondents also had degrees in process: 27 participants were working on an additional Master's degree; 12 were working on a doctorate; and three were working on a professional degree. Of those respondents who already held additional degrees, 130 had an additional Master's degree, 29 had a doctorate, and 10 had a professional degree (see Figure 3.6). The final question about participants' educational experiences asked them to indicate when they had completed graduate school in library or information science. Of those participants who chose to respond ($n = 461$), 219 graduated ten or more years ago, 81 graduated 4-6 years ago, 67 graduated 1-3 years ago, and 66 graduated 7-9 years ago. Twenty-two respondents had graduated within the last year, four were still in library school, and two participants had not attended library school at all (see Figure 3.7).

Work characteristics. Finally, participants could answer five questions about their work experiences and characteristics. In the first question in this section, respondents were surveyed about their institution type. Of those who chose to respond ($n = 461$), 178 worked at doctoral or research universities, 104 worked at Master's-granting institutions, 100 worked at four-year colleges, 72 worked at community or junior colleges, and seven worked at another kind of institution (see Figure 3.8). Participants were then asked to

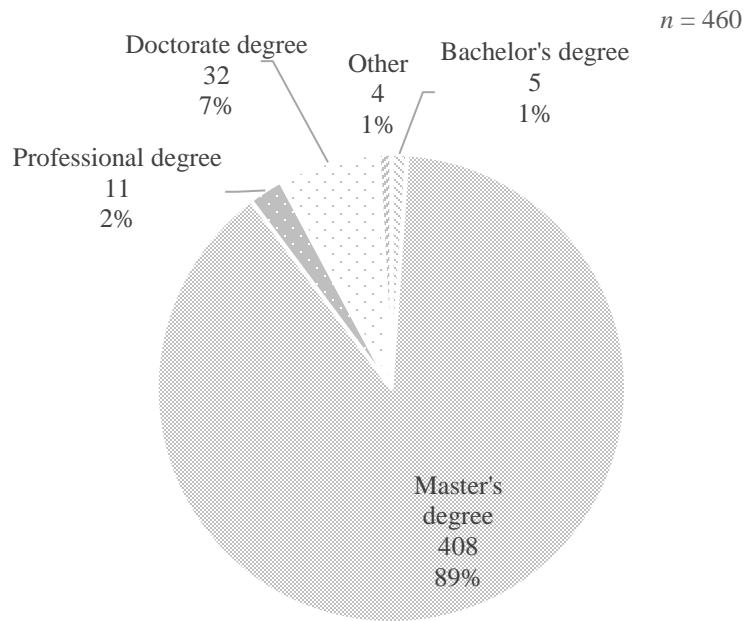


Figure 3.5. Education level distribution of survey participants.

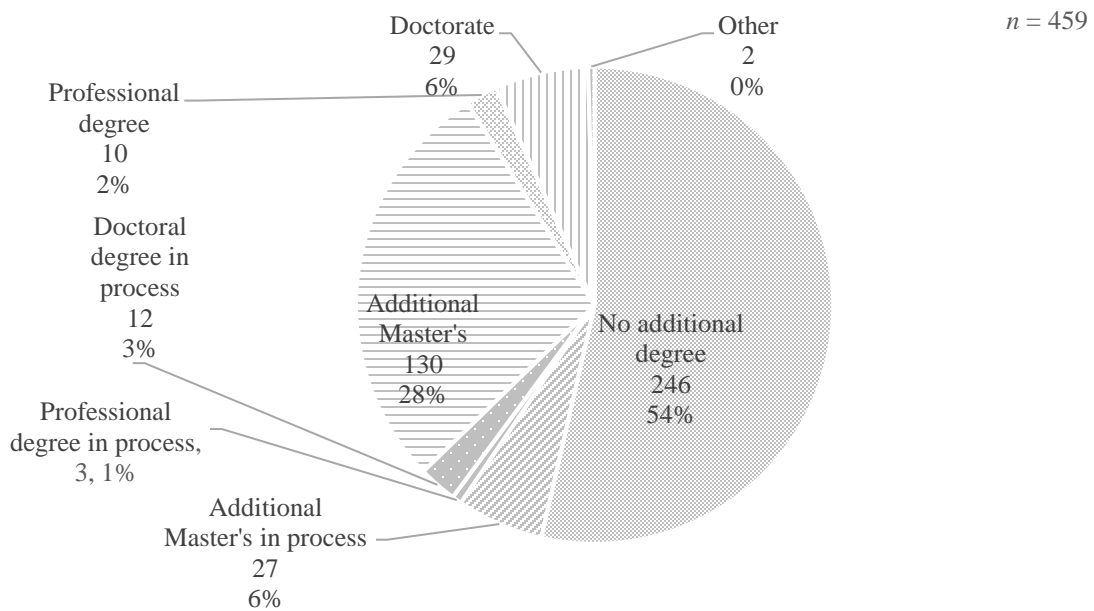


Figure 3.6. Additional graduate education distribution of survey participants.

n = 461

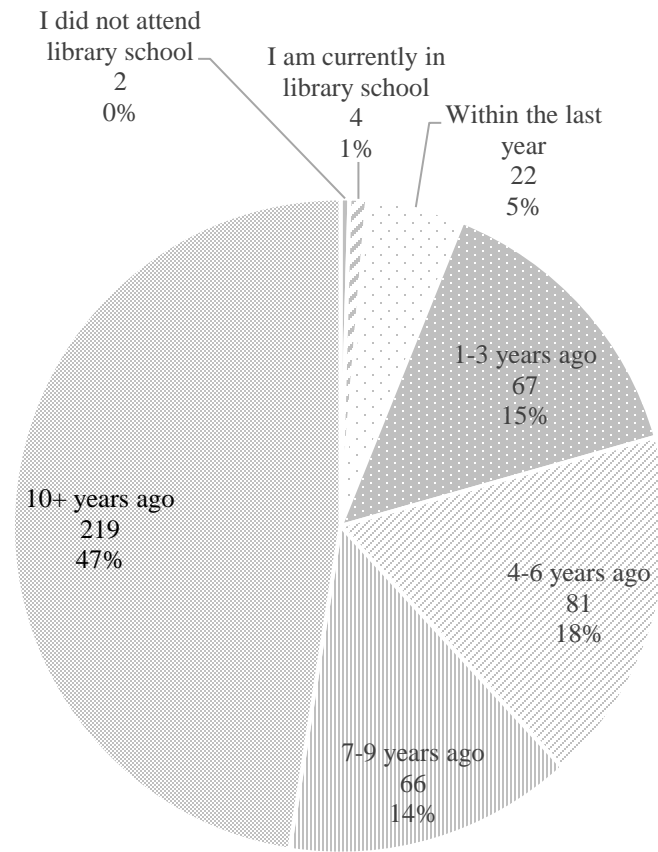


Figure 3.7. Graduation from library school distribution of survey participants.

share how long they had worked at their current institution. From the pool of respondents ($n = 457$), 129 had worked at their current institution for ten or more years, 104 had worked at their current institution for 1-3 years, and 96 had worked at their institution for 4-6 years. Seventy-two respondents had been employed by their current institution for less than a year, while 56 had been at the same college or university for 7-9 years (see Figure 3.9). Because librarians' job responsibilities may shift, either during their time at a single institution or when they change employers, I also asked participants to share how long instruction had been a part of their job responsibilities overall. Of those who shared a response ($n = 458$), 163 had been working in instruction for ten or more years, 97 had been working in instruction for 1-3 years, and 92 had been working in instruction for 4-6 years. Sixty-six respondents had had instruction as part of their work responsibilities for 7-9 years, and 40 individuals had been working in instruction for less than one year (see Figure 3.10).

Because library instruction happens in face-to-face, online, and blended/hybrid learning environments, I asked participants to indicate the formats their teaching took. For this question, respondents could select all that applied. Of the total number of individuals who responded ($n = 458$), 454 engaged in face-to-face instruction, 243 engaged in online instruction, and 209 engaged in blended or hybrid instruction (see Figure 3.11). Finally, participants indicated, on average, how frequently they engaged in instruction over the course of an academic year. Of those who shared information ($n = 456$), 318 taught ten or more times each semester, 57 taught 7-9 times each semester, 41 taught 4-6 times each semester, and 39 taught 1-3 times each semester. One individual indicated that he or she only taught once each year, on average (see Figure 3.12).

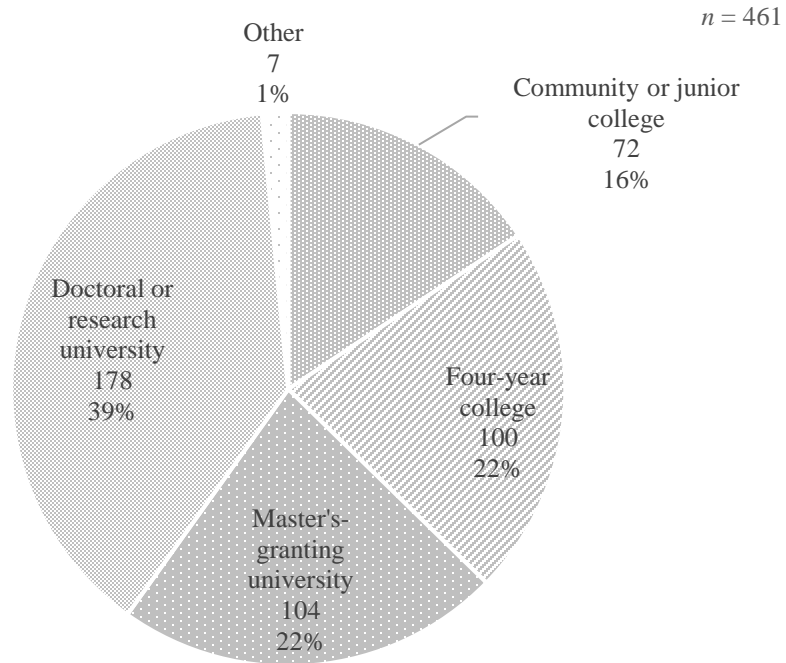


Figure 3.8. Institution type distribution of survey participants.

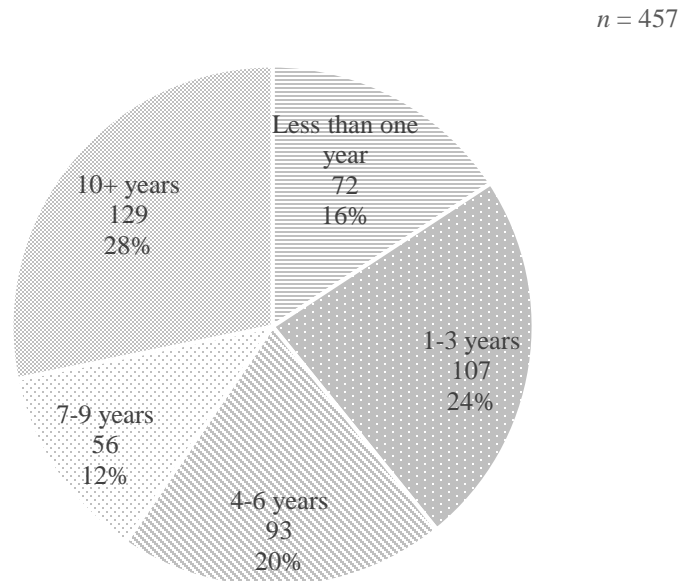


Figure 3.9. Time at institution distribution of survey participants.

n = 458

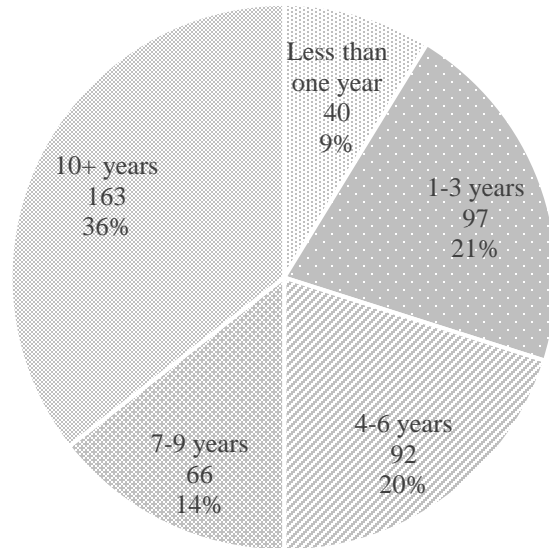


Figure 3.10. Time working in instruction distribution of survey participants.

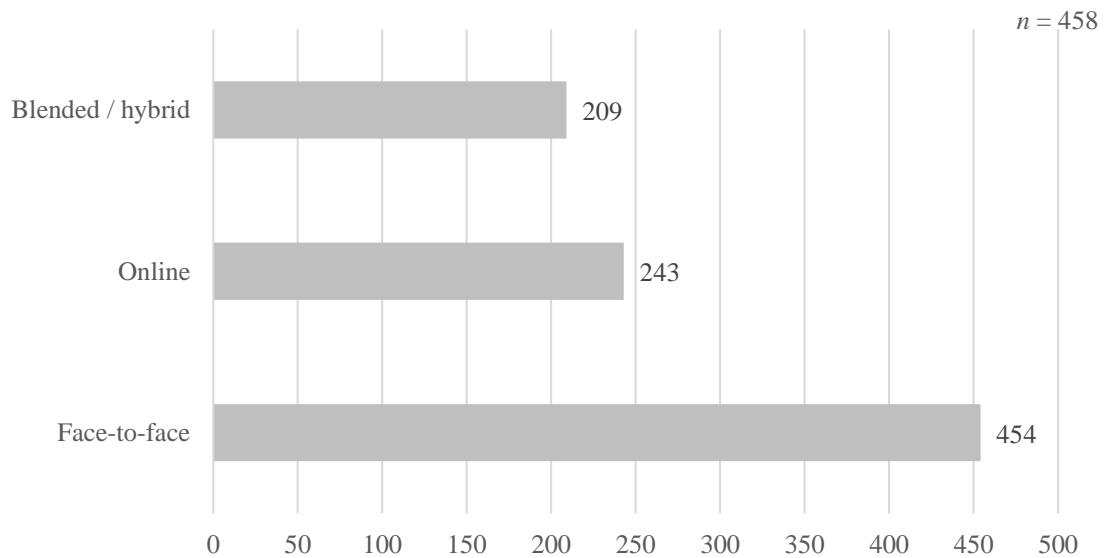


Figure 3.11. Instructional formats distribution of survey participants.

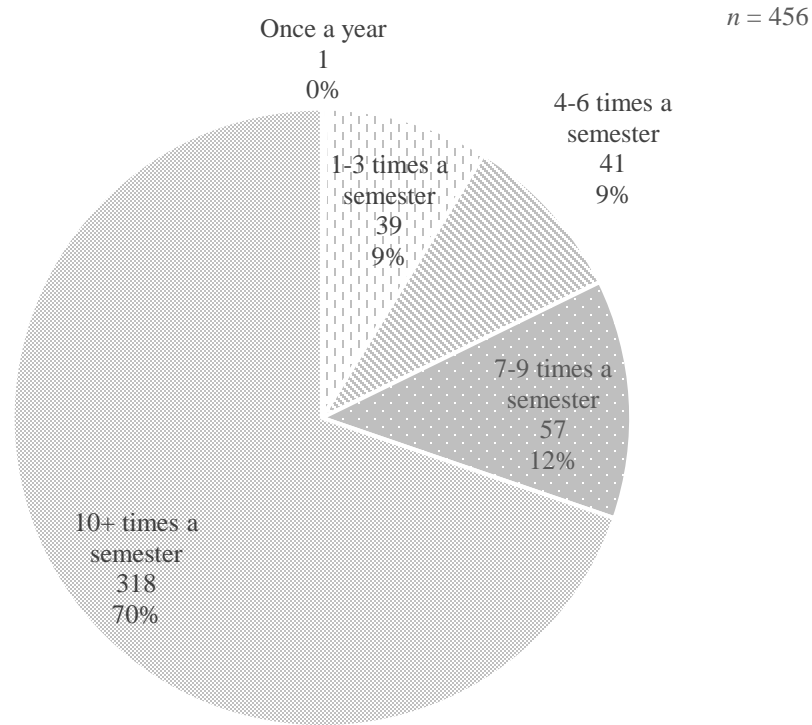


Figure 3.12. Instructional frequency distribution of survey participants.

Virtual interviews. As a part of my survey instrument, I asked participants to indicate if they were interested in participating in a follow-up virtual interview. Before analyzing my data, I assigned randomly-generated numerical codes generated at random.org to all survey responses. I then arranged the responses in sequential order, and generated a separate list of the names, email addresses, and numerical codes for those individuals who were willing to participate in follow-up conversations ($n = 141$). I reviewed this list and ensured that all potential interviewees met the following qualifications:

1. I did not know them personally;

2. They currently worked at an academic institution (i.e., not a public, K-12, or special library); and
3. They had experienced perspective transformation around their role as an academic librarian.

From this remaining list ($n = 129$), I emailed the first 20 individuals who met the inclusion criteria in the order of their numerical code on April 4, 2017. In this message, I inquired about their willingness to participate in a virtual interview, and I asked for a response by April 21, 2017. I sent a follow-up email to those in this group who had not yet responded on April 17, 2017. From this first group, I scheduled nine virtual interviews. On April 24, 2017, I then contacted ten additional individuals, again based on the sequential order of their random numerical codes. From this second group, I scheduled five virtual interviews. In total, then, I conducted fourteen virtual interviews with participants.

Interview participant demographics. Although the individuals I interviewed represent a subset of survey participants, their demographic data are important to contextualize their thoughts about and experiences in perspective transformation. All interviewees were selected at random, and their demographic data was culled from their survey responses. Again, here, I present personal, educational, and work-related characteristics for this sub-population.

Personal characteristics. Of the participants who engaged in follow-up interviews ($n = 14$), 13 identified as women and one identified as a man (see Figure 3.13). In terms of racial or ethnic identity, 13 individuals identified as white or Caucasian and one

participant identified as Asian or Pacific Islander (see Figure 3.14). The ages of interviewees spanned a greater number of groups: Five individuals were between the ages of 25-34, four were aged 45-54, three were between the ages of 35-44, and two individuals were 55-64 years old (see Figure 3.15).

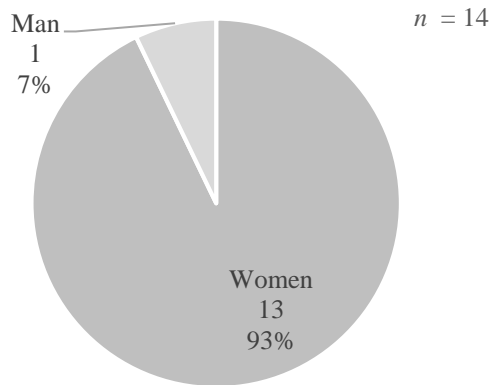


Figure 3.13. Gender distribution of interview participants.

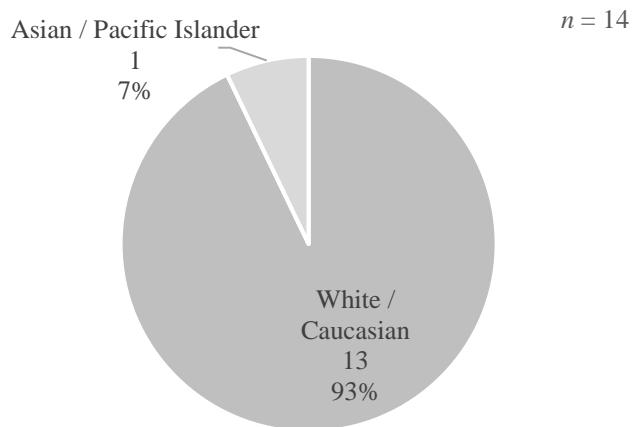


Figure 3.14. Race or ethnicity distribution of interview participants.

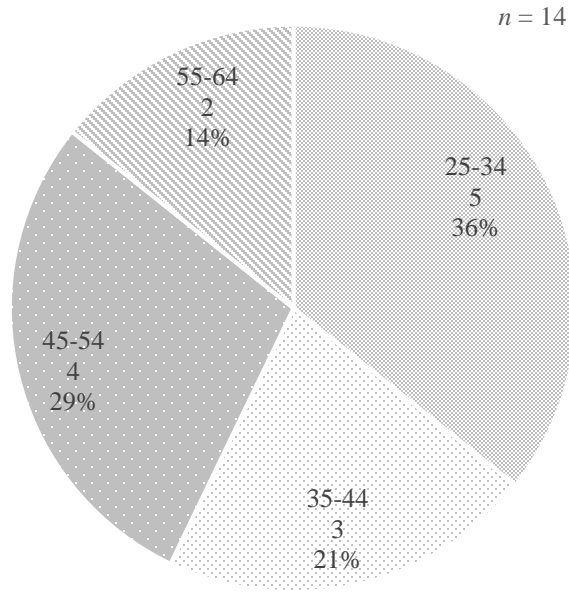


Figure 3.15. Age distribution of interview participants.

Educational characteristics. All 14 interviewees held a Master’s degree as their highest educational level (see Figure 3.16). There was greater diversity in their responses about additional graduate education, though: While eight held no additional degree, three held an additional Master’s degree, two individuals were working toward an additional Master’s degree, and one individual was working toward a professional degree (see Figure 3.17). And in terms of interviewees’ graduation from library school, seven had graduated ten or more years ago, three had graduated 7-9 years ago, three had graduated 1-3 years ago, and one individual had graduated 4-6 years ago (see Figure 3.18).

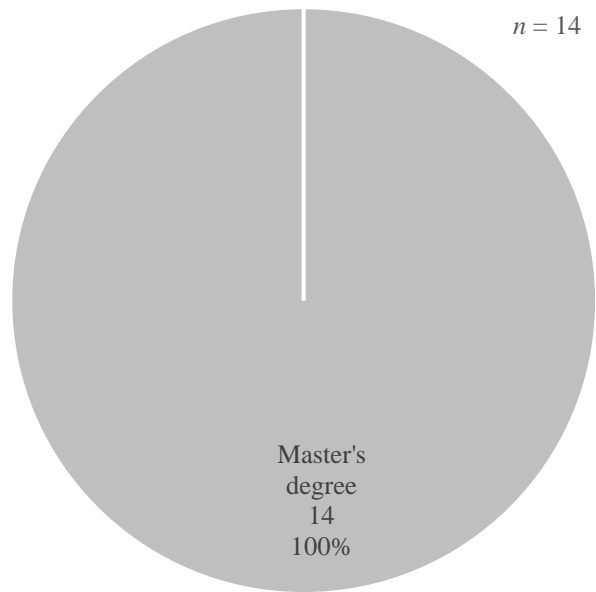


Figure 3.16. Education level distribution of interview participants.

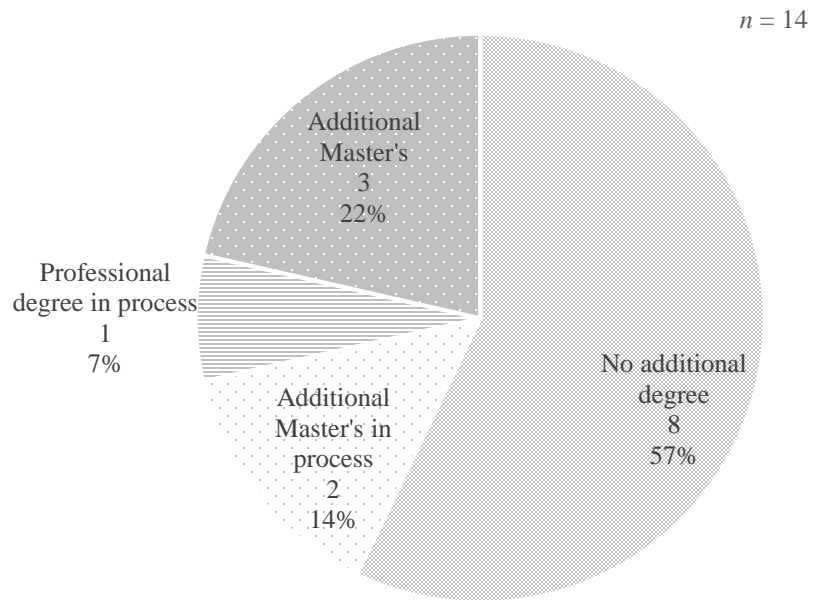


Figure 3.17. Additional graduate education distribution of interview participants.

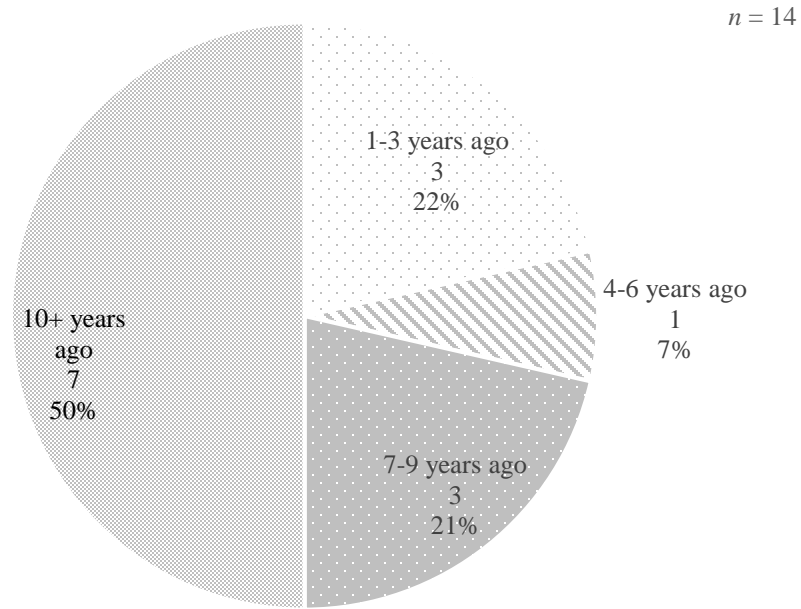


Figure 3.18. Graduation from library school distribution of interview participants.

Work characteristics. Finally, interviewees ($n = 14$) could provide demographic information in response to five items about their work experiences and characteristics. Seven interviewees worked at doctoral or research universities, while four worked at community or junior colleges. Two were employed by Master's-granting institutions, and one worked at a four-year college (see Figure 3.19). Interview participants' work experience cut across each demographic category: Four individuals had worked at their current institution for ten or more years, and four individuals had been employed by their college or university for 1-3 years. Three interviewees had been at their place of employment for 4-6 years, two had been at their current institution for 7-9 years, and one individual had been with her or his college or university for less than a year (see Figure

3.20). Most interviewees had several years of instruction experience: Four individuals had ten or more years of instructional experience, four had 7-9 years of experience, and three had 4-6 years of experience. Three individuals had been working in instruction for 1-3 years (see Figure 3.21). Of the 14 interviewees, all engaged in face-to-face instruction, while nine individuals engaged in online instruction and nine individuals engaged in blended or hybrid teaching (see Figure 3.22). And finally, most interview participants taught frequently: Nine individuals indicated that, on average, they taught ten or more times each semester; moreover, two individuals taught 7-9 times a semester. Three individuals taught 1-3 times a semester, on average (see Figure 3.23).

$n = 14$

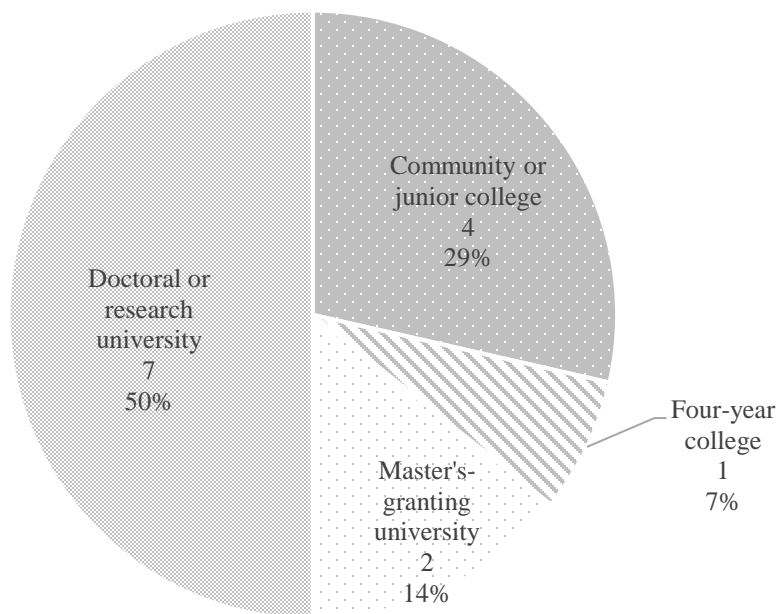


Figure 3.19. Institution type distribution of interview participants.

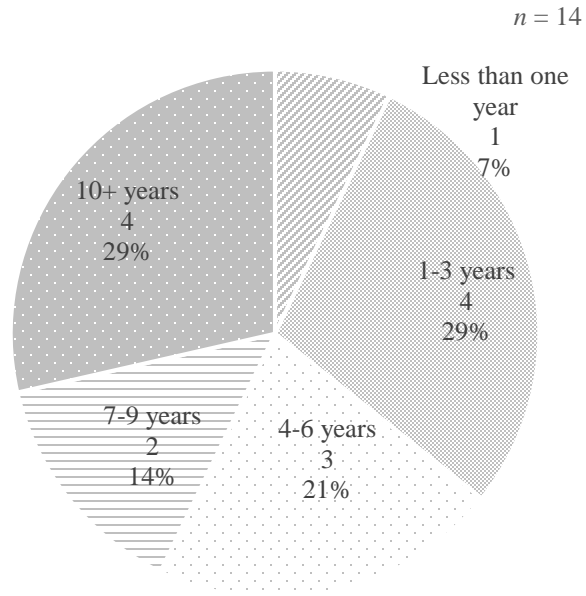


Figure 3.20. Time at institution distribution of interview participants.

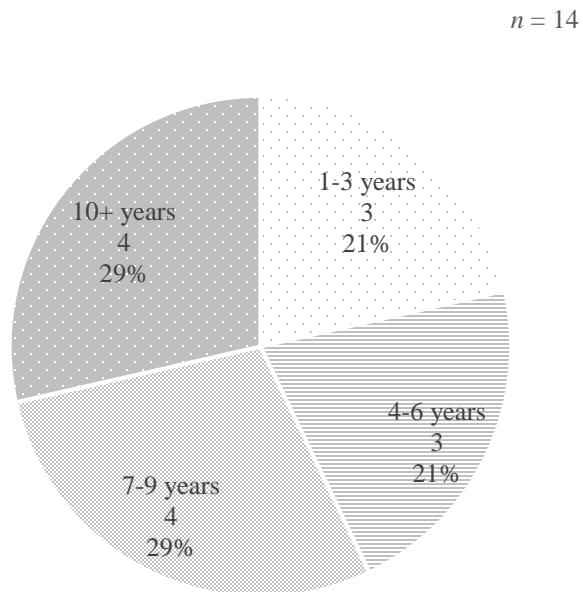


Figure 3.21. Time working in instruction distribution of interview participants.

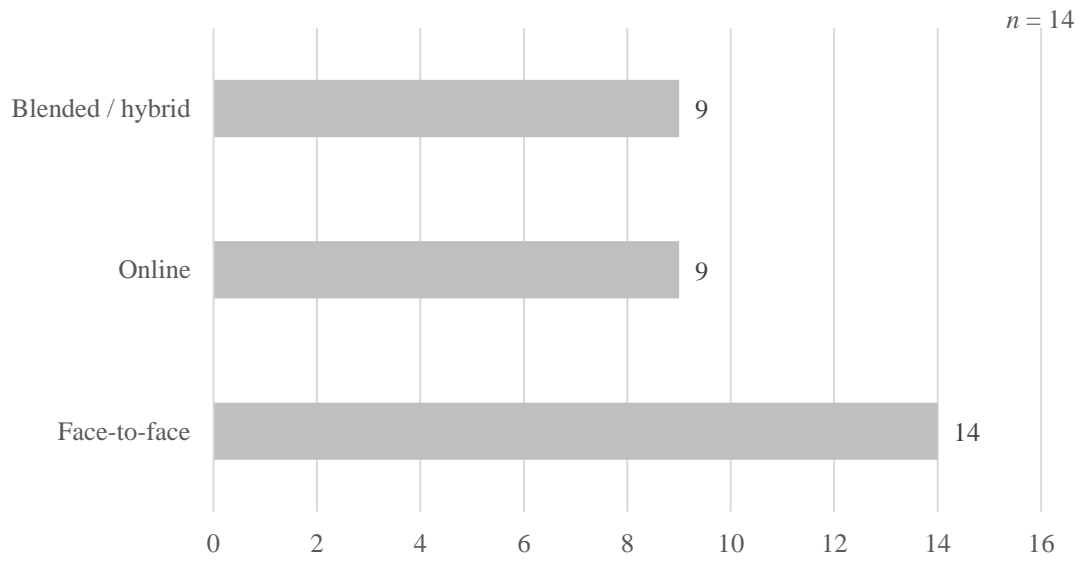


Figure 3.22. Instructional formats distribution of interview participants.

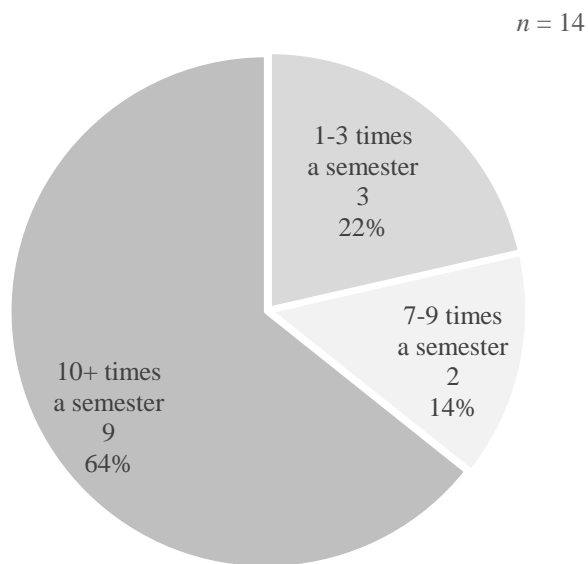


Figure 3.23. Instructional frequency distribution of interview participants.

Data Collection

Online survey instrument. In the first phase of my sequential explanatory data collection, I used a survey instrument in which academic librarians shared their experiences with perspective transformation as they related to their teaching. I built my instrument from King's (1997, 2009) Learning Activities Survey (see Appendix B). King (2009) asserted that her instrument can be modified and used effectively in such a situation. She noted that the instrument itself is designed to help researchers better understand perspective transformation in any adult learning experience and therefore supported its adaptation to broaden transformative learning scholarship. Moreover, she argued that because other research (Cranton, 1994, 2006; King, 1997, 2002, 2003) had indicated that adults often retrospectively recognize perspective transformation, the validated and reliable survey did not need to be used in relation to a single specific learning experience.

Survey instrument modifications and distribution. I designed my version of the survey instrument in Qualtrics, Oakland University's institutionally-provided survey tool. Using this online service allowed me to develop an instrument that could be responsive based on participants' answers (i.e., employ page breaks and skip logic); using a web-based tool also helped me to share this instrument widely. In the instrument itself, I collected information on participants': demographics, including their educational and work experiences; professional experiences as educators through the lens of Mezirow's (1981, 1994, 2000) perspective transformation phases; opinions on the factors that may have impacted their perspective transformation process; and reflection and action in their

work as educators. While most of the questions on this survey instrument provided pre-defined responses, I included several free-response questions where participants could write about their experiences, thoughts, or issues.

In providing guidance for modifying her instrument, King (2009) recommended that no changes be made to those items that addressed perspective transformation, as these changes would affect its validity. On these items, I made minor language changes to align options with academic librarians' experiences in teaching rather than to students' experiences in a classroom. I also added a response option to one item (item 15 on the survey instrument), which previously had provided only Yes/No response options. Because transformative learning theory and perspective transformation are not well-established in the library literature, I added an option where participants could indicate if they were unsure if they had experienced a viewpoint shift about their roles as educators. Since Qualtrics allowed me to use skip logic, those respondents who selected both the "Yes" and the "I'm not sure" options were then able to answer the questions about factors in perspective transformation, while those who answered "No" skipped these survey items. I distributed my version of this instrument by sending a link to the survey to each of the targeted librarian listservs.

Virtual interviews. After I completed data collection from my survey, I conducted semi-structured interviews with a subset of participants in the second part of my study. I engaged in this phase of my research to better conceptualize academic librarians' experiences in instruction-related perspective transformation. As with my survey instrument, I used King's (1997, 2009) validated Learning Activities Survey

Interview Protocol as a point of departure for my interview protocol (see Appendix C). However, I refined what I asked based on my participant population (e.g. academic librarians and not adult learners returning to formal education). I also reviewed and honed this semi-structured protocol in response to the data I collected through my qualitative survey.

I conducted, and recorded the audio from, each of these interviews using WebEx. Interview participants had access to the WebEx session via a link only during the interview session. Once the interview session had concluded, I stored these WebEx recordings in a password-protected eSpace site provided through Oakland University's e-Learning and Instructional Support office.

Reviewing modifications to data collection instruments. In modifying King's (1997, 2009) Learning Activities Survey instrument and follow-up interview protocol, I consulted with two academic librarians who had both instructional and data collection experiences. I asked them to review the modifications I made to King's instrument and interview protocol. From their review, I asked for their feedback on the resulting tools' clarity to, and usefulness for, other academic librarians. These library faculty members provided essential insights into how I could improve my modifications, and I used their constructive comments to further develop my data collection tools.

Data Analysis

Quantitative Survey Data. Because I used King's (1997, 2009) Learning Activities Survey as a starting point in my research, I also used her analysis techniques to

make sense of the quantitative survey data. When using a modified version of her instrument, she recommended that researchers develop a perspective transformation (PT) index score, which would provide them with “a single score... [that] indicates whether [learners] have experienced a perspective transformation” (King, 2009, p. 38) as a result of variables under study. In developing this index, King required that researchers use four items on the instrument; on my instrument, these prompts were:

- Think about your professional experiences in teaching – check off any of the following statements that apply (item 14);
- Since you have been providing information literacy instruction, do you believe you experienced a time when you realized that your values, beliefs, opinions, or expectations (for example, how you viewed your work responsibilities or roles as an academic librarian) changed? (item 15);
- Describe what happened when you realized your values, beliefs, opinions, or expectations about your instructional responsibilities had changed (item 16); and
- Think back to when you first realized that your views or perspective had changed. What did your professional life have to do with the experience of change? (item 21)

From these items, King (2009) advised that researchers should group participants into three categories based on their responses. One group of participants should represent those respondents who had experienced a perspective transformation related to the variables under study. In King’s original instrument, this group focused on those whose perspectives had shifted because of educational experiences, but on my instrument, this group was comprised of those participants who had experienced perspective

transformation around their instructional work and roles as educators. For the remaining participants, King directed that one group should be comprised of those respondents who had experienced perspective transformation *not* related to the variables under examination (i.e., related to a disorienting dilemma in one's personal life), and the third group should be made up of those individuals who had not experienced perspective transformation at all. King then recommended that those who had experienced perspective transformation related to one's research variables and those who had not experienced perspective transformation at all be included in any data analysis. Because my research specifically focused on whether academic librarians experienced the phenomenon of perspective transformation at all, most of my analysis focused on those who believed they have seen shifts in their thinking and practices about teaching.

Cleaning the survey data. To analyze my data most effectively, I cleaned and re-categorized participants' survey responses in several ways. First, I downloaded this data set from Qualtrics as a .csv file so that I could perform basic cleaning procedures in Microsoft Excel. I created eight-character labels for each question in Excel before bringing the information into SPSS. As aforementioned, I also assigned each participant's response with a randomly-generated numerical code; for those individuals who had provided personally-identifying information for a follow-up interview, I replaced this information in the original data set with their randomly-generated code. I maintained a separate codebook of those individuals' names, email addresses, and corresponding numerical identifier for contact purposes only.

Once I had done basic cleaning in Microsoft Excel, I then brought my data set into SPSS for further cleaning and analysis. In SPSS, I started by recoding missing or empty variables as 0. I then reviewed each item, added information about each item, and inputted variable information so that text-based responses were coded numerically for analysis purposes. Because several of my instrument questions allowed participants to select all options that applied, the process of exporting my data from Qualtrics made each of these options its own item with dichotomous variable options. In reviewing these items, I ensured that all instances where participants had selected an item were coded as 1 and instances where participants had not selected an item were coded as 0. There were a small number of items where participants could select a “None of the above”-style option; in these cases, I ensured that if participants had selected this option, it was coded as 0 instead of as 1.

Calculating participants’ PT-Index scores. From my cleaned data set, I then worked with participants’ responses to generate PT-Index scores. First, I created a new variable that measured the percentage of items participants checked in item 14; anyone who had a percentage greater than 0% (i.e., had experienced at least one aspect of perspective transformation around their teaching) was included in this composite variable. Then, I re-coded participants’ responses to item 15 into a new variable; this question asked if individuals had experienced a time when their values, beliefs, opinions, or expectations of their role as academic librarian had changed. In my composite variable, I re-coded all respondents who did not answer no or leave it blank as 1.

I also read through participants' text responses to questions 16 and 20, which asked them to write about their experiences with perspective transformation and what their professional lives had to do with the perspective transformation they experienced around their teaching practices. I created a new variable for each question in which I coded my analysis of their responses. I coded text that reflected perspective transformation about teaching that was grounded in professional activities with a 3. I coded text that reflected perspective transformation about teaching that was based on events or activities outside of professional life with a 2. I coded text that stated that no such perspective transformation had occurred with a 1, and I coded responses that were either incomplete, unclear, or blank with a 0.

From these four questions, I created several different composite variables to determine how to best represent the sub-population of participants who had experienced perspective transformation around their instructional work. Each of these variables considered the following factors:

- An individual's percentage of responses to question 14 must be greater than zero;
- An individual's response to question 15 must be Yes or I'm not sure;
- An individual must have a score of 3 (work-related perspective transformation) for question 16;
- An individual must have a score of 3 (work-related perspective transformation) for question 20.

First, I created a new variable in which only one of these conditions had to be met. In this case, the number of participants who met at least one of these criteria was 392. Then, I

created a more restrictive new variable in which all of the following conditions had to be met, and the respondent population dropped to 157.

However, because many participants who completed the survey and indicated perspective transformation *had* occurred did not answer questions 16 and/or 20, I created two other variables to attempt to represent the most accurate number of respondents. I created a third PT-Index option in which participants had to have a percentage of responses to question 14 that was greater than zero, responded to question 15 as Yes or I'm not sure, and a score of 3 (work-related perspective transformation) for question 16. Based on these criteria, 234 participants met these criteria. Finally, I created a fourth PT-Index variable in which a participant's response to question 14 must be greater than zero and her or his response to question 15 must be Yes or I'm not sure. In this case, 368 participants met these criteria. Because of the many blank free-text fields, I used this fourth variable to examine the influences, factors, and experiences that affected academic librarians' perspective transformation around their teaching.

Analyzing participants' responses for statistically significant relationships. For the actual analysis of these participants' survey responses, King (2009) directed researchers to make sense of the information collected in several ways. She recommended beginning with frequency analysis to identify participants' demographic characteristics. From this basic analysis, she advised that researchers understand the individual effects of particular transformative experiences through "crosstabulations and chi-squared tests of significance between each of the demographics" (King, 2009, p. 39)

and those who have experienced perspective transformation. She also advised to analyze demographic categories where sufficient response rates existed.

Because the inputs I asked my participants to consider in their experiences of perspective transformation (e.g. people, experiences/resources, professional events) offered many options and more than on King's (1997, 2009) original instrument, it was not feasible for me to run crosstabulations or chi-squared tests of significance between the different demographic questions and each of the potential options. Instead, I performed principal component analysis using Varimax (orthogonal) rotation and a subsequent confirmatory factor analysis on the three questions that asked participants to check all the conditions that applied to their experience with perspective transformation around their instructional identities. The exploratory factor analysis test helped me to identify themes in participants' responses to these three questions, and the confirmatory factor analysis helped me reduce the number of variables for analysis.

On item 17, I asked respondents to consider if a variety of individuals affected their experiences with perspective transformation. Through the exploratory factor analysis, I identified four components with eigenvalues greater than 1.0 that explained a cumulative variance of 57.78%. In table 3.1, I represent these factor loadings after rotation with a significant factor criterion of 0.4. From my confirmatory analysis of these data, I identified four combined components:

- Supportive individuals in the perspective transformation process;
- Supervisors or those in administration influencing change;
- Colleagues who influence change; and
- Other participant-identified individuals who influence change.

Table 3.1

Principal component analysis and resulting confirmatory factors for survey item 17, "Did any of the following individuals influence this change? Check all that apply."

Item	Supportive Individuals	Supervisors or Administration	Colleagues	Other
Support from another librarian	.74			
Support from a colleague	.73			
Support from a subject area faculty member	.68			
Interaction with students	.63			
Support from a supervisor	.59			
Support from my library/institution's administration	.55			
Challenge from a supervisor		.73		
Challenge from a mentor		.69		
Challenge from my library/institution's administration		.56		
Support from a mentor	.53	.55		
Challenge from a colleague			.71	
Challenge from another librarian			.66	
Challenge from a subject area faculty member			.65	
Other				.91
Eigenvalues	4.62	1.34	1.11	1.03
Percent of Variance	32.97%	9.56%	7.92%	7.33%

On item 18, I asked participants to indicate if a number of experiences or resources had influenced their perspective transformation process. Through the exploratory factor analysis, I identified five components with eigenvalues greater than 1.0 that explained a cumulative variance of 59.1%. In table 3.2, I represent these factor loadings after rotation with a significant factor criterion of 0.4. From my confirmatory factor analysis of these data, then, I identified five combined components:

- Self-directed professional learning experiences;
- External-facing actions or behaviors;
- Input from non-librarians (e.g. subject area faculty, students);
- Input from those with a library-centric perspective (e.g. colleagues, self, library school experiences); and
- Self-reflection or other experiences.

And on item 19, I asked participants to indicate if any professional events had influenced their perspective transformation process. Through the exploratory factor analysis, I identified three components with eigenvalues greater than 1.0 that explained a cumulative variance of 54.29%. In table 3.3, I represent these factor loadings after rotation with a significant factor criterion of 0.4. From my confirmatory analysis of these data, I identified three combined components:

- Completion of graduate education (both library school and other graduate programs);
- Change in job status, including loss of, change in, or new employment; and
- Change in job duties.

Table 3.2

Principal component analysis and resulting confirmatory factors for survey item 18, “Did any specific learning experience or resource influence this change? If so, check all that apply.”

Item	Self-directed learning	External-facing actions	Input from non-librarians	Input from librarians	Self-reflection and other
Reading scholarly literature on information literacy instruction	.81				
Reviewing guidelines, standards, or other documents from professional organizations	.78				
Participating in online webinars or seminars	.77				
Reading scholarly literature on the scholarship of teaching and learning	.77				
Attending professional meetings, conferences, or workshops outside of your work environment	.71				
Attending meetings, workshops, or trainings within your work environment	.63				

Table 3.2 – Continued

Item	Self-directed learning	External-facing actions	Input from non-librarians	Input from librarians	Self-reflection and other
Observing other academic librarians' instructional practices	.55				
Teaching in a blended/hybrid course		.79			
Teaching in an online course		.72			
Writing about your teaching practices for publication		.66			
Taking a class or classes in another graduate program		.42			
Teaching in a face-to-face course					
Receiving feedback from subject area faculty on your teaching practices			.84		
Observing subject area faculty's instructional practices	.42		.60		
Receiving feedback from students who participated in your instruction	.42		.58		
Taking a class or classes in library school				.79	

Table 3.2 – Continued

Item	Self-directed learning	External-facing actions	Input from non-librarians	Input from librarians	Self-reflection and other
Receiving feedback from other academic librarians on your teaching practices				.64	
Completing a self-assessment of your teaching practices				.48	
Other					.79
Writing about your teaching practices in a reflection journal or other personal format					.53
Eigenvalues	6.95	1.48	1.16	1.14	1.09
Percent of Variance	34.47%	7.42%	5.80%	5.70%	5.43.5

By performing factor analysis on these questions and creating new standardized variables that represented themes in participants' responses, I was then able to analyze these data to determine if statistically significant relationships existed between the different factors and demographic categories. For those demographic variables that represented categorical information (e.g. gender, ethnicity, education level, additional education beyond a Master's in librarianship, type of work institution, and instructional formats), I used a one-way analysis of variance (ANOVA) analysis. This analysis examined the contrast between the differences observed among means between groups

(the mean square distance between groups) with the difference of each observation from the group mean observed within each group (the mean square distance within groups). As such, this analysis determined whether at least one group differs significantly from any of the others. If significant differences existed, I further examined the individual contrasts between groups in a post-hoc comparison, using the Fisher Least Square Distance (LSD) test. For both stages of this analysis, I used the standard alpha level of .05 to argue for significance.

Table 3.3

Principal component analysis and resulting confirmatory factors for survey item 19, "Did any specific professional event influence this change? If so, check all that apply."

Item	Completion of graduate education	Change in overall job status	Change in job duties
Completion of other graduate program	.73		
Completion of library graduate program	.71		
First professional job after graduate school		.65	
Change of job		.65	
Loss of job		.65	
Other			.70
Change in job responsibility or duties			.678
Eigenvalues	1.58	1.15	1.07
Percent of Variance	22.62%	16.36%	15.31%

For those demographic variables that represented continuous information (e.g. age, education level, time since completing Master's in Librarianship, time in current job, time that information literacy has been a job responsibility, frequency of information literacy instruction), I used Ordinary Least Squares (OLS) regression analysis. This analysis built on the correlational association between two continuous variables, and used calculus to solve the least-squares-distance estimation to find the best fitting line minimizing the distance between all observed points. As such, this analysis provided two critical points of information: (1) the strength of association (R) and its related amount of variance explained by the predictor (R^2); and (2) the amount of estimated linear relationship between predictor and outcome (B). Regression analysis also supplied each estimate with an associated significance, to determine the extent to which the observed estimate could have occurred by chance. For this analysis, I used the standard alpha level of .05 to argue for significance.

Analyzing data on reflection. King's (1997, 2009) instrument also included a section on reflection; based on my conceptual model, understanding reflection in academic librarians' experiences was a critical part of my data analysis process. She directed researchers to use these questions to "determine the adult learner's use of reflection in general and specifically to perspective transformation" (King, 2009, p. 40), as well as to provide points of entry for further examination through additional data collection techniques (i.e., interviews). In understanding the role of reflection in perspective transformation, I crosstabulated whether there were relationships between individuals' self-reported personal or professional reflection and their experiences with

perspective transformation based on their assigned PT-Index score. The chi-square test statistic compared the combined difference of each observed proportion from that expected by chance, and tested the overall amount of difference to that derived from the distribution of chi-square for the number of cells in the analysis. For this analysis, I used the standard alpha level of .05 to argue for significance.

Text response questions. King (2009) also provided specific guidance on how to best make sense of participants' text responses in the survey instrument. She advised that these data be coded by theme, and that these themes guide subsequent follow-up interviews (King, 2009, p. 40). I inputted all participants' text responses to the survey's free-response questions into nVivo to conduct this analysis. This qualitative-focused program allowed me to organize these data, identify themes, and develop coding schema for free-text and aural data.

Virtual interviews. Following each interview, I transcribed the conversations from the audio recordings in nVivo. I completed this transcription as soon as possible after each interview so that each unique conversation was fresh in my mind. By inputting these transcripts into nVivo, I could organize and code these data using structures consistent with participants' text responses from the survey. For the follow-up interviews, King (2009) recommended using the data gathered to "check against responses obtained in the survey" (p. 40) as well as to verify and expand on identified themes. Transcribing these data helped me to develop deeper understandings of participants' experiences and begin to draw broader connections across interviews.

Before I analyzed these data, I used bracketing to acknowledge my a priori assumptions and pre-identified potential codes from my review of the literature. For instance, the areas of my conceptual framework – a focus on student learning, relationship-building, using technology in teaching, the importance of feedback, the role of reflection, developing a teaching identity, and the importance of institutional culture/systems – formed my first coding categories. Then, when I performed factor analysis on my survey data, the twelve different potential impacts relating to people, experiences/resources, and professional events were integrated into this coding scheme. And as I reviewed interview data, I developed new codes for ideas or comments that were not otherwise represented. After working through these coding cycles, I examined all collected textual data and the assigned codes in depth once I had transcribed all interviews. At this point, I conducted a holistic review and revision of my codes where I sought to simplify and clarify my codes while preserving the depth and differences in participants' responses. Throughout these analysis processes, I worked to ensure that my codes reflected participants' experiences with the phenomenon of perspective transformation around their teaching identities.

Timeline

I worked through my data collection and analyses processes within the following timeline:

- January 2017: I obtained IRB approval for my proposed research study (see Appendix A).

- February-March 2017: I distributed my qualitative survey to the identified library listservs and collected data from participants.
- April 2017: I analyzed the collected survey data in SPSS and in nVivo using textual analysis. I also scheduled follow-up virtual interviews with participants via email communications.
- May 2017: I conducted follow-up interviews with participants using unique and secure WebEx videoconferencing sessions. I recorded the audio of these sessions and transcribed all interview data during this process. As I transcribed my data, I conducted preliminary data analysis.
- June 2017: I analyzed the qualitative survey and interview data in nVivo and identified broader conclusions from survey and interview data.

Conclusion

As I honed my research focus, I deeply examined Mezirow's transformative learning theory and other scholars' research on how academic faculty experience perspective transformation from discipline expert to educator. From this theoretical and scholarly basis, the understandings I developed about academic librarians' teaching identity development can both address a specific research need and advance the scholarship on transformative learning. While I considered several methodological approaches, I believe that an exploratory mixed methods approach, and specifically a sequential explanatory design, helped me to most accurately generate both top-down and bottom-up insights into this phenomenon. Through deductive survey-based research and inductively grounded phenomenological interviews, I gained understanding of how

academic librarians move from seeing themselves as information experts to considering themselves as educators. I was able to identify relationships, themes, and takeaways from the data I collected that may help individuals, libraries, and institutions understand how to best foster perspective transformation.

CHAPTER FOUR

RESULTS

In considering whether academic librarians experience perspective transformation around their roles as educators, I used a mixed methods research approach to collect both quantitative and qualitative data. In my research, I also examined the factors, experiences, or interpersonal relationships played roles in this process. I collected data from a broad swath of academic librarians using a modified validated and reliable survey instrument (King, 1997, 2009). While I collected primarily quantitative information with this instrument, participants did provide narrative responses about their experiences with perspective transformation around teaching on several items. From this qualitative data and preliminary qualitative information, I then engaged in 14 follow-up interviews to further explore whether academic librarians believed their instructional perspectives and practices had been transformed and the factors that may have helped – or hindered – these change processes.

While I provided frequency data for both the survey and interview participants in Chapter 3 (under the heading of Participants), I present statistical, textual, and thematic results in this chapter to address both whether academic librarians reported experiencing perspective transformation and the influences that may shape this process. Wherever possible, I integrate the quantitative and qualitative data to provide holistic responses to my research questions. By presenting these data sources together, I hope to offer a broad

and deep understanding of academic librarians' experiences developing teaching identities.

Do Academic Librarians Report Experiencing Perspective Transformation around Teaching?

Before conducting any analysis, I first had to determine whether academic librarians in fact reported experiencing a shift in their thinking about their roles as educators. To address my first research question, which specifically asked if academic librarians experience the phenomenon of perspective transformation around their views of themselves as educators, I asked both survey and interview participants to respond to several questions on the topic.

Quantitative Findings

In my survey instrument, I asked participants to respond to the question, "Since you have been providing information literacy instruction, do you believe you experienced a time when you realized that your values, beliefs, opinions, or expectations (for example, how you viewed your work responsibilities or roles as an academic librarian) changed?" In this question (item 14 on the instrument), I provided participants with three response options: Yes, No, and I'm not sure. Of the respondents who answered the question ($n = 415$), 303 reported that they had experienced such a time and 66 indicated that they were not sure if they had had such an experience. Forty-six participants indicated they had not had such an experience. From these responses, 89 percent of participants believed they had, or may have had, a perspective transformation experience around their roles as educators (see Figure 4.1).

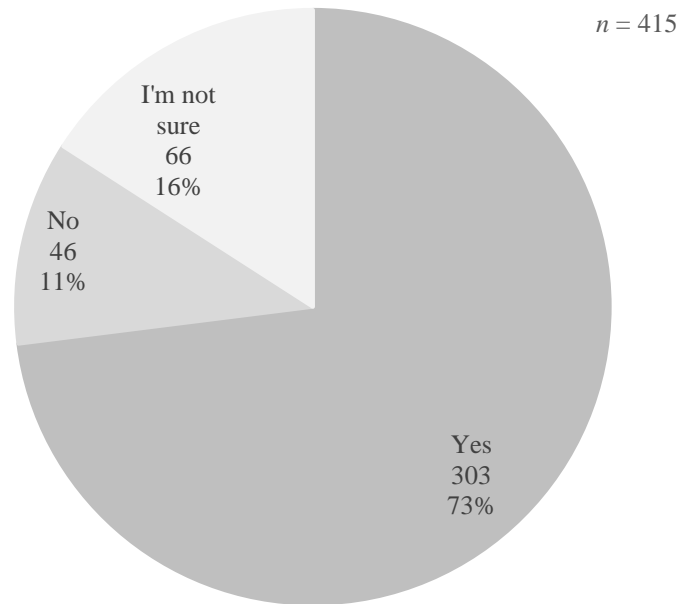


Figure 4.1. Responses to the question, “Since you have been providing information literacy instruction, do you believe you experienced a time when you realized that your values, beliefs, opinions, or expectations (for example, how you viewed your work responsibilities or roles as an academic librarian) changed?”

I also asked participants to indicate if any of the phases of perspective transformation had occurred in their professional lives. This question was item 15 on my instrument, and it specifically asked respondents to, “Think about your professional experiences in teaching – check off any of the following statements that apply.” In the response choices, participants could select any of Mezirow’s (1981, 1994, 2000) transformative phases as well as an option to indicate that none of the phases had occurred. Participants could select all options that they felt applied in their professional lives. Of those respondents who answered the question ($n = 413$), only 21 individuals

indicated that none of the phases had occurred in their professional lives (see Figure 4.2). Therefore, 95 percent of participants reported they had experienced at least one phase of perspective transformation around their identities as educators (see Figure 4.3).

Qualitative Findings

In addition to collecting data from survey participants, I asked those individuals who participated in follow-up interviews to indicate whether they believed they had experienced perspective transformation around their identities as educators or their views of their roles as teachers. In the 14 interviews, 93 percent ($n = 13$) of respondents reported that they had experienced a time when they realized their values, beliefs, or expectations about their role as an educator or teacher had changed (see Figure 4.4). One individual reported that she had not experienced such a time.

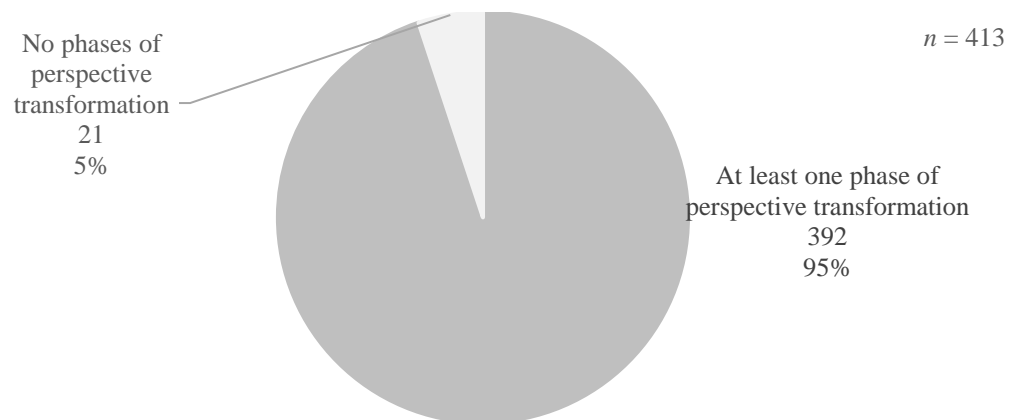


Figure 4.2. Comparison of participants who selected at least one phase of perspective transformation and those who selected no phases of perspective transformation in response to the question, "Think about your professional experiences in teaching – check off any of the following statements that apply."

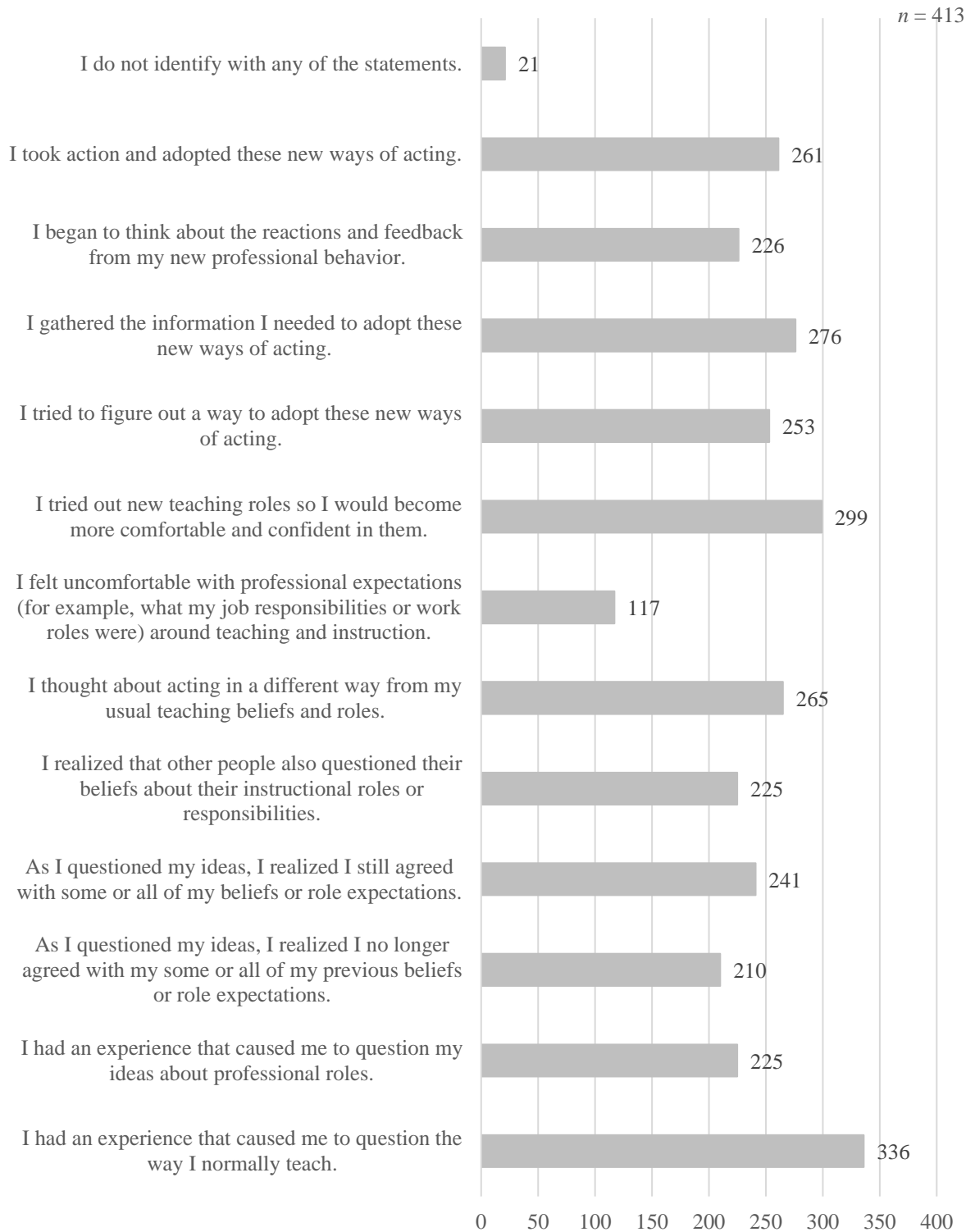


Figure 4.3. Responses to the question, “Think about your professional experiences in teaching – check off any of the following statements that apply.”

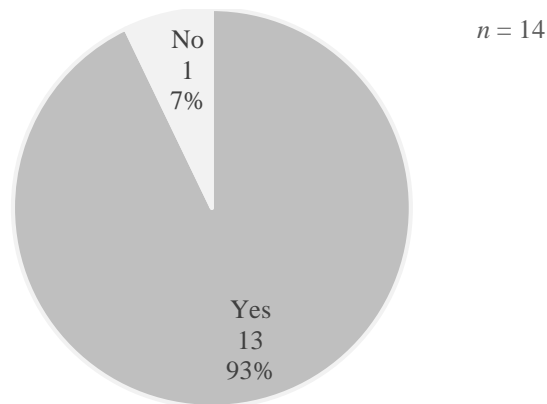


Figure 4.4. Responses to the interview question, “Think about your work as an academic librarian, and specifically your work in information literacy instruction. Have you experienced a time when you realized that your values, beliefs, or expectations about your role as an educator or teacher had changed?”

Qualitative comments about the nature of perspective transformation. In both the survey instrument and interviews, participants commented on how their views, beliefs, expectations, or opinions about their role as educators had changed. Generally, these personal reflections fell into three categories. First, some academic librarians reported having experienced perspective transformation resulting from what Mezirow (1978) called an “epochal event.” That is, some individuals cited a single moment in time or a specific event as a catalyst to changing their thinking. Second, some participants indicated that their perspective transformation had happened over time. In these instances, factors including their experiences, observations, and interactions with others laid a mental foundation for academic librarians to see more gradual evolution of their beliefs, attitudes, or ways of thinking about their work as educators. And third, some individuals felt that they were still engaged in the perspective transformation process

around their teaching identities. While some respondents indicated that they were in the midst of change, others asserted that their ways of thinking were constantly evolving as librarianship, education, and the sociocultural environment changed.

Transformation from epochal events. Several survey respondents referenced specific events as transformative in how they thought of their instructional identities. Most of these comments focused on supervisory change: individuals noted that a “change in administration at my library,” a “new Dean,” “a change of leadership at the Director level [which made]... things happen,” the departure of a “longtime instruction librarian,” the hire of a “new inspirational Dean to challenge and support changes,” or the hiring of a “[n]ew Associate University Librarian who brought about change and focus on instruction” often led to changes in their thinking. Other commenters noted that a “[I]ack of commitment by administration to hire more staff” or, conversely, a “[n]ew hire in the department with new ideas about instruction” impacted their teaching identity development.

Other survey respondents commented on the role that learning-centric shifts had on their perspective transformation processes. These kinds of shifts included “changes in curriculum” (two participants), “adopt[ing] Information Literacy Student Outcomes” at an academic library, and “[w]orking on a revision of our general education outcomes and requirements.” Two participants specifically mentioned new or renewed focuses on assessment: one noted that “[i]nstitutional priorities influenced the [library’s] focus on assessment,” while another noted that “[l]earning assessment development collegewide”

had been an influencing factor. And one academic librarian indicated that “co-leading a task force on my library’s approach to information literacy” caused a shift in thinking.

Four interview participants mentioned epochal events in relation to their perspective transformation around their teaching identities. Nancy*, who worked at a community college, noted that her experience as a student initially shaped her instructional approaches. However, when she taught in a different disciplinary area, she reported experiencing a sea change moment:

So when I came here to be the instruction librarian, the only experience I had in education was as a student. And because it was, let me do a little math in my head, twenty years since I had graduated from college, what I was drawing on as a model was lectures. So when I started to teach library workshops, I taught like I had been taught: I lectured. And it put students to sleep reliably. So once I became an adjunct instructor and taught college skills, which was involved with much more active learning, I had an epiphany that things weren’t going well with the workshops. So I changed from lecture to demonstrate and then experiment – so I changed my teaching style about 180 degrees.

Kathy, a librarian working at a doctoral/research institution, echoed Nancy’s comments that an instructional experience in another discipline led to a dramatic shift in her thinking. She said that she taught a class with what she described as “very generic freshmen students.” She went on to say:

And, um, so that was the first week of class that I all of a sudden realized that sometimes they, the people you’re working with, do not have the skills you think. And it just really... like oh my gosh, right this minute I’ve noticed this. And I think at that point, I did have to adjust, because I had that class for the entire semester. And... in order to be successful, I had to figure out what I was being faced with and how to deal with it.

For these academic librarians, then, experiences in other disciplines and especially teaching in credit-bearing courses were transformational to their teaching identities.

* All names used are pseudonyms.

These comments suggest that the more traditional library instruction, which involves a single session in the context of a broader course, may not lead academic librarians to change their beliefs or attitudes about their roles as educators.

The other two interviewees' comments about single transformative events focused on how professional learning experiences had shaped their teaching identities. Joann, a librarian working in a four-year institution, noted that:

I went to the Georgia Information Literacy conference one fall, and, and they started talking about this in the, in the construct of the citation project. And I came back and, and I just I used that as my, my, my Kairos moment of, oh my god, like my world shifted at that moment. And I, I just decided we needed to think about it differently, how we approach information literacy, and what we do with it... it was kind of earth-shaking when it happened, because I knew I could never go back.

Similarly, Lynne, a librarian working at a doctoral/research institution commented that:

I went to a presentation by Kevin Sieber and his colleague um and he talked a lot about um, active learning and having an instruction arsenal, is what his term was... I was very excited by that presentation and by that philosophy and I came back to my former institution and I kind of got everybody on board with that idea. So that, I would say was really um a big turning point for me.

These comments imply that professional learning experiences, and especially conferences, provide opportunities for academic librarians to think about their instructional practices, attitudes, and perspectives in new or transformative ways.

Transformation over time. While some survey respondents and interviewees noted that epochal events had led to transformation around their teaching identities, many more noted that their shifts had happened more gradually over time. For instance, respondents indicated that change had happened for them “gradual[ly]... over ten years and three different institutions and sets of responsibilities;” as “methods and

philosophical approaches... [became] more grounded in educational theory along with the continual adaptation to” teaching contexts and students’ needs; as “recurring experiences... [based on] opportunities to stay open to new perspectives and processes;” and “gradually over time. There have been many points along the way when I’ve adjusted my perceptions about myself and/or about students’ needs and expectations and/or faculty needs or expectations.” One participant summed up these, and other, comments by indicating that the phases of perspective transformation in librarianship were “constantly evolving and somewhat fluid (as opposed to having a single experience, or a response that prompted me to concretely change what I do and how I teach).” For many of the academic librarians who responded to this instrument, perspective transformation seemed to happen in these kinds of ongoing and dynamic ways.

Interviewees also more commonly cited this kind of transformative process; the majority indicated that their teaching identities and views of themselves as educators had changed incrementally. Their experiences, though, presented offered several factors at play in this kind of shift. Teresa, an academic librarian at a community college, said that it wasn’t:

A moment – it was more of a progression where what I was doing with classes was reflected in what the students were producing... And the faculty member making it clear to me the difference in what they received... by classes that hadn’t received library instruction in comparison to the classes... that were receiving library instruction... what I did mattered, and having it matter meant I needed to take [it] more seriously or be more aware or educated or professional, I guess, about what I was doing.

This comment highlights the important role that experience, reflection, and feedback can play in changing academic librarians’ perspectives. For Teresa, reflection on her own practices combined with feedback from a faculty member helped facilitate her teaching

identity development. Jenna, an academic librarian at doctoral/research institution, also commented on the key role that her hands-on experiences played in shaping her pedagogical persona. She said:

I'm not sure if there was a specific moment that I had a shift in my thinking, but I definitely think that the more I experienced what being a, a librarian, an academic librarian was like, the more I learned about information literacy instruction, the more I realized how important it is both... for the profession... and also just for myself, um, slowly I started to see the impact that teaching had on student success... the more I saw that, the more excited I got and the more I wanted to do it, I think.

In her case, too, reflection on practice helped her to understand the importance of her work as an educator to her, her students, and the profession more generally.

Other interviewees commented on how diverse work experiences helped them to think differently about information literacy instruction and their roles as educators.

Helen, an academic librarian who had worked at both a large non-profit research university and several for-profit universities, identified how these different environments – and the different types of students – affected her views of herself as an educator over time:

I guess I consider it to have been a, a rather slow evolution over time... partly because of the fact that I worked at really different institutions... [the kind of instruction] is going to be different... whether I'm doing it with young traditional students, doing with, with students – older students who aren't very tech-savvy versus doing it with students I'm not in the same room with... delivery is going to vary, but the core, uh, concern for critical thinking in information literacy is, remains the same.

For Helen, then, her realizations focused more on what was important for an educator-librarian to convey to students, regardless of their backgrounds, about critical thinking and information literacy. Lynne, who held an additional Master's degree, spoke about how her professional experiences had provided different opportunities for her teaching

identity to develop. She had previously worked as a K-12 educator before shifting to libraries, and when she did, she began her career in a different library setting:

I started as a public librarian. I was the director of a public library and, um that, while I enjoyed it, it never felt fully natural to me... I think I was an academic at heart... I actually started working part-time at a community college while I was the director of that public library, because I wanted to test my theory that I was really an educator at heart... I had not taught a classroom for at least seven or eight years before I went back to, um, the community college to be a librarian... I was very surprised at how uncomfortable I was in front of a classroom at the community college... I was part-time and didn't know the faculty or students very well... but I also think it was a lot about that... the one-shot [instructional format] did not feel natural to me. So I think my reflection started as early as that... that transformation continued, um, when I became a full-time academic librarian.

For Lynne, these experiences of not quite fitting in different library settings led her to rethink her teaching approaches as well as the role she could play as an educator. Sonja also commented on how her experiences in a public library setting impacted her teaching identity:

When I was working in a public library... I noticed that libraries were kind of the most genuine form of education... people came in curious about something and it didn't really matter what they were interested in, the library was going to fill their need in some way... at that point in my life, I had teaching certificates – I could have taught in a traditional middle school or high school... but I chose the library world because there was more freedom of information and like, you can learn whatever you want to... so it's been kind of a while that I've had this belief that librarians are educators, um, just not the traditional sense of educator if you only think about classroom teachers and professors.

Interestingly, both Lynne and Sonja could have chosen to teach in K-12 environments, but elected to work as educators in library settings. This background knowledge and experience may also have informed their views of librarians as educators.

Other interviewees noted that formal or informal professional learning experiences had shaped how they thought of themselves as educators. Christina, who

worked at a large research university, noted that her thinking about her teaching happened as she:

Started making some small changes or, um, you know, even just like calling on students more instead of telling them things... and then as that was kind of happening, I was simultaneously – you know – doing some more reading and going to Immersion and all this stuff. So I think it was sort of like this gathering [of experiences].

In this case, her hands-on experience combined with her own professional learning (i.e., Immersion) and development (i.e., reading) to shape her pedagogical persona. Dave, a librarian at a community college, also commented on the role that personal learning played in his perspective transformation. In his case, “some lightbulbs started going off” when he took a continuing education class for academic librarians. From this experience, he “started thinking, oh, this instructional design – I’ve never heard the term before... so lightbulbs started going off there.” These learning experiences that build on each other mirror how some academic librarians experience perspective transformation around their teaching: As a gradual, accumulative process.

Transformation as constant and ongoing. While survey respondents and interviewees commented on transformation happening over time, they also indicated that they felt their attitudes, beliefs, or approaches to their teaching were continuing to – and would continue to – evolve. This particular theme emerged directly from their remarks and not from the existing literature on perspective transformation. In survey participants’ comments, there was a sense of change as a constant in academic librarianship: Several asserted that “[c]hange is constant,” “my professional life is constantly changing,” their beliefs “are constantly changing as my students and the educational landscape changes

[sic],” and that “it is essential to change in order to grow and become better.” One survey respondent said that transformative shifts “happen every semester... so I learn and shift approach[es] as needed.” Another said that developing a teaching identity had been “an evolutionary process and continues.” Other participants focused this change process into a drive to constantly improve with comments including, “I am on a path for continuous [sic] improvement... It is essential to change in order to grow and become better;” “in the process of learning to be a good library instructor I have learned things along the way;” “I revise my beliefs and opinions in laight [sic] of new evidence on a regular basis... my understanding of my role as an instruction librarian [sic] is always up for adjustment;” and that “[t]eaching is something you never get exactly right, you always try new things.” For these academic librarians, then, perspective transformation does not represent a single shift or even a series of cognitive changes. Instead, their transformative experiences are imbued into their everyday professional lives and experiences.

A number of interviewees also pushed back at the idea that their perspective transformation had been fully achieved, or even that it could be fully achieved. Teresa commented:

You know to be, to be honest, I don't know that the, the totality of the transformation has been achieved... it's that focusing, that crystallizing... you know, where all the pieces, you know – the puzzle's almost made, but it's not quite finished.

Kathy echoed these remarks, saying that her teaching identity development was “an ongoing process... I don't think I walk into a room one day the same way I did the day before. I think it's constant.” These statements speak to the development processes academic librarians may experience in seeing a shift in their attitudes, beliefs, or ways of

thinking about teaching; they may also imply that once a librarian has engaged in transformative experiences, they see perspective evolution and changes as ongoing components of their professional lives.

Other interview participants talked about transformation in relation to their work instead of their mindsets. For example, Sonja spoke to the idea of continuous improvement or change in how she works with students:

You know, teaching, my teaching methods aren't perfect, but I'm going to be improving... my teaching, my ability to teach with each time I host a... workshop or instruction session. So it's, you know... I don't think any educator is perfect... I'm still growing in the area of information literacy instruction just as, you know, just as all other librarians are.

Rather than viewing a teaching identity as something to achieve, then, she believed that her instructional practices and personas would continue to develop. Dave also commented on the ongoing changes he saw in his work, especially related to new job responsibilities:

This [development of instructional design skills] grew to be a little more than I thought it would be... you know, I've been in my career for about ten years, I'm doing really well – I've grown a lot, but I'm realizing I want to do the next thing, whatever it is, and here it was... it's exhilarating because, wow, I'm moving into something new. [But] I'm a little nervous because, um, I'm a newbie at this... I feel like I'm back to... being a novice again.

For these respondents, the changes they experienced in their views were directly linked to work experiences and interactions with students or faculty; moreover, their changing views were reflected in what their respective work looked like and job responsibilities entailed. These comments, then, reflect the different ways that academic librarians can see their instructional perspectives as evolving or still in development.

Factors that Influence Perspective Transformation around Teaching

After collecting information from my participants about whether they had shifted from seeing themselves as disciplinary experts in information access, retrieval, and management to thinking of themselves as postsecondary educators, I gathered data to explore what factors may affect this perspective transformation process. In both the survey instrument and the interview protocol, these potential influences break down into three categories: people, or interpersonal relationships; experiences or resources; and work-specific events, such as a change in employment status or broader, institutional-level shifts. I sought to understand the influences on academic librarians' teaching identity development in both the quantitative and qualitative questions on these factors.

Reported Impact of People on Perspective Transformation

In understanding participants' reported interpersonal influences on their perspective transformation processes, I present two sets of themes. First, the quantitative findings offer which predefined relationships or interpersonal interactions participants felt influenced how they thought of themselves as educators. Second, the qualitative findings present themes I identified through coding and analysis of interviewees' comments about their transformative experiences. While these concepts may echo participants' responses to a predefined survey item, they emerged directly from my conversations with interviewees. These themes include: the importance of student/librarian dynamics; the role that relationships with subject-area faculty play; connections with other librarians, both within and across institutions; and how individuals' personal reflective dispositions shape the perspective transformation process.

Quantitative findings. On my survey instrument, I asked those respondents who reported either that they had experienced a time, or that they were not sure if they had experienced a time, when they realized their values, beliefs, opinions, or expectations about their work as an academic librarian to reflect on the individuals who may have affected this change. In item 17, I provided 13 pre-defined response categories as well as an “Other” option for participants to select; they could also indicate that no individual had influenced their experiences of change around their teaching identities. Respondents could select all individuals who had affected their experience of perspective transformation.

Of those participants who responded to this item ($n = 303$), 247 indicated that interactions with students had influenced their perspective transformation process. Individuals also indicated that supportive relationships were crucial in shifting their thinking, including from other librarians (146 respondents), colleagues (136 respondents), subject area faculty members (129 respondents), supervisors (75 respondents), library/institution administration (66 respondents), and mentors (63 respondents). Challenges from colleagues (69 respondents), other librarians (68 respondents), and subject area faculty (59 respondents) were the next most-commonly selected options. Challenges from other individuals, such as library/institutional administration (37 respondents), supervisors (28 respondents), or mentors (17 respondents) were less common among participants’ experiences. Fifteen individuals indicated that no individual influenced their perspective transformation experience, and 40 shared other interpersonal relationships that were not reflected in this item’s pre-defined options (see Figure 4.5).

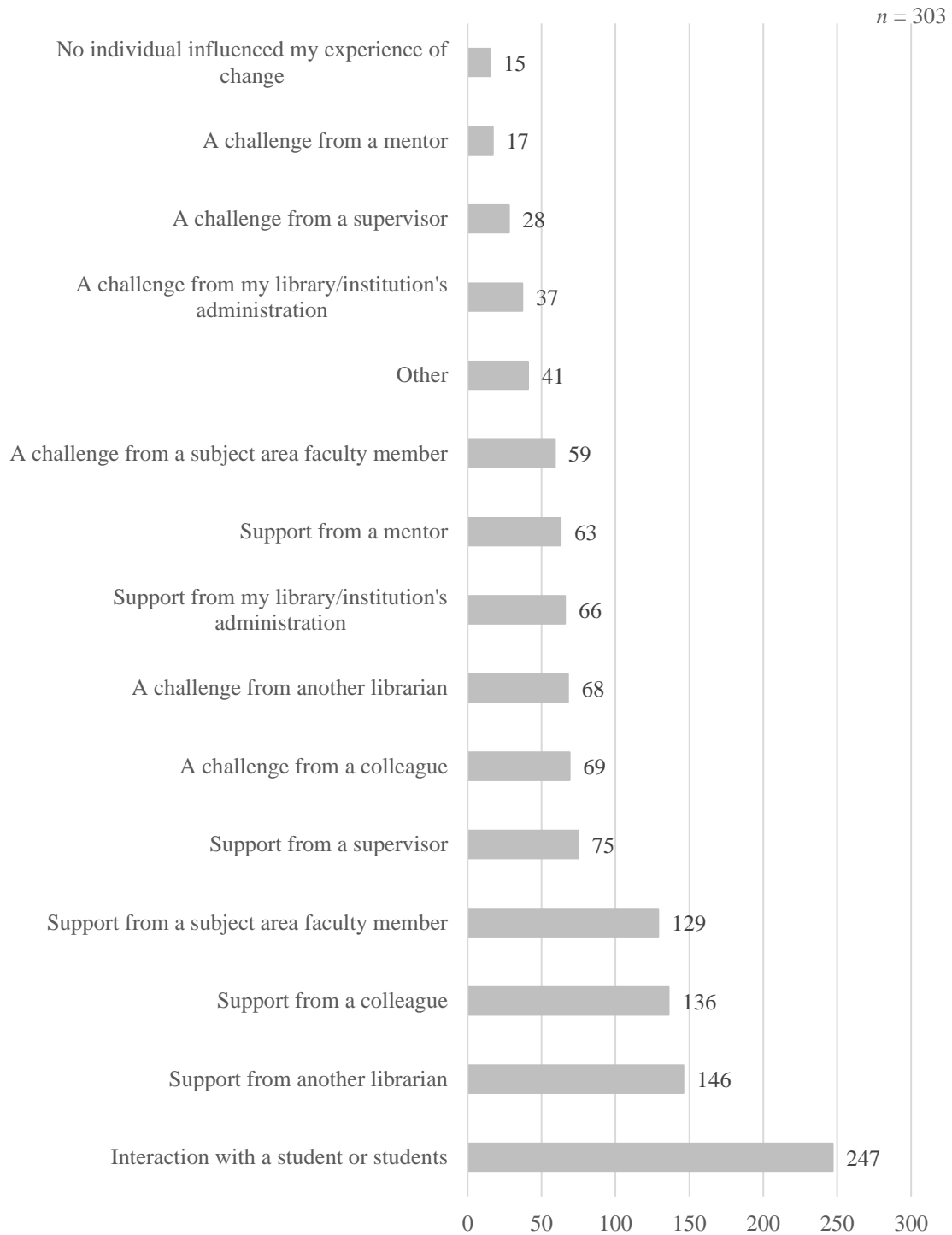


Figure 4.5. Participants' responses to the question, "Did any of the following individuals influence this change? Check all that apply."

Other individuals who influenced perspective transformation. From those participants who indicated that other relationships or people had influenced how their teaching identities had developed, common themes emerged. Several respondents indicated that they themselves were the most important person in their perspective transformation process. One participant noted that, “[m]yself: self-awareness and reflection” were critical to her shifting perspective. Another noted that “my own interest in critical theory, social justice, and pedagogy” prompted change.

Other themes that emerged from this response category were not necessarily focused on individuals, but instead identified broader social or institutional inputs. For instance, two respondents noted the role that a lack of support at their institutions played: one individual noted that “[l]eadership denying meaningful support” affected the perspective transformation process, while the other respondent commented on the “[l]ack of support of my library/institution.” Two other respondents referenced institution-level resources for teaching, which imply interpersonal relationships – both with those staffing a teaching center and with others attending such workshops. And four individuals commented on the social and cultural inputs present in 21st century life, including on issues of critical pedagogy, social justice, and the 2016 US presidential election. While these comments do not necessarily refer to relationships with specific individuals, there are implied interpersonal dynamics at play in these factors.

Qualitative findings. In the qualitative interviews, participants’ responses both mirrored, and diverged from, the survey data. Interviewees spoke to the roles that students, and their interactions with students, played in shaping their senses of themselves

as educators. They also commented on the important role that their relationships with disciplinary faculty played in determining how they thought of themselves as teachers and worked to develop pedagogical personas. They did not speak as much to the role that their collegial relationships with other librarians played in forming these teaching identities, and these relationships seemed to be less important. But for all respondents who reported having experienced perspective transformation, their own selves and their personal reflection were key pieces in establishing teaching identities.

Importance of student-librarian dynamics. Many interviewees commented on the role that students' input, classroom engagement, and performance played in shaping their teaching identities. Christina commented that when she first started teaching in academic libraries:

I literally, like, wrote out a script and wanted everything to go exactly as planned... from then to now, I'm much more, um, I'd much rather just hear from students – what they want to learn or what they want to know and let their instinct kind of guide the class... sometimes that's more doable than other times... depending on the faculty member and the content of the class.

For her, this focus on students' needs and student learning represented shifts in both her perspective and practice. She also shared that, following instruction sessions, she spent time “thinking about how a class went... or if it seemed like the students were getting it or engaged.” Reflecting on student engagement and student achievement played a role in how Christina has developed as an educator.

Emily, an academic librarian at a doctoral/research institution, reported having experienced a similar shift in her classroom focus. She noted that, “taking the focus off of me... and turning it to toward what the students are getting out of this session has really

helped to guide... how I think of my [instructional] sessions now.” Like Christina, she noted a transformation from thinking, “oh my gosh, they’re looking at me... [to] getting out of that mindset and say[ing], okay, what are they really getting out of this session? What sort of learning are they expecting to happen?” In Emily’s work, she said that this kind of focus “really sort of changed how... I’m interacting with the students in the classroom.” For some academic librarians, then, perspective transformation around teaching can involve a change from centering a learning interaction on one’s own instructional practice to using students’ needs, interests or goals as the foundation.

Beth, an academic librarian at a Master’s-granting university, also noted the importance of understanding student performance in relation to an academic librarian’s teaching identity. She said she has focused on “trying to provide some evidence of outcomes of teaching rather than just saying, ‘I, I want to do this,’ or, ‘I think it’s important to teach like this.’” Moreover, for her teaching identity, measuring “what kind of, kind of outcomes you see as a result of your teaching” had become increasingly important, especially in her institutional environment.

Dave spoke specifically about teaching to reach students by understanding their needs and interests. He said, “I think about the kind of experience I would want to have if I were back in college... if I were a community college student again... what would I want to know that I know now?” This perspective, he said, has “often driven me to do the kind of stuff I’ve done.” His experiences thinking about what today’s college students need aligned with Joann’s experiences when she re-entered librarianship after several years away. In her experiences, she found that “the student questions were different... the students had different needs and I, and I had just never seen that before.” For Joann, then,

“recognizing that their needs, [and] the way they approach information was changing” has influenced how her perspective on her teaching has developed.

Kathy encountered similar issues in understanding what students were bringing to the classroom, and recognizing their broader academic and personal needs shaped how she thought of herself as an educator. She said that she “took for granted that, if you were in college, you had certain skills that you brought with you to college,” but that in working with students, she learned that their expectations did not always align with hers. She referenced a specific student’s expectations in particular:

I had a few students that was [*sic*] really struggling because they were doing really poorly, and I really could not understand what I was doing wrong... and then one of them had a passing grade for the first time in the semester, and [he] was so incredibly excited and came up to me after the class and was just expressing his excitement... he explained to me that he had had a football scholarship at a different college that actually had academic requirements for entering and... he wasn't allowed in because he couldn't meet the minimum academic requirements. So it made me realize that I should not always judge how well I was doing on the outcomes... on my expectations. Maybe they were more based on the students' expectations.

Moreover, she found that to best reach her students, she needed to “approach each student as a different person and realize that different people have different skills.” Shifting her perspective in this way in this way involved thinking about “what can I do to help them [students]” and coming to the conclusion that “I was there to meet their needs, and... I used my resources to do that.”

Sarah commented that student feedback influenced how her instructional identity developed. She said that:

Feedback from students really does... motivate me because I get comments from them sometimes, like, ‘Oh, I feel so much more confident about using the library,’ or, or they get excited about their research project... that to me is, makes me feel like what I’m doing is really worthwhile... [and] like my work is authentic.”

Nancy felt similarly, saying that “student feedback is what gave me the initial impetus to change.” In her case, it involved seeing students in a credit-bearing course who “were really involved, they enjoyed it, they weren’t falling asleep... [and] they understood the concepts.” When contrasting this experience to her library-based teaching, Nancy “realized that the difference... is not really content, it’s what we were doing in class with it.” In response to these different kinds of feedback, then, she shifted how she thought about her role as an educator. These comments highlight the role that anecdotal comments from students can play in informing academic librarians’ teaching identities.

Relationships with subject area faculty. Interviewees also discussed how their relationships with subject-area faculty had shaped their teaching identities. For some academic librarians, these interpersonal interactions had helped them in positive ways to develop their teaching identities. For others, though, disconnects between faculty and librarians had stymied how these perspective shifts had translated into their professional growth as educators.

Faculty conversations informing academic librarians’ teaching identities. For some interviewees, connecting with faculty across instructional work helped them to develop how they viewed themselves as educators. Joann spoke about how working more with faculty, and collaborating with them in new ways, had played a role in her perspective transformation. She said that by “working more with faculty... the conversations about information literacy in the curriculum and, and what all of this is and changing information needs, and how students write” fell into place and facilitated

broader information literacy instructional changes at her institution. For her, “wider conversations being had” and “networking with faculty” helped her to push a shift in thinking into a shift in practice. In Nancy’s case, these kinds of conversations and networking activities directly affected her practices. She said that, “once I started hanging out with teachers, that changed the way I taught library skills.” Jenna also noted that her conversations with faculty had shaped her pedagogical persona, saying that “talking to subject faculty about... sort of what they’re seeing and how they see themselves as educators has helped me to see how I do and do not fall into that role, too.” Like Joann and Nancy, then, she used these interpersonal interactions to develop her own sense of herself as an educator.

Other academic librarians may experience these kinds of connections at a deeper, more embedded level, especially as their time at an institution increases. Kathy, who worked at her doctoral/research institution for 7-9 years, noted that “as you work in... an environment over time and you build relationships with people... you... might be aware of how the main faculty in programs teach, and you can adjust and be more likely to meet the needs of your students.” For other academic librarians, these relationships are perhaps less about duration and more about depth. Lynne highlighted how high levels of connectedness with faculty had influenced both her teaching identity and instructional practices. She said that:

I’ve gotten the most benefit from working closely with subject faculty... I have found it very rewarding to talk with them about what I can do as a librarian, uh what my background is, the fact that I see myself as an educator, as a teacher librarian... then they shared their perspective... on what it means to teach and what it means to be um active in the classroom. And I have found those conversations to be very enriching... I have found the most benefit from really

working closely with faculty... and I find that to be very, very rewarding as a librarian.

Lynne, perhaps, was in a unique situation, because she was truly embedded with faculty in a department. She said that she has, “received a great deal of support from nursing faculty, and their culture is built around... [the] idea[s] of supporting, promoting... celebrating the accomplishments of their group.” In contrast, she said, “the library where I work is trying to build that kind of supportive culture and that kind of celebratory culture... [but] it is not in place in the same way it is” with her institution’s nursing faculty. These high levels of collaboration and support seem to have helped Lynne develop her teaching identity.

Faculty development and academic librarians’ teaching identities. For other interviewees, working with faculty in campus-centric professional learning settings helped them hone their pedagogical personas. This kind of work could be as a learning facilitator or participant. Sarah noted that her work with faculty in collaborations outside of traditional library instruction settings had helped her to think about her teaching role in different ways. At a previous institution, she had served “on committees with faculty and I did a lot of collaborating with the writing center director... [to] put on workshops for faculty on doing flipped classrooms and all kinds of fun, exciting, new instruction things.” This faculty development work was in place of a teaching center on campus, so Sarah’s work in teaching faculty “kind of solidified my feeling that instruction was an area of expertise for me.” Beth had similar experiences connecting with faculty in professional learning experiences, saying that:

Getting to know more of the non-librarian faculty on campus and working with them on teams and going to... course design academies and things like that... has gotten me sort of out of my little bubble of what maybe librarian educators do.

In her case, then, these experiences have broadened her understanding of her teaching identity and practices.

Faculty's information literacy skills as a collaboration point. In some instances, academic librarians acknowledged discipline faculty's information literacy knowledge or skills as a factor in developing collaborative relationships that informed their teaching identities. Kathy addressed the issues she has encountered in faculty's own 21st century research skills, and her experiences speak to how this aspect may limit academic librarians' teaching identity development. She said that faculty, as well as students, often "don't have the skills" to work with specific research models (i.e., evidence-based practice in nursing) "because it wasn't included in their programs." At her institution, "faculty who need to do this as part of their jobs... [may] not have the skills or education to do it," or to teach these practices to students. In working with these faculty, Kathy commented that, "they rely on us [the librarians] and they really make us feel valued because they need us for their work." While this dynamic may not represent one of equals, it may help librarians to acknowledge both their information expertise and teaching identities.

But for some academic librarians, this understanding gap may not lead to fruitful dynamics. Teresa commented on disciplinary faculty members' knowledge gaps in relation to the disconnect she observed between faculty and academic librarians. At her community college specifically and in higher education more broadly, she said there was

a “faculty-librarian gap or misunderstanding” that impacted academic librarians’ teaching identity development. Teresa stated that:

Faculty are insecure and take a [*sic*]... ego-driven ride when it comes to trying to address things beyond the scope of their knowledge in their classes... [they fail to recognize] what contributes to the success of the student... it’s not just about the content in the class... you complain about your papers all the time but you don’t take any action in regards to trying to make it better... so [academic librarians] want to be knowledgeable but you don’t want to be condescending, um, but you want to address them in their expertise, but you want to be acknowledged for your expertise... I think librarians working with faculty is a more complicated relationship than marriage.

If this dynamic exists in academe, either broadly or in situation-specific contexts, her comments suggest that academic librarians may encounter it as a roadblock to building collaborative instructional relationships and developing their teaching identities.

Relationships with other librarians. While interviewees spoke about their professional relationships with other academic librarians in relation to their teaching identities, this factor seemed to impact their perspective transformation processes to a lesser extent than student-librarian or faculty-librarian interactions.

Benefiting from colleagues with different experiences or perspectives. For some academic librarians, working with colleagues who have different backgrounds or experiences influenced their teaching identities. For example, Jenna, who had been working in instruction for 4-6 years, cited “working with librarian colleagues who are more experienced with instruction, and who do have a strong sense of themselves as educators” as “helpful in developing that role myself.” In her case, learning from others in a mentor-like dynamic impacted her beliefs about her role as a librarian-educator. Sonja had a similar relationship with more experienced colleagues, noting that “other

librarians... saw my potential as an educator... and um, convinced me to use... my abilities to think about pedagogy and apply it to information literacy instruction.” In her case, these relationships helped to shape her teaching identity and practices.

Other interviewees commented on how more balanced colleague relationships have led them to reconsider their beliefs and practices. Dave commented on how the other instruction librarian at his institution, who has a different teaching perspective, has led him to think about his own approach to education. He noted that:

She’s a very different librarian than I am. We have the same position, same responsibilities, but I think she is rooted in a more... pre-21st century librarianship... [and] the contrast between us that’s developed... helped me think about what kind of librarian I am.

This dynamic presents a possibility for how peers’ practices or views may shape academic librarians’ attitudes about teaching. And more veteran librarians may be impacted by new professionals in the field: Joann referenced how new relationships with librarian colleagues supported her perspective transformation around teaching. She said that when her institution “brought in two new liaison librarians... from top programs, top jobs... they brought a new perspective” that helped the “conversations with colleagues... to change.” She also commented that with this staffing shift, they “focused a lot more on [the] culture” around teaching and especially assessment. In this instance, then, new colleagues helped Joann to continue to develop her teaching identity while also shifting the broader library culture at her institution.

Colleagues as sounding boards. For other academic librarians, colleague relationships offered sounding boards or sharing venues for instructional views and

strategies. Sarah commented on a specific kind of collegial relationship that helped her to develop her teaching identity. She said:

I kind of started a critical friendship kind of relationship with one of my colleagues at my first institutions where I was a librarian... we talked about what I had intended to do in... [instruction] and whether or not I actually met my goals.

For her, this kind of structured feedback dynamic helped foster growth around instructional practices. Emily also noted that reflection with colleagues played a role in her perspective transformation:

I had a couple of colleagues that [*sic*] really served, I would say, as my support system... I think... talking to them about the student body, about what they were seeing in the classroom, what instructors really expected... their role in information literacy on campus, all that sort of helped shape... my instruction and what I thought about information literacy and how I was going to approach, um, library instruction on campus.

Supportive colleague relationships, then, where academic librarians can discuss their perspectives, practices, and problems around teaching can help to foster their development as educators.

Librarian connections outside of an institution. While librarian colleagues at an institution may impact perspective transformation, these kinds of interpersonal dynamics can also exist beyond campus boundaries. For instance, Christina noted that she had previously participated in an instructional exchange group where other librarians from other institutions “would demonstrate something they’d done or talk about something they’d done... you could see a bunch of ideas in action.” She also referenced her participation in the ACRL Immersion program on teaching. Christina cited her participation in this selective international program as “really helpful... in exchanging ideas with people” outside of an institution or local organization. Sarah also cited external

opportunities for intra-librarian connections as influential to her teaching identity. She said that attending the ACRL biannual conference as a graduate student:

Was my first introduction to what... the priorities [are]... of academic librarians. And instruction was just everywhere. Everyone was talking about it, people had all kinds of creative and exciting ideas, and I just got really excited and jazzed about instruction, going to ACRL.

The relationships or interactions that can develop from library-specific professional learning experiences, then, can also influence academic librarians' instructional identities.

Jenna, worked in a state where there was:

Only one four-year university but there are a number of community colleges that we work pretty closely with... [so the] conversations within that community [are helpful] because we are all sort of on the same page, and we have a lot of similarities... sometimes they take place, you know, as part of a conference or, um, like an articulation meeting or something, and sometimes they're more informal.

For her, then, the most meaningful intra-profession relationships evolved from broader institutional relationships within a region.

Negative collegial influences on teaching identities. In some interviewees' comments, intra-profession connections seemed to stifle pedagogical persona development. Christina noted that what "has really affected me... [is] how the other, like, instruction librarians at the library, how much they see themselves as educators." In her current institution, she said that her fellow instruction librarians had an attitude that "we have this specialized knowledge" and were therefore resistant to teaching first-year students. In response, she worked to counterbalance this attitude and provide effective information literacy instruction to these classes. Helen said that while "some [academic librarians]... have been mentors... I have found it surprising... that academic

librarianship is much more competitive than I expected it to be. Compared to the business world, which is ironic.” The relationships between academic librarians around their work as educators, then, are not issue-free.

Personal reflection. All interviewees commented on the role that self-reflection and their own metacognition played in their perspective transformation processes. While this action may constitute an experience rather than an interpersonal relationship per se, these academic librarians’ remarks echo what survey respondents said: In certain situations, an individual’s relationship with himself or herself is the most important, or at least most foundational, factor in perspective transformation around teaching. While most interviewees talked about informal personal reflection, some identified formal reflection structures that had impacted their thinking and practices.

Informal personal reflection about practices. A sense of self-reflection imbued interviewees’ comments about their experiences and relationships. Teresa noted that faculty feedback on students’ performance after library instruction helped her to see “that what I did mattered, and having it matter meant I needed to take [it] more seriously or be more aware or educated or professional.” Christina commented on her own metacognition when talking about her experiences in teaching. She said that she “would reflect on classes, which generally happens in kind of an end-of-the-semester way... [but] I’m trying to reflect more on, you know, right away or individually.” Lynne also said that her initial experiences with instruction in librarianship led to unease and discomfort, and:

It took some reflection and... talking with colleagues to realize that what I was uncomfortable with was, first of all, being... some sort of guest in someone else’s space and not knowing these students... also just having to do a lecture... in a

one-shot [instruction session]. You know, trying to get everything in in a 50-minute session. And so that realization actually led me to, um, explore and become more involved in being... an embedded librarian and also in doing a lot more active learning... when I was doing library instruction.

For Lynne, then, reflecting on her teaching practices and the discomfort she felt led to a specific course of action and change in her instructional behaviors. Similarly, Jenna indicated that, once her instruction sessions end, “I spend a lot of time trying to figure out what went well and what did not go well... so that has certainly played a role.” But when she became involved in assessment projects, she had seen more concretely the issues students were facing in their research and information literacy skills:

When I looked at the actual assignments that they’d produced at the end of class, I found that, while, yes, they were finding great sources, they had no idea how to use them effectively in their papers... So that more global perspective of how this [instruction] had played into their overall research process... was really useful and made me think more about what maybe I should be focusing on in library instruction for those classes.

This comment highlighted how academic librarians can push their own self-reflection into concrete reflection on students’ needs, learning, or experiences, and how this focus can influence their teaching identities.

Informal reflection about students’ needs. As with Jenna’s experiences focusing on students in her reflection, other interviewees commented on how metacognition centered on students’ abilities, interests, or needs influenced their senses of themselves as educators. Kathy indicated that her reflection about students and her expectations of them had impacted how she thought of herself as an educator. She said that she:

Just took for granted that if you were in college, you could read and write and understand... some people just did not have the skills I thought they were going to have. So I just thought about, what can I do to help them with those skills?

Her consideration of students' needs, then, led to direct action on her part "to meet their needs." Similarly, Dave used reflection about students first as a prerequisite to action, rather than a follow-up action. He noted that his reflection has focused on "the kind of experience I would want to have if I were back in college... if I were a community college student again... what would I want to know that I now know?" This thinking, then, guided his practice. While this quote illustrated a student-centric focus, it also suggested reflective practice around what was, and was not, useful or necessary in his teaching practices based on his knowledge and experiences.

Informal personal reflection about the profession. For some interviewees, their informal reflection focused more on how they could address issues they saw in libraries or higher education more broadly. For instance, Joann commented that her personal reflection arose because:

I felt like I was in a rut and... I decided it was time for me to go back to school and to, you know, revisit what else was out there and to really try to blend together information literacy with writing... I think I was personally reflecting on, I wasn't content in... being a librarian anymore. And I wasn't content in the limitations of the profession... and so, uh, I, it really took, it took some soul-searching to try to figure out how I could turn myself around.

For Dave, his informal personal reflection has also been centered on how he wanted his work and educational contributions to look in a 21st century academic environment. He noted feeling "restless... I was kind of frustrated with the limitations to what I could do. I wanted to be able to do more than I could... And so that drove me to kind of keep digging, and start trying things." In his case, reflecting on his discomfort and seeing the skills he did not have, but wanted, led to action. These librarians' experiences suggest

that thinking about the profession and what it offers those interested in meaningful instruction may lead some academic librarians to seek additional learning opportunities.

Formal personal reflection. While interviewees commonly referenced informal reflection activities, some cited structures or formal tools they had used to think about themselves as educators. Sarah noted that in her:

First year as an instruction librarian, after every single instruction session, I reflected... doing that after every time I taught was incredibly informative... both just kind of on a class-by-class basis, but also just, I could see over time how I was changing as an instructor and I could set my goals higher because I had kind of a way to reflect and think about how to reach those goals.

She used a “reflection template that I would type up after every... time I taught,” and she established a “critical friendship kind of relationship with one of my colleagues.” For Beth, she found that, when she “was forced to write my promotion materials and really reflect on teaching... I think I realized then that my perspectives had changed... [as] I was sort of like, looking back on what I had done.” In her case, the university’s administration pushed for this kind of structured reflection. She said that:

Our Provost has been very supportive of [a teaching personal statement]... it sounds kind of stupid that this promotion process would help, but the way that... he has encouraged people to sort of – it’s not a mandate, but you know when the Provost says do something, you usually do it... [So] we do these academic portfolio workshops every year... [and] that support structure... has helped me reflect.

These librarians’ experiences suggest that formal structures can facilitate reflection and help academic librarians experience perspective transformation around their teaching.

Reported Impact of Experiences or Resources on Perspective Transformation

In understanding participants' reported experience- or resource-based influences on their perspective transformation processes, I present two sets of themes. First, the quantitative findings offer which predefined experiences or resources participants felt influenced how they thought of themselves as educators. Second, the qualitative findings present themes I identified through coding and analysis of interviewees' comments about their transformative experiences. While these concepts may echo participants' responses to a predefined survey item, they emerged directly from my conversations with interviewees. These themes include: teaching as an activity to learn how to teach; technology in information literacy instruction as changing educational responsibilities and aims; and the importance of formal and informal professional development in ongoing learning and perspective transformation.

Quantitative findings. On my survey instrument, I also asked those respondents who reported either that they had experienced a time, or that they were not sure if they had experienced a time, when they realized their values, beliefs, opinions, or expectations about their work as an academic librarian to reflect on the experiences or resources that may have affected this change. In item 18, I provided 19 pre-defined response categories as well as an "Other" option for participants to select; they could also indicate that no experience or resource had influenced their process of change around their teaching identities. Respondents could select all experiences or resources that had affected their experience of perspective transformation.

Of those participants who responded to this item ($n = 304$), 209 indicated that reading the scholarly literature on information literacy instruction had influenced their perspective transformation process, and 177 indicated that reading the scholarly literature on the scholarship of teaching and learning had influenced their perspective transformation process. Teaching experiences were also important, both in terms of individuals actively providing instruction (182 respondents), observing others in practices (179 respondents), and receiving feedback from students (125 respondents). Participants indicated that professional learning experiences were also formative in developing their teaching identities: 194 indicated that attending a meeting, conference, or workshop outside of their normal working environment had affected their thinking about their teaching, while 147 noted that such events within their working environment had helped to shape their pedagogical persona and 136 indicated that online webinars or seminars had been influential.

Individuals also indicated that several aspects of reflective practice had influenced their teaching identity development. Eighty-three noted that completing a self-assessment of their teaching practices had been a factor in their perspective transformation, 72 had reflected on their experiences in a written format, 67 had received feedback from library colleagues, and 67 had received feedback from disciplinary faculty on their instruction. Less commonly selected options included teaching online (62 respondents), writing about teaching practices for publication (52 respondents), taking a class or classes in a graduate program outside of librarianship (48 respondents), teaching a blended or hybrid course (46 respondents), and taking a class or classes in library school (30 respondents). Eight individuals indicated that no experience or resource influenced their perspective

transformation experience, and 30 shared other comments that were not reflected in this item's pre-defined options (see Figure 4.6).

Other experiences or resources that influenced perspective transformation.

From those participants who indicated that other experiences or resources had influenced how their teaching identities had developed, several common themes emerged. First, eight individuals commented on the role that non-scholarly sources, such as blogs and listservs, played in developing their teaching identities. One respondent noted that “[r]eading blogs on the scholarship of teaching & [l]earning and on information literacy instruction” had influenced perspective transformation around teaching. Others echoed this sentiment, noting that “relevant blog posts,” “ili-l listserv,” and “[i]nteracting with other librarians on social media” had shaped their view of their roles as educators as well. Five participants named Immersion, a specific professional learning program offered to academic librarians through the ACRL, as transformative to their pedagogical personas. One commented that “Immersion program [and]... writing my teaching philosophy” was a critical experience in perspective transformation. Two other individuals commented on metacognitive experiences, including contemplative pedagogy, mindfulness, and therapy, as important experiences and resources in shaping their teaching identities. And three individuals cited negative experiences – including not being able to teach and lacking support at the institutional level – as formative in their pedagogical persona development. One individual commented that, “[t]here is no change, other than me losing optimism.”

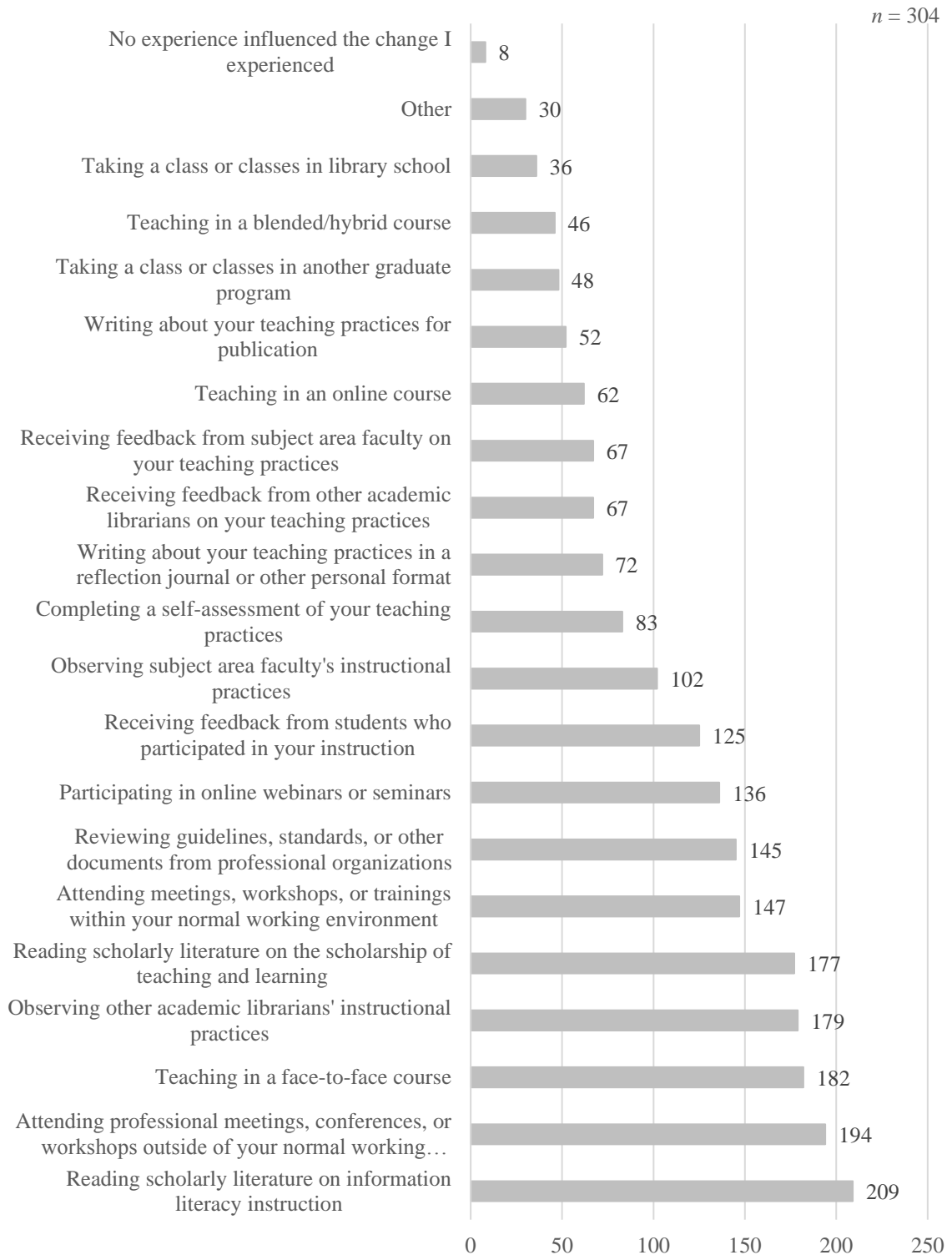


Figure 4.6. Participants’ responses to the question, “Did any specific learning experience or resource influence this change? If so, check all that apply.”

Qualitative findings. In the interviews with participants, they placed less emphasis on engagement with literature on teaching and learning and focused their comments more on how engaging in instruction had shaped their identities as educators. Three key themes emerged from my 14 follow-up interviews. First, academic librarians spoke to the transformative power of acting as an educator or instructor, and how these experiences shaped their views of education in library settings. Second, many identified the role that technology had played in forming, or re-forming, their conceptions of themselves as educators. And third, they emphasized how relevant professional development had been in developing their pedagogical personas.

Teaching as an activity to learn how to teach. Many of the interviewees spoke about how actually teaching in classrooms had directly impacted their views of themselves as educators as well as their instructional practices. These comments largely centered around three themes: how repeated practice in teaching led to more fully-formed teaching identities; how instruction had caused academic librarians to reconsider their expectations, both of themselves and of students; and how teaching in different settings helped some librarians to think about their roles as educators.

Evolving practices, evolving perspectives. For several respondents, the repeated and cumulative act of building a personal instructional approach helped them to work through perspective transformation around their teaching. Christina noted that as she taught more, “I started preparing for classes differently... I also started maybe, like, making more flexible lesson plans... so if I ask students... are you familiar with X, and they all raise their hands, then I can skip that part.” This shift in her practice – away from

writing “a script and [wanting]... everything to go exactly as planned” developed in part from her hands-on experiences with students and information literacy instruction.

Similarly, Sarah reflected on her initial experiences in information literacy instruction and identified how in-class work changed her teaching views and practices:

I think initially, I was so nervous that all I could think about was, you know, like, am I breathing, do I sound shaky, am I, am I loud enough... so once I got over that, I think very quickly, I started to like, even just the act of looking around the room and seeing instead of just kind of looking straight back. So seeing who is there, and then starting to realize like, okay, they're starting to fall asleep. I need to change my, my delivery.

She also commented that her experiences teaching in, “the same kind of very similar classes multiple times, I started to think, *uh you know, wait a second, I don't think what I was doing was working. What is it exactly that I am trying to do?*” Jenna echoed these comments in noting how her hands-on instructional experiences had shaped her teaching identity. She said that:

As I started doing a lot of instruction and working with students more... [it] really changed the way I thought about how librarians should be supporting these students and... how instruction could work to help them get the information literacy skills that they need for whatever project they're working on and also just, like, life skill information literacy.

For these academic librarians, their instruction sessions built on each other and helped her to hone their teaching identities over time.

Teaching and reconsidering expectations. Other interviewees commented on how teaching in classrooms led them to broader considerations about their expectations about themselves as educators and the students in their classes. Similarly, Emily referenced her first experiences in information literacy instruction – as a graduate student – as formative to her teaching identity. Before she took on these responsibilities as a graduate intern:

I didn't understand, um, that I was even, I was considered an educator, I guess... uh, before I started grad school... I was like, "Oh, I never want to be a teacher – I don't, I don't think I could do that."... And I think... it was [my] instruction internship [in graduate school] and working with students and sort of, like, seeing those aha moments... that really sort of, like... made me change my mindset... and really helped me to see myself as... an instructor.

In her experience, then, her experiences with students led her to reconsider what she thought was important about her work in librarianship. Other respondents referenced how they grappled with their instructional and library-centric expectations as they experienced perspective transformation around teaching. As noted earlier, Lynne's teaching identity development process began when she felt uncomfortable in library instruction. She said that she was:

Very surprised at how uncomfortable I was in front of a classroom at the community college.... I was part-time and didn't know the faculty or students very well... but I also think it was a lot about that... the one-shot [instructional format] did not feel natural to me.

From this discomfort, she explored alternatives, such as active learning strategies and embedded librarianship relationships. In her case, then, teaching was an initiating act to thinking about her role as an educator in a new way. Kathy's experiences with students forced her to examine her expectations as well:

I took for granted that, if you were in college, you had certain skills that you brought with you to college. And I found that that's not necessarily the case... You go in and you have all these high expectations, and some groups it works really well and you actually can move above what you had expected... other groups, if you're going to benefit the group, you have to back off and maybe not have as high of an expectation.

In her case, then, these assumptions dealt with both students' performance and her role in the classroom. Working with her students and understanding their needs, goals, and abilities experiences helped Kathy to see herself as a resource and facilitator to help

students achieve their own goals rather than to meet her externally-determined goals for them.

Teaching in different instructional environments. Different instructional environments – both in and out of librarianship – affected how some interviewees’ instructional identities had developed. For example, Nancy noted that, from her experience working with students, she realized that “how you teach is almost more important than what you teach.” Her experience teaching a “college skills class... [where] students were really involved, they enjoyed it, they weren't falling asleep, they got, they understood the concepts” highlighted this point, especially when she “would teach a library workshop and I would put those students to sleep.” She said that she “realized that the difference... [was] not really content, it's what we were doing in class with it.” The acts of teaching, then, in different settings and with different pedagogical approaches, helped Nancy to reconsider what being an educator looked like to her. And for Helen, who came to academic librarianship after a career in the corporate world, working with different student populations helped her get a sense of how she could demonstrate her teaching identity in different classroom settings:

When I started working as a librarian... I was working at the [large research university] for a period of time, and they had a very rigidly prescribed, um, presentation that was not very engaging... it was a real struggle to keep the students on task... you know the younger set tends to be more tech-savvy. I then started working for a, uh, um, a different university, um, [for-profit university], with non-traditional students, people who were not as tech-savvy, and while working there... I was able to get a feel for pacing and how much creative license I could use as I was presenting in order to keep my students engaged. And of course, the needs of the student population were very different... I feel like I found my niche and uh better pacing and how much creative license I can use.

Her experiences in different classrooms, then, helped her to develop an instructional identity and approach that could be nimbly adapted across settings and situations.

Technology and information literacy instruction. Interviewees also mentioned that they had experienced perspective transformation around their instructional identities because of how they used technology in their teaching practices. For some, gaining access to students through a campus learning management system helped them expand their instructional work and identities. For others, they focused on how they could use different technology tools to accomplish educational objectives. Several respondents mentioned how technology had caused them to rethink their instructional boundaries, and in some cases, technology and online learning support staff had helped them in this process. Importantly, though, there were some interviewees who pushed back against the idea of technology as a universally-helpful resource for academic librarians committed to effective instruction.

Learning management systems as library resources. Lynne commented on the role that her institutions' course management systems played in developing her instructional identity. She said that these tools have "given me the ability to work with students in a different way. So in addition to being very collaborative in face-to-face courses, I'm also very integrated into online programs." Embedding in these broader technological systems helped Lynne to reach all learners in her liaison areas and reframe what being an educator librarian looked like for her. Jenna had also used online learning management tools to advance her instructional practices and sense of herself as an educator. She said:

[When] I started teaching online... it was mostly in discussion boards so, you know, whoever was the instructor of record for the class would give me partial access. And often they... would want me to have just sort of an open discussion with students, either about refining their research questions or, um, finding sources for their, once they decided on a research question. And that worked okay... but especially in that evidence-based nursing class, I found that the same, the same questions were coming up over and over again... and they didn't necessary seem to really get through... So then I started developing an interactive tutorial... [that's] evolved a lot because I kept encountering new and different issues, but but the good thing is that students now do seem to end up with questions that meet the criteria more often.

She continued to say that while she found herself doing less direct instruction, the students “actually understand the material better afterwards and can apply it.” Other librarians had similar comments about shifting instructional strategies online. Nancy shared how using technology in her teaching has focused her instruction and facilitated student engagement:

When I first got here, students had to attend a library skills workshop... but when they came to the workshop, and I don't know why we ever let this happen, they were not required to have a topic. So what I was doing was a 55-minute information speech... about something that they didn't really care about because they don't, they, they only had their research paper assignment... [so] what we did was that I took the demonstrate-a-database aspect of it and made videos and put them in Blackboard. Students had to watch those videos and select a topic before their library workshop. So now they show up with some, some knowledge about... the difference between subject searching and keyword searching. And they have a topic. So I do a much more abbreviated demo, like look you already know how to do this; remember the video? That takes like, a minute. And then I say... let's start pulling some sources.

While she used technology to both deliver and share her instructional content, Nancy did say that “it was really hard for me to stop talking and let them do things because it felt like if I wasn't talking, they weren't, quote, learning.” While technology has helped her to address specific learning needs, then, she was still adjusting to what these tools meant for how her teaching identity presented to learners.

Using technology to accomplish key educational goals. Other interviewees discussed how they had used technology, or thought about technology, in terms of accomplishing specific learning objectives. Christina shared how she used technology tools to foster student collaboration and encourage engagement in her instruction sessions. She said:

I've been using collaborative technologies like Google Docs and Padlet a lot... on a very basic level, students are like, you know, writing things down and seeing what other people write down, and um, you know having to articulate about, like, their topics, search terms, or how they think about a source... having the ability for them to do that... has made that all a lot easier, I think... I just realize it's made it a lot easier, to get that like, student interest, um, in in there

Beth discussed working in ongoing instruction-focused technology projects and how these tasks helped her reframe her sense of herself as an educator. Specifically, she talked about her work on a tutorial designed for first-year composition students, and how this tool provided assessment data:

The data that I got from this [tutorial] – because they take a pre- and post-test – not that I think it's so super effective but, the fact that we were able to [get]... some of the best assessment data we [have ever] gotten for instruction... it made me sort of appreciate or see some more potential in doing more technology-based teaching... I had to sort of, um, also accept that... what I do with tutorials and teaching online is also... important and, um, can be effective if it's done well.

In this instance, then, online learning's potential for assessment encouraged Beth to consider how her teaching identity could accommodate developing instructional formats as well as traditional face-to-face teaching. And more broadly, Dave addressed how his teaching and technology experiences have helped him to see how these tools should be used in instruction:

There are other times that I've realized that, um, the best is to get the tech out of the way, you know? And uh, and a paper and pencil solution is best. So it isn't like one is better than the other... it's really looking at the outcomes you want to

have and the objectives you have, and seeing... how could technology do something that I couldn't do with paper and pencil, you know?... I think I've gotten to a point in my practices... [that] I can discern when it's best and when it's not. That's what I hope, anyway.

Through his experiences, then, Dave has learned to use technology intentionally and to help accomplish student learning outcomes.

Technology as shifting what “teaching” means. For some respondents, using technology in their teaching caused them to rethink what teaching could mean. Sarah, who described herself as a “pretty early-career librarian,” noted that, “as I grew as an instructor, my interest in online learning kind of grew at the same time.” Beth, who had been working as an academic librarian for less than ten years, noted that her instructional format had evolved, too: “I have also been teaching less face-to-face in the last couple of years anyway, um, ‘cause I’ve moved to more of an online, technology-focused teaching.” Nancy mentioned that she “realize[d] now that in order to help students, you don't have to stand up in front of them and show them how to do things... you can deliver that learning object in multiple different ways.” Jenna said that her experiences working with students online had led her to shift her view of what she could do as an educator. She asserted that, “how I am viewing instruction more and more these days [is], in terms of, ok, so if this is the goal, how can I make sure students are meeting that goal, whether or not that looks like traditional instruction?” Her hands-on experiences online, with their successes and failures, then, led her to reconsider what library instruction can look like more generally, and what kind of postsecondary teacher she wanted to be more specifically. And Dave addressed how technology had affected what he saw as his responsibilities as an educator librarian. He said that:

There are these assumptions, I think that we a lot of times make... about traditional age learners, you know that they're very tech-savvy and such, but I also know from talking to others that they're maybe not tech-savvy in the way we think they are, or the way that we expect them to be as college students. So... my focus is information literacy, but I think technology literacy is part of it. Because if they're going to produce information in a way they're expected to do in the academic world, they'll need these kinds of skills in, in this day and age

From his experiences and perspective, then, digital age technology tools broadened what information literacy instruction should encompass and expanded what he could do as an educator.

Technology support staff as valuable resources. A few interviewees also referenced the technology support staff at their institutions, and how these individuals' work had supported their teaching identity development. Beth said that the e-learning support staff at her institution had provided encouragement for teaching online, while Dave mentioned that:

Our coordinator of online courses here on campus... is, um, essentially a technologist – he doesn't play a role in um guiding faculty... [on] how to develop content... by sitting and talking to him in his office, I've, I've learned an awful lot. That was when I first really started thinking about the importance of pedagogy versus a technology focus, and he had that notion even though... that's not his role on campus.

Jenna also noted that her work with “some of the instructional designers who support [online] classes... [had] been really useful as well” in shaping her thinking about technology and her teaching. Collaborating with these technology or e-learning experts may help academic librarians to develop teaching identities in intentional ways.

The downsides of technology. While many interviewees noted how technology had played a role in how they thought of their roles as educators, not all viewed it with unbridled enthusiasm. Kathy said that, although she did a lot of teaching online, she was:

So incredibly tired of having to learn new things... but it's a tool – and I'm not the first adopter, but when something is useful and it can help... bridge a gap, especially between the distance students [and on-campus students], then we use it constantly.

Teresa commented, “I don’t see technology as being an automatic enhancement in teaching and learning. I think it, most likely, will distract from teaching and learning unless it’s done well.” She went on to describe her experience designing a library skills-focused online resource (in the style of a massively open online course) with colleagues. While it was meant to standardize instruction and ensure all students had the same information literacy instructional experiences, she noted that “we didn’t assess it the way it should have been assessed, or... we didn’t evaluate it [fully].” She then said, “I kick myself in the butt all the time” about this issue, because the online course had become the de facto library instruction for many disciplinary instructors. In this case, then, technology had replaced at least part of her instructional duties, and Teresa felt that she couldn’t fully understand its effectiveness or impact. Using technology to restructure library instruction meant she and her colleagues lost some measure of control.

Although technology can be a challenge to some academic librarians’ teaching identities, Dave offered a perspective that helped him to grapple with instructional technology issues on his campus. In speaking to how he thought educators and institutions should approach technology should fit in an educational environment, he said that during:

A product demo... I was thinking, *how would I use this in instruction? How would I, how would I use this in teaching?* And what slowly started to dawn on me is, these guys aren't teachers, you know. And, and actually the instructional technology person there did not have an instruction background, either. And the lightbulb slowly started to go off over my head that we had things backwards. That you know, that you bring technology, you show us what we can do, and then we try to fit it into what we're doing. And it should be the opposite – it should be driven by what we're already doing or want to do in the classroom, um, or online... so I sort of started to recognize the importance of a person who... had that pedagogical understanding and approach to technology so that you're not just trying to, um, do whatever is the fad or whatever wee, whatever tools are out there and trying to make them fit to what you're doing... But the challenge is having somebody in place who kinda understands that and can facilitate that.

Dave's perspective may be helpful for those academic librarians who are struggling to identify what new technology, online options, or other digital tools mean for their teaching identities.

Formal and informal professional development. Finally, the academic librarians interviewed discussed how different professional learning activities impacted their teaching identities. For some, they engaged in faculty development at their institutions, often through a center for teaching and learning. For others, their experiences at external professional events, such as conferences or immersive learning programs, had influenced their instructional identities. And still others had been, or were engaged in, ongoing continuing education to better understand themselves as educators.

On-campus learning. Several interviewees discussed how on-campus offerings, especially through a campus teaching center, influenced their teaching perspectives and practices. For Beth, her work with the campus faculty development center led to her “being more involved with other faculty members on campus more, and seeing how they teach, and sort of feeling like I'm one of them instead of... someone different who does

something different.” In particular, she noted that she had done a weeklong “course design [professional development institutes]... and that [writing student learning outcomes] was really one of the... big main ideas that we talked about.” This experience helped her to consider whether academic librarians teaching information literacy “should really be starting with the ‘What do I want students to learn?’ and coming up with the outcomes first and sort of planning backward from there.” This realization represented a shift away from the attitude Beth saw in many disciplinary instructors and academic librarians alike; she said, “people tend to focus on what they want to cover in a course... especially planning one-shot instruction sessions.” Christina, too, had taken advantage of the teaching resources on her campus. She said:

We have a center for excellence in teaching at [my institution]... [and] it's been a really great instructional support for me. Not that I just learn things at the workshops that they do, which I do, but... [also to see] what other faculty are doing and for them to see me as an educator, too... I mostly go to this series on active learning that they do... and I think, you know, when I go to those meetings, you know there are people... [who] like, chat about what that means.

For Christina, then, engaging with others outside of librarianship around teaching had helped her think more broadly about her role as an educator.

Some librarians had been more involved in on-campus learning offerings, either in conjunction with a teaching center or in partnership with other librarians. Jenna had collaborated with her campus’s teaching center as both a facilitator and learner noting that:

We have a great center for teaching and learning that the library has worked pretty closely with. Sometimes we work with them as colleagues and sometimes I just go to their workshops and learn interesting things as an instructor, so that's been really valuable.

And Emily commented on the role that on-campus professional learning played in helping her to establish her teaching identity. During her graduate internship in instruction, she participated in:

Workshops... [focused on] talking about learning outcomes talking about assessment, the four of us interns really getting together and talking about instruction, um, and it was only after I think that internship that I realized... it's like I realized I didn't really, I still didn't really know what information literacy was, but I knew that it... was important and... I still wanted to learn more about it. And so I think that's where the passion for this work came from.

These different experiences, then, present different options that can help academic librarians develop how they view their roles as educators in post-secondary environments.

External professional learning opportunities. Other interviewees mentioned external professional learning opportunities that had helped them form their pedagogical persona. For Christina, a selective professional development program impacted her practices:

I went to, um, ACRL Immersion five years ago now, and that was really the first place that I felt like I got like formal, structured feedback on a lesson plan or an information literacy plan.... that really... started me thinking about, that was like something that I could do even, is like have these colleagues... who are interested in the same things and exchange ideas with.

Beth spoke of similar conference-based experiences as influential in her teaching identity development. She had attended “LOEX conferences where it's focused on instruction, and... did the ACRL Immersion program for teaching.” These experiences helped her in, “connecting with other librarian educators and talking primarily about teaching.” Lynne also reported she had experienced transformation in part because of a professional conference, saying that “a huge... part of the transformation for me was when I went to

ACRL in... 2013.” As part of this conference experience, she learned more about active learning; she then incorporated this knowledge into her teaching practices and her interactions with her colleagues. Joann, too, found inspiration for transformation at an academic library conference. She said:

I went to the Georgia Information Literacy conference one fall, and, and they started talking about [instruction in first-year writing]... in the construct of the citation project. And I came back and, and I just I used that as my... Kairos moment of, oh my God, like, my world shifted at that moment.

As with other interviewees, Joann’s professional learning at an instruction-focused conference helped her to grapple with the challenges she felt around her teaching identity and educational practices.

Formal continuing education. Several interviewees commented about formal continuing education as transformative to their teaching identities. For Sarah, working with technology in her teaching inspired her to continue her education:

I really loved the idea of making online tutorials and working with the software and so I started right away doing that sort of thing... I'm earning my adult learning and development degree, and I chose to do my internship with our institution's... center for e-learning, so really all my projects had to do with creating online learning objects and putting them in our LMS... now I'm kind of serving as a liaison between the library and that department... it's kind of like my identification as, um, an instructor in an online environment just keeps growing.

In her case, using technology had shaped her ongoing coursework, but her coursework also directly informed how she demonstrated her instructional identity. Dave had pursued continuing education and approached it in a similar way. While he began by taking a continuing education course online that focused on how librarians could better serve online learners, what he found and how he applied it to his view of himself as an educator spurred him to future study:

I had been through that first continuing ed course... I had this instructional design phrase in my head and I was like, oh, okay... I started googling some stuff to think about possible further um, education I could do. And I didn't know what that was going to be... at the point, I just wanted to enhance myself as a librarian... I came across, um [a] program at [a large research university]... looking at the descriptions I thought, oh wow this is perfect. Because it was the kind of stuff I wanted to do.

For Dave, this opportunity to continue his education helped him to see the instructional role he could play by pushing the boundaries of his knowledge beyond librarianship only. Joann reported experiencing a similar shift, although her move toward continuing education was rooted in feelings of discontent. She said:

I felt I was in a rut and I, um, I decided it was time for me to go to back to school and to, you know, revisit what else was out there and to really try to blend together information literacy with writing and... specifically first-year, of seeing what these students need and try to get a bigger handle and understanding on my own knowledge base for it. So it, it was what transpired that I decided to go back... to try to work on a PhD.

While Joann reported experiencing discomfort around her work as an educator, this sensation prompted her to revisit her teaching identity and how she could most fully meet students' needs.

Reported Impact of Work-Related Events on Perspective Transformation

In understanding participants' reported professional event-related influences on their perspective transformation processes, I present two sets of themes. First, the quantitative findings indicate which predefined work occurrences participants felt influenced how they thought of themselves as educators. Second, the qualitative findings present themes I identified through coding and analysis of interviewees' comments about their transformative experiences. While these concepts may echo participants' responses to a predefined survey item, they emerged directly from my conversations with

interviewees. These themes include: how changing work environments have influenced individuals' teaching identities; and how being a part of a profession in flux has led academic librarians to experience perspective transformation.

Quantitative findings. On my survey instrument, I also asked those respondents who reported either that they had experienced a time, or that they were not sure if they had experienced a time, when they realized their values, beliefs, opinions, or expectations about their work as an academic librarian to reflect on the experiences or resources that may have affected this change. In item 19, I provided seven pre-defined response categories as well as an "Other" option for participants to select; they could also indicate that no work-related event had influenced their process of change around their teaching identities. Respondents could select all work events that had affected their experience of perspective transformation.

Of those participants who responded to this item ($n = 288$), 123 indicated that no professional event had influenced their processes of perspective transformation around teaching. Seventy participants noted that a change in job duties had shaped their thinking about their roles as educators; 50 individuals responded that a change of job had prompted such thinking; and 48 respondents felt that their first professional jobs after library school had impacted their perspective transformation. The other options were less frequently selected as influences in shaping academic librarians' views of themselves as educators, including completion of another graduate program (17 participants), completion of library graduate program (16 participants), and the loss of a job (two

participants. Twenty-eight individuals indicated that another work event had impacted their pedagogical personas (see Figure 4.7).

Other professional events that influenced perspective transformation. Several themes emerged from the 28 respondents who indicated that another work-related event had impacted their perspectives about their roles as educators. From these responses, the most commonly-cited work event was a supervisory or administrative change: five individuals noted that either a “new Dean,” “[n]ew Associate University Librarian,” or a “[c]hange of supervisors” led to a change in instructional focus. Three individuals commented on a change of status in their work: “[g]aining faculty status,” “receiving tenure,” or taking on new work in assessment were also cited as professional factors that influenced perspective transformation. Two other individuals noted that the profession of librarianship was experiencing broader changes, and that these shifts impacted their own views of themselves as educators. One participant commented that “my professional life is constantly changing,” while another noted that “since the beginning of my career I’ve been afraid that my job (academic instruction librarian) might become obsolete... So [as a result, I’ve focused on] expanding my skills beyond traditional instruction librarianship and into instructional design... to make myself more valuable.” These comments speak to the larger-scale shifts that academic librarians may see in relation to their job duties, work environment, or the nature of libraries more generally.

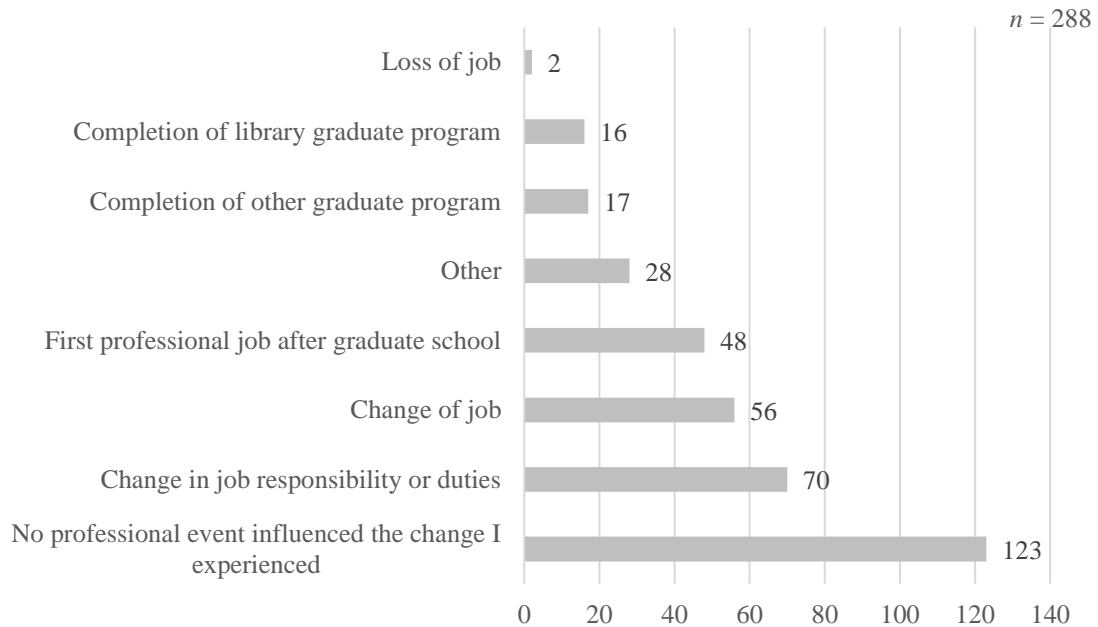


Figure 4.7. Participants’ responses to the question, “Did any significant professional event influence the change? If so, check all that apply.”

Qualitative findings. In the follow-up interviews, my conversations with the participants echoed my survey findings. Interviewees did not speak about epochal events in their professional lives as transformative, although some mentioned changes in jobs or new professional positions as relevant in shaping their views of themselves as educators. Instead, these individuals highlighted how dynamic instructional responsibilities evolved in tandem with their own personal perceptions of their roles as educators. In these discussions, this group of academic librarians demonstrated their openness to change; flexibility in adapting to student and faculty needs; and willingness to engage in a profession they saw as in flux.

Changing work environments and teaching identities. For some interviewees, their experiences in different work environments led them to consider their teaching identities in different ways. For example, Christina noted that two different work environments fostered different aspects of her pedagogical persona to develop:

I've really been professional librarian at two places. The place where I was at my first job, and then where I am now. So the, the place I was before was a... business university, so all students majored in a business discipline... [so] they took, like, a very instrumental approach to education... lot of times their attitude was, 'How is this going to help me?'... that really did help to change my perspective... [but] it also influenced the way that I sort of like worked with faculty... on assignment design or for library instruction... [Now at my] large research university... I think it's kind of like a, almost a negative, influence... like anti-influence. That a lot of librarians here, um, [who] aren't really excited about teaching first-year students, which is where a lot of our instruction happens... So, I think almost in like a contrary way, I want to work really hard at making that first-year instruction, um, student-centered.

In her work experiences, then, Christina was forced to consider how to focus instruction on the learners, but in different ways and in response to different inputs. In commenting on her experiences, Lynne noted that:

At the institution I worked previously... I made the transformation from one-shots uh to being embedded in a program. I'm a health careers librarian, and I found it amazing how the health careers subject faculty really embraced the idea of a librarian being more involved with their curriculum planning, with their classroom, with their students... that is actually I think a big reason why I was hired here... I'm fairly unique in, in the way I see myself as a library educator and the fact that I am so collaborative with subject faculty.

While she transformed her view of herself as an educator-librarian at another institution, she worked to advance that view – and help others work through similar transformations – at her current institution.

For others, though, a shifting in job responsibilities impacted how they thought of themselves as educators. Sonja spoke about this concept generally, saying:

What your job duties are and your title, I think, can matter in these kinds of situations... if you're an intern or graduate assistant, um, versus a... professional librarian with liaison responsibility, um, [or] an instruction librarian with no liaison responsibility, I think... it all impacts, um, what you might think of, of librarians as educators... as well as the opportunity [you have to develop that idea]... I think it's, you know, the climate of the library culture and the institutional culture also tied in with, like, your job title and your expected duties.

Joann was one interviewee who reported having experienced the differences that a job title and its corresponding responsibilities could make in her thinking about her teaching identity. When she returned to academic librarianship after working in other academic capacities, Joanne noted that:

I was now head of a department coordinating nine liaisons' information literacy work and instruction... We started to think about how we, how we taught [first-year students' information literacy instruction], what students did, what they needed, and, and I was becoming increasingly frustrated with this feeling that we... were taking them to the edge of the cliff, and I use this all the time in presentation things, taking them to the edge of the cliff and then, you know, pushing them off and saying, 'Well good luck with that!' And we'd have students come back and they weren't asking how to find as much as what to do with... I just decided we needed to think about it differently, how we approach information literacy [and] what we do with it.

Like Lynne, she both transformed her own thinking about teaching and worked to help others do the same. For other academic librarians, though, these shifts might happen within an existing position. Dave spoke about his experiences taking on more instructional design work while still serving as an instruction librarian:

I'm still an instruction librarian – my title hasn't changed. But... I was asked to begin supporting also online instructors. And so I'm doing instructional design with about ten hours of release time from my week... I'm feeling really worn out, honestly, but, um exhilarated, you know... I'm making myself into the kind of professional I wanted to be but um, you know, it's a little, it's exhilarating and a little nervous at the same time.

In terms of his teaching identity, then, his work as an instructional designer both enriched and challenged his own conception of his role as an educator.

Engaging in a dynamic and evolving profession. Other interviewees spoke to the idea that the profession of academic librarianship was changing more broadly, even if their job descriptions or work requirements stayed the same on paper. For instance, Helen felt that:

Information literacy in the Information Age has changed so dramatically and I think that what we're doing, uh, a lot of the time is teaching critical thinking skills as we're doing information literacy and that's something that I never expected to be doing.

This changing instructional responsibility, then, affected how she saw her role as an educator. She went on to elaborate:

I think that with librarians especially, we're not teaching content in the traditional sense of the sage-on-the-stage. We're teaching a, a skill-set and a way of seeing... going back to critical thinking... I think that, that's changed a lot as I've moved through it and getting people to think critically, uh, is really what information literacy is all about as I see it now... I look at it in much broader terms now so that they can... transfer that skill-set to other aspects of life in general and their studies in particular.

From her view, then, academic librarians' work was continuing to evolve as information literacy, critical thinking, and how students demonstrated these knowledges and skills evolved. Sarah echoed those comments, saying:

The impression that I get about... academic libraries and the purposes that we have is that it has changed a whole lot and so when I think about, the more I learned about that, too, about how what we used to be is very different from what we do now, or the, the kind of roles we have now, the more I realized how important we could, our, our role could be as information literacy... instructors.

And Kathy noted that, over the last “five to eight years, at our library – and I think in publishing and in education – I think personally our role has, has increased... there's more value placed on what the librarians can offer, you know.” These interviewees' statements suggest that academic librarians' teaching identities may evolve as their roles

change more broadly within higher education. One interviewee noted a specific profession-wide shift as an ongoing influence on her teaching identity. Christina discussed the role that critical librarianship was playing in her ongoing perspective evolution. She said that she had:

Delved into [it] a lot more in the last couple of years. And has been kind of a struggle, 'cause at first... I didn't really feel like I understood it or that it was such a closed community... but now I feel like, I don't know, like another dimension of a perspective shift. It's just like, a way to think about one way of a reflection-centered teaching approach.

This focus represents a growing area of academic librarians' scholarly and professional discussions, and she saw it as an area for future identity development. These observations and experiences suggest that broader professional shifts may impact how academic librarians' senses of themselves as educators form.

Two other interviewees focused on the profession more generally and how challenges they encountered affected their pedagogical persona development. For instance, Joann said that her transformation process was spurred on, and she specifically sought out additional graduate education in another discipline, because she “wasn't content with what the profession was offering, I wasn't content in the limitations of the profession, I wasn't content in the literature, you know, that I thought just bitched and moaned about the same stuff over and over again.” These broader profession-wide concerns motivated her to seek additional education and opportunities for scholarly connections with other disciplines (i.e., writing). And Dave remarked on how librarianship's limits had been magnified in the current educational climate:

The reason I started thinking about changing directions was some things in... being a librarian are just hard. You know we make it hard for ourselves to get data... and everything is driven by data now. So it becomes very hard to

demonstrate your value, and I know that librarians are talking about this, I mean, and there, you know, a lot of people I'm sure doing great work on it. It's just super, super hard to do something, make an impact, and show that you've made an impact, you know... the limitations of, of the field... [are] one of the things that got me thinking, you know, could I make a more demonstrable impact... and get rich data about it and say here's what I did [in other instructional ways]?

Like Joann, his sense of these restrictions motivated him to action outside of the discipline to better understand himself as an educator. These comments suggest, then, that academic librarians may experience perspective transformation by looking into other academic areas that connect with their practice.

Relationships between Participants' Demographics and Transformative Factors

I also sought to understand the relationships between demographic categories and transformative factors in addition to analyzing the frequency statistics and participants' qualitative responses about the people, experiences, resources, and professional events that shaped their teaching identities. I used the variables I identified through my factor analyses on items 17, 18 and 19 to conduct these analyses. For those people who may have impacted participants' perspective transformation (item 17), I identified four factors:

- Supportive relationships or interpersonal dynamics in the perspective transformation process;
- Change motivation from supervisors or those in administration;
- Change motivation from colleagues; and
- Other participant-identified individuals who influence change.

From those experiences or resources that may have impacted participants' perspective transformation (item 18), I identified five factors:

- Self-directed professional learning experiences;
- External-facing actions or behaviors;
- Input from non-librarians (e.g. discipline faculty, students);
- Input from those with a library-centric perspective (e.g. colleagues, self, library school experiences); and
- Self-reflection or other participant-identified experiences/resources.

And from those professional events that may have impacted participants' perspective transformation (item 19), I identified three factors:

- Completion of graduate education (both library school and other graduate programs);
- Change in overall job status, including loss of, change in, or new employment; and
- Change in job duties or other participant-identified professional events.

I used these variables to measure the relationships between each demographic category and factors that may influence perspective transformation.

For demographic categories with categorical responses – gender, race/ethnicity, education in addition to a master's in library/information science, institution type, and instructional formats (e.g. face-to-face, online, blended/hybrid) – I used one-way analysis of variance (ANOVA) to measure the relationships between the twelve factors and participants' responses. While I represent these results in the following section, additional

information about the results of these tests are in Appendix D; in each of these tables, I represent the mean and standard deviation for each group, as well as which post-hoc comparisons were significant using a Least Squares Distance (LSD) comparison test. For demographic categories with continuous responses – age, education level, graduation from Master’s in Library/Information Science, time at current institution, time working in instruction, and instructional frequency – I used Ordinary Least Squares (OLS) regression analysis to determine if significant relationships existed between the twelve factors and participants’ responses. I used Jacob Cohen’s (1988) guidelines on effect size to indicate the strength of any significant relationships.

Gender

There were no statistically significant differences between the gender categories of female, male, and those who preferred not to indicate a gender for any of the twelve factors of: supportive relationships/interpersonal dynamics; change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; external-facing actions or behaviors; feedback or input from those outside of librarianship; feedback or input from those with a library perspective; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Qualitative data related to these twelve factors. Neither survey respondents nor interviewees commented on the relationships between gender and the various factors that influenced academic librarians' perspective transformation around teaching.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' gender and teaching identity development through my qualitative analysis processes.

Race/Ethnicity

Because of the small numbers of respondents who were parts of non-white racial or ethnic minority groups (Hispanic or Latinx, Black or African American, Native American or American Indian, Asian/Pacific Islander, Other, Multiracial, and Prefer not to Say), I combined all non-white responses into a single category for analysis purposes. There were no statistically significant differences between those who were white or Caucasian or part of a non-white minority group for the factors of: supportive relationships/interpersonal dynamics; change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; external-facing actions or behaviors; feedback or input from those outside of librarianship; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Feedback or input from those with a library-centric perspective. I did observe a difference, though, between white and non-white respondents in terms of their reported

influence of feedback from those with a library-centric perspective ($F = 4.563$, $df = 352$; $p = .033$). In the data presented in table 4.1 (as well as Appendix D, table 20), non-white minority respondents indicated that the importance of feedback from within the profession was 43 percent above the overall mean. These results suggest that those academic librarians who are part of a racial or ethnic minority group are more likely to have their teaching identities transformed in part from colleagues' feedback or guidance than their white or Caucasian counterparts.

Qualitative comments about library-focused feedback or input. Neither survey respondents nor interview participants commented on the relationship between their racial or ethnic identities and the role of feedback from others with a library-focused perspective.

Table 4.1

Race and Ethnicity Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.11	1.12	Non-white minority
Non-white minority	.15	1.32	White

*p < .05

Qualitative data related to these twelve factors. Neither survey respondents nor interviewees commented on the relationships between race/ethnicity and the various factors that influenced academic librarians' perspective transformation around teaching.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' race or ethnicity and teaching identity development through my qualitative analysis processes.

Age

There were no statistically significant differences between participants' age and the following factors: supportive relationships/interpersonal dynamics; change motivation from supervisor or administration; other participant-identified interpersonal relationships; self-reflection or other participant-identified experiences or resources; feedback or input from those outside of librarianship; and completion of graduate education.

Change motivation from colleagues. There was a small significant positive relationship between participants' age and the impact that change motivation from colleagues played in their perspective transformation around their teaching identities ($t = 2.202, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their colleagues' challenges for change or growth ($R^2 = .014, p = .028$). Every one standard deviation increase in academic librarians' age was related to a .117 standard

deviation increase in role that the change motivation they reported having experienced from colleagues played in developing their teaching identities.

Self-directed professional learning experiences. There was a small significant positive relationship between participants' age and the impact that self-directed professional learning played in their perspective transformation around their teaching identities ($t = 3.383, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their self-directed professional development ($R^2 = .032, p = .001$). Every one standard deviation increase in academic librarians' age was related to a .178 standard deviation increase in the role that self-directed professional learning experiences played in developing their teaching identities.

External-facing actions. There was a small significant positive relationship between participants' age and the impact that external-facing actions played in their perspective transformation around their teaching identities ($t = 2.618, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their external-facing actions ($R^2 = .019, p = .009$). Every one standard deviation increase in academic librarians' age was related to a .139 standard deviation increase in the role that external-facing actions played in developing their teaching identities.

Feedback or input from a library-centric perspective. There was a small significant negative relationship between participants' age and the impact that feedback

or input from those with library knowledge played in their perspective transformation around their teaching identities ($t = -4.182, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their experiences with feedback from other librarians and library school instructors ($R^2 = .048, p = .001$). Every one standard deviation increase in academic librarians' age was related to a .218 standard deviation decrease in the role that feedback from those with a library-centric perspective played in developing their teaching identities.

Change in overall job status (new/change/loss of employment). There was a small significant negative relationship between participants' age and the impact that changes in their overall job status, such as a new/loss of/change in job, played in their perspective transformation around their teaching identities ($t = -2.778, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their employment status ($R^2 = .022, p = .006$). Every one standard deviation increase in academic librarians' age was related to a .147 standard deviation decrease in the role that a change in job status played in developing their teaching identities.

Change in job duties and other participant-identified events. There was a small significant positive relationship between participants' age and the impact that changes in their job responsibilities or other self-identified work events played in their perspective transformation around their teaching identities ($t = 2.901, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences

with perspective transformation around their teaching identities in relation to their changes in job responsibilities or other participant-identified work events ($R^2 = .023$, $p = .004$). Every one standard deviation increase in academic librarians' age was related to a .153 standard deviation increase in the impact a change in job duties or other participant-identified work events played in developing their teaching identities.

Qualitative data related to these twelve factors. Neither interviewees' comments nor survey participants' free-text responses commented on the effects of age and the various factors that influenced academic librarians' perspective transformation around teaching. While some interviewees mentioned their time in librarianship, time since graduation, or age, they did not mention these in relation to any transformative factors. Instead, they were comments intended to give context or clarification.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' age and teaching identity development through my qualitative analysis processes.

Education Level

There were no statistically significant differences between participants' reported education level and any of the twelve factors of: supportive relationships/interpersonal dynamics; change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; external-facing actions or behaviors; feedback or input from those outside of librarianship; feedback or input from those with a library

perspective; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Qualitative data related to these twelve factors. Some survey participants indicated that their educational backgrounds, rather than specific educational levels, influenced their perspective transformation around teaching. Several commented on being trained or certified K-12 teachers before becoming academic librarians, and so this pedagogical experience influenced how they thought about their work as educator librarians. Two interviewees also commented on their pedagogical training in similar ways. Sonja mentioned that she was certified to teach in secondary school settings; these background experiences seemed to influence her view of librarian as educator. Lynne similarly mentioned that she had begun her educational career as a writing educator, and therefore had additional training as a teacher. While these comments relate to these respondents' education levels, they focus more on the experiences or training they had and how these factors influenced their perspectives about their roles as librarians and educators.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' education level and teaching identity development through my qualitative analysis processes.

Education in Addition to a Master's in Library or Information Science

There were no statistically significant differences between respondents across educational levels for the factors of: supportive relationships/interpersonal dynamics; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; feedback or input from those outside of librarianship; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Change motivation from supervisor or administration. I observed a difference in relation to the role that change motivation from supervisors or administration played for academic librarians with varying educational levels ($F = 2.214$, $df = 350$; $p = .041$). In the data presented in table 4.2 (as well as in Appendix D, table 26), those who were in the process of more advanced education – and specifically those seeking professional (mean = 1.44) or doctorate degrees (mean = 0.72) – were more likely to report having experienced this kind of top-down push for perspective transformation. However, these groups represented relatively small pools of participants, so these results may overstate the differences that occur. Nonetheless, these results suggest that those academic librarians who are pursuing additional education are more likely to feel a need to shift their thinking from those in administrative or supervisory roles.

Qualitative comments. While survey respondents commented on the role that administrative or supervisory changes played in their perspective transformation process, they did not connect their education level as an additional factor related to these changes.

In my discussions with interviewees, those who had education in addition to a Master's degree in library or information science did not comment on how these additional educational experiences related to change motivation from supervisors or administration, and in turn how this factor related to their teaching identity development.

External-facing actions. I observed a difference in relation to the role that external-facing actions, such as the practices of teaching in a classroom or working with students, played for academic librarians with varying educational levels ($F = 4.219$, $df = 350$; $p < .001$). In the data presented in table 4.3 (as well as Appendix D, table 30), those

Table 4.2

Additional Education Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.06	1.30	Professional degree in process
Additional Master's in process	.28	1.27	No statistically significant difference
Additional Master's	-.20	.85	Professional degree in process, Doctorate in process
Professional degree in process	1.44	2.72	No additional education, Additional Master's, Professional degree, Doctorate
Professional degree	-.34	.56	Professional degree in process, Doctorate in process
Doctorate in process	.71	1.82	Additional Master's, Professional degree, Doctorate
Doctorate	-.19	.77	Professional degree in process

*p < .05

who were in the process of more advanced education – again, those seeking professional or doctorate degrees – were more likely to report having experienced a shift in their perspectives based on these actions. Again, though, these groups represented relatively small pools of participants, so these results may overstate the differences that occur. Nonetheless, these results suggest that those academic librarians who are pursuing additional education are more likely to report having experienced perspective transformation because of their own external-facing actions.

Table 4.3

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	-.01	1.03	Professional degree in process, Doctorate in process**
Additional Master's in process	-.01	1.03	Professional degree in process, Doctorate in process
Additional Master's	.16	1.16	Professional degree in process, Doctorate in process**
Professional degree in process	1.61	2.01	No additional education, Additional Master's in process, Additional Master's, Professional degree
Professional degree	-.24	.87	Professional degree in process, Doctorate in process
Doctorate in process	1.62	1.78	No additional education**, Additional Master's**, Professional Degree, Doctorate
Doctorate	.26	1.42	Doctorate in process

*p < .05
**p < .001

Qualitative comments. Several survey respondents mentioned how their education in addition to a Master's in librarianship affected their external-facing actions. One individual held an "ABD in history and had taught history courses before," so in this instance, the combination of education and experience influenced teaching identity development. Another respondent's "masters [sic] degree in sociology" helped hone a broader critical perspective, which in turn resulted in "seek[ing] alternative methodologies that are inclusive." For this survey participant, then, additional Master's-level education influenced perspective transformation around teaching.

In my conversations with interviewees, some respondents who had education in addition to a Master's in library or information science did comment on how these educational experiences related to their external-facing actions, and in turn how this factor related to their teaching identity development. Interestingly, those individuals who were anticipating starting an additional graduate program or working through additional graduate education commented on how their experiences, or emotions about these experiences, influenced their views of themselves as educators. Teresa mentioned that she was going to be starting a new Master's program in education by the end of the year. This program focused on "adult learning theory" for individuals "where the person isn't coming from a teaching background but wants to know more about education." She commented that, although she was beyond the midpoint in her career, she was "really excited about it... I see this as really important to what I do over the next fifteen years" before retirement. In her case, then, Teresa seemed to find value in ongoing formal education so that she could be an informed educator and practitioner as she continued to work with students.

Two interviewees specifically commented on the role that their graduate programs were playing in how their perspectives about their roles as educators were developing and being enacted in their practices. Dave and Joann were both enrolled in graduate education when I spoke with them, and their experiences grew from their external-facing actions as educators and seemed to inform their instructional practices. Dave said that, although he was exhausted by working and going to graduate school at the same time, he felt he was becoming the kind of educator he wanted to be. He had taken on additional instructional design work because of his ongoing education, and he said these new tasks made him feel like he was “back to being a novice again... but... [this new challenge was] exhilarating and nervous at the same time.” Joann spoke to how her perspective transformation and her desire to seek additional education were intertwined:

I was becoming increasingly frustrated with this feeling that... we were taking [students] to the edge of the cliff... then, you know, pushing them off and saying, ‘Well, good luck with that!’... And, and I went to the Georgia Information Literacy conference one fall, and, and they started talking about this [issue]... in the construct of the citation project... And I, I just decided we needed to think about it differently, how we approach information literacy, what we do with it... [and] I got interested and went back to PhD school to learn more about background theory and writing studies in the first year.

She went onto say that, four years after her perspective began to change, her external-facing actions were still evolving as her educational experiences informed her practices.

Joann said she was still:

Clogging along at it. I see that it's [the revised instructional approach] made a difference in how we teach and how we talk to faculty. It's raised a lot of questions, it, I mean, there aren't necessarily answers... I think it's one of those – I see that it's a looooooong, long haul.

For both Dave and Joann, then, a shift in their perspectives led them to seek additional educational experiences, but their ongoing formal learning influenced their instructional actions and interactions with others.

Feedback or input from those with a library perspective. Finally, I observed a difference in relation to the role that input or feedback from those with a library perspective played for academic librarians with varying educational levels ($F = 4.184$, $df = 350$; $p = .005$). In the data presented in table 4.4 (as well as Appendix D, table 32), those who had earned professional degrees (mean = 1.12) or were in the process of doctorate degrees (mean = 1.33) were more likely to report having experienced a shift in their perspectives based on feedback they had received from those who had a library-centric mindset (as opposed to students or faculty in other disciplines). Interestingly, though, those individuals who had earned a doctorate were less likely – by 32 percent – to cite this factor as an input in their perspective transformation. These groups represented relatively small pools of participants, though, so these differences should be considered through that lens. Nonetheless, these results suggest that that some groups of academic librarians who are pursuing additional education are more likely to report having experienced perspective transformation because of feedback from their peers, while those with doctorates were less likely to be influenced by this factor.

Table 4.4

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.15	1.19	Doctorate in process, Professional degree
Additional Master's in process	.03	1.01	Doctorate in process, Professional degree
Additional Master's Professional degree in process	-.09	1.02	Doctorate in process
Professional degree	-.22	.43	No statistically significant differences
	1.12	1.76	No additional education, Additional Master's in process, Additional Master's, Doctorate
Doctorate in process	1.33	1.77	Additional Master's in process, Additional Master's, Doctorate
Doctorate	-.32	.96	Professional Degree, Doctorate in process

*p < .05

Qualitative comments. While survey respondents commented on the role that collegial feedback played in their perspective transformation processes, they did not connect additional educational experiences as factor related to these changes. In my discussions with interviewees, those who had education in addition to a Master's degree in library or information science did not comment on how these additional educational experiences related to feedback or input from those with a library perspective, and in turn how this factor related to their teaching identity development.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' additional graduate education and teaching identity development through my qualitative analysis processes.

Graduation from Library School

There were no statistically significant differences between when participants indicated they completed library school and the factors of: supportive relationships/interpersonal dynamics; change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; self-reflection or other participant-identified experiences or resources; and completion of graduate education.

External-facing actions. There was a small significant positive relationship between participants' graduation from library school and the impact that their external-facing actions played in their perspective transformation around their teaching identities ($t = 3.00, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their external-facing actions ($R^2 = .03, p = .003$). Every one standard deviation increase in academic librarians' time since graduating from library school was related to a .158 standard deviation increase in the role external-facing actions played in developing their teaching identities.

Feedback or input from those outside of librarianship. There was a small significant positive relationship between participants' graduation from library school and the impact that feedback from those outside of librarianship (e.g. subject area faculty, students) played in their perspective transformation around their teaching identities ($t = 3.33, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their relationships with individuals outside of the profession ($R^2 = .031, p = .001$). Every one standard deviation increase in academic librarians' time since graduating from library school was related to a .175 standard deviation increase in the role that feedback or input from those outside of librarianship played in developing their teaching identities.

Feedback or input from a library-centric perspective. There was a moderate significant negative relationship between participants' graduation from library school and the impact that feedback from those connected to librarianship (e.g. colleagues, library school faculty, and oneself) played in their perspective transformation around their teaching identities ($t = -5.77, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their relationships with those with a library-centric perspective, including themselves ($R^2 = .085, p = .001$). Every one standard deviation increase in academic librarians' time since graduating from library school was related to a .292 standard deviation decrease in the role that feedback or input from a library-centric perspective played in developing their teaching identities.

Change in overall job status (new/change/loss of employment). There was a small significant negative relationship between participants' graduation from library school and changes in overall job status played in their perspective transformation around their teaching identities ($t = -3.46, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their changes in employment – loss, new, or change of job ($R^2 = .033, p = .001$). Every one standard deviation increase in academic librarians' time since graduating from library school was related to a .181 standard deviation decrease in the role that a change in overall job status played in developing their teaching identities.

Change in job duties and other participant-identified events. There was a small significant positive relationship between participants' graduation from library school and changes in their job duties or other self-identified professional in their perspective transformation around their teaching identities ($t = 4.57, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to the shifts they experience in work responsibilities or duties ($R^2 = .056, p = .001$). Every one standard deviation increase in academic librarians' time since graduating from library school was related to a .237 standard deviation increase in the role that a change in work responsibilities played in developing their teaching identities.

Qualitative data related to these twelve factors. Neither interviewees' comments nor survey participants' free-text responses commented on the effects of when

they graduated from library school and the various factors that influenced academic librarians' perspective transformation around teaching. While some survey respondents commented that graduating from library school and beginning to work as an academic librarian opened their eyes to their instructional expectations, necessary knowledge/skills, and students' research abilities, they did not mention these in relation to any transformative factors. Some interviewees also mentioned the difference in being a graduate student and a working academic librarian. For instance, Sarah commented that "within a very short time after graduating with my LIS degree... I started to realize like, [instruction] is an important part of what I do and... I identify strongly with it." And Jenna mentioned that she had "done some reference desk work [in graduate school]... but [that] working with classes... really changed the way I thought about how librarians should be supporting these students and how, how instruction could work to help them get the information literacy skills that they need." For Sarah, Jenna, and the survey respondents who commented on graduate school, then, when they graduated from library school was less important than their experiences upon entering the profession.

Other themes identified through qualitative analysis. A few survey respondents and interview participants referred to their graduate education in librarianship and the role this experience played shaping their perspectives of themselves as educators. While these comments do not specifically align with, or refer to, library education completion dates, they can help to illuminate these individuals' experiences in developing teaching identities. Two survey participants commented on the disconnect between what they learned in library school and the skills they needed as practicing

academic librarians. One said that an experience with an assignment “made me realize the disconnect sometimes between what you are taught in library school and the real-world.” The other respondent noted that, “I had just graduated with my MLIS and was trying to find jobs, the skills I thought I needed were not the skills I had.” According to these individuals’ comments, they reported having experienced issues with their graduate education and their preparedness to work as academic librarians in instructional environments.

The interviewees who commented on their library school experiences in relation to their teaching identities told a different story. For these individuals, library school had helped them to develop how they thought of themselves as educators. For example, Sarah mentioned a mentor and graduate assistantship she held during library school, saying that her mentor “made a point of encouraging me to do... my big final project on creating a workshop and teaching some students, which was terrifying at the time... but kind of pushing me in that direction really did, looking back, make a difference in, um, what I decided to do later on and what my focus was later on.” Emily also had several positive graduate school experiences that helped to shape her teaching identity. She said she “took a class in grad school, um, that was [a] really influential class... not only my instructor but also my peers in that class” influenced her views of herself as an educator librarian. She also noted that her graduate school culture played a significant role in developing her pedagogical persona. In Emily’s graduate program, “we really did have, um, just a, a greater focus on, uh, on collaboration, on student learning... on working towards improving, um, our teaching, and, and the classroom experience for students.” For these academic librarians, then, their educational experiences shaped how they considered

themselves as educators, and in Emily's case, her supportive graduate school environment led her to help others collaborate around developing teaching identities as well.

Institution Type

There were no statistically significant differences between respondents across institution types for the factors of: supportive relationships/interpersonal dynamics; change motivation from supervisors or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; external-facing actions; feedback or input from those outside of librarianship; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Feedback or input from those with a library-centric perspective. The one area, then, where I identified a difference was in relation to the role that input or feedback from those with a library perspective played for academic librarians working at varying institution types ($F = 2.688$, $df = 352$; $p = .031$). In the data presented in table 4.5 (as well as Appendix D, table 44), those working at community or junior colleges and doctoral or research universities cited this type of feedback as an influence at rates 26 percent and 29 percent higher, respectively, than the mean. Those librarians at four-year institutions were 11 percent less likely, and Master's-granting universities were 13 percent less likely, to cite this factor as an influence in their perspective transformation around teaching. These results suggest that those academic librarians at the opposite ends of the institutional

spectrum – that is, those at community and research institutions – are more likely to report having experienced perspective transformation because of input from their colleagues or library school faculty than those at four-year or Master’s-granting institutions.

Qualitative content. While survey respondents commented on the role that their institution types played in their perspective transformation process, they did not connect it with the feedback they received from those with a library-centric perspective. In my

Table 4.5

Institutional Differences in Experiences or Resources that Influence Academic Librarians’ Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.29	1.25	Four-year college, Master’s-granting university
Four-year college	-.13	.93	Community or junior college, Doctoral/research university
Master’s-granting university	-.11	1.14	Community or junior college, Doctoral/research university
Doctoral/research university	.26	1.26	Four-year college, Master’s-granting university
Other	-.54	.53	No statistically significant differences

*p < .05

discussions with interviewees, those who worked at different institution types also did not comment on how this factor related to feedback or input they received from those with a library-centric perspective, and in turn how this factor related to their teaching identity development.

Other themes identified through qualitative analysis. Many survey respondents and all interviewees commented on how their institution type played a role in their perspective transformation around their teaching identity development. These comments aligned with two themes. First, a number of individuals spoke to an institutional lack of support for academic librarians generally; this factor seemed to influence how participants' teaching identities developed – or did not develop. Second, both survey respondents and interview participants commented on how institutional expectations shaped their perceptions of themselves as educators. While neither of these themes seem to align with specific institutional types, they do highlight environmental factors that academic librarians may experience as they grapple with perspective transformation around their teaching.

Lack of institutional support. Several survey respondents commented on the lack of support they experience at their institution, both for the library generally and information instruction specifically. Respondents noted that “lack of support of my library,” “[l]eadership denying meaningful support,” “leadership’s lack of desire to allow change,” and having to “fight to get them to take instruction seriously beyond lecturing about the history of the institution” impacted how – and indeed if – their perspectives about themselves as educators could develop. Other survey participants said that having

“instruction sessions... not [be] mandated at the institutional level” or being told “that library instruction is ‘nice’ but not the library’s main mission,” influenced their transformative processes around teaching. The implication from these comments is that, in non-supportive environments, academic librarians find it challenging – if not impossible – to develop teaching identities that reflect their beliefs about themselves as educators and information literacy instruction.

Some interviewees also shared instances where their institution did not support the academic library’s role on campus or in teaching. For instance, Teresa spoke about how her institution had received a federal grant to support teaching and learning on campus, but that:

Librarians and advisors weren’t allowed to participate in the programming of that grant... they’re just, they’re a part of educating the students as much as the faculty are... The [grant] assessment is going to reflect on what we do as part of our jobs, but we’re not included in professional development opportunities, and I think it marginalizes us.

In this case, Teresa believed that her institution’s culture did not “see all the educators, or all the people educating as educators.” Her comments aligned with survey respondents who did not experience support at their institutions as they sought to be seen as educators.

For other interviewees, though, their institution supported them in developing teaching identities. For Beth, this support came from the top down; she worked at what she called a “teaching-focused university” led by a Provost who had encouraged quality teaching. From this administrative support, campus resources such as a teaching center developed to support how individuals – including academic librarians – could form their teaching identities. Sarah and Lynne both commented on how the size and culture of their previous institutions had supported their teaching identity development. For Sarah,

working at a small college with a “very open” culture allowed her to “try new things, I could experiment, I could really get involved professionally in different, um, groups and associations... I think that initial culture really did a lot to get me excited and, um, kind of start me on my path towards wanting to teach a lot.” Lynne had a similar experience while working at a community college: In this environment, her focus was “on teaching and not having to worry so much about service and scholarship... really allowed me time to explore different ways of doing things.” In these cases, then, the institutional type and culture had supported interviewees’ teaching identity development.

Institutional expectations. Survey respondents also shared their thoughts about the role that their institutions’ expectations played in influencing their perspective transformation processes. Some simply said that “[i]nstitutional expectations” and “the way my institution works and what they expected out of me” impacted their transformative processes. Others noted that institutional shifts such as “[l]earning assessment development collegewide” and an “[i]nstitutional... focus on assessment” helped their perspectives to evolve. Several also commented on how their status as faculty members shaped their thinking about their roles as educators. For instance, one participant said that:

When I became a tenure-track faculty member, my perspective changed quite a bit. I am required to continually assess my instruction, and provide detailed documentation each year in the form of a dossier. This forces you to become more aware of your teaching and what's working vs. what's not.

Another survey respondent said, “I went through tenure review and reflected on how I was teaching. I wasn't satisfied with my methods or the level of engagement I received from students.” And another commented that perspective transformation happened when

“I was in a faculty, rather than staff, position, and felt I could make these changes based on my rank and my professional experiences.” In these cases, then, the structures that guided academic librarians’ work influenced how they reported experiencing teaching-centric perspective transformation.

Interview participants also commented on how their institutions’ expectations had informed their teaching identity development. Jenna noted that librarians at her institution “are faculty, and we go through the tenure and promotion process with faculty, too. But we get extended term at the end of that instead of full tenure.” This set of expectations helped her engage with other faculty around teaching at the campus teaching center or instructional designers focused on online learning. Beth’s institution had both yearly evaluation reports and promotion processes for academic librarians; both systems codified expectations that in turn influenced how she thought of herself as an educator. In Beth’s case, these factors:

Certainly forced me to think about, uh, a teaching philosophy. Because I don't think I had, you know, ever thought about that before. What is my philosophy and really having to examine what I did and how it was effective or not, and how to improve that.

Jenna had also found that her institution’s broader structures had played a role in her teaching identity development. She said that two years ago her institution had:

Adopted a new general education plan, which I think inspired a lot of people inside the library and outside of it to think, you know, about the educator role more broadly, um, and to sort of reconsider some of the ways we work with each other and collaborate to help students learn what they need to learn.

For these interviewees, then, their transformative experiences were shaped in part because their college or university supported teaching generally or for librarians specifically.

In other cases, though, interviewees felt that their institutions' expectations limited teaching identity development. Helen had worked at both a large non-profit research institution and several for-profit institutions, and she said that she thought "whether you're considered faculty or professional staff, and... [if that] influence[s] how faculty would view librarians, but I think... the struggle to be considered a partner with faculty continues. In mine and a lot of other institutions." This comment echoed the frustration that survey respondents shared about being seen as collaborators with faculty, rather than as support staff or substitute teachers.

Time at Current Institution

There were no statistically significant differences between participants' reported time at their current institutions and the factors of: change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; feedback or input from those outside of librarianship; self-reflection or other participant-identified experiences or resources; or completion of graduate education.

Supportive relationships/interpersonal dynamics. There was a small significant positive relationship between participants' time at their current institution and the impact that supportive relationships and interpersonal dynamics played in their perspective transformation around their teaching identities ($t = 3.22, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their positive and supportive relationships with others ($R^2 = .029, p = .001$). Every one standard deviation

increase in academic librarians' time at current institution was related to a .169 standard deviation increase in the role that supportive relationships or interpersonal dynamics played in developing their teaching identities.

Self-directed professional learning experiences. There was a small significant positive relationship between participants' time at their current institution and the impact that self-directed professional learning experiences played in their perspective transformation around their teaching identities ($t = 2.926, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to how they choose to engage in professional development and personal work-related learning ($R^2 = .024, p = .004$). Every one standard deviation increase in academic librarians' time at current institution was related to a .154 standard deviation increase in the role that self-directed professional learning experiences played in developing their teaching identities.

External-facing actions. There was a small significant positive relationship between participants' time at their current institution and the impact that their external-facing actions played in their perspective transformation around their teaching identities ($t = 4.097, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their external-facing actions ($R^2 = .046, p = .001$). Every one standard deviation increase in academic librarians' time at current institution was related to a .214 standard deviation increase in the role that external-facing actions played in developing their teaching identities.

Feedback or input from a library-centric perspective. There was a small significant negative relationship between participants' time at their current institution and the impact that library-centric feedback played in their perspective transformation around their teaching identities ($t = -4.085, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to the feedback they gather from fellow librarians at their institutions, librarians outside of their work environments, and library school faculty ($R^2 = .045, p = .001$). Every one standard deviation increase in academic librarians' time at current institution was related to a .213 standard deviation decrease in the role that feedback-gathering from those with a background in, or knowledge of, librarianship played in developing their teaching identities.

Change in overall job status (new/change/loss of employment). There was a moderate significant negative relationship between participants' time at their current institution and the impact that a change in their overall job status played in their perspective transformation around their teaching identities ($t = -4.681, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their experiences with new, changes in, or loss of employment ($R^2 = .059, p = .001$). Every one standard deviation increase in academic librarians' time at current institution was related to a .242 standard deviation decrease in the role that a change in overall job status played in developing their teaching identities.

Change in job duties and other participant-identified events. There was a small significant positive relationship between participants' time at their current institution and the impact that changes in their work responsibilities and other self-identified work events played in their perspective transformation around their teaching identities ($t = 2.705, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to how academic librarians' work evolves and changes and other self-identified work events ($R^2 = .020, p = .007$). Every one standard deviation increase in academic librarians' time at current institution was related to a .143 standard deviation increase in the role that changes in job duties and other self-reported events played in developing their teaching identities.

Qualitative data related to these twelve factors. In some free-text responses, survey respondents referenced their time at their current institution. Generally, these remarks focused on gaining knowledge of an institution's culture or "no longer [being] new in [a] position." As these individuals' experience increased, then, they grappled more with the "deeper, structural issues at play," or how to reconcile their own beliefs with broader institutional issues. Interviewees did not comment on the effects of time at their institution gender and the various factors that influenced academic librarians' perspective transformation around teaching.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' time at their institution and teaching identity development through my qualitative analysis processes.

Time Working in Instruction

There were no statistically significant differences between participants' reported time working in instruction and the factors of: change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-reflection or other participant-identified experiences or resources; or completion of graduate education.

Supportive relationships/interpersonal dynamics. There was a small significant positive relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that supportive interpersonal connections played in their perspective transformation around their teaching identities ($t = 3.470, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their positive teaching-focused relationships with others ($R^2 = .033, p = .001$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .182 standard deviation increase in the role that supportive relationships or interpersonal connections played in developing their teaching identities.

Self-directed professional learning experiences. There was a small significant positive relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that self-directed professional learning experiences played in their perspective transformation around their teaching identities ($t = 2.909, p < .05$). This relationship suggests that one can predict a

portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their self-directed work to develop their pedagogy and instructional approach ($R^2 = .024, p = .004$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .153 standard deviation increase in the role that self-directed professional learning experiences played in developing their teaching identities.

External-facing actions. There was a small significant positive relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that external-facing actions played in their perspective transformation around their teaching identities ($t = 3.254, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their external-facing actions in relation to experiences or resources ($R^2 = .029, p = .001$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .171 standard deviation increase in the role that external-facing actions played in developing their teaching identities.

Feedback or input from those outside of librarianship. There was a small significant positive relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that feedback from non-librarians (e.g. subject area faculty, students) played in their perspective transformation around their teaching identities ($t = 2.594, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation

around their teaching identities in relation to their interactions with individuals who offered a different instructional perspective ($R^2 = .019, p = .01$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .137 standard deviation increase in the role that feedback from those outside of librarianship played in developing their teaching identities.

Feedback or input from a library-centric perspective. There was a small significant negative relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that other librarians' perspectives played in their perspective transformation around their teaching identities ($t = -3.224, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their interpersonal interactions with other librarians and faculty in library graduate programs ($R^2 = .029, p = .001$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .170 standard deviation decrease in the role that feedback or input from a library-centric perspective played in developing their teaching identities.

Change in overall job status (new/change/loss of employment). There was a small significant negative relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that a change in an employment status played in their perspective transformation around their teaching identities ($t = -3.320, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching

identities in relation to their loss of, change in, or acquisition of a new job ($R^2 = .030$, $p = .001$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .174 standard deviation decrease in the role that a change in overall job status played in developing their teaching identities.

Change in job duties and other participant-identified events. There was a small significant positive relationship between the length of time that participants had engaged in instruction as part of their work responsibilities and the impact that a change in their work duties or another self-identified work event played in their perspective transformation around their teaching identities ($t = 4.353$, $p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their job responsibilities or other professional shifts ($R^2 = .051$, $p = .001$). Every one standard deviation increase in academic librarians' time working in information literacy instruction was related to a .226 standard deviation increase in the role that changes in job duties and other self-identified work events played in developing their teaching identities.

Qualitative data related to these twelve factors. In some free-text responses, survey respondents referenced their time working in instruction indirectly. As with their comments about time at their institution, these academic librarians primarily focused on how their experiences in teaching helped them hone their instructional approaches over time. For example, participants said, "I changed how I was teaching, and took a more active role as a faculty member;" that a perspective change "was a direct result of my personal experience, combined with educating myself about different ways to carry out

my instructional responsibilities;” and “[t]he more you teach, the more evidence you have regarding what works and what doesn’t.” While these, and other, respondents did not directly reference their time working in instruction, their bodies of experience helped them see perspective transformation in their teaching over time.

Interviewees made similar indirect comments about how their time working in instruction had influenced their pedagogical personas. Lynne, Kathy, and Joann referenced their past teaching experiences outside of librarianship and mentioned that this instructional work influenced how they thought of themselves as educators. Christina talked about teaching in a business-centric college and a research university, and she mentioned how these experiences had shaped how she approached her work as an instructor. And Emily and Sarah, who were early-career librarians, discussed how their teaching experience was building to help them develop senses of themselves as educators. For these academic librarians, then, their time in instruction seemed to relate to their perspective transformation around teaching without being linked to these twelve identified factors.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians’ time working in instruction and teaching identity development through my qualitative analysis processes.

Instructional Formats

In responding to this demographic question, participants could indicate whether they engaged in face-to-face, online, and/or blended/hybrid instruction. For each of these

instructional categories, I measured the relationship between respondents' teaching environments and the aforementioned influences on shaping their teaching identities.

Face-to-face instruction. There were no statistically significant differences between respondents who did, or did not, engage in face-to-face instruction for any of the following factors: supportive relationships/interpersonal dynamics; change motivation from supervisors or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; external-facing actions; feedback or input from those outside of librarianship; feedback or input from those with a library-centric perspective; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Qualitative data related to these twelve factors. While both survey respondents and interviewees discussed how important their face-to-face instructional work had been in shaping their teaching identities, their comments did not provide any additional insight into the twelve instructional factors identified. Rather, what they shared highlighted the key role that working with students in physical classrooms played in shaping academic librarians' teaching identities.

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' work in face-to-face instruction and teaching identity development through my qualitative analysis processes.

Online instruction. There were no statistically significant differences between respondents who did, or did not, engage in online instruction for the following factors: supportive relationships/interpersonal dynamics; change motivation from colleagues; self-directed professional learning experiences; feedback or input from those outside of librarianship; feedback or input from those with a library-centric perspective; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Change motivation from supervisors or administration. I identified a difference in the role that supervisors' or administrators' change motivation influenced academic librarians who did, and did not, teach online ($F = 7.085$, $df = 352$; $p = .008$). In the data presented in table 4.6 (also in Appendix D, table D.62), those who delivered online instruction cited this type of interpersonal dynamic as an influence 16 percent higher than the mean; in contrast, those who did not teach online cited this influence at a rate 18 percent less than the mean. These figures suggest that academic librarians who engage in online instruction are more likely to report having experienced perspective transformation that has been influenced by their supervisors or institution's administration.

Qualitative content. Neither survey participants nor interviewees commented on the relationship between online instruction and the change motivation they felt from supervisors or administrators that may have influenced their perspective transformation around teaching.

Table 4.6

Online Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers online instruction	.16	1.40	Does not deliver online instruction
Does not deliver online instruction	-.18	.89	Delivers online instruction

*p < .05

Other participant-identified interpersonal relationships. I identified a difference in the role that other participant-identified interpersonal relationships played in influencing the teaching identities of academic librarians who did, and did not, teach online ($F = 9.033$, $df = 352$; $p = .003$). In the data presented in table 4.7 (also in Appendix D, table D.64), those who delivered online instruction cited other relationships as transformative at a frequency 30 percent higher than the mean; in contrast, those who did not teach online cited this influence at a rate seven percent less than the mean. These figures suggest that academic librarians who engage in online instruction are more likely to have other interpersonal relationships that impact their perspective transformation around their pedagogical personas.

Table 4.7

Online Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers online instruction	.30	1.27	Does not deliver online instruction
Does not deliver online instruction	-.07	.97	Delivers online instruction

*p < .05

Qualitative content. Neither survey participants nor interviewees commented on the relationship between online instruction and other interpersonal relationships that may have influenced their perspective transformation around teaching.

External-facing actions. Finally, I identified a difference in the role that external-facing actions (e.g. teaching, working with students) played in influencing the teaching identities of academic librarians who did, and did not, teach online ($F = 32.643$, $df = 352$; $p < .001$). In the data presented in table 4.8 (also in Appendix D, table D.66), those who delivered online instruction cited these kinds of activities as transformative at a frequency 41 percent higher than the mean; in contrast, those who did not teach online cited this influence at a rate 19 percent less than the mean. The disparity between these two groups may be because one of the responses included in this composite variable focuses on teaching online. Those participants who did not engage in online teaching, then, would

not select this input as an experience or resource that shaped their teaching perspectives. Still, though, these figures suggest that academic librarians who engage in online instruction are more likely to report having experienced perspective transformation that has been influenced by their external-facing actions.

Qualitative content. While both survey respondents and interviewees discussed how important their online instructional work had been in shaping their teaching identities, their comments did not provide any additional insight into the twelve instructional factors identified here. Rather, what they shared highlighted the key role that working with students in online classrooms played in shaping academic librarians’ teaching identities.

Table 4.8

Online Instruction and Differences in Experiences or Resources that Influence Academic Librarians’ Instructional Perspective Transformation: External-facing actions

Instructional format	Mean	Standard Deviation	Significantly** different from
Delivers online instruction	.41	1.39	Does not deliver online instruction
Does not deliver online instruction	-.19	.77	Delivers online instruction

**p < .001

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' online instruction and teaching identity development through my qualitative analysis processes.

Blended or hybrid instruction. There were no statistically significant differences between respondents who did, or did not, engage in blended or hybrid instruction for the following factors: supportive relationships/interpersonal dynamics; change motivation from colleagues; self-directed professional learning experiences; feedback or input from those outside of librarianship; feedback or input from those with a library-centric perspective; self-reflection or other participant-identified experiences or resources; completion of graduate education; overall job status change; or change in job duties or other participant-identified professional events (see Appendix D).

Change motivation from supervisors or administration. I identified a difference in the role that supervisors' or administrators' change motivation influenced academic librarians who did, and did not, teach in blended/hybrid environments ($F = 11.170$, $df = 352$; $p = .005$). In the data presented in table 4.9 (also in Appendix D, table D.74), those who delivered online instruction cited this type of interpersonal dynamic as an influence at frequencies 19 percent higher than the mean; in contrast, those who did not teach online cited this influence at a rate 16 percent less than the mean. These figures suggest that academic librarians who engage in hybrid instruction are more likely to report having experienced perspective transformation that has been influenced by their supervisors or institution's administration.

Table 4.9

Blended/Hybrid Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.19	1.53	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	-.16	.78	Delivers blended/hybrid instruction

*p < .05

Qualitative content. Neither survey respondents nor interview participants commented on the relationship between blended/hybrid instruction and the change motivation they felt from supervisors or administrators that may have influenced their perspective transformation around teaching.

Other participant-identified interpersonal relationships. I identified a difference in the role that other participant-identified interpersonal relationships played in influencing the teaching identities of academic librarians who did, and did not, teach in blended/hybrid environments ($F = 7.602, df = 352; p = .006$). In the data presented in table 4.10 (also in Appendix D, table D.76), those who delivered hybrid instruction cited other relationships as transformative at a frequency 30 percent higher than the mean; in contrast, those who did not teach online cited this influence at a rate three percent less

than the mean. These figures suggest that academic librarians who engage in blended instruction are more likely to have other interpersonal relationships that impact their perspective transformation around their pedagogical personas.

Qualitative content. Neither survey respondents nor interview participants commented on the relationship between blended/hybrid instruction and the other interpersonal relationships that may have influenced their perspective transformation around teaching.

External-facing actions. I identified a difference in the role that external-facing actions (e.g. teaching, working with students) played in influencing the teaching identities

Table 4.10

Blended/Hybrid Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.35	1.07	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	.25	1.02	Delivers blended/hybrid instruction

*p < .05

of academic librarians who did, and did not, teach in blended/hybrid environments ($F = 39.777$, $df = 352$; $p < .001$). In the data presented in table 4.11 (also in Appendix D, table D.78), those who delivered blended or hybrid instruction cited these kinds of activities as transformative at a frequency 53 percent higher than the mean; in contrast, those who did not teach online cited this influence at a rate 21 percent less than the mean. The disparity between these two groups may be because one of the responses included in this composite variable focuses on teaching online. Those participants who did not engage in blended teaching, then, would not select this input as an experience or resource that shaped their teaching perspectives. Still, though, these figures suggest that academic librarians who engage in hybrid instruction are more likely to report having experienced perspective transformation that has been influenced by their external-facing actions.

Qualitative content. As with face-to-face and online teaching, survey respondents and interviewees discussed how important their online instructional work had been in shaping their teaching identities. However, their comments did not provide any additional insight into the twelve instructional factors identified here. Rather, what they shared highlighted the key role that working with students in online classrooms played in shaping academic librarians' teaching identities.

Change in job duties or other, participant-identified work events. Finally, I identified a difference in the role that a change in job duties or other participant-identified professional events played in influencing the teaching identities of academic librarians who did, and did not, teach in blended/hybrid environments ($F = 6.206$, $df = 352$; $p = .013$). In the data presented in table 4.12 (also in Appendix D, table D.84), those who

delivered blended or hybrid instruction cited these kinds of work-specific events as transformative at a frequency 33 percent higher than the mean; in contrast, those who did not teach in hybrid environments cited this influence at a rate four percent less than the mean. These figures suggest that academic librarians who engage in hybrid instruction are more likely to report having experienced perspective transformation that has been influenced by changing job duties or other professional events.

Qualitative content. Neither survey respondents nor interview participants commented on the relationship between blended/hybrid instruction and a change in job responsibilities or another identified work event that may have influenced their perspective transformation around teaching.

Table 4.11

Blended/Hybrid Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Instructional format	Mean	Standard Deviation	Significantly** different from
Delivers blended/hybrid instruction	.53	1.45	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	-.22	.72	Delivers blended/hybrid instruction

**p < .001

Table 4.12

Blended/Hybrid Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.33	1.21	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	.04	1.02	Delivers blended/hybrid instruction

*p < .05

Other related themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' blended/hybrid instruction and teaching identity development through my qualitative analysis processes.

Instructional Frequency

There were no statistically significant differences between participants' reported instructional frequency and the factors of: supportive relationships and interpersonal dynamics; change motivation from supervisor or administration; change motivation from colleagues; other participant-identified interpersonal relationships; self-directed professional learning experiences; external-facing actions or behaviors; feedback or input from those outside of librarianship; feedback or input from those with a library

perspective; self-reflection or other participant-identified experiences or resources; overall job status change; or change in job duties or other participant-identified professional events.

Completion of graduate education (librarianship/other). There was a small significant negative relationship between the frequency of participants' information literacy instruction and the impact that their completion of graduate education (either in librarianship or another discipline) played in their perspective transformation around their teaching identities ($t = -3.131, p < .05$). This relationship suggests that one can predict a portion of academic librarians' experiences with perspective transformation around their teaching identities in relation to their completion of graduate education ($R^2 = .027, p = .002$). Every one standard deviation increase in academic librarians' frequency of information literacy instruction was related to a .165 standard deviation decrease in the role that completion of graduate education played in developing their teaching identities.

Qualitative data related to these twelve factors. Neither survey respondents nor interview participants commented on the relationship between instructional frequency and the various factors that influenced academic librarians' perspective transformation around teaching.

Other themes identified through qualitative analysis. I did not identify any other themes or factors related to academic librarians' additional graduate education and teaching identity development through my qualitative analysis processes.

Reflection and Perspective Transformation

Finally, I analyzed the relationship between survey participants' self-reported reflection, both in their personal and professional lives, and their teaching identity development. While I also analyzed the qualitative data collected from both survey participants and interviewees for personal and professional reflection, this analysis focused on identifying differences in individuals' teaching identity development and their reflective practices. I used crosstabulation analysis with a chi-square test statistic to determine if there were differences in participants' self-reported reflection and their development of teaching identities. Crosstabulation uses categorical predictors and outcomes, comparing the observed frequency of each cell to the expected frequency one would expect under the assumption of no relationship. Hence, this process provided the best analytic approach to this line of inquiry. I used an alpha level of .05 to test for significance.

Personal reflection. I used crosstab analysis to determine if participants' self-reported personal reflection influenced their experiences with perspective transformation around their teaching identities ($n = 346$). In Table 4.13, I illustrated the percentages of respondents who reported having, or not having, engaged in personal reflection by whether they experienced a shift in their thinking about their roles as educators (as illustrated by their PT-Index score). The adjusted standardized residuals under each population highlight the percents that differ significantly from chance. I determined that there was not a relationship between these variables. From these results alone, then, I cannot infer that there is a relationship between academic librarians' experiences with

personal reflection and shifts or transformations in their thinking around their teaching identities.

Professional reflection. I also used crosstab analysis to determine if participants' self-reported professional reflection influenced their experiences with perspective transformation around their teaching ($n = 346$). Again, I determined that there was not a relationship between these variables. In Table 4.14, I illustrated the percentages of respondents who did and did not report engaging in professional reflection by whether they experienced a shift in their thinking about their roles as educators. The adjusted standardized residuals under each population highlight the percents that differ significantly from chance. Again, from these results alone, I cannot infer that there is a relationship between academic librarians' experiences with professional reflection and shifts or transformations in their thinking.

Conclusion

In my survey instrument and follow-up interviews, I collected both broad and deep data on academic librarians' experiences with perspective transformation. This information helped me to address my two lines of inquiry: first, whether academic librarians experience perspective transformation around their views of themselves as educators or teachers; and second, if they experience this kind of a shift in their thinking, what factors or influences inform this change or evolution. From individuals' responses to my survey instrument and interview protocol, I understood whether this phenomenon is reported as broadly experienced across academic librarians who work in instruction. I also dove more deeply into their experiences to understand what elements of their work

Table 4.13

Occurrences of Personal Reflection and Perspective Transformation around Teaching Identity

Experiences with Personal Reflection	Reported having experienced perspective transformation	Count	Did not report having experienced perspective transformation	Count
Reported engaging in personal reflection	96.7%	238	94.0%	94
<i>Adjusted residual</i>	(1.2)		(-1.2)	
Did not report engaging in personal reflection	3.3%	8	6.0%	6
<i>Adjusted residual</i>	(-1.2)		(1.2)	

* p < .05

Table 4.14

Occurrences of Professional Reflection and Perspective Transformation around Teaching Identity

Experiences with Professional Reflection	Reported having experienced perspective transformation	Count	Did not report having experienced perspective transformation	Count
Engaged in professional reflection	90.7%	223	91.0%	91
<i>Adjusted residual</i>	(-0.1)		(0.1)	
Did not engage in professional reflection	9.3%	23	9.0%	9
<i>Adjusted residual</i>	(0.1)		(-0.1)	
* p < .05				

environments, interpersonal relationships, and experiences either foster or stymie their teaching identity development. From these two analytical approaches, then, I can provide insight and interpretation on these data in Chapter 5.

CHAPTER FIVE

FINDINGS AND CONCLUSIONS

Overview

In my exploratory research, I used a revised validated survey instrument to collect deductive data from academic librarians about their experiences with perspective transformation and their teaching identities. From this information, I then collected inductive data in follow-up, in-depth interviews about a group of survey respondents' experiences and influences as they develop their senses of themselves as educators. By using these sequential explanatory data collection methods, I can address my research questions about whether academic librarians experience perspective transformation around their views of themselves as educators, and what factors may help academic librarians work through this type of process. I can also revisit the conceptual model I developed and presented in Chapter 2 (see Figure 2.1) that reflected how I understood the literature as representing subject area faculty's teaching identity development. By revising this proposed model, I can express how these academic librarians' relationships, experiences, and events interact and reflect their experiences with perspective transformation around their teaching identities.

Academic Librarians Report Experiencing Perspective Transformation

Based on the survey and interview data, I posit that academic librarians do – or at least *can* – experience perspective transformation around their views of their roles as

educators. Most survey respondents (73%, $n = 303$) indicated that they had experienced a time when they realized their values, beliefs, opinions, or expectations around instruction had changed. Moreover, 95% ($n = 392$) reported that at least one phase of perspective transformation had happened in their instructional lives. And from the 14 follow-up interviews, 93% ($n = 13$) indicated that they had experienced a time when they realized their views or attitudes about their roles as educators had changed.

Importantly, though, academic librarians do not experience perspective transformation as a monolith. Based on the data I collected, I posit that this worldview shift happens gradually over time for many – if not most – academic librarians. Some, though, seem to experience transformation as a sea change moment in their professional lives.

Perspective transformation as a shift over time. For many of the academic librarians who responded to the survey instrument, perspective transformation happened in ongoing, dynamic ways. Their comments about their experiences in their teaching identity development referenced building-up processes and accumulation over time. Survey participants highlighted the importance of hands-on teaching work and reading the literature on instruction, both in and outside of librarianship. Interview participants echoed this take on gradual perspective change and spoke about the important roles that experience, reflection, and feedback played in impacting their views about their roles as educators. For some, experience focused on in-class teaching; for others, experience involved professional learning programs (i.e., the ACRL Immersion programs) or reading. Other interviewees mentioned how their prior work, education, or credentials

(i.e., K-12 teaching certification) prepared them – either with a skill-set, knowledge base, or a mental outlook – to act as post-secondary educators. Again, these kinds of background experiences seemed to offer a foundation on which academic librarians could construct teaching identities. So for those academic librarians who experience perspective transformation, I argue that it often occurs as a gradual process that develops over time through a loop of experience and reflection.

Perspective transformation because of an event. While many survey respondents and interviewees discussed how their views about themselves as educators had evolved over time, others did identify single events that had caused dramatic shifts in their perspectives. Survey respondents cited administrative changes within their library environments as catalysts for seismic changes in their teaching identities. In many cases, changes in a library dean, director, or instructional supervisor led to growth in academic librarians' teaching identities; for others, though, administrative shifts – both within the library and at the broader institutional level – hindered their perspective transformation processes. That is, a lack of support for the academic library or library instruction program kept survey respondents from fully realizing their roles as educators. Both survey respondents and interviewees cited cultural changes at their institutions as important catalysts to initiate the perspective transformation process. These bigger-picture shifts were often around educational trends or policies and had mixed results. For some participants, a new assessment focus, general education policy revision, or integrating information literacy across campus prompted them to reconsider their place as a post-secondary instructor and assert this role at their institutions; for others, academic

librarians were forgotten or not included in these educational discussions and thereby not considered educators by academic administrators. These epochal events, then, could cause academic librarians' teaching identities to grow or stagnate, and even in some cases, regress.

For interviewees, there were other types of epochal events that caused dramatic mental shifts. Interactions with students, and especially those interactions that highlighted the disconnects between students' needs and abilities and academic librarians' instructional goals and expectations, forced interviewees to reconsider their views of themselves as educators. Interestingly, though, interviewees spoke about these kinds of interactions in teaching *outside* of librarianship – they were often in the context of basic skills or introduction to college courses. While interviewees mentioned these kinds of experiences as isolated moments of change, they did not seem to identify single student-librarian interactions that occurred within these one-shot workshops as transformative to their practices or perspectives. Their comments about these experiences suggest that the one-shot library instruction session situated in a disciplinary course may not cause these sea change moments for academic librarians.

Revised Proposed Conceptual Model: Academic Librarians' Teaching Identity Development

While academic librarians may work through perspective transformation in these two different ways, neither type of experience happens in a vacuum. As such, I revisited my proposed conceptual model of teaching identity development (see Figure 2.1 in Chapter 2) and offer a revised version to account for the factors that my research indicated impacted academic librarians' teaching identity development processes (see

Figure 5.1). From survey participants' responses and my discussions with interviewees, I posit that there are both catalysts to, and components in, these transformative events. The catalysts to transformation may come from personal or external sources. Once perspective transformation is initiated, then, I argue that an academic librarian's personal, relational, and professional components interact to shape how her or his views of himself or herself as an educator form or are revised. External components – those pieces outside of an academic librarian's control that include their institutional environment, cultural or social dynamics, or profession-wide changes – undergird and inform these component interactions. As these pieces work together to shape academic librarians' teaching identities, I assert that the beliefs that develop or evolve about their roles as educators are then demonstrated in different ways. For some professionals, this changed perspective may lead to a broader mental shift about their work and transformation as a process – that is, some librarians begin to see transformation as constant and ongoing. For others, developing a teaching identity may lead to new or revised approaches to instruction or collaboration. And for others, seeing their work and role as educators differently can result in seeking professional change for personal reasons.

Factors that Influence Academic Librarians' Perspective Transformation

From my research, I posit that there are three sets of factors that influence whether academic librarians experience gradual or epochal perspective transformation around their teaching identities. There are personal catalysts to perspective transformation, which seem to influence academic librarians as they experience evolving shifts in their views of themselves as educators. There are also external catalysts to

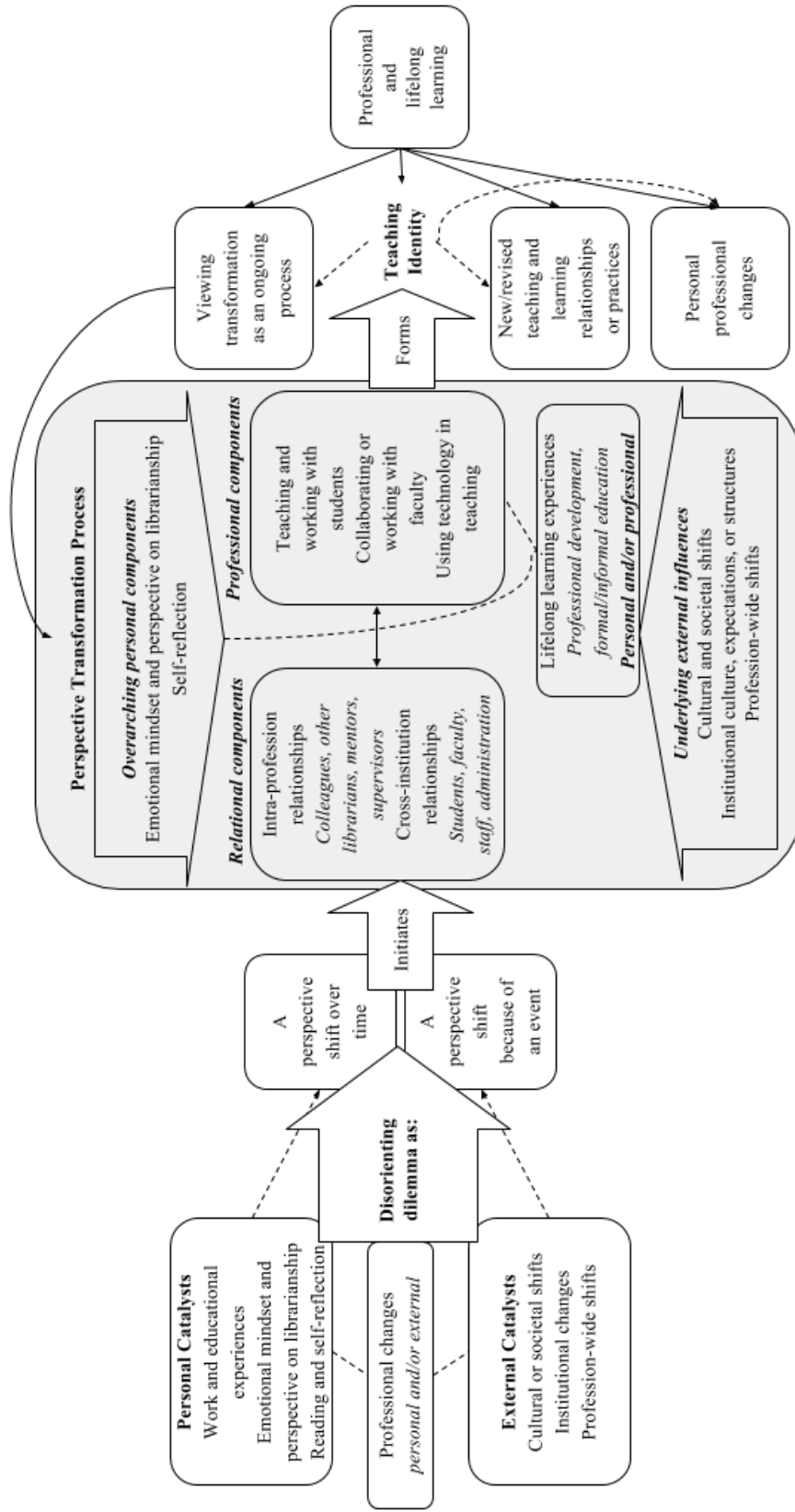


Figure 5.1. Conceptual model of academic librarians' experiences with perspective transformation around their teaching identities.

perspective transformation, which seem to cause the sudden or dramatic changes that some academic librarians experience around their teaching identities. Then there are those professional events which exist between the personal and external and may inform both kinds of shifts.

Personal Catalysts to Perspective Transformation

The personal catalysts to perspective transformation that academic librarians experience are grounded in their individual experiences, views, and affective dimensions. For some, their personal work and learning experiences lead them to reconsider their views about their role as educators. For others, reading – whether professional (i.e., trade publications), scholarly (i.e., research-based articles), or social media (e.g. blogs, Twitter discussions, listservs) – can lead to self-reflection; these factors may combine to impact academic librarians’ senses of themselves as teachers. And individual academic librarians’ affective states, including their emotional mindset about their work or their perspectives about librarianship, can also impact how – or indeed, whether – perspective transformation about instruction happens.

Work and educational experiences. From survey participants’ responses and interviewees’ comments, I argue that an individual librarian’s professional or educational experiences may cause her or him to reconsider, or consider for the first time, his or her views of themselves as educators. Survey respondents referenced their work with students as critical to challenging their perspectives about teaching and how these experiences built up over time to inform their views or practices. Many interviewees discussed how previous work experience, past educational experiences, or ongoing

learning endeavors (i.e., additional graduate work) initiated their perspective transformation processes. In each of these cases, though, the work and educational experiences were unique to the respondent. This factor plays a role in motivating academic librarians to reconsider their teaching identities at a personal level.

Reading and self-reflection. While my crosstab analysis did not demonstrate that those librarians who indicated they engaged in either personal or professional reflection were statistically more likely to experience perspective transformation around teaching than their counterparts who did not engage in reflection, many survey respondents' comments cited reading and reflection as sources of perspective transformation. They referenced a number of different kinds of materials, both scholarly and non-scholarly; they also discussed how information from outside the discipline and that focused more broadly on the scholarship of teaching and learning motivated them to reconsider their teaching identities. Self-reflection is implicit in survey respondents' use of these resources. Reading others' work, whether on Twitter or in a top-tier publication, can only lead to perspective transformation if an academic librarian considers her or his own practices or perspectives in light of another's experiences. Interviewees also referenced the role of reading in their perspective transformation processes, but they spoke more about self-reflection and its influence on reconsidering their views of themselves as educators. For many interview participants, reflecting on their practices or actions with students – and seeing students' reactions to their instructional approaches – caused them to reconsider their mental constructions of what being a librarian, or educator librarian, looked like. As with the work experiences that may inform either process, academic

librarians' personally-directed reflection and reading can be individually-specific catalysts for change.

Emotional mindset and perspective on librarianship. The final personal catalyst I identified is the role that academic librarians' emotional mindsets and broader perspectives on their chosen profession play in prompting teaching identity development. This affective dimension is unique to each individual and can directly influence whether perspective transformation around teaching happens at all. For those survey respondents or interviewees who indicated that they saw change as a positive aspect of their work lives, or who viewed academic librarianship's ongoing evolution as a profession in the Information Age as an opportunity for development, these emotional mindsets may have predisposed them to work through transformation with a growth mindset (Dweck, 2006). There were individuals, though, who commented about how disheartened, unsupported, or unfulfilled they felt. While I found these kinds of emotional reactions in survey respondents' data, fewer interviewees discussed the limitations they saw in the profession and how those factors drove them to consider their teaching identity outside of their role as an academic librarian. From these data points, then, I argue that individual academic librarians' mindsets – their feelings about their work, their affective state, and their hope (or lack thereof) about the profession more broadly – can act as personal-level catalysts for instruction-related perspective transformation.

External Catalysts to Perspective Transformation

In addition to these personal catalysts that may cause academic librarians' teaching identity transformation, I identified external catalysts through my data analysis.

These factors reside outside of academic librarians' control but often directly affect their work and views of themselves as educators. Shifts in society or culture are one such influence; changes at an institution – including administrative/supervisory, curricular, or programmatic changes – are another. Academic librarians' teaching identities may also be influenced by profession-wide shifts as librarianship evolves. And they may experience job-related professional shifts, which straddle the line between personal and external catalysts. Based on my data, I posit that these externally-driven catalysts are more likely to influence academic librarians in experiencing a sudden perspective shift around their teaching.

Cultural or societal shifts. In their free-text responses, several survey participants spoke about how the current climate in the United States, and especially the 2016 presidential election, had influenced their views of their work as educators. An interview participant also specifically mentioned the 2016 US election cycle and cited her renewed sense of the importance of academic librarians' work in teaching critical thinking and information literacy skills in a time of fake news and relative truth. For some academic librarians, then, I posit that either gradual or epochal social changes can cause them to reconsider their roles as educators or important their instruction is as a part of their job responsibilities.

Institutional changes. As aforementioned, a number of survey respondents referenced institutional staffing changes, especially at the supervisory or administrative levels, as influences in their perspective transformation processes. While interviewees did not reference these changes as transformative, several did discuss how institutional-level

cultural changes – such as reviewing information literacy across campus – impacted their views of themselves as educators. These top-down kinds of developments, which are completely outside of academic librarians’ control, affect their work environments and interpersonal relationships with library colleagues, faculty, students, and institutional staff. For some, then, an external institution-level change may spur them to reconsider their roles as educators more broadly.

Profession-wide shifts. Larger-scale changes in librarianship as a profession represent another external factor in whether academic librarians experience a perspective shift around their teaching. Some survey respondents named the ACRL’s (2015) *Framework for Information Literacy for Higher Education* as a factor that led them to reconsider their role as educators; this document, which intended to support deeper academic librarian-faculty collaborations, may have prompted sea change moments for some instructional librarians. Other survey respondents referenced the developing focus on critical pedagogy and social justice in librarianship initiated perspective transformation processes. One interviewee echoed these comments about critical librarianship, noting that it was a piece in her professional transformation that was still ongoing. So while broader professional shifts such as changes in instructional guidelines may lead academic librarians to experience epochal transformational moments, ongoing dialogues about what the profession should look like in 21st century learning environments can cause more gradual change over time.

Professional Shifts that are both Personal and External

While some transformational catalysts are either personal or external, I posit that professional shifts, such as position changes or revised job expectations, may act as either catalyst to academic librarians' teaching identity development. Some survey respondents and interviewees commented on how taking on new responsibilities or revising their own work expectations influenced their perspectives on their role as educators. In these instances, their choice to approach their work as academic librarians differently influenced their perspective transformation process. But not all academic librarians revise their work responsibilities out of choice; some experience top-down job restructuring that results in perspective transformation. Changing professional work might also involve seeking a new job, and this shift, too, can be either personally- or externally-motivated. Interviewees spoke about changing work environments for a variety of reasons, including seeking additional responsibility; some survey respondents commented on seeking new employment because of administrative or supervisory issues. As this factor leads academic librarians to consider, or reconsider, their teaching identities, it may come from a personal or external source.

Components in the Transformation Process

Once an academic librarian has experienced catalyst(s) for change, I posit that his or her perspective transformation process is comprised of four different pieces: overarching personal components that structure individuals' points of view and engagement with the other three factors; relational components, which include the interpersonal relationships academic librarians form or re-form in their transformative

experiences; professional components, which include academic librarians' teaching and technology use; and underlying external components from cultural, institutional, and professional inputs that affect librarians' ability to develop teaching identities. Academic librarians' teaching identities develop in the interactions between these pieces.

Overarching personal components in perspective transformation. Just as academic librarians' personal elements may initiate their perspective transformation processes, their individual factors are overarching components in how their teaching identities develop from an initial disorienting dilemma. As these views shift or develop, two personal components may be at play. First, academic librarians' emotional mindsets or perspectives on their work may influence their perspective transformation. Second, their reflective practices and ongoing reading may also inform how their teaching identities form.

Emotional mindset and perspective on librarianship. While an academic librarian's emotional mindset may influence whether she or he experiences a perspective shift at all around his or her teaching, this affective dimension and her or his opinions on librarianship as a profession can also influence how a teaching identity forms. Again, for those individuals with what Carol Dweck (2006) called a growth mindset, these kinds of changes offer opportunities rather than challenges; conversely, for those who view the profession as under-respected or undervalued by administrators, their transformation processes may be less fruitful or fail to progress at all. Two themes emerged from qualitative data, and particularly from those survey respondents and interviewees who saw themselves and the profession as dynamic and evolving, that may be personal sub-

factors in librarians' teaching identity development. First, some spoke about the idea of librarians as change agents in education, and how assuming this role impacted perspective transformation. Second, they acknowledged that learning in libraries looked different than a traditional classroom environment, but that librarians were still educators in spite of the inherent instructional differences. These personal factors may be parts of an academic librarian's personal mindset about his or her work and may therefore influence her or his perspective transformation.

Librarian as change agent. For some academic librarians, engaging in perspective transformation around their teaching involves considering their role in a broader academic context. Several interviewees spoke to this idea of librarian as change agent, either within their academic library settings or across their institutions. Christina, who served as a library-wide instruction coordinator at her doctoral/research institution, commented that as her perspective had shifted, she was "trying really hard to, to infuse it into everything... so to get broader perspective shifts" around student learning at her library. Dave mentioned that his work had begun to include helping faculty shift their practices, and this sense that "I could help with that... [had] made a difference in how, how I think of myself" as an instructor. And Jenna talked about librarian as change agent across educational settings. She mentioned engaging in broader "conversations that librarians are having and also that... faculty are having about the issues that they see... [including] thinking about the big-picture skills that we want students to have and the habits of mind" that all higher education instructor want students to have had helped advance her sense of herself as an educator. These interviewees' comments about their

work demonstrate how some academic librarians' personal perspectives about their work as change agents, and this factor may influence their teaching identity development.

Acknowledging the unique nature of learning in libraries. For some academic librarians, acknowledging that learning looks different in libraries than in traditional classroom settings is another dimension of their affective, personal components that influence the perspective transformation process. The key piece of this sub-factor is whether these individuals accept and work with the learning differences in their instructional settings, or if they view the distinctions as obstacles or challenges. Several interviewees discussed how academic libraries' role had changed over time, and how they viewed these changes positively, but some felt that those outside of librarianship – such as disciplinary faculty, students, and administration – saw librarians “in the box of stamping books in and checking books out, checking books in, [and] putting them on the shelf.” Instead, though, interviewees spoke about academic librarians' role in teaching critical thinking, which crosses all disciplinary areas. Those individuals who have this view – and those who see library-based instruction as inadequate based on the traditional classroom model – bring different personal perceptions to play in their perspective transformation processes.

Self-reflection. Engaging in reading and self-reflection is the other overarching personal component that influences academic librarians' experiences with perspective transformation around teaching. Ninety-three percent ($n = 332$) of all respondents who answered the survey item indicated that they engaged in personal reflection, and 91% ($n = 314$) of all respondents indicated that they engaged in professional reflection. More

specifically, 96.7% ($n = 238$) and 90.7% ($n = 223$) of individuals who indicated they had experienced perspective transformation around their teaching engaged in personal and professional reflection, respectively. Crosstab and chi-squared statistical analyses did not reveal significant differences between those individuals who did, and did not, indicate that they engaged in reflection and whether they experienced perspective transformation. However, both survey respondents' selected influences and interviewees' comments regularly referenced the role self-reflection played within the transformation process. While reflection may not be a prerequisite step, then, participants, indicated it was a component in the transformation process: They discussed how they had considered and reviewed their own practices in terms of students' learning needs; they also mentioned their reflection about their work as librarians and the profession as a whole. With these data, sequential explanatory data collection methods helped me to present the full range of information and illustrate that academic librarians reported that these kinds of introspective activities influenced their teaching identities. The divergence between the statistical analysis and qualitative data may be due to the large numbers of librarians who indicated they engaged in personal and professional reflection, regardless of whether they experienced perspective transformation around their teaching. These different pieces of information represent discrepancies in my data rather than contradictory information; because I espoused a socially relativist view in this research rather than a positivist ideology, I interpreted this information as complementary (DiLoreto & Gaines, 2016). Based on selected influences in transformation and qualitative comments, then, I argue that academic librarians' reflective tendencies and practices shape how other pieces

inform their senses of themselves as educators as they work through the different components of perspective transformation around their teaching.

Relational components in perspective transformation. While personal components frame how academic librarians' perspective transformations occur, relational components offer an area in which individuals can engage with others to form their teaching identities. From the data I collected, I argue that these relationships are generally either: With library colleagues or those with a library-centric perspective (e.g. library educators, supervisors, mentors, librarians outside of an institution); or with other individuals at an institution, including students, faculty, staff, and administration. These different kinds of relationships offer different transformative components to academic librarians considering their teaching identities.

Intra-profession relationships. Survey respondents and interviewees commented on how other librarians had influenced their perspective transformation processes. These kinds of intra-profession relationships helped academic librarians to establish relationships where all parties understood instructional dynamics and they could learn from others' practices. Moreover, individuals' relationships with other librarians helped them fruitful and focused conversations about instructional work that acknowledged the unique issue of librarians' instructional responsibilities. For some, these kinds of dynamics provided a space where they could talk about and grow from failures in a safe environment; for others, these intra-profession relationships were mentor-based and involved other librarians prompting them to grow or develop their potential as educators. While some survey participants and interviewees spoke about their institutional library

colleagues as supportive in their teaching identity development processes, many referenced external library-focused groups or relationships as most helpful for sharing ideas and supporting practice. Based on my data and analysis, then, I argue that these kinds of librarian-librarian relationships help those individuals working through perspective transformation to consider their teaching identities in more well-rounded ways.

Intra-professional relationships and demographic groups. While academic librarians across the profession may find that connections with other librarians facilitate their teaching identity development, my statistical analyses between demographic categories and transformative factors revealed that these kinds of relationships may have greater impacts in several specific situations. For instance, academic librarians at community colleges and doctoral/research institutions cited these types of relationships as influential in developing their teaching identities. These interpersonal connections may be important at these types of institutions because of faculty/instructor-librarian disconnects, or because of institution size. Also, those librarians with a professional degree or doctorate in process found their library-based relationships influential in their practices. And supportive library-based relationships played more of a role for librarians of color as they develop their teaching identities. This statistically significant relationship is important, especially as academic libraries and librarians work to make the profession more diverse; providing relational supports for non-white academic librarians can help them to experience perspective transformation more fully.

There were also statistically significant relationships between intra-professional relationships and several demographic categories related to academic librarians' age and experience. For instance, as academic librarians' ages increased, so did the change motivation they felt from colleagues around their instructional identities. But as librarians' ages, total time teaching, and time at their institutions increased, feedback from library colleagues was less important in shaping their teaching identities. Instead, they felt greater change motivation from supervisors or administrators. These findings offer academic librarians and administrators guidance on what inputs may help, or hinder, veteran librarians' teaching identity development.

Cross-institution relationships. While academic librarians learned from each other, many cited how those outside of the profession had influenced their teaching identities. Students, disciplinary faculty, and staff/administration at their institutions all influenced individuals' perspective transformation processes.

Students. Both survey participants and interviewees cited the importance of student input on their teaching identity development. Much of this input came from direct interaction – working with students one-on-one in research consultations, interacting with smaller groups of students, or teaching classes. From these kinds of interactions, academic librarians reflected on students' engagement and achievement; these factors informed how they thought about their instruction. Some participants referenced the role that anecdotal student feedback played, and many interviewees named a very specific feedback format in their teaching: Whether students fell asleep during a class session. For

academic librarians, then, their relationships with students in learning interactions are a relational factor that can influence their teaching identity transformation.

Faculty. Survey and interview participants also spoke to the idea that librarian-faculty relationships were crucial to developing their teaching identities. Some mentioned that disciplinary faculty's own views of themselves as educators informed how they as academic librarians thought about their pedagogical personas; others struggled against faculty's view of them as substitute teachers or support staff. In some instances, academic librarians cited their work with faculty at campus teaching and learning centers as instrumental in both forming their views of themselves as educators and reinforcing their role as educators on their campuses. With both sides of this faculty-librarian dynamic at play, though, I posit that how academic librarians work with and relate to the subject area faculty at their institution is an important component in shaping their perspective transformation process around their teaching identity. In instances where faculty are supportive of academic librarians' roles as educators at an institution, this relational piece can foster teaching identity development. And in instances where the librarian-faculty relationship is not one of equals, academic librarians may not be able to work through the perspective transformation process around their pedagogical personas.

Administration and staff. Academic librarians also cited their relationships, or at least the dynamics, with administration as another component of their teaching identity development. For those who had supportive administrators or institutional structures, they were able to work through the phenomenon of perspective transformation around their teaching. Meanwhile, those who did not have support, either for their libraries broadly or

for library teaching programs more specifically, seemed to experience greater challenges in developing instructional identities. In some instances, librarians cited the positive contributions that collaborating with technology or e-learning experts at their institutions brought to their perspective transformation processes. So in addition to their interactions with administrators, academic librarians' relationships with institutional staff may also affect whether they can develop teaching identities in intentional ways.

Cross-institution relationships and demographic groups. While academic librarians across the profession may find that connections with those outside of librarianship facilitate teaching identity development, my statistical analyses between demographic groups and these types of relationships revealed that these factors may be more important in certain instances. While there were statistically significant negative relationships between intra-professional relationships and academic librarians' age and experience, there were statistically significant positive relationships between these demographics and their cross-institution relationships. As their ages, time since graduation, total time teaching, and time at their institutions increased, relationships with faculty and academics outside of the library were more important to teaching identity development. These relationships suggest that more veteran academic librarians may find more meaning by seeking out cross-institutional connections to enhance their pedagogical personas. Also, as librarians' instructional frequency increased, there was a statistically significant positive relationship that these kinds of non-librarian relationships played in their perspective transformation processes. Again, this relationship reflects that this relational factor may be more influential for some instructional librarians than others.

Professional components in perspective transformation. I posit that, based on my research, academic librarians' professional work makes up the other key components that shape their perspective transformation processes. Their actual practices as instructors are concentrated in these factors, both in how they teach students and how they work with faculty. While these components are related to academic librarians' relationships with these two groups, these pieces reflect more of what librarians *do* or enact in their external-facing actions. How academic librarians teach with technology is another professional component that may play a role in their perspective transformation process. These work- and practice-centric pieces form a set of professional components that interact with academic librarians' relational components and overarching personal components to develop their teaching identities.

Teaching and working with students. From the data I collected and analyzed, I argue that academic librarians' hands-on instructional work is a key component in their perspective transformation processes. Survey respondents and interviewees spoke about how these experiences built over time and helped them hone their senses of themselves as educators. Academic librarians seemed to grow from both positive (i.e., visible student excitement or relief) and negative (i.e., students sleeping) teaching experiences. While part of this accumulating knowledge was relational in nature, much of it involved focusing on what value the librarians themselves brought to the classroom and how they could most effectively facilitate learning. Having these kinds of repeated, but personally cumulative, experiences can help academic librarians see themselves as educators whose

work involves helping students achieve learning goals and develop lifelong information literacy skills.

Collaborating or working with faculty. As with their teaching and interactions with students, the practices academic librarians used to establish or foster collaborative working relationships with faculty influenced their perspective transformation processes. Again, this component is related to their relationships with faculty but focuses more on the actions librarians take to pursue instructionally-centered partnerships with subject area educators. Based on survey and interview participants' comments, I argue that these practices are informed by academic librarians' senses of themselves as educators and the relationships they have with disciplinary faculty. The steps they take then inform how their perspectives continue to evolve and form around their teaching identities.

Using technology in teaching. The final piece of academic librarians' professional factors in their perspective transformation processes involves how they use technology to provide instruction. Again, this component may look different for individuals across institution types or with different instructional roles (e.g. delivering online or blended/hybrid instruction). But for those academic librarians who use technology as part of their instructional work, these tools may reframe what they consider instruction. For instance, some survey respondents and interviewees talked about how technology had extended their instructional reach and caused them to rethink what "teaching" meant. Others noted that technology tools, such as freestanding learning objects or course management systems, meant they had lost some measure of control over their content. In both kinds of situations, academic librarians had to consider what new

technology, online options, or other digital tools meant for their identities as educators, and how these tools could be used effectively to support learning. In considering these factors, academic librarians may find that using technology in their teaching practices reshapes their instructional identities.

Professional components and demographic groups. While academic librarians across the profession may find their professional activities and work actions facilitate teaching identity development, my statistical analyses between demographic groups and these factors revealed that they may be more important in certain instances. As academic librarians' graduation dates, time teaching, and time at their institutions increased, there were statistically significant positive relationships with the roles that their teaching and collaborative work with faculty played in influencing their perspective transformation processes. I assert that these data support the notion that academic librarians' experiences build over time to influence their pedagogical personas. Moreover, those who were working toward a professional or doctorate degree had statistically significant positive relationships with these professional components. And those librarians who provided blended/hybrid instruction were more likely to cite these work experiences as factors in influencing their teaching identities. For these specific demographic groups, then, ongoing opportunities to accumulate concrete practice and reflect on those practices may be especially formative.

Lifelong learning experiences as personal and professional. While I assert that academic librarians experience personal, relational, and professional components in their teaching identity development, I argue that their lifelong learning experiences can be

personal and professional component. These practices may take a number of forms, depending on the librarian; what ongoing learning looks like may mean it is either personal or professional in nature. Some interviewees and survey respondents mentioned engaging in faculty development at their institutions, often through a center for teaching and learning. Other survey and interview participants discussed how meaningful their experiences at external conferences or immersive learning programs had been to their instructional identities. These kinds of ongoing education can be simultaneously personal and professional, because they address individual growth while being connected to work-related goals. And still others had been, or were engaged in, ongoing continuing education to better understand themselves as educators. While these types of experiences may have a professional component, participants' comments about this learning format aligned it with the personal components of the perspective transformation process. They sought these experiences to better understand themselves as educators or to be the kinds of instructors they wanted to be. But I posit that, whether this component is personal, professional, or some combination thereof, it interacts with the other relational, personal, and professional pieces at play in an academic librarian's teaching identity development process.

Lifelong learning and demographic groups. While academic librarians across the profession may find that ongoing professional development facilitates their perspective transformation processes, my statistical analyses between demographic groups and these factors revealed that this component may be more important in certain instances. As academic librarians' ages, graduation dates, time teaching, and time at their institutions

increased, there were statistically significant positive relationships with professional learning as a factor in their teaching identity development. For more veteran librarians, then, informal learning opportunities, additional graduate work, or other educational activities may have a greater impact on their pedagogical personas than for their more junior colleagues.

Underlying external components in perspective transformation. While academic librarians have at least some measure of control over the personal, relational, and professional components in their perspective transformation process, I posit that there are also underlying external components that influence their teaching identity development. These pieces involve: Cultural or societal shifts; an institution's climate, structures, or expectations; and profession-wide changes. In many ways, these components are similar to the external catalysts academic librarians may experience in these three areas that lead to a perspective transformation process. During this phase of the perspective transformation process, though, academic librarians' interactions with these three component areas are different. While they cannot control these cultural/social, institutional, or profession-wide elements, they may use the other three component areas to neutralize or maximize these external pieces in their identity development processes.

Cultural or societal shifts. As aforementioned, some participants cited sociocultural factors as motivators in perspective transformation around their teaching identities. I posit that as academic librarians' personal, relational, and professional factors interact in this transformation process, the broader cultural climate influences how these pieces work together to form their views of themselves as educators. For instance, if the

zeitgeist demonstrates value for higher education or critical thinking skills, academic librarians may feel more able to establish a teaching identity within their institution. But if the social moment does not value these elements, academic librarians' transformative experiences may be stifled. Interestingly, though, some participants pushed back against a current moment they saw as anti-intellectual, anti-science, or anti-truth: They asserted that it was more important than ever that librarians be seen as educators because the role they could play in fostering critical thinking skills was of great importance. So for some academic librarians, then, I argue that social environments influence how the transformative components coalesce in forming their senses of themselves as educators.

Institutional culture, expectations, or structures. Another important underlying component in academic librarians' perspective transformation processes are their institutions' structures, expectations, and cultures. Both survey and interview participants cited the role of librarians on campus as an influence on their teaching identities: For those who were tenure-track, these structures encouraged them to think about their teaching in intentional and reflective ways. For those who were in staff or administrative positions, the instructional expectations and performance guidelines were sometimes not as clear. At a broader level, academic librarians who worked at institutions where quality instruction was important spoke to the effect that this value had on their work as educators. I argue, then, that if an institution demonstrates that it values teaching in its culture, structures, or expectations, academic librarians may experience a more complete teaching identity development and perspective transformation process.

Profession-wide shifts. Finally, academic librarians' perspective transformation processes may be influenced by external professional shifts as the nature of librarianship and libraries continue to evolve. Both survey respondents and interviewees commented on how academic librarianship was undergoing broad changes, even as their job descriptions or work requirements stayed the same. As information proliferates, students demonstrate different skill-sets or knowledges, and faculty seek new research support, these academic librarians saw that their profession sought to respond and their work as educators evolved. Moreover, they commented on how students' demonstrations of information literacy and critical thinking were continuing to develop, and how professional documents such as the *Framework for Information Literacy for Higher Education* (ACRL, 2015) might reflect this dynamic environment. As academic librarians grapple with their own personal, relational, and professional components, I argue that the profession-wide changes occurring outside of their control may inform how these pieces interact and transform individuals' teaching identities.

Resulting Perspective and Practice Shifts

Once academic librarians work through the perspective transformation process around their pedagogical personas, I argue a change in their views or thinking may be demonstrated in three ways. First, these individuals may experience a broader transformation about their transformations: That is, they may begin to see change as an ongoing, cyclical process that represents constant evolution rather than a journey with a destination. Second, they may enact their transformed thinking in new or revised approaches to instructional or collaborative interactions. Third, academic librarians may

pursue personal professional changes to demonstrate their revised views of themselves as educators. And these individuals' ongoing professional learning, whether for work-related growth or personal interest, is both a manifestation of these changed views and an option to foster continued transformation around teaching.

Seeing transformation as ongoing. For some academic librarians, working through the perspective transformation process results in a realization that there is no end to process. Both survey respondents and interviewees pushed back against the idea that their transformative process was complete. Instead, they noted that perspective transformation around their teaching did not represent a single shift or even a series of cognitive changes over time, but instead an ongoing evolution of how they saw their professional lives and experiences. Survey and interview participants seemed to see this ongoing evolution manifested in their practices in their continued reflection and reading. By engaging with their own practices and with others' reflections on their work as educators, these academic librarians fed their own transformative cycles. I argue that participants' comments on this continuous development process suggest that that once librarians engage in these kinds of transformative experiences, they see perspective evolution and changes as ongoing components of their professional lives.

New or revised relationships around teaching and learning. Academic librarians also spoke about how their perspective transformation processes resulted in new or revised relationships around teaching and learning. These concrete actions reflected their revised senses of themselves as educators, and allowed them to assert their instructional identities in student-librarian, faculty-librarian, and administrator-librarian

dynamics. For instance, some interviewees discussed how they pursued deeper and more embedded instructional relationships, both in online and face-to-face instructional settings; other participants noted that their changed perspective led them to focus their teaching more on students and make their classrooms learner-centered. I posit that these outward manifestations reflect academic librarians' teaching identity transformation processes and the interplay between their personal, relational, and professional components.

Personal professional changes. Making personal professional changes offers another way for academic librarians to reflect this transformation process. These actions can include taking on additional or new responsibilities in a current work environment. In my analyses, there were statistically significant positive relationships between changing work responsibilities and academic librarians' increased age, graduation dates, time teaching, and time at institutions. From these relationships, I argue that veteran academic librarians are more likely to revisit their job duties because of teaching identity development, and that increased responsibilities then inform their perspective transformation processes.

These personal professional changes may also mean seeking different employment – with different opportunities – at other institutions. In my analyses, there were statistically significant negative relationships between broader job changes and academic librarians' increased age, graduation dates, time teaching, and time at institutions. From these relationships, I argue that veteran academic librarians are less likely to seek new employment because of teaching identity development. While these

kinds of events relate to work-related shifts, they are highly personal in that academic librarians can choose to demonstrate their senses of themselves as educators through this kind of action. A change in perspective, then, may result in a change in employment.

Professional and lifelong learning. While these aforementioned areas represent manifestations of academic librarians' perspective transformation processes, their ongoing learning – whether for professional or lifelong goals – can demonstrate changed views while fostering ongoing change. Survey respondents and interviewees referenced their professional and formal educational experiences as results and inputs in their perspective transformation processes. For instance, an academic librarian may pursue graduate coursework in instructional design because he sees himself differently as an educator; during this graduate program, he then may experience additional perspective shifts based on his learning experiences, interactions with faculty, and collaborations with other students. Another librarian may pursue professional development programs that can bolster her assessment knowledge because she sees this as an important part of her educational mission. However, she recognizes during the learning process that the assumptions she has about learning evaluation do not mesh with her experiences. Or an academic librarian may read scholarly or professional literature on critical pedagogy because she sees her instructional role differently because of recent social events and movements; then, while engaging in Twitter discussions about critical librarianship and social justice, she experiences a disorienting dilemma about how she can confront her privilege in her teaching. These three examples highlight different kinds of professional

or lifelong learning to demonstrate how this result of transformation can, in fact, encourage academic librarians to continue to critically consider their teaching identities.

Limitations of This Research

Although I sought to collect both broad and deep data from academic librarians about their perspective transformation processes, my research has several limitations. First, my survey sample size represented less than 10% of all potential listserv participants. While my phenomenological research approach guided me in seeking to understand academic librarians' experiences with the phenomenon of perspective transformation and my sequential explanatory mixed methods research tools sought to explain the factors that affected their experiences, I acknowledge that a larger sample size on my survey instrument may have lent increased validity to my data. I believe my follow-up interviews mitigated this limitation, but a similar study with a larger sample size may provide a richer data set.

Moreover, I ran a considerable number of statistical analyses to examine the relationships between the factors I identified through confirmatory factor analysis and the different demographic groups of academic librarians. The number of statistical tests I ran raised the likelihood of Type I errors present in my data analysis (see, for instance: Davis, 2001; Strasak, Zaman, Pfeiffer, Gobel, & Ulmer, 2007); these kinds of errors may suggest a false positive in terms of statistical significance between these factors and demographic groups. While I took an exploratory approach to considering these data rather than engaging in hypotheses testing, subsequent research on this topic using multivariate analysis may mitigate experimentwise errors (Davis, 2001). Additional

research of this kind could also hone in on which factors truly impact academic librarians' teaching identity development and identify the essential pieces of the conceptual model I proposed from my interpretation of the quantitative and qualitative data.

Furthermore, my data collection methods measured academic librarians' self-reporting of their perspective transformation rather than providing concrete evidence of whether this kind of a shift had indeed occurred. There may have been ways of asking for evidence of this transformation, such as: Lesson plans written before and after transformative experiences; teaching philosophy statements that have evolved over time; or other instruction-related artifacts (e.g. personal communications with mentors or colleagues, reflection journals). However, these materials fell outside of the scope of my research. Moreover, because perspective transformation is an inherently personal and individualized process, I believe participants knew if they had experienced such a shift and could speak to it without relying on external evidence to make their cases.

Another limitation of my research is that I focused, and in fact limited, my sample – both in my survey respondents and interview participants – to those librarians who currently engaged in information literacy instruction. As academic librarians' roles and responsibilities evolve, they may provide instruction in other areas, including: Research data management; scholarly communications; learning or instructional design; and instructional technology. By limiting my sample to individuals who currently worked in information literacy instruction, I may have inadvertently excluded those librarians with instructional experiences to share in other teaching areas. Subsequent research that

broadens the “instructional” focus may further enhance our understanding of academic librarians’ teaching identity development and perspective transformation experiences.

Significance of This Research

Despite these limitations, though, I believe the results of my exploratory research provide three significant conclusions. First, my data demonstrate that academic librarians see themselves as educators and that they perform educational and learning-centric tasks across college and university environments. Second, participants’ responses show that teaching identities can be developed over time and through several factors. And third, I identified specific inputs that influence academic librarians’ teaching identities. They can use these components to foster their perspective transformation, or others may find they provide a starting point to consider other instructor groups’ experiences in developing pedagogical personas.

Academic Librarians as Educators

Broadly, my research demonstrates that academic librarians both see themselves and act as educators in post-secondary environments. Subject area faculty and administrators who work to foster quality teaching at different types of institutions should consider this conclusion as they look for options to impact student learning. Faculty members may see benefits in developing instructional partnerships with academic librarians, especially if they want their students to develop critical thinking, information literacy, digital literacy, or research skills. Academic administrators who are working to develop teaching or enhance instruction across their campuses may also benefit from partnerships with academic librarians, because they may have a broader and less siloed

view of students' academic needs. My research also supports academic librarians who see themselves as educators. From both the survey responses and interview data, I argue that those academic librarians who identify as instructors are not alone – instead, they are part of a larger body of information professionals working to improve students' educational and personal learning.

Teaching Identities can be developed

Since this research considers whether individuals experience perspective transformation about their identities as educators, another key conclusion is that teaching identities can, in fact, be developed. While my proposed conceptual model in Chapter 2 (see Figure 2.1) connected subject area faculty's different inputs and experiences in forming how they thought of themselves as educators, this original research confirms that an individual's sense of himself or herself as an educator can form over time (see Figure 5.1). Moreover, I assert that these data and analyses highlight that teaching identity development is an ongoing, iterative process: Once an instructor has formed a sense of herself or himself as a teacher, he or she can continually revisit it based on new information, experiences, relationships, and events. This takeaway reinforces that ongoing learning opportunities at institutions and conferences are important to education professionals.

Specific Influential Factors Identified

Finally, the factors influential to perspective transformation that I identified in my research are takeaways that can be useful to other researchers in the future. At a macro level, my data collection and analysis processes showed that interpersonal relationships

and hands-on experiences impacted academic librarians' perspective transformation processes around their teaching identities, and that work-related professional events had less of an impact on these processes. At a more micro level, these interpersonal factors included relationships with colleagues, students, faculty, and administrators, while the experiential factors centered on instructional practices, working with faculty, and using technology. And I identified individual-level factors that impact how each academic librarian approaches instructional identity development, including their reflective practices and affective perceptions of their profession. Moreover, there were limited statistically significant relationships between the demographic items on my survey instrument and the factors that influenced perspective transformation. This result implies that academic librarians across gender, age, ethnic, institutional, educational, and instructional lines can develop teaching identities and evolve as educators.

Recommendations

From these key conclusions, then, I can offer recommendations for individual academic librarians, those in academic library leadership or supervisory roles, librarian educators in graduate programs, and academic administrators. These recommendations take into account the catalysts for perspective transformation, the ways that academic librarians' perspective transformation may occur, the components of this transformative process, and what the ensuing results may look like in terms of individuals' teaching identities.

Individual Academic Librarians

For individual academic librarians, I posit that my research offers several action options. First, I recommend that they find ways to reflect on their own experiences as educators and use this reflection to inform their future practices. Second, I advocate that they seek opportunities for growth; these opportunities could be formal or informal in nature. And third, I believe they should find opportunities to engage in relationships and discussions around teaching.

Reflect on experiences as an educator. Individual academic librarians who are interested in developing their teaching identities or experiencing perspective transformation around their roles as educators can begin by reflecting on their instructional experiences. This reflection can be introspective and internal, or some individuals may find that writing down or journaling their experiences helps flesh out their thoughts. One interviewee mentioned critical friendship, which provides a more formal reflection structure; other educators have engaged in such dynamics to foster their teaching identity development (see, for instance: Adams & Mix, 2014; Samaras et al., 2014). These varied structures can offer academic librarians across the profession with metacognitive options about their instructional practices and work; from this personal reflection, they can identify their next steps in developing a teaching identity or pursuing perspective transformation.

Seek opportunities for growth. Academic librarians may also find that seeking opportunities for growth can help them work through transformative experiences or develop senses of themselves as educators. Again, these opportunities can be diverse as

individuals' needs, abilities, and constraints. Survey participants and interviewees noted conference and external professional learning programs as helpful in forming their teaching identities, but for many librarians, budgets and schedules may not allow these kinds of activities. Reading literature, joining an existing teaching-focused group at an institution, or starting a new professional learning community are just some of the options academic librarians could seek as they work toward teaching-centric personal professional growth.

Engage in discussions and relationships around teaching. Finally, academic librarians should find ways to engage in discussions about their teaching practices that allow them to reflect and grow. From these conversations, they can establish meaningful, supportive, and critical relationships that may inform their instructional work and teaching identity development. Librarians may find that intra-library relationships are most constructive, because other academic librarians understand the nature or challenges of information literacy instruction; others may want to reach out to subject area faculty and learn from their educational experiences. Some still may find it beneficial to establish mentor relationships with administrators or staff members across an institution or in another higher educational environment; these dynamics and conversations can help academic librarians grow in different ways. Based on their instructional interests and needs, then, individual librarians should explore how they can engage in meaningful discussions and relationships around instruction. These elements can help them to engage in transformation around their teaching.

Academic Library Leaders or Supervisors

Academic library leaders or supervisors can also help academic librarians become more intentional and effective educators by fostering their teaching identity transformation processes. Based on my findings, I argue that they can support individual instruction librarians in four ways. First, they can create opportunities for librarians to reflect, build relationships, and have discussion around their work as educators. Second, academic library leaders can foster librarians' ongoing growth in whatever way budgets, schedules, and institutional expectations allow. Third, they can emphasize both the academic library's and academic librarians' educational roles within higher educational institutions. And fourth, academic library leaders can collaborate with graduate programs to outline the skills and knowledge new professionals need to enter the workforce.

Create opportunities for reflection, relationships, and discussion. While individual academic librarians should seek out opportunities to reflect on their teaching practices, establish supportive relationships with other educators, and engage in instruction-focused discussions, academic library leaders have roles to play in each of these components. As they structure work responsibilities, create library cultures, or outline instructional roles, they should ensure that reflection, relationships, and discussion can happen for academic librarians who work in instruction. Developing environments where these factors can commingle and inform teaching identities will look different at every institution, but academic library leaders should closely evaluate their instructional librarians' strengths and areas for development. From such an analysis, then,

they can determine how to best support these individuals in becoming reflective, connected, and critical educators.

Support academic librarians' ongoing growth however possible. Academic library leaders or supervisors can also support their librarians' teaching identity development by encouraging their ongoing growth as professionals. While professional or external conference attendance is an oft-used resource for this kind of professional growth, not all academic libraries may be able financially support such endeavors. In these cases, academic library supervisors should look to within their institutions for professional development resources. These efforts may include: encouraging academic librarians to attend specific professional development programs; seeking partnerships with institutional units (e.g. center for teaching and learning, school or department of education/human services, e-learning office) that can design targeted professional learning offerings for librarians; or identifying librarians who can offer professional development programs for their colleagues. These alternatives to external professional development may help academic librarians develop their teaching identities and engage in the relationships, discussion, and reflection that can foster transformation.

Emphasize academic librarians' educational role within institutions. Because academic library leaders or supervisors interact with other higher education administrators, supervisors, program directors, or department chairs, they should emphasize academic librarians' teaching roles in these connections. By reminding other academics that librarians are an essential part of an institution's instructional work, academic library leaders can work to get seats at the table on key educational issues such

as assessment plans or instructional program revisions. These kinds of cross-campus connections can help individual academic librarians develop their teaching identities and connect with faculty while also reinforcing the library's role in campus life. Academic library leaders, especially library deans and directors, can advocate for academic librarians in the upper echelons of institutional life in ways that individual librarians cannot do on their own.

Outline skills and knowledges needed from library school graduates. Finally, academic library leaders or supervisors can work with library graduate school programs to ensure that coursework and graduate experiences align with the profession's needs. Survey participants and interviewees commented on the disconnects they experienced between their library school experiences, professional expectations, and working reality, specifically in terms of what they needed to know as educators. If academic library leaders work with librarian educators in library graduate programs, they can help new professionals be better prepared to hit the instructional ground running.

Library Educators in Graduate Programs

As with academic library leaders or supervisors, librarian educators in graduate programs have unique opportunities to affect librarians' teaching identity development processes. As they support librarians-in-training who will enter myriad instructional settings (e.g. public, K-12, academic), they should engage with academic library leaders to understand the skill sets and knowledge bases graduates need to be effective educators. These librarian educators should also work to offer library students with opportunities to engage in hands-on instruction while they are still in graduate school. And finally, as

educators themselves, they should act as instruction-focused mentors to their students as possible.

Work with academic library leaders to understand necessary skill-sets.

Library educators, and especially those focused on training instruction librarians, can help academic librarians develop teaching identities by partnering with library leaders to identify necessary instructional skills and knowledge. These relationships may exist already, but strengthening these partnerships and having two-way communication between graduate schools and work environments can only help future library professionals. Such partnerships may also facilitate graduate students' internship placement or practicum experiences in different instructional settings. By translating the scholarly discipline of librarianship into professional work, library educators can ensure their graduate students are equipped for future instructional work.

Identify opportunities to offer hands-on instructional experiences. Library educators can also help academic librarians-in-training develop their teaching identities by providing them with hands-on instructional opportunities. Practicing academic librarians cited this factor as key in their perspective transformation processes, and those who had positive graduate educational experiences mentioned the value they found in teaching while still in library school. While these opportunities may be hard to facilitate for larger groups of graduate students, library educators should investigate options at their institutions for graduate students to facilitate one-shot instruction sessions or workshops. As with academic library leaders providing growth opportunities to instruction librarians, these kinds of partnerships may have to be creative. Other graduate

schools or departments on campus may offer possibilities for instructional exchanges between students, for instance. This kind of hands-on practice can help academic librarians think about their roles as educators before they enter the profession.

Offer mentorship relationships as possible. Finally, library educators should consider how they can mentor library graduate students who are interested in or will pursue a career in instruction. Based on the data I collected, feedback from this type of library-centric perspective was helpful to academic librarians as they formed their teaching identities. Again, library educators need to consider how this mentorship piece is feasible in their institution: It could mean that faculty are paired with students in a critical friendship-type dynamic, or even that instruction librarians from an institution's library system work with future instruction librarians to share their experiences. If those options are not feasible, library educators may want to think about how in-class mentoring around teaching identities could take shape. For instance, they could make their own thinking about instructional practices, approaches, and content visible to students, thereby pulling back the proverbial curtain on the oft-opaque work of educators. From these different kinds of mentorship dynamics, academic librarians may get a jump-start on their teaching identity development processes.

Academic Administrators

Academic administrators across institutions of libraries may find it insightful to consider these key research takeaways in their practices. Because they have a broader views of systems, culture, programs, and expectations, they may identify ways to help academic librarians develop teaching identities that can then transform students'

academic and personal experiences. I argue there are three areas academic administrators can consider based on my research. First, they can evaluate academic librarians' status and roles within their institutions. From this assessment, they can then ensure that academic librarians are included in discussions about instructional and assessment issues. And finally, academic administrators can verify that instructional support resources are open to all who play educational roles at their institutions.

Evaluate academic librarians' roles within institutions. Academic administrators can review academic librarians' roles at their institutions to determine if their status matches their work responsibilities. At many institutions, librarians are classified as administrative or support staff in spite of the educational role they play. While the American Association of Colleges and Universities (AAC&U), the American Association of University Professors (AAUP), and the Association of College and Research Libraries (ACRL) (2012) asserted that academic librarians should have faculty status at higher education institutions, not all do; some have a similar, but separate system. Regardless of librarians' status on campus – which is often dictated by bargaining unit or union contracts – academic administrators should work with library administration and academic librarians to ensure their performance review criteria reflect the nature of their instructional work. By letting librarians' work inform how their performance is assessed, academic administrators can validate the unique but important learning that happen in libraries and library instruction settings.

Include academic libraries in instructional and assessment discussions.

Academic administrators should also work to ensure that academic librarians have a seat at the table when instructional issues are discussed. These kinds of experiences can help academic librarians learn more about faculty's myriad educational responsibilities, and in turn academic librarians can bring their own instructional perspectives to these dialogues. Several research participants mentioned serving in, or even leading, these kinds of institution-wide discussions, and they cited the value these experiences brought to their teaching identity development. Both institutions and academic librarians benefit from their inclusion in instructional conversations, and so academic administrators should consider where they may provide valuable insight and contribute more to institutions' teaching missions.

Ensure instructional support resources are open to all who educate. Finally,

academic administrators can ensure that all instructors across their institutions have access to instructional support resources. One interviewee spoke to the idea that, although academic librarians, advisors, and other staff members teach courses or work with students, they can be excluded from instructional-focused professional development. Academic administrators should evaluate their institutional professional learning offerings to verify that all who serve in educational roles can attend, and they should find ways to remedy situations where instructors are not welcomed. By recognizing the different teaching contributions that all an institution's educators make – full-time tenure-track faculty, adjunct lecturers, advisors, librarians, and others – academic administrators

can help a wider range of post-secondary instructors develop their teaching identities and positively impact student learning.

Scholars Researching Transformative Learning Theory

While there are practical applications and takeaways for academic librarians, library leaders, library educators, and academic administrators, there are also several potential directions for researchers investigating perspective transformation or transformative learning theory. First, they can try to deepen this scholarship specifically about academic librarians' reported experiences with perspective transformation by addressing this study's limitations. Other researchers looking to expand our understanding of how these individuals identify as educators as well as information experts could cast a wider net, both with a survey instrument and with in-depth interviews. Collecting information from a larger swath of academic librarians may help researchers to further focus the themes in this research, identify granularity in experiences across different demographic categories, or develop new understandings of individuals' experiences with perspective transformation. Also, scholars interested in examining this phenomenon more deeply with academic librarians may seek evidence of perspective transformation through academic librarians' instructional documents (e.g. lesson plans, teaching philosophies/statements, reflection-based writings). Designing research that incorporates concrete examples of how academic librarians have developed teaching identities over time can help to identify the kinds of activities, mindsets, or practices that may help others work through this process.

Second, researchers interested in understanding transformative learning theory more broadly can use this scholarship as a jumping-off point to explore how other groups of educators experience perspective transformation. Understanding how both those groups whom we commonly consider as educators (e.g. K-12 teachers and full-time, tenure-track disciplinary faculty) and those individuals who may be forgotten in instructional conversations (e.g. adjunct instructors/faculty, support teachers in K-12 schools, academic counselors/advisors) work through this process can help us to develop a more holistic definition of transformative learning theory. Perhaps these educators who work in different environments or have different work expectations experience perspective transformation differently, but perhaps there are similarities. We do not know unless we investigate. For scholars interested in this theoretical framework, better conceptualizing educators' experiences can help to more fully understand transformation.

Conclusion

As information formats, needs, and access change, post-secondary students need to be prepared to make sense of the morass of content they encounter – for academic, professional, and personal purposes. Academic librarians can serve a key role in meeting these needs, especially if they see themselves as educators. In this research, I sought to examine whether academic librarians experienced perspective transformation around their teaching identities, or senses of themselves as instructors; respondents to a survey instrument and participants in follow-up interviews asserted that they did have such experiences. From this basic understanding, I then sought to determine the factors that influenced individuals' perspective transformation processes. From the descriptive

statistics gathered, I then demonstrated that academic librarians' interpersonal relationships and experiences are key influences in how they view themselves as educators; discussion with interview participants emphasized these points. Through one-way analyses of variance (ANOVA) and linear regression, I further examined relationships between demographic variables and the factors that influenced academic librarians' perspective transformation. The areas where statistically significant relationships exist offer additional research avenues on this topic, and provide jumping-off points for future researchers interested in exploring academic librarians' transformative experiences around teaching.

APPENDIX A
IRB APPROVAL



Institutional Review Board for the Protection of Human Subjects

DATE: January 26, 2017

TO: Amanda Nichols Hess, MSI
FROM: Oakland University IRB

PROJECT TITLE: From information experts to expert educators? Academic librarians' experiences with perspective transformation and developing teaching identities

REFERENCE #: 998744-2
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: January 26, 2017
EXPIRATION DATE: January 25, 2018
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 6 and 7
IRB MEETING DATE: February 16, 2017

Thank you for your submission of New Project materials for this project. The Oakland University IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

The submission packages include the following approved documents:

- Application (IRBNet # 998744-2)
- Consent Form Survey Version 1/26/2017 which has been published as a Board Document under Review in IRBNet. **The IRB approved consent document MUST be used in recruitment and consent of participants in the research.**
- Consent Form Interview Version 1/26/2017 which has been published as a Board Document under Review in IRBNet. **The IRB approved consent document MUST be used in recruitment and consent of participants in the research.**
- Survey Instrument (IRBNet # 998744-1)
- Interview Protocol (IRBNet # 998744-1)
- email Recruitment (IRBNet # 998744-1)

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and assurance of participant understanding followed by a signed consent form. Informed consent must

continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure. Do not collect data while the revised application is being reviewed. Data collected during this time cannot be used.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this committee. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of January 25, 2018.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

Please retain a copy of this correspondence for your record.

If you have any questions, please contact Kate Wydeven M.S. at (248) 370-4306 or kwydeven@oakland.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Oakland University IRB's records.

APPENDIX B
SURVEY INSTRUMENT

Introduction / Consent form

Q1 Introduction You are being asked to participate in a research study that is being done by researchers from Oakland University. This study is being done by Amanda Nichols Hess, under the direction of Eileen Johnson, Associate Professor, School of Education and Human Services. This study is being conducted as part of the requirements for a PhD in Educational Leadership. The purpose of this consent form is to let you know more about the study so you can decide whether to participate in the study or not. Please read the form carefully. You may ask questions about why the research is being done, what you will be asked to do, the possible risks and benefits, your rights as a participant, and anything else about the research or this form that is not clear. You may talk with your friends and family about this research study before making your decision. When all your questions have been answered, you can decide if you want to be in this study. This process is called ‘informed consent.’ If you decide to participate, you will indicate that on this form and can download / save a copy of this form at bit.ly/HessSurvey2017.

Why is this study being done? The purpose of this research study is to investigate if academic librarians transform from seeing themselves as disciplinary experts in information access, retrieval, and management to thinking of themselves as postsecondary educators. This study also seeks to determine, if academic librarians experience such perspective transformation, what experiences or influences help them through this process.

Who can participate in this study? You are being asked to participate in the study because you are an academic librarian, or you are a part of an academic library-focused email listserv.

Who is sponsoring this study? None.

Where is this study being done? This study takes place online in an internet-based survey instrument.

What procedures are involved with this study? If you agree to take part in this research study, you will be asked to do the following: complete this online survey to the best of your ability.

How long will participation in this study last? It is estimated that this survey will take approximately 20 minutes to complete.

How many people will be participating in this study? Up to 1000 people will be participating in this survey.

What are the risks, side effects or discomforts that can be expected from participating in this study? By taking part in this study, you may experience minimal risk, much like what you would experience in your day-to-day life. You will be sharing information about your experiences and perceptions related to your work as an academic librarian. A breach of confidentiality is also a possible risk. Breach of confidentiality means that it is possible that individuals not associated with this research may accidentally gain access to information that personally identifies participants. Appropriate safeguards are set in place to minimize a breach of confidentiality (e.g. researcher’s office is secure and

computers and external storage devices are password protected); but no researcher can ever guarantee that this sort of breach will not occur.

Are there any known benefits from taking part in this study? There are no direct benefits to you for participating in this study. However, the results of this study may benefit others in the future.

What are the alternatives to participation in this study? You may choose not to participate in this study.

What are the costs of taking part in the study? There is no cost to you for participating in this study.

What compensation is being provided for participation? You will not be paid for participating in this study.

What are your rights if you participate in this study? Your decision to participate in this study is voluntary. You may choose to leave the study at any time, or refuse to answer any questions that may be asked during the study. You will not lose any benefits to which you are otherwise entitled and your decision will not affect your present or future relationship with Oakland University, the researcher, or the Organizational Leadership department. If you are a student or employee at Oakland University, your decision about participation will not affect your grades or employment status. If you would like to stop participating in this study, you should contact the researcher, Amanda Nichols Hess, 248-370-2487, who will provide instructions on how to withdraw from the study and any potential consequences for withdrawal. Any new information that may affect your willingness to participate in the study will be provided to you as soon as possible.

What will be done to keep my information confidential? Every effort will be made to keep your study-related information confidential. Personal information regarding your participation in this study may be disclosed if required by law. Also, your research records may be reviewed by the following groups: Regulatory authorities involved in the oversight of research (Office for Human Research Protections or other federal, state, or international regulatory agencies); Members or representatives of Oakland University Institutional Review Board (IRB) (in order to ensure that your rights as a research participant are being protected); When study results are presented at professional conferences or published in professional journals, your name will not be used.

What do you do if you have questions about the study or the rights of research participants? For questions about the study you may contact Amanda Nichols Hess, 248-370-2487, or Eileen Johnson, 248-370-2627 (faculty adviser). For questions regarding your rights as a participant in human subjects research, you may contact the Oakland University Institutional Review Board, 248-370-2762. You can access this information sheet at www.bit.ly/HessSurvey2017.

- Yes, I agree to participate in this study.
- No, I do not agree to participate in this study.

Skip To: End of Survey If Q1 = No, I do not agree to participate in this study.

Qualify to participate in the study

Q2 Is information literacy instruction part of your **current** work responsibilities?

- Yes
- No

Skip To: End of Survey If Q2 = No

Q3 Gender

- Prefer not to say
- Male
- Female

Q4 Ethnicity

- White / Caucasian
- Hispanic or Latinx
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Other
- Multiracial
- Prefer not to answer

Q5 Age group

- Under 25
 - 25-34
 - 35-44
 - 45-54
 - 55-64
 - 65-74
 - 75 or over
-

Q6 What is the highest level of education you have completed?

- Bachelor's degree
 - Master's degree
 - Professional degree
 - Doctorate degree
 - Other
-

Q7 Have you completed a graduate degree **in addition to** a Master's degree in library/information science?

- No
 - No, but I am in the process of completing an additional Master's degree
 - No, but I am in the process of completing a professional degree
 - No, but I am in the process of completing a doctoral degree
 - Yes, I have an additional Master's degree
 - Yes, I have a professional degree
 - Yes, I have a doctoral degree
 - Click to write Choice 8
-

Q8 When did you graduate from library school?

- I did not attend library school
 - I am currently in library school
 - Within the last year
 - 1-3 years ago
 - 4-6 years ago
 - 7-9 years ago
 - 10+ years ago
-

Q9 At what kind of institution do you work?

- I am not currently employed
- Community or junior college
- Four-year college
- Master's-granting university
- Doctoral/research university
- Other

Skip To: End of Survey If Q9 = I am not currently employed

Q11 How long have you worked at your current institution?

- Less than one year
 - 1-3 years ago
 - 4-6 years ago
 - 7-9 years ago
 - 10+ years ago
-

Q12 How long has instruction been a part of your work responsibilities?

- Less than one year
 - 1-3 years ago
 - 4-6 years ago
 - 7-9 years ago
 - 10+ years ago
-

Q10 What kinds of instruction are part of your work responsibilities? Select all that apply.

- Face-to-face instruction
 - Online instruction
 - Blended / hybrid instruction
-

Q13 On average, how frequently do you engage in classroom instruction?

- Once a year
- 1-3 times a semester
- 4-6 times a semester
- 7-9 times a semester
- 10+ times a semester

End of Block

Academic librarians' experiences with perspective transformation phases

Q14 Think about your professional experiences in teaching -- check off any of the following statements that apply.

- I had an experience that caused me to question the way I normally teach.
 - I had an experience that caused me to question my ideas about professional roles (Examples of professional roles include the kinds of instructional responsibilities an academic librarian should take on.)
 - As I questioned my ideas, I realized I no longer agreed with my some or all of my previous beliefs or role expectations.
 - As I questioned my ideas, I realized I still agreed with some or all of my beliefs or role expectations.
 - I realized that other people also questioned their beliefs about their instructional roles or responsibilities.
 - I thought about acting in a different way from my usual teaching beliefs and roles.
 - I felt uncomfortable with professional expectations (for example, what my job responsibilities or work roles were) around teaching and instruction.
 - I tried out new teaching roles so I would become more comfortable and confident in them.
 - I tried to figure out a way to adopt these new ways of acting.
 - I gathered the information I needed to adopt these new ways of acting.
 - I began to think about the reactions and feedback from my new professional behavior.
 - I took action and adopted these new ways of acting.
 - I do not identify with any of the statements above.
-

Q15 Since you have been providing information literacy instruction, do you believe you experienced a time when you realized that your values, beliefs, opinions, or expectations (for example, how you viewed your work responsibilities or roles as an academic librarian) changed?

- Yes
- No
- I'm not sure

Skip To: End of Block If Q15 = No

Q17 Describe what happened when you realized your values, beliefs, opinions, or expectations about your instructional responsibilities had changed.

Q18 Did any of the following individuals influence this change? Check all that apply.

- Interaction with a student or students
 - Support from a colleague
 - A challenge from a colleague
 - Support from another librarian
 - A challenge from another librarian
 - Support from a subject area faculty member
 - A challenge from a subject area faculty member
 - Support from a mentor
 - A challenge from a mentor
 - Support from a supervisor
 - A challenge from a supervisor
 - Support from my library/institution's administration
 - A challenge from my library/institution's administration
 - Other: _____
 - No individual influenced my experience of change
-

Q19 Did any specific learning experience or resource influence this change? If so, check all that apply.

- Taking a class or classes in library school
- Taking a class or classes in another graduate program
- Teaching in a face-to-face course
- Teaching in an online course
- Teaching in a blended/hybrid course
- Observing other academic librarians' instructional practices
- Receiving feedback from other academic librarians on your teaching practices
- Observing subject area faculty's instructional practices
- Receiving feedback from subject area faculty on your teaching practices
- Receiving feedback from students who participated in your instruction
- Completing a self-assessment of your teaching practices
- Writing about your teaching practices in a reflection journal or other personal format
- Writing about your teaching practices for publication
- Attending meetings, workshops, or trainings within your normal working environment
- Attending professional meetings, conferences, or workshops outside of your normal working environment
- Participating in online webinars or seminars
- Reviewing guidelines, standards, or other documents from professional organizations
- Reading scholarly literature on information literacy instruction

- Reading scholarly literature on the scholarship of teaching and learning
 - Other _____
 - No experience influenced the change I experienced
-

Q20 Did any significant professional event influence the change? If so, check all that apply.

- Completion of library graduate program
 - Completion of other graduate program
 - First professional job after graduate school
 - Change of job
 - Loss of job
 - Change in job responsibility or duties
 - Other _____
 - No professional event influenced the change I experienced
-

Q21 Think back to when you first realized that your views or perspective had changed. What did your professional life have to do with the experience of change?

End of Block

The role of specific experiences, including reflection

Q16 Would you characterize yourself as someone who usually thinks back over previous decisions or past behavior?

Yes

No

Q22 Would you characterize yourself as someone who reflects upon the meaning of your professional experiences for your own purposes?

Yes

No

Q23 Which of the following factors have been a part of your instructional work as an academic librarian? Please select all that apply.

- Interaction with a student or students
- Support from a colleague
- A challenge from a colleague
- Support from another librarian
- A challenge from another librarian
- Support from a subject area faculty member
- A challenge from a faculty member
- Support from a mentor
- A challenge from a mentor
- Support from a supervisor
- A challenge from a supervisor
- Taking a class or classes in library school
- Taking a class or classes in another graduate program
- Teaching a face-to-face class session
- Teaching or providing instruction for an online course
- Observing other academic librarians' instructional practices
- Receiving feedback from other academic librarians on your teaching practices
- Observing subject area faculty's instructional practices

- Receiving feedback from subject area faculty on your teaching practices
- Receiving feedback from students who participated in your instruction
- Completing a self-assessment of your teaching practices
- Writing about your teaching practices in a reflection journal or other personal format
- Writing about your teaching practices for publication
- Attending professional meetings, conferences, or workshops outside of your normal working environment
- Attending meetings, workshops, or trainings within your normal working environment
- Participating in online webinars or seminars
- Reviewing guidelines, standards, or other documents from professional organizations
- Reading the scholarly literature on information literacy instruction
- Reading the scholarly literature on the scholarship of teaching and learning
- Other _____
- None of these have been factors of my instructional work as a librarian

End of Block

Complete this survey

Q24 Thank you for completing this survey! Would you be willing to participate in a virtual follow-up interview? If so, please include your first and last name as well as an email address where you can be reached during the summer months.

Name _____

Email address _____

Q25 *Individuals who qualify to participate in the follow-up interviews will be selected at random.*

APPENDIX C
QUALITATIVE INTERVIEW PROTOCOL

Interview Introduction

This interview is part of dissertation research, which also includes the survey you completed online. This research specifically examines the experiences of academic librarians as they develop how they think of themselves professionally, especially in terms of their roles as educators. It has been approved by Oakland University's Institutional Research Board.

This interview should take between thirty and sixty minutes, and with your permission, I'd like to record this interview. That will allow us to have more of a conversation. Is that OK with you?

The questions in this interview are designed to gather additional information about the topics covered in the original survey, so some may sound familiar.

If at any point you have any questions, please don't hesitate to ask. If you would like to end the interview at any time or have your responses withdrawn, either during the interview or after it has been completed, just let me know.

Do you have any questions before we begin?

Interview Questions

Section 1: Experiencing perspective transformation

1. Think about your work as an academic librarian, and specifically your work in information literacy instruction. Have you experienced a time when you realized that your values, beliefs, or expectations about your role as an educator or teacher had changed?
 - a. *If answered in the affirmative:* Can you describe that experience?
 - b. *If answered in the negative:* Thank you for your time. That concludes our interview.

Section 2: Factors in perspective transformation

2. Instructions: Now I'm going to ask you some questions about whether seven different factors influenced how your views or perspective changed.
3. First, did personal reflection play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role reflection played?
4. Did your connections with other people -- such as your colleagues at your institution, other librarians outside of your institution, or subject area faculty -- play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role these interpersonal connections played?
5. Did feedback from other people on your work as an educator play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role this feedback played?

6. Did shifting your focus from thinking about your teaching practices to considering student learning as the central goal of your instructional work play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role this revised focus played?
7. Did the culture of your institution play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role the institutional culture played?
8. Did the support systems available at your institution play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role these institutional supports played?
9. Finally, did using technology in your teaching play a role in this process?
 - a. *If answered in the affirmative:* Can you describe the role that technology played?

Section 3: Identifying that perspective transformation has occurred

10. Think back to when you first realized that your views or perspective had changed. When did you first realize this change had happened? Was it as your perspective began to change, mid-change, or in retrospect once it had happened?
11. What made you aware that this change had happened?
12. What did you do about it?
13. How did, or do, you feel about the change?

Section 3: Conclusion and wrap-up

14. As we near the end of our interview, is else you'd like to add that we didn't discuss?
15. Do you have any questions for me?

Interview Conclusion

Thank you again for participating in this interview today. If you think of anything you'd like to add to our discussion later on, please let me know via email. You can either email me your thoughts in writing, or we can set up another time to talk. And, please don't hesitate to let me know if you'd like me to send you any follow-up information, such as the recording or transcript of this interview or the conclusions from my research.

APPENDIX D

ONE-WAY ANALYSIS OF VARIANCE STATISTICAL TABLES

Gender

Table D.1

Gender Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Gender	Mean	Standard Deviation	Significantly* different from
Female	.34	1.04	No statistically significant difference
Male	.22	.95	No statistically significant difference
Prefer not to say	.16	1.09	No statistically significant difference

*p < .05

Table D.2

Gender Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Gender	Mean	Standard Deviation	Significantly* different from
Female	.01	1.17	No statistically significant difference
Male	-.08	1.27	No statistically significant difference
Prefer not to say	.49	1.41	No statistically significant difference

*p < .05

Table D.3

Gender Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Gender	Mean	Standard Deviation	Significantly* different from
Female	.06	1.34	No statistically significant difference
Male	.50	1.20	No statistically significant difference
Prefer not to say	.12	1.12	No statistically significant difference

*p < .05

Table D.4

Gender Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Gender	Mean	Standard Deviation	Significantly* different from
Female	.12	1.14	No statistically significant difference
Male	.19	1.21	No statistically significant difference
Prefer not to say	-.51	.56	No statistically significant difference

*p < .05

Table D.5

Gender Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Gender	Mean	Standard Deviation	Significantly* different from
Female	.30	1.04	No statistically significant differences
Male	.28	1.04	No statistically significant differences
Prefer not to say	-.22	.83	No statistically significant differences

*p < .05

Table D.6

Gender Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Gender	Mean	Standard Deviation	Significantly* different from
Female	.07	1.14	No statistically significant differences
Male	.32	1.29	No statistically significant differences
Prefer not to say	.61	1.17	No statistically significant differences

*p < .05

Table D.7

Gender Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Gender	Mean	Standard Deviation	Significantly* different from
Female	.14	1.14	No statistically significant differences
Male	.18	1.31	No statistically significant differences
Prefer not to say	.12	.60	No statistically significant differences

*p < .05

Table D.8

Gender Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Gender	Mean	Standard Deviation	Significantly* different from
Female	.08	1.16	No statistically significant differences
Male	.12	1.26	No statistically significant differences
Prefer not to say	.44	1.24	No statistically significant differences

*p < .05

Table D.9

Gender Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Gender	Mean	Standard Deviation	Significantly* different from
Female	.10	1.18	No statistically significant differences
Male	.07	1.07	No statistically significant differences
Prefer not to say	-.28	.10	No statistically significant differences

*p < .05

Table D.10

Gender Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Gender	Mean	Standard Deviation	Significantly* different from
Female	.10	1.16	No statistically significant differences
Male	.15	1.28	No statistically significant differences
Prefer not to say	.05	.47	No statistically significant differences

*p < .05

Table D.11

Gender Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Gender	Mean	Standard Deviation	Significantly* different from
Female	.14	1.22	No statistically significant differences
Male	-.02	.81	No statistically significant differences
Prefer not to say	.29	1.35	No statistically significant differences

*p < .05

Table D.12

Gender Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Gender	Mean	Standard Deviation	Significantly* different from
Female	.17	1.13	No statistically significant differences
Male	.16	1.07	No statistically significant differences
Prefer not to say	.35	1.12	No statistically significant differences

*p < .05

Race/Ethnicity

Table D.13

Race and Ethnicity Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.29	1.03	No statistically significant difference
Non-white minority	.47	1.03	No statistically significant difference

*p < .05

Table D.14

Race and Ethnicity Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	-.02	1.18	No statistically significant difference
Non-white minority	.08	1.26	No statistically significant difference

*p < .05

Table D.15

Race and Ethnicity Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.17	1.12	No statistically significant difference
Non-white minority	.26	1.30	No statistically significant difference

*p < .05

Table D.16

Race and Ethnicity Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.11	1.12	No statistically significant difference
Non-white minority	.15	1.32	No statistically significant difference

*p < .05

Table D.17

Race and Ethnicity Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.30	1.03	No statistically significant difference
Non-white minority	.24	1.11	No statistically significant difference

*p < .05

Table D.18

Race and Ethnicity Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.12	1.17	No statistically significant difference
Non-white minority	.13	1.17	No statistically significant difference

*p < .05

Table D.19

Race and Ethnicity Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.16	1.17	No statistically significant difference
Non-white minority	.04	1.12	No statistically significant difference

*p < .05

Table D.20

Race and Ethnicity Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.11	1.12	Non-white minority
Non-white minority	.15	1.32	White

*p < .05

Table D.21

Race and Ethnicity Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.07	1.12	No statistically significant difference
Non-white minority	.22	1.36	No statistically significant difference

*p < .05

Table D.22

Race and Ethnicity Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.12	1.22	No statistically significant difference
Non-white minority	.07	.80	No statistically significant difference

*p < .05

Table D.23

Race and Ethnicity Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.11	1.20	No statistically significant difference
Non-white minority	.18	.96	No statistically significant difference

*p < .05

Table D.24

Race and Ethnicity Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Race/Ethnicity	Mean	Standard Deviation	Significantly* different from
White	.15	1.11	No statistically significant difference
Non-white minority	.30	1.13	No statistically significant difference

*p < .05

Education in Addition to a Master's in Library or Information Science

Table D.25

Additional Education Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.30	1.02	No statistically significant differences
Additional Master's in process	.32	1.10	No statistically significant differences
Additional Master's	.35	1.07	No statistically significant differences
Professional degree in process	-.55	.44	No statistically significant differences
Professional degree	.26	.60	No statistically significant differences
Doctorate in process	.87	1.40	No statistically significant differences
Doctorate	.13	.83	No statistically significant differences

*p < .05

Table D.26
Additional Education Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.06	1.30	Professional degree in process
Additional Master's in process	.28	1.27	No statistically significant difference
Additional Master's	-.20	.85	Professional degree in process, Doctorate in process
Professional degree in process	1.44	2.72	No additional education, Additional Master's, Professional degree, Doctorate
Professional degree	-.34	.56	Professional degree in process, Doctorate in process, Additional Master's, Professional degree, Doctorate
Doctorate in process	.71	1.82	Professional degree in process, Doctorate in process, Additional Master's, Professional degree, Doctorate
Doctorate	-.19	.77	Professional degree in process

*p < .05

Table D.27

Additional Education Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.22	1.20	No statistically significant differences
Additional Master's in process	.16	.96	No statistically significant differences
Additional Master's	.12	1.05	No statistically significant differences
Professional degree in process	.04	.90	No statistically significant differences
Professional degree	.90	1.39	No statistically significant differences
Doctorate in process	-.44	1.25	No statistically significant differences
Doctorate	.22	.89	No statistically significant differences

*p < .05

Table D.28

Additional Education Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.10	1.10	No statistically significant differences
Additional Master's in process	.01	.96	No statistically significant differences
Additional Master's	.06	1.12	No statistically significant differences
Professional degree in process	.91	2.12	No statistically significant differences
Professional degree	.28	1.21	No statistically significant differences
Doctorate in process	.90	1.81	No statistically significant differences
Doctorate	.04	1.27	No statistically significant differences

*p < .05

Table D.29

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.20	1.00	No statistically significant differences
Additional Master's in process	.76	1.12	No statistically significant differences
Additional Master's	.38	1.10	No statistically significant differences
Professional degree in process	.84	1.47	No statistically significant differences
Professional degree	.70	1.22	No statistically significant differences
Doctorate in process	.06	.70	No statistically significant differences
Doctorate	.42	1.01	No statistically significant differences

*p < .05

Table D.30

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	-.01	1.03	Professional degree in process, Doctorate in process**
Additional Master's in process	-.01	1.03	Professional degree in process, Doctorate in process
Additional Master's	.16	1.16	Professional degree in process, Doctorate in process**
Professional degree in process	1.61	2.01	No additional education, Additional Master's in process, Additional Master's, Professional degree
Professional degree	-.24	.87	Professional degree in process, Doctorate in process
Doctorate in process	1.62	1.78	No additional education**, Additional Master's**, Professional Degree, Doctorate
Doctorate	.26	1.42	Doctorate in process

*p < .05
**p < .001

Table D.31

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.22	1.16	No statistically significant differences
Additional Master's in process	-.05	.89	No statistically significant differences
Additional Master's	.13	1.19	No statistically significant differences
Professional degree in process	-.17	1.72	No statistically significant differences
Professional degree	-.25	1.12	No statistically significant differences
Doctorate in process	-.16	1.37	No statistically significant differences
Doctorate	.14	1.6	No statistically significant differences
*p < .05			No statistically significant differences

Table D.32

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.15	1.19	Doctorate in process, Professional degree
Additional Master's in process	.03	1.01	Doctorate in process, Professional degree
Additional Master's Professional degree	-.09	1.02	Doctorate in process
Professional degree in process	-.22	.43	No statistically significant differences
Professional degree	1.12	1.76	No additional education, Additional Master's in process, Additional Master's, Doctorate
Doctorate in process	1.33	1.77	Additional Master's in process, Additional Master's, Doctorate
Doctorate	-.32	.96	Professional Degree, Doctorate in process,

*p < .05

Table D.33

Additional Education Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.03	1.17	No statistically significant differences
Additional Master's in process	.17	1.21	No statistically significant differences
Additional Master's	.10	1.13	No statistically significant differences
Professional degree in process	-.23	.50	No statistically significant differences
Professional degree	-.24	.58	No statistically significant differences
Doctorate in process	1.13	1.33	No statistically significant differences
Doctorate	.49	1.16	No statistically significant differences

*p < .05

Table D.34

Additional Education Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	-.01	.92	No statistically significant differences
Additional Master's in process	-.09	.37	No statistically significant differences
Additional Master's	.19	1.39	No statistically significant differences
Professional degree in process	.79	2.58	No statistically significant differences
Professional degree	.61	2.16	No statistically significant differences
Doctorate in process	.79	1.57	No statistically significant differences
Doctorate	.11	1.67	No statistically significant differences

*p < .05

Table D.35

Additional Education Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.29	1.38	No statistically significant differences
Additional Master's in process	.05	.88	No statistically significant differences
Additional Master's	-.11	.81	No statistically significant differences
Professional degree in process	-.23	.27	No statistically significant differences
Professional degree	-.21	.62	No statistically significant differences
Doctorate in process	-.03	.96	No statistically significant differences
Doctorate	-.04	.76	No statistically significant differences
*p < .05			

Table D.36

Additional Education Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Additional Education	Mean	Standard Deviation	Significantly* different from
No additional education	.07	1.09	No statistically significant differences
Additional Master's in process	.44	1.40	No statistically significant differences
Additional Master's	.24	1.11	No statistically significant differences
Professional degree in process	.39	1.75	No statistically significant differences
Professional degree	.06	.83	No statistically significant differences
Doctorate in process	.76	1.37	No statistically significant differences
Doctorate	.36	1.02	No statistically significant differences
*p < .05			No statistically significant differences

Institution Type

Table D.37

Institutional Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.38	1.01	No statistically significant differences
Four-year college	.31	1.21	No statistically significant differences
Master's-granting university	.38	.94	No statistically significant differences
Doctoral/research university	.26	1.00	No statistically significant differences
Other	.45	.24	No statistically significant differences

*p < .05

Table D.38

Institutional Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	-.07	.97	No statistically significant differences
Four-year college	-.02	1.01	No statistically significant differences
Master's-granting university	-.14	1.19	No statistically significant differences
Doctoral/research university	.13	1.37	No statistically significant differences
Other	-.52	.15	No statistically significant differences

*p < .05

Table D.39

Institutional Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.30	1.18	No statistically significant differences
Four-year college	.16	1.27	No statistically significant differences
Master's-granting university	.08	.98	No statistically significant differences
Doctoral/research university	.22	1.15	No statistically significant differences
Other	-.29	.16	No statistically significant differences

*p < .05

Table D.40

Institutional Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.14	1.25	No statistically significant differences
Four-year college	.04	.99	No statistically significant differences
Master's-granting university	-.02	1.07	No statistically significant differences
Doctoral/research university	.22	1.23	No statistically significant differences
Other	.91	1.26	No statistically significant differences

*p < .05

Table D.41

Institutional Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.41	1.15	No statistically significant differences
Four-year college	.21	1.02	No statistically significant differences
Master's-granting university	.43	.99	No statistically significant differences
Doctoral/research university	.20	1.02	No statistically significant differences
Other	.72	1.33	No statistically significant differences

*p < .05

Table D.42

Institutional Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	-.02	.99	No statistically significant differences
Four-year college	-.04	1.06	No statistically significant differences
Master's-granting university	.29	1.29	No statistically significant differences
Doctoral/research university	.17	1.23	No statistically significant differences
Other	-.02	.56	No statistically significant differences

*p < .05

Table D.43

Institutional Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.22	1.26	No statistically significant differences
Four-year college	.10	1.05	No statistically significant differences
Master's-granting university	.16	1.31	No statistically significant differences
Doctoral/research university	.15	1.08	No statistically significant differences
Other	-.70	.65	No statistically significant differences

*p < .05

Table D.44

Institutional Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.29	1.25	Four-year college, Master's-granting university
Four-year college	-.13	.93	Community or junior college, Doctoral/research university
Master's-granting university	-.11	1.14	Community or junior college, Doctoral/research university
Doctoral/research university	.26	1.26	Four-year college, Master's-granting university
Other	-.54	.53	No statistically significant differences

*p < .05

Table D.45

Institutional Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	-.10	.88	No statistically significant differences
Four-year college	.10	1.20	No statistically significant differences
Master's-granting university	.17	1.18	No statistically significant differences
Doctoral/research university	.14	1.24	No statistically significant differences
Other	-.46	.37	No statistically significant differences

*p < .05

Table D.46

Institutional Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.21	1.35	No statistically significant differences
Four-year college	.10	1.42	No statistically significant differences
Master's-granting university	-.03	.75	No statistically significant differences
Doctoral/research university	.17	1.16	No statistically significant differences
Other	.11	1.17	No statistically significant differences

*p < .05

Table D.47

Institutional Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.11	.95	No statistically significant differences
Four-year college	.22	1.87	No statistically significant differences
Master's-granting university	.10	.86	No statistically significant differences
Doctoral/research university	.07	.89	No statistically significant differences
Other	.15	.92	No statistically significant differences

*p < .05

Table D.48

Institutional Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Institution type	Mean	Standard Deviation	Significantly* different from
Community or junior college	.27	1.08	No statistically significant differences
Four-year college	.12	1.18	No statistically significant differences
Master's-granting university	.16	1.05	No statistically significant differences
Doctoral/research university	.14	1.13	No statistically significant differences
Other	.79	1.46	No statistically significant differences

*p < .05

Instructional Formats

Table D.49

Face-to-face Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.32	1.03	No statistically significant difference
Does not deliver Face-to-face instruction	.24	1.03	No statistically significant difference

*p < .05

Table D.50

Face-to-face Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	-.01	1.19	No statistically significant difference
Does not deliver Face-to-face instruction	-.66	.08	No statistically significant difference

*p < .05

Table D.51

Face-to-face Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.19	1.14	No statistically significant difference
Does not deliver Face-to-face instruction	-.15	.07	No statistically significant difference

*p < .05

Table D.52

Face-to-face Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.11	1.14	No statistically significant difference
Does not deliver Face-to-face instruction	1.67	2.11	No statistically significant difference

*p < .05

Table D.53

Face-to-face Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.29	1.04	No statistically significant difference
Does not deliver Face-to-face instruction	.98	.83	No statistically significant difference

*p < .05

Table D.54

Face-to-face Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.11	1.17	No statistically significant difference
Does not deliver Face-to-face instruction	.83	.26	No statistically significant difference

*p < .05

Table D.55

Face-to-face Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.15	1.16	No statistically significant difference
Does not deliver Face-to-face instruction	-1.31	.18	No statistically significant difference

*p < .05

Table D.56

Face-to-face Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.10	1.18	No statistically significant difference
Does not deliver Face-to-face instruction	-.68	.53	No statistically significant difference

*p < .05

Table D.57

Face-to-face Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.10	1.16	No statistically significant difference
Does not deliver Face-to-face instruction	-.92	.08	No statistically significant difference

*p < .05

Table D.58

Face-to-face Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.11	1.18	No statistically significant difference
Does not deliver Face-to-face instruction	-.75	.49	No statistically significant difference

*p < .05

Table D.59

Face-to-face Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.11	1.17	No statistically significant difference
Does not deliver Face-to-face instruction	.37	1.18	No statistically significant difference

*p < .05

Table D.60

Face-to-face Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Face-to-face instruction	.16	1.11	No statistically significant difference
Does not deliver Face-to-face instruction	1.42	1.39	No statistically significant difference

*p < .05

Online Instruction

Table D.61

Online Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.38	1.02	No statistically significant difference
Does not deliver Online instruction	.25	1.04	No statistically significant difference

*p < .05

Table D.62

Online Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.16	1.40	Does not deliver online instruction
Does not deliver Online instruction	-.18	.89	Delivers online instruction

*p < .05

Table D.63

Online Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.18	1.07	No statistically significant difference
Does not deliver Online instruction	.19	1.22	No statistically significant difference

*p < .05

Table D.64

Online Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.30	1.27	Does not deliver online instruction
Does not deliver Online instruction	-.07	.97	Delivers online instruction

*p < .05

Table D.65

Online Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.35	1.07	No statistically significant difference
Does not deliver Online instruction	.23	1.01	No statistically significant difference

*p < .05

Table D.66

Online Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Instructional format	Mean	Standard Deviation	Significantly** different from
Delivers Online instruction	.41	1.39	Does not deliver online instruction
Does not deliver Online instruction	-.19	.77	Delivers online instruction

**p < .001

Table D.67

Online Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.15	1.22	No statistically significant difference
Does not deliver Online instruction	.14	1.10	No statistically significant difference

*p < .05

Table D.68

Online Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.15	1.16	No statistically significant difference
Does not deliver Online instruction	.04	1.20	No statistically significant difference

*p < .05

Table D.69

Online Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.04	1.20	No statistically significant difference
Does not deliver Online instruction	.09	1.18	No statistically significant difference

*p < .05

Table D.70

Online Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.10	1.23	No statistically significant difference
Does not deliver Online instruction	.12	1.12	No statistically significant difference

*p < .05

Table D.71

Online Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.16	1.39	No statistically significant difference
Does not deliver Online instruction	.07	.88	No statistically significant difference

*p < .05

Table D.72

Online Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers Online instruction	.21	1.12	No statistically significant difference
Does not deliver Online instruction	.12	1.11	No statistically significant difference

*p < .05

Blended or Hybrid Instruction

Table D.73

Blended/Hybrid Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Supportive relationships/interpersonal dynamics

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.41	1.04	No statistically significant difference
Does not deliver blended/hybrid instruction	.24	1.02	No statistically significant difference

*p < .05

Table D.74

Blended/Hybrid Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from supervisor or administration

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.19	1.53	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	-.16	.78	Delivers blended/hybrid instruction

*p < .05

Table D.75

Blended/Hybrid Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Change motivation from colleagues

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.30	1.21	No statistically significant difference
Does not deliver blended/hybrid instruction	.09	1.08	No statistically significant difference

*p < .05

Table D.76

Blended/Hybrid Instruction and Differences in Individuals that Influence Academic Librarians' Instructional Perspective Transformation: Other, participant-identified interpersonal relationships

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.35	1.07	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	.25	1.02	Delivers blended/hybrid instruction

*p < .05

Table D.77

Blended/Hybrid Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-directed professional learning experiences

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.35	1.06	No statistically significant difference
Does not deliver blended/hybrid instruction	.25	1.02	No statistically significant difference

*p < .05

Table D.78

Blended/Hybrid Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: External-facing actions

Instructional format	Mean	Standard Deviation	Significantly** different from
Delivers blended/hybrid instruction	.53	1.45	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	-.22	.72	Delivers blended/hybrid instruction

**p < .001

Table D.79

Blended/Hybrid Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from those outside of librarianship

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.24	1.25	No statistically significant difference
Does not deliver blended/hybrid instruction	.06	1.08	No statistically significant difference

*p < .05

Table D.80

Blended/Hybrid Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Feedback or input from a library-centric perspective

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.02	1.11	No statistically significant difference
Does not deliver blended/hybrid instruction	.16	1.22	No statistically significant difference

*p < .05

Table D.81

Blended/Hybrid Instruction and Differences in Experiences or Resources that Influence Academic Librarians' Instructional Perspective Transformation: Self-reflection and other participant-identified experiences

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.06	1.23	No statistically significant difference
Does not deliver blended/hybrid instruction	.12	1.10	No statistically significant difference

*p < .05

Table D.82

Blended/Hybrid Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Completion of graduate education (librarianship/other)

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.07	1.08	No statistically significant difference
Does not deliver blended/hybrid instruction	.14	1.25	No statistically significant difference

*p < .05

Table D.83

Blended/Hybrid Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in overall job status (new/change/loss of employment)

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.21	1.49	No statistically significant difference
Does not deliver blended/hybrid instruction	.04	.82	No statistically significant difference

*p < .05

Table D.84

Blended/Hybrid Instruction and Differences in Professional Events that Influence Academic Librarians' Instructional Perspective Transformation: Change in job duties and other participant-identified events

Instructional format	Mean	Standard Deviation	Significantly* different from
Delivers blended/hybrid instruction	.33	1.21	Does not deliver blended/hybrid instruction
Does not deliver blended/hybrid instruction	.04	1.02	Delivers blended/hybrid instruction

*p < .05

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