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444 Castro Street, Suite 900, Mountain View, California, 94041, USA
A Cohort’s Culture of Learning

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A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Library and Information Science

DOMINICAN UNIVERSITY

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A COHORT’S CULTURE OF LEARNING

By

Kelly Visnak

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Abstract of Dissertation
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Abstract

In the past decade, higher education institutions have experimented with various educational delivery models including blended learning and cohort graduate degree programs. As the adoption of these graduate programs increases, institutions strive to understand the various dimensions of learning, related to students’ perceptions of their long-term social involvement as part of an academic cohort in a blended learning environment. The primary purpose of the study was to explore social involvement among cohort members and how their interaction or relationships create or influence a culture of learning in a blended learning environment. In addition, the extent to which these influences reflect Schein’s (2010) ten dimensions of a learning culture was also considered. The study participants were graduates from a Master of Library Science cohort program in a medium-sized university. All the graduates were invited to complete a survey questionnaire. Seven of the survey participants were randomly selected to participate in semi-structured interviews. The data was coded using qualitative directed content analysis, because that method provided the best paradigmatic lens with which to view non-intentional learning among professional cohort peers. Edgar Schein’s (2010) ten dimensions of a learning culture served as the beginning thematic guide for coding and analyzing the data. The findings describe the cohort learning experience in relation to Schein’s ten dimensions and provide evidence that the cohort developed a culture of learning.
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Chapter 1
Introduction to the Study

Area of Investigation

Institutions of higher education strive to provide quality education that is accessible to all those who aspire to attend. For many colleges and universities this goal includes reaching non-traditional students. Often times these students require a flexible schedule, so that they can also continue to work or care for a family member and then participate in courses during non-traditional hours. Or it may mean providing equal access to undergraduate and graduate courses for those who live and work too far from the main campus to conveniently commute to classes. In order to expand their borders and reach such non-traditional students, educational institutions in the United States have implemented a variety of delivery models to make courses and degree programs available to a wider audience. These modes of delivery include offering courses at a location site off campus, intensive face-to-face weekend courses, cohort programs, and the increasingly popular use of interactive technology as a tool to replace time in the traditional classroom. This expanse of education delivery models has more institutions experimenting with various delivery models.

One such mode, which has been used across the country, involves administering a degree program to an entire cohort of students. A cohort is a group of students that takes their coursework together. This enables the institution to offer each course once, while also optimizing the enrollment. This delivery model has grown to incorporate online instruction as well as the face-to-face instruction of the traditional classroom, thus providing a blended learning approach. Such a blended learning delivery model involves a focused or threaded online discussion forum for each course along with an intensive weekend where group presentations and guest lecturers fill the cohort’s face-to-face class time. This uniquely blended learning
environment, in which degree programs present a combination of instructional modalities that serve to meet the need of flexible scheduling for non-traditional students, also provides both economical and innovative solutions to delivering education beyond campus borders. Over the past decade, various delivery modes have provided levels of opportunity and success for today’s learners.

**Statement of Research Problem**

This type of cohort education delivery model prompts numerous important questions about student learning as it relates to small group communication and organizational culture, also known as group culture. How does the cohort create community? Does the social involvement among the group members influence learning? Is there any added value to graduate students who are in cohort programs and entering a profession? If so, what added learning might a student gain by choosing to participate in a cohort program within a blended learning environment?

**Researcher’s Interest**

The researcher is interested in understanding the learning that occurs among a graduate student cohort. The thought is that a cohort enables its members to learn beyond the institution’s intended curriculum and that a learning culture may develop, but to what extent? How might it develop and what are the characteristics that define it? This study focused on a cohort education delivery model in a blended learning environment with a special emphasis on the interaction among cohort students as peers.

**Definition of Terms**

Learning. For the purpose of this research, learning will be defined as the process of using information to create knowledge and wisdom. To become knowledgeable is to have

Learning culture. Edgar Schein (2010) defines learning culture as a culture by its very nature that is learning oriented, adaptive, and flexible. The terminology learning culture presents a defining difficulty. Schein points out the difficulty or the paradox: culture is a stabilizing force that makes things predictable, yet learning is a growth process that is in a state of flux (2010). In addition, Schein offers the notion that an ideal learning culture “optimizes individual competition and collaborative teamwork” (2010, p. 373).

Blended learning. In this research investigation, blended learning is defined as an educational model wherein students receive their teaching instruction in both online and face-to-face learning environments.

Information professional. For the purpose of this study, an Information professional is one who is knowledgeable in the studies of Library and Information Science.

Cohort. This term is defined by the population or group of students that begin and finish their graduate coursework together.

Community of Practice. Lave and Wenger define a Community of Practice (1991) as the interactive participation among individuals who are provided the opportunity to gain skills and create new knowledge by actively participating in a community where social relationships emerge from a shared passion or professional practice.

Research Questions. To ascertain specifics about the cohort experience that may influence learning, it is important to investigate learning that may occur as a result of group membership. Interviews with individuals who participated in this type of educational format yielded descriptive data that led to a better understanding of the learning experience. Given the
focus of this study on the student’s experience, the researcher did not interview faculty or administrators about their perceptions of the cohort model. Instead, the investigation focused on graduate-level students and the relational aspects of the learning community that emerge when students begin and finish their program coursework together as a group of peers. Assessment of student learning outcomes as might be demonstrated in capstone portfolios, course grades, or exams was not investigated in this study. This type of assessment is designed to determine if a given program is graduating students who know and have learned the competencies of the profession as outlined by an institution or professional association. While this type of assessment is worthy and valued by accrediting bodies, it does not necessarily capture the unique organizational culture that emerges from social interactions among cohort members and that culture’s relation to learning. There is an abundance of literature related to higher education delivery models; however, the theoretical framework for this study gives particular attention to Communities of Practice (Wenger, 2000) and learning culture (Schein, 2010) in the sense that the cohort members were learners in a community of Library Science and Information professionals. The following questions guided the research design and process:

Primary Question:

- How does the social involvement among the members of a cohort create or influence a culture of learning in a blended learning environment?

Sub-Questions:

- How do the students and their relationships among one another influence behavior and work as they accomplish their goals in a cohort environment?
- How do these relationships and influences reflect Schein’s ten dimensions of a learning culture?
Significance

The study focused on a cohort education delivery model in a blended learning environment with a special emphasis on the interaction among cohort students as peers. This research adds a unique contribution to the literature reviewed by providing the student’s perspective to their learning in a cohort. The results may serve to inform faculty and administrators as they make decisions and conduct strategic planning aimed toward higher education reform that may also involve the design of the educational delivery infrastructure, student advising and support services, curriculum development, and policies for students at a distance. This is especially timely as delivery models with cohort programs continue to grow, and the use of online learning continues to increase in higher education institutions.

Organization of the Dissertation

This dissertation is organized into five chapters. Chapter 1 is the introduction to the study. It presents the area of investigation, the research problem, and the significance. Chapter 2 reviews the related literature that provides insight to the area surrounding the research questions of this investigation. The research is extensive and covers literature from education, psychology, sociology, and communication with special focus given to the following: a background on cohort delivery models; their administration by higher educational institutions; blended learning; the learning theory literature and the work that supports the learner’s perspective through the aspects of informal learning; communities of practice; online learning communities and small group dynamics; and the culture of the learning experience. Chapter 3 describes the research design, the participants and data collection methodology, and procedures of this investigation. This includes the detailed explanation of the survey and interview instruments and the steps taken to analyze the data. Chapter 4 reports the findings of the study as it relates to Schein’s ten
dimensions of a culture of learning. Evidence is presented with regard to these results, the additional resonant themes, and notable findings that emerged from the data. Chapter 5 provides a discussion of the findings that includes the limitations, implications for the practice, and suggestions for future research.
Chapter 2

Literature Review

Introduction

The literature review for this study provides background on cohort education as a model for education delivery and on the nuances of administering higher education cohort programs. Also presented is the research pertaining to blended learning and the components of learning theory literature surrounding the research questions for this investigation. In addition, due to this study’s focus on the students’ perspective of their unique experience, the literature supporting informal learning, communities of practice, online learning communities, group dynamics, and culture and learning are surveyed to support this inquiry into the learning culture among cohort peers within the blended learning environment.

The Cohort Model

A cohort is typically defined as a group of students who begin an academic program, proceed through their courses together, and work toward the completion of a specific degree or certification (Merino, Muse, & Wright, 1994; as cited in McCarthy, Trenga, & Weiner, 2005). Students within a cohort tend to share the same courses, faculty, networking and social support, learning activities, and collaborative projects (Merino et al., 1994; as cited in McCarthy et al., 2005). There are four primary characteristics that work to define the essence of a cohort: (1) long-term group membership, (2) the understanding that academic and emotional support for each other will best help them achieve the shared common goal of degree or certificate completion, (3) a structured and intense meeting schedule, and (4) a group-developed and shared synergy with regard to learning relationships (Saltiel & Russo, 2001; as cited in Maher, 2004).
The concept of a cohort can be further explained by looking at various administrative formats that have emerged in academic programs. Three basic types of cohorts predominate: (1) a closed group, that has all its classes together in sequence, (2) an open or mixed group, in which students take only their core coursework together and then branch off for additional classes that fulfill their goals, and (3) a fluid arrangement, that permits students to come together as a cohort at various times in contrast to starting a degree program as a cohort (Yerkes, Basom, Norris, & Barnett, 1995; as cited in McCarthy et al., 2005).

The cohort population in this investigation provides a fourth cohort type. In this structure the cohort students take their core coursework together, split up for specializations, and then come back together for their final course. The core coursework covers the theoretical foundations for the Library and Information Science (LIS) profession, along with courses that teach the basic technology and resources of the profession. For example, core courses include reference and user service, research, and technology knowledge and skills. The students then branch off for elective courses that apply to the practice within their area of interest. The cohort comes back together for its final capstone course. This course provides a culminating academic framework that requires students to reflect on how their professional philosophy, coursework (theory, tools, and practical application), and field experiences mesh together with the degree program’s outcome goals. The student’s end product is the creation of an electronic portfolio and presentation to the cohort members. It is this function of coming back together (after electives) for the final capstone course that renders a type of cohort that differs from the structures discussed in the current literature.
Higher Education Cohort Programs

Cohort programs, as an educational delivery format, are introduced into higher education academic programs for various reasons. Higher education administrators recognize that a cohort approach can be used to combat financial and spatial constraints by sequentially scheduling courses for each cohort (Garrison & Vaughan, 2008; Miller, 2010). Designing a cohort program also meets the unique demands of full time employed adult learners who are interested in obtaining a degree or certificate (Maher, 2004). This student market has generated tuition revenue without the costs of traditional on-campus student support services. Additionally, there is evidence that higher education institutions benefit from sequentially scheduled courses in the following ways: consistent student enrollment, projected planning for budgetary costs and revenue, and the convenience of early notification and long-term scheduling for faculty teaching commitments, all of which provide the opportunity to plan a stronger learning experience for students (Maher, 2005). As a result, administrators and faculty enjoy the predictability brought about by the cohort model.

Additional research shows that students in cohort programs have enjoyed their clearly defined timeline of study (Maher, 2005), increased sense of emotional support (Norris & Barnett, 1994; as cited in Maher, 2005), and reduced attrition (Reynolds & Herbert, 1998; as cited in Maher, 2005). However, students’ perceptions of their learning experience in a cohort program have not always been positive. For example, some students have reported feeling “boxed in” by taking classes repeatedly with peers with whom they do not want to interact (Teitel, 1997; as cited in Maher, 2005). While the student reviews are mixed, there is no doubt that cohorts are seen as an innovative and cost effective way for higher education institutions to design learning communities (Saltiel et al., 2001; as cited by Maher, 2005). In addition, cohort programs make
up a growing contingent among universities as an educational delivery model to be used when program administrators and faculty seek educational reform (Maher, 2005). The literature addresses many administrative outcomes associated with cohorts; however, an investigation of the learning that takes place between peers, as a result of their long-term social connections, is lacking.

**Blended Learning**

Some cohorts, including the one for this study, use blended learning. Increasingly, students are participating within a blended learning environment, which can be characterized as a delivery model that contains a combination of face-to-face instruction with communication and/or instruction in an online environment, a stand-alone course, or within an entire program (Bonk, Kim, & Zeng, 2006). The integration of two learning environments provides an opportunity to capitalize on the strengths of both face-to-face and online. For example, in a study that compared a traditional face-to-face course, a fully online course, and a course blending both instruction elements, it was found that stronger feelings of community (connectedness) and learning were generated for those students in the blended course (Rovai & Jordan, 2004).

Blended learning is no longer used interchangeably with the term hybrid learning. In actuality, use of the term hybrid learning is disappearing, while the preferred term in the literature has clearly become blended learning. Blended learning will likely continue to grow in higher education settings as teaching methods change to incorporate online resources and components (Allan, 2007; Committee on Developments in the Science of Learning and the National Research Council, 2000; Bonk & Zhang, 2008). A survey shows that 60 percent of faculty anticipate they would offer blended learning to students in their college, university or organization in about 40 percent of their courses, and by 2013 the percentage of blended learning courses is anticipated to
nearly double (Bonk, et al., 2006). For some, it is a pedagogical solution offering financial sustainability (Miller, 2010) as it is cheaper for both the institution and the student, decreasing classroom use and travel costs. For others, a blended model serves to create an experience of transformational learning in regards to student growth and development by providing a blended delivery model with the best uses of both face-to-face and online instruction (Allan, 2007).

There is a limited body of research involving blended learning as a format for higher education program delivery. As noted earlier, the population in this study experienced their education through blended delivery, 51% in a face-to-face classroom and 49% using the online environment with course management software (CMS).

**Learning Theory**

**Multiple perspectives.** There are many theoretical approaches to learning that can support an investigation into the phenomenon of learning in a cohort program. Educational practitioners respond to varying instructional situations by using multiple learning theories (Tisdell & Taylor, 2001; as cited by Elias & Merriam), so too the cohort members may have multiple perspectives about their learning experiences. When considering the education of adults, which is the population for this study, three main educational foundations may be useful in understanding the learning among cohort peers: behaviorist, humanistic, and constructivist. The behaviorist approach views each learner as a blank slate, where learning occurs as behavior change largely influenced by the use of positive or negative reinforcement (Elias et al., 2005). Behaviorism has had an impact on adult education in situations where the focus has been on shaping observable behaviors, and learning is viewed as the acquisition of new behaviors (Elias et al., 2005). Learning theory from the humanistic approach emphasizes the idea that learning is a personal act, where students make meaning by bringing their prior knowledge to a situation,
grapple or experiment, and discover what is most meaningful to themselves (Elias et al., 2005). Humanists understand learning to be an intrinsic process, where motivation comes from learners as they take what they perceive to be important for their goals, interests, or beliefs (Elias et al., 2005). Constructivist theory portrays learning as being actively constructed through discussion and negotiation with peers (Allan, 2007). Learners construct meaning as they process new experiences from their social context with their own experiences and knowledge about the world (Elias et al., 2005). The cohort in this study participated in an educational program that was designed primarily with a constructivist approach to learning in mind, because the curriculum emphasized and supported students making meaning about the profession and their roles in it through the interaction with faculty and peers. The students engaged in theory-to-practice learning activities that addressed current issues in the profession. Any of the three theoretical foundations may be present; however, the constructivist was predicted to be the most prominent in the data collected regarding the graduates’ perspectives of the cohort learning experience. For the purposes of this inquiry it is necessary not to focus on just one learning theory, but instead to apply multiple theoretical perspectives of learning in the full range of the phenomena of student learning as presented by the cohort population under investigation.

**Learner-centered.** The literature demonstrates that there has been “a shift in thinking about teaching and learning from a transmission-oriented pedagogy to one that is more open and involves students as active participants in the construction of knowledge and meaning” (Allan, 2007, p. 53). The shift in higher education can be seen in the student-centered learning, or learner-centered, movement. The teacher becomes a facilitator in the student-centered philosophy, and the learner is free to take on the responsibility, both for learning as well as for his or her own development. As Allan (2007) explains, “In the learner-centered model of
learning...what we learn depends on who we are, what we want to become and what we value. This means that learning is placed within the context of a group or a community” (p. 55). The learner-centered philosophy is currently valued in the higher education cohort model that was studied.

**Experiential learning.** The values of the learner-centered philosophy are also evident in the experiential learning model, where the learner builds upon previous knowledge and experiences by integrating new information through a holistic approach. Experiential learning is an integral aspect of the educational design of the cohort format to be investigated in this study. Dewey’s philosophical pragmatism, Lewin’s social psychology, and Piaget’s cognitive-developmental genetic epistemology contributed to Kolb’s (1984) Experiential Learning Theory. The experiential learning model recognizes that the learner’s concrete experiences are used to test new abstract concepts, where experiences are observed or reflected upon and then used by the individual to either change his or her behavior or to choose additional experiences that are then observed and reflected upon (Kolb & Fry, 1975). This four-stage cycle makes up the following forms of knowledge: accommodative, divergent, convergent, and assimilative, which make up the building blocks for higher levels of knowing (Kolb, 1984). These modes stress that learning or knowing can be understood through a process that “requires both a grasp or figurative representation of experience and some transformation of that representation” (Kolb, 1984, p. 42). Such learning transformation is also articulated in adult development when experience, perception, cognition, and behavior are used to explain the learning process (Elias et al., 2005). The experiential learning model is the basis for specific types of instructional methods. It drives the selection of certain methods, and while not a method itself, the model “provides guidance for applications to helping people improve their learning and designing better processes in education
and development” (Kolb, Boyatzis, & Mainemelis, 2000, p. 28). Thus, it is this constructivist approach to experiential learning in which the learner actively gains knowledge by exploring opportunities for reflecting, generalizing in light of previous knowledge, and contextualizing, that applies to this inquiry into the cohort model of education and the professional graduate students’ learning experience.

Additional work has built on Kolb’s basic concepts. Fenwick (2000), for example, explores the use of discussion as a way to promote experiential learning (as cited by Elias et al., 2005). Scholarship about the use of discussion informed this research inquiry because discussion is an instructional device present in the face-to-face and online instruction learning activities. Another investigation considered the experiential learning that occurs in small group interactions and identified six levels of in-group processes (Barrett-Lennard, 1975, p. 61). These experiential learning investigations highlight various aspects of group relationships and suggest that learning both builds upon the students’ previous knowledge and will be influenced by the social involvement in the cohort.

**A consideration of theoretical and practical wisdom.** Several educational scholars have considered how learners transition from acquiring information to gaining knowledge and, from there, to developing wisdom (Greer, Grover, & Fowler, 2007 and Elias et al., 2005). As Orna (1999) explains, “Before information can be used it has to be transformed into knowledge in human minds, and then applied by them to affect both the material world and the ideas of others” (p. 9). This perspective provides useful insights into the learning that may occur in a graduate professional cohort program. For example, two very different types of wisdom, practical and theoretical, are important to the learning process. As Elias et al. (2005) explains, “Practical wisdom refers to the ability to apply information and knowledge to the activities of
daily life....Theoretical wisdom is the contemplation of the deepest principles of some reality and the reorganization of its connection and relationship to other areas” (p. 28). According to Gray (1968), “Though we cannot unite the two kinds of wisdom, they must learn to support and to supplement each other” (as cited by Elias et al., 2005, p. 29). It can be said that producing graduates who have learned to operate with both theoretical and practical wisdom is a primary goal of professional graduate education. In the work world, professionals may create an action plan of intended experience and learning, but then unexpected events influence a change. Marsick & Watkins (1990) point out, “If they are too linear in their thinking, they may miss rich opportunities. The unexpected may lead to...trying out alternative ways of working” (p. 123). Education professionals, for example, are required to be aware of simultaneous events, recognize the context of a problem, collaborate to discover the gaps, use different viewpoints, and deviate from the original plan (Marsick et al., 1990). The recognition of wisdom in both its theoretical and practical sense exists as an important goal for professional graduate education.

The value in reviewing literature about learning theory for this inquiry is to better understand learning as it may pertain to the members within the educational cohort delivery model. As noted in the previous sections, numerous factors about learning theory supported the researcher’s inquiry into the phenomenon of cohort learning. This literature served as a theoretical guide to understanding and describing themes that emerge from the cohort members as they discuss their learning.

Aspects of the Cohort Experience on the Influence of Informal Learning

Some discussions in the education literature about learning include a focus on informal, non-formal, and formal learning. Formal learning is defined as being provided by a training or educational institution and leads to certification, while non-formal learning is recognized as the
opposite (European Commission, 2001). Informal learning can take place at work, with family, or during leisure where activities tend to be non-structured (European Commission, 2001). The graduate population in this research study is working toward a degree (formal learning) and working toward joining a profession which necessitates participating in a variety of activities and professional opportunities (informal learning). Seeking to gain more clarity about the unique contribution of the cohort education model and the influence of informal learning, one study examined the relationship among informal learning, education, and career goals of students in a cohort (Freiberg-Svoboda, 2003). The learning themes that emerged include academic success skills, communication, leadership, personal development, professional development, and teamwork (Freiberg-Svoboda, 2003). Another investigation provides further insights into the cohort experience through the influence of informal learning aspects recognized as building a learning community, experiencing a collaborative process, valuing multiple perspectives, bridging interpersonal connections, and facilitating individual development (Lawrence, 1996). This study considered both theoretical and practical aspects of informal learning by unveiling what is being learned, how learning is occurring among cohort peers, and to what extent learning might be changing in the blended delivery environment.

**Communities of Practice**

Literature about communities of practice provides concepts that are central to this study’s research questions because it highlights various ways that learning occurs as people interact (Vygotsky, 1978; as cited by Misanchuk, 2001; Palloff & Pratt, 2003). Transformational learning often results when people and a purpose are present together (Palloff et al., 2003). In addition, community is created as a group forms and members make initial contact, interact, and establish relationships that grow into a dependence upon one another as they work on common
areas of interest and concern (Thibaut & Kelley, 1959). Such interpersonal relationships support learning. When a balance of status and solidarity are involved, a conversational space of mutual respect and understanding can be created (Schwitzgebel & Kolb, 1974). Status is one’s position in a group and solidarity is one’s network of relationships, and both are needed to sustain conversation that leads to learning (Kolb, Baker, & Jensen, 2002). In the literature surrounding online community building, there are four basic attributes that must be present for an online community to form: people, purpose, policies, and computer systems (Preece, 2000; Palloff & Pratt, 2007). These attributes support regular interaction, which in turn builds a community. Regular interaction is also central to the role of learning in Communities of Practice theory. Such interaction provides individuals the opportunity to gain skills and create knowledge by actively participating in a community of networked relationships that also have a shared passion in common (Lave & Wenger, 1991). When community is defined in the socio-cultural terms of the Communities of Practice, it carries an understanding of interactive participation with regard to “what they are doing and what that means in their lives and for their communities” (Lave et al., 1991).

Communities of Practice can be used as a framework to explore “the production, transformation, and change in the identities of persons, knowledgeable skill in practice, and communities of practice...in everyday activity” (Lave et al., 1991, p. 47). The theory supporting Communities of Practice provides a perspective of social practices where individuals ease into participation gradually and then move toward social engagement to foster the needed knowledge and skill development. Such creation of knowledge and learning comes from the social relationships that emerge within a community. It is suggested that the developmental cycle of a community is the ideal mechanism for understanding the learning among the members in
communities of practice (Lave et al., 1991). This type of interaction is important to note, because the academic cohort moves through stages of learning as the student progresses toward degree completion. A similar cycle emerged from the student interview data that can further explain the learning culture of a cohort.

Communities of Practice are often associated with apprenticeships. The traditional way to learn a trade is to acquire skills from “observation and initiation” which supports student learning and accomplishment through social interaction that has been referred to as “situated learning” and “legitimate peripheral participation” (Lave et al., 1991). The term “situated learning” encompasses two concepts: “learning by doing” and the act of engagement which is social interaction, best understood historically as apprenticeships (Lave et al., 1991). This idea has evolved into “legitimate peripheral participation” which posits that learning in social situations takes place regardless of an educational structure, and research observations show that not only does a student learn when a teacher teaches, but that learning can also take place within the social practices of a community (Lave et al., 1991). Learning is such an active part of community life that participation and engagement (intertwined with empowerment) are seen as things that people do naturally throughout their lives (Darrouzet & Lynn, 1999; cited by Allan, 2007). The cohort members under investigation for this study engage in many social learning opportunities as they move through the two-year MLS program. Such opportunities include both individual and group coursework and their activities with professional organizations. It is through the creation of both academic and professional communities of this population that the Communities of Practice theory provided a strong theoretical fit for investigation of this cohort population.
There is difficulty in accessing the knowledge held by a Community of Practice when one is an outsider, similar to the cohort situation where the members are beginners and participating as students in a professional graduate program. Such graduate students can experience barriers from both inexperience and underdeveloped professional identities. As a newcomer to the profession, the student’s success in legitimate peripheral participation in the Community of Practice rests in the ability to participate in the discourse of the practice, to increase his or her identity for the benefit of the community, and to be flexible for changing with the community (Lave et al., 1991). In Communities of Practice it is the discourse of the practice that can prevent access to knowledge, as members may not know how to engage in conversation when they are new to the culture or when it has changed. In fact, a change places everyone in the group on the same beginning level as a newcomer to the group (Lave et al., 1991). This is where the Community of Practice fosters the participation of its members as they engage in the existing practice (building professional skills) while developing their individual identity through networks. This social participation enables further learning among individuals and moves them towards achieving the skill set needed to be a master practitioner. Ultimately, this is accomplished by, “not just a greater commitment of time, intensified effort, more and broader responsibilities within the community, and more difficult and risky tasks, but more significantly, an increasing sense of identity as a master practitioner” (Lave et al., 1991, p. 111). The arrival as a master practitioner occurs when one is identified through the value of their participation in the community. The literature regarding group identity and cohort students recognize factors such as group personality, group bonding and trust, group pride, group power, subgroup formation, and diversity (Freiberg-Svoboda, 2003). These factors are important because they relate to group identity and a community of practice, and they also informed this investigation into
understanding the phenomenon of learning that emerges from the cohort experience. These characteristics and this social practice theory served as a foundational theoretical framework for understanding the transformation in professional development of the cohort individuals and the informal learning that may occur within the cohort experience.

**Online Learning Communities and Small Group Dynamics**

The cohort experience involves student participation within a dynamic and evolving group or community. As Barrett-Lennard (1975) explains, “The group process is seen as an emergent, unfolding, multilevel complex of happenings that grows out of what the group participants (including the leader) are like and what they are up to—individually and in combination—where they are with each other” (p. 82). The literature of online learning communities and small group dynamics were of importance as the researcher sought to understand the learning phenomenon that takes place among cohort members.

**Aspects of learning and the functions of online learning communities.** The rise in the implementation of online course delivery has also resulted in higher education faculty developing and discovering effective ways of teaching. Therefore, it is not surprising that much of the research has been about best practices of how to teach in the online environment (Bonk et al., 2008; Hunter, 2005; Kharrufa & Olivier, 2010; Palloff et al., 2007) and how to design learning activities that promote student interactions and build community (Beer, Slack, & Armitt, 2005; Robles & Braathen, 2002; as cited by Gaytan & McEwen, 2007). This literature helps researchers understand how instructors work to design an environment for learning that supports student interaction resulting in community building and how a learning community interacts from the student perspective. However, what is of most importance to this inquiry is the small body of literature that addresses how an online learning community functions in order for
learning to occur. The literature shows that when the online community is created for students two additional attributes are important: collaborative learning and reflective practice (Palloff et al., 2007). These attributes are important when exploring cohort student learning and community building where online instruction is a consistent element.

Collaborative online learning communities are influenced by their participants. Factors that contribute to or hinder successful collaboration are enmeshed with participants’ actions and behavior, the characteristics of the environmental setting, and the artifacts used (Kharrufa et al., 2010). In order for relationships to be formed at a distance, the rewards for the interactions shared must be high in relation to the total cost to the individual (Thibaut et al., 1959). Online learning communities have challenged this understanding of relationship interactions, especially where the common occurrence of online communication continues to bring people together. In addition, online instructors are increasingly being urged to become proficient in the dynamics of groups and how they work, while engaging their students in synchronous and asynchronous communications (Bocchi, Eastman, & Swift, 2004; Robles et al., 2002; as cited by Gaytan et al., 2007). Both of these forms of communication are important to online learners as they build relationships, so data about the characteristics of the online communication gathered from the graduates contributed to the findings of this investigation.

Related research also demonstrates the importance of positive student and faculty interaction in the online environment (Hamaidi, 2009; Swan, 2002; Walker, 2009; Wysocki, 2009). Successful test performance, above average grades, and student satisfaction contributed to increased interaction, which also resulted in increased learning (Gaytan et al., 2007). Additional research has focused specifically on student participation as a vital factor for active and engaged learning to occur (Bloom, 1984; Chickering & Gamson, 1987; Fleming, 1987 cited
by Vonderwell & Zachariah, 2005). There are three main ways that learners behaved in the online classroom: as workers, lurkers, and shirkers (Mason, 1994; as cited by Vonderwell et al., 2005). These terms are readily used in the literature to describe student learners who are actively engaging in online discussions, those on the periphery, and students who don’t demonstrate participation (Mason, 1994 & Taylor, 2002; as cited by Vonderwell et al., 2005). In addition, there were not any differences in the participation factor and three types of patterns for learner participation when the two studies, Mason, 1994 & Taylor, 2002, and their unique environments were compared (Vonderwell et al., 2005). Thus, these studies reinforce that these three distinct behavioral actions (working, lurking, and shirking) provide insight about student patterns of participation during online classes. Vonderwell argues that student participation in online environments can be additionally influenced by their familiarity with technology including whether students were able to interface with the online class platform, access content, or complete instructional tasks, and to what degree their participation is affected by information overload (Vonderwell et al., 2005). These studies demonstrate a consistent pattern for learner participation in online course environments and may provide some insight to learner participation and interaction in this investigation.

Research about discussion in the online course environment is important to understanding the student’s social learning, interaction, and perceptions that develop through their online experience. Three significant research factors must be considered as related to student perceptions: clarity and consistency in course design, contact with and feedback from course instructors, and the active and valued discussions that contribute to building learning communities online (Swan, 2002). Research has looked at the impact the online virtual environment has on student learning experiences through an online student presence, social
presence, social interaction, and sense of community (Walker, 2009). More specifically, researchers have looked at the social development of learning communities through online discussion (Bender, 2003; Misanchuk & Anderson, 2010; Palloff & Pratt, 2010; Swan, 2002). Discussion has been shown to be an important component for building online learning communities as a result of student interaction and participation. These works contribute to an understanding of learning and the functions of online learning communities, as it serves to inform this inquiry into the blended learning environment of a cohort delivery model.

**Small group dynamics and progression to cohesion.** The literature about small groups addresses communication, socio-psychological, and leadership dynamics that may provide insights into the cohort community and the learning that occurs within them. First, the field of communication is relevant to this study because it has highlighted a progression of factors essential to understanding small group dynamics: social influence, persuasion, solidarity, and cohesion. King (1975) notes, “social influence cannot occur without communication, social influence is the inevitable result of communication, communication is the process of assigning meaning to behavior, and social influence is the process by which the behavior of one or more individuals induces change in the state of another individual or group of individuals” (p. 14).

It is not just the field of communication that has studied small groups with regard to social influence. The Socio-Psychological Model promotes communication as a socially constructed practice within the participation and interaction of individuals and norms of that practice (Craig, 2006). In the field of social psychology, social influence is described as informational and normative. The informational group is influenced when group members are persuaded by the content of what they read or hear. Normative influence occurs when group members are persuaded by the knowledge that a majority of group members holds (Craig, 2006).
In addition, influence and persuasion are also mentioned in the social psychology literature in relation to solidarity. Some evaluative aspects of solidarity include offering evaluation, displaying gratitude, and showing concern for another’s contribution (Keyton & Beck, 2009). Solidarity is essential for a set of individuals to begin functioning as a group. Group communication generally starts with social influence, moves to persuasion, and leads to the act of solidarity which further supports cohesion. According to Shepherd (1964), “The concept of cohesion refers basically to the complex of forces which bind members of a group to each other and to the group as a whole” (p. 26). In the psychology literature, it is recognized that the group’s leader is influential, while at the same time stressing that it is the members who are responsible for the process that influences a group’s decisions (Barrett-Lennard, 1975). The factors noted in the literature present what might be interpreted as a progression toward cohesion that can aid in understanding how small group dynamics bind a cohort together or, at times, have a negative impact, and affect learning among the members.

**Cohesion and learning.** Cohesion is recognized as a “degree of attachment (involvement, belongingness, importance) that members have for a group” (Shepherd, 1964, p. 25) and is particularly relevant to this investigation because the cohort members form attachments to one another during their two-year MLS coursework. In the literature on small group communication, cohesion is paramount to understanding small groups (Mills, 1976; as cited by Lewin, 1947). The cohesion includes “satisfactions members obtain from being in a group, the degree of closeness and warmth they feel for each other, the pride they feel from being members of a group, the ability they have to meet emergencies and crises which may confront them as a group, and their willingness to be frank and honest in their expression of ideas and feelings” (Shepherd, 1964, p. 26).
Shepherd’s seminal field theory analyzes two areas of existing research about cohesion in small groups. The first includes the recognition that the level of group cohesion depended on the agreement achieved among group members about group goals, roles and norms, while the second main area involved “the effects or products of cohesion, such as interaction patterns, productivity, satisfaction, and influence” (Shepherd, 1964). According to Shepherd (1964),

A key indicator of group cohesion is the way in which a group makes a decision: where the members make a decision by acquiescence to the leader or by a majority vote, cohesion is probably low; where the members make a decision by unanimity, especially where this unanimity means that all members feel they have had their say and that even though they may still have reservations they are personally willing to express agreement, cohesion is probably high. (p. 26)

Research about cohesion and the elements that lead to cohesion informed this study, because those studies assisted the researcher in understanding whether the cohort had become a group and to what extent the cohort members’ perceptions of their social involvement created or influenced learning.

**Ineffective and effective factors regarding group creation.** Small groups provide a venue for communicating feelings. The research shows that group members are less inhibited in displaying a wide range of emotions including the extremes of both hostile and affectionate feelings (Barrett-Lennard, 1975). Emotions that are shared due to a comfort with group members may become extreme and ineffective for group functions and overall cohesion. These behaviors may contribute to additional ineffective group dynamics, such as social and cyberostracism (Williams, Govan, Craker, Tynau, Crivickshak, & Kam, 2002; as cited by Barrett-Lennard, 1975) and depersonalization (Postemps, Spears, & Lea, 2002; as cited by Barrett-Lennard, 1975).
A successful group typically demonstrates factors that contribute to “high cohesion and high productivity, in which objectives, role differentiation, values and norms, and membership criteria are clear and agreed upon, and in which communication is open and full” (Shepherd, 1964, p. 124-125). Additional research demonstrating the creation of successful small group interactions includes personal satisfaction in the group based on the style or form of communication (Sullivan & Gee, 2007), effective negotiations (Morris, Nadle, Kurtzberg, & Thompson, 2002; as cited by Brennan & Johnson, 2008), constructive confrontation and cooperation (Smith & Williams, 2004), support from family and friends in an online environment (Cummings, Sproull, & Kiesler, 2002) and mediation for online performance (Driskell, Radtke, & Sales, 2003). Recognition that these features are not a complete list of successful group characteristics further highlights the possibility that additional attributes may yet be discovered. As a result, this directed content analysis investigation offered an original look into the cohort experience and the communication and interaction resulting from prolonged interaction among peers.

In summary, literature from the fields of communication and social psychology provided insight into aspects of small group dynamics in many areas, including online learning communities and their functions in relation to aspects of learning, the communication dynamics of small groups and the progression toward cohesion and learning, and factors regarding effective group creation and functioning. This literature assisted the researcher in identifying, describing, and understanding the learning that occurs in the highly social environment of an academic cohort.

**Culture and the Learning Experience**

A key focus of this study was on the culture of learning that may develop and be sustained in a cohort of students. Many of the factors noted in the literature about small groups
and learning was useful information; however, Edgar Schein (2010) provided a particularly important view of learning culture, the specific dimensions of which are explored in this study. First, it is important to recognize the central focus of his work is organizational culture, with a primary emphasis on the role of learning. As he explains, culture is formed by social interactions and from previously learned social experiences, which serve as a stabilizing force to members of an organization (Schein, 2010). It is important to note that Schein views organizations (and groups) as evolving systems that influence our behavior and values while maintaining social order. When a change in the culture occurs it also causes a change in the system or organization (Schein, 2010). It is natural for individuals to be resistant to a situation that requires change, especially when it includes “the prospect of learning new ways of perceiving, thinking, feeling, and behaving” (Schein, 2010, p. 302). Such anxiety or resistance to change both enables and inhibits learning (Coutu, 2002). Learning anxiety occurs for a variety of valid reasons, most of which are based in fear, including loss of power or position, temporary incompetence, punishment for incompetence, loss of personal identity, and loss of group membership (Schein, 2010). Schein addresses the value of leaders in creating organizational cultures and effecting change. For a leader to create the conditions for change, it is first paramount to create a psychologically safe environment for learners, because the anxiety associated with learning may create resistance to change (Schein, 2010).

Each organization or group is unique as a result of its culture. There are three levels of culture: (1) artifacts, (2) espoused beliefs and values, and (3) basic underlying assumptions (Schein, 2010). These levels have varying degrees of visibility. Artifacts are the most visible products and include structures, processes, and behavior that an outsider can readily see, hear, and feel (Schein, 2010). The second level is a step further removed from the visibility of
someone outside the group. Instead, it is the espoused beliefs and values that are present in forming a logic or reason that guides behavior and attitude (Schein, 2010). The third level is hidden and consists of the basic underlying assumptions available only in the subconscious minds of the group members because they are so interwoven into the group’s culture. These assumptions are a true reflection of the actual values for that group’s culture, even though they are completely hidden from anyone outside of the group (Schein, 2010). Recognizing these three levels of culture assisted the researcher with the creation of interview questions and conducting the semi-structured interviews. Since learning is heavily influenced by cultural assumptions (Schein, 2010), the intent was to examine the culture that emerges from this cohort delivery model and explore how culture influences the learning among members in a cohort.

Schein recognizes that the concept of learning is affected by cultural assumptions, and from reflecting on his own concept of culture, he has identified ten dimensions of a learning culture (2010). These ten dimensions served as the lens for analyzing and interpreting the interview data in this study. The ten dimensions are, briefly:

• Proactivity. As the rate of change increases people will need to be involved in the learning process because it creates proactive problem solvers and learners.

• Commitment to Learning to Learn. When an organization values reflection and experimentation, it ultimately supports members with the time and resources needed to become learners. This is done in the practical sense when one asks for assistance, gets feedback, then reflects and analyzes in order to create a new way of accomplishing tasks.

• Positive Assumptions about Human Nature. The basic belief that humans can and will learn.

• Belief That the Environment Can Be Managed. The adaptation to a quickly evolving environment rests on the concept that managing the environment is both desirable and possible.

• Commitment to Truth through Pragmatism and Inquiry. First, it is critical for learning leaders to accept their own lack of expertise and to assist others in the process of seeking
truth. Then the organization can share the responsibility to solve problems through a flexible inquiry process.

• Positive Orientation toward the Future. It is necessary to balance thinking far enough into the future to assess the consequences of different options while looking to the near future to assess whether the solutions will be effective, thus supporting the best possible result.

• Commitment to Full and Open Task-Relevant Communication. The organization’s communication system permits everyone to be connected. Openness with regard to information is critical to effective problem solving and learning.

• Commitment to Cultural Diversity. Diversity creates subcultures that provide additional and unique resources for learning and innovation, which makes an organization more able to cope with unpredicted events.

• Commitment to Systemic Thinking. The ability to think systemically in order to understand that most things in the world are complex, non-linear, and interconnected.

• Belief That Cultural Analysis Is a Valid Set of Lenses for Understanding and Improving the World. It is the analysis and reflection on culture that supports the completion of tasks and also enables the understanding of how an organization grows and evolves. This process is vital for a learning culture (Schein, 2010).

Schein’s ten dimensions are “a first approximation of what a learning culture should emphasize” (Schein, 2010, p. 373) and reflects his own cultural understanding of how learning culture “optimizes individual competition and collaborative teamwork” (Schein, 2010, p. 373). Cohort members (as a group or system) create their own culture and so it stands to reason that these dimensions could be used as a starting point for the initial coding, analysis, and interpretation of the interview data. This is of particular value in understanding the learning culture that emerges in the cohort that has formed over the two-year MLS program.

**Literature Review Conclusion**

The literature reveals that higher education institutions have been embracing various educational deliveries from the traditional classroom instruction, online, or a blending of these two with various levels of success. In addition, some institutions implement these deliveries
with a cohort model. While the literature provides many positive outcomes associated with cohorts, what is lacking is the investigation of the learning that takes place among peers as a result of their long-term social connections in the cohort.

The learning theory literature provides information about the many aspects contributing to learning: the multiple perspectives about adult learning, learner-centered approaches to instruction, experiential learning (Kolb, 1984), and aspects of theoretical and practical wisdom. These aspects of learning informed the description of the learning in the cohort population under investigation, especially since the population’s curriculum emphasizes a learner-centered approach, as well as academic and professional field experiences.

The literature also addresses the importance of discussion and different features of small group dynamics related to learning. The community of practice literature describes and explains the interaction and participation often seen in a community of networked relationships. This social practice research identifies characteristics that were useful in understanding the students’ transformations in professional development as they convey their perceptions on learning. Both the informal learning literature and the communities of practice literature are critical areas for directing the researcher to the possible learning that took place in the cohort. This literature is particularly applicable because the cohort population consists of a community of adult learners with diverse backgrounds who have achieved their MLS while also striving to join the wider LIS profession during their time as graduate students.

In addition, the literature on student learning environments reveals that students have stronger feelings of community connectedness and learning once an online learning community has been built. An ideal online learning environment that fosters transformative learning occurs when the learners have active participation, collaboration, and the perception of a community
providing the necessary interaction and engagement for deep learning to emerge. While the experiential learning literature stresses the need for reflection and observation in order to support an individual’s transformative learning experience, the social psychology and communication literature about group cohesion and solidarity resulting from the sharing of ideas and feelings may also lead to the critical process of a cycle of learning (Kolb, 1984). This body of literature served to inform the researcher with regard to the communication and social involvement among the members of the cohort.

The final section of the literature review moves beyond small group dynamics and the online learning community to the literature of organizational culture, which most closely resembles the professional cohort learning environment of the population under investigation for this study. The work of Schein is of particular importance. More specifically, his perspective on cultures, especially learning cultures, provided the framework for developing interview questions and analyzing the interview data. In reviewing the literature, the researcher found that Schein’s ten dimensions provided a thematic approach to the initial coding of the interview data. The researcher pulled additional themes from the related reviewed literature to describe the learning culture among cohort peers within the blended learning environment.
Chapter 3
Methodology

Introduction

The study focused on discovering the learning that occurred among a graduate student cohort as a result of the cohort education delivery model. This chapter presents the research design and approach, the implementation of the data collection methods and procedures, and an overview of the data analysis.

Research Design and Approach

The researcher used a combination of mixed-methodology and methodological and theoretical frameworks to support the investigation into the research questions. The thought is that a cohort enables its members to learn beyond the institution’s intentioned curriculum and that a learning culture may develop, but to what extent? How might it develop, and what are the characteristics that define it? The researcher was particularly interested in the patterns and themes that might emerge from studying a cohort pursuing graduate professional education.

Research questions. The unique nature of this investigation lies in its examination of the effect of the cohort community on learning. More specifically, how does the social involvement among the members of a cohort create or influence a culture of learning in a blended learning environment? There are two additional sub-questions.

1. How do the students and their relationships with one another influence behavior as they work to accomplish their goals in a cohort environment?

2. How do these relationships and influences reflect Schein’s ten dimensions of a learning culture?
Mixed-methodology. This investigation used both a survey questionnaire and semi-structured interviews for a mixed methods research inquiry. The inductive approach provided a flexible methodological framework from which to study a complex situation, while the deductive approach provided additional reliability (Creswell, 2009). The survey used a common item format that provided a five-point range of standardized responses, originated in Likert scaling (Babbie, 2010). This survey questionnaire determined the relative intensity of each graduate’s perception as they reflected on their cohort as a whole. As with a two-layered research design, both measurement instruments provided two different results that served as a triangulation to cross-check the questionnaire with the interview result to corroborate evidence and illuminate themes. The survey questionnaire with the Likert ranging scale provided information about the primary research question. The semi-structured interview provided the researcher with an opportunity to guide the conversation and uncover the cohort members’ perspectives of learning in their blended learning environment. This is the appropriate method of study from which to research this inquiry. The qualitative methodology permitted the researcher to probe to a deeper level to view the unique culture of the cohort. First, a pilot study involving the surveying and interviewing of one cohort graduate was conducted. This enabled the researcher to evaluate the interview questions and general prompts, ultimately deciding to proceed to the next phase.

The use of standardized response categories in the survey questionnaire provided additional reliability, which was necessary when seeking an accurate representation of the group. Surveying as many members of the cohort as possible yielded results that provided a broad understanding of the cohort, with which to balance specific insights and underlying cultural assumptions that were gained from the in-depth qualitative interviews. The interview findings cannot be generalized (Babbie, 2010) to another Masters in Library Science (MLS) cohort, nor
another similarly situated professional program in higher education using a cohort delivery model. Instead, the qualitative methodology permitted the emergence and identification of themes that described and explained the learning culture among the cohort peers. This study’s interview questions were ideally suited for descriptive responses from the participants in which the research technique for semi-structured interviews supported the discovery, understanding, and description of cohort learning as perceived by the graduates.

**Methodological framework.** The specific methodological framework that was best suited to this research is content analysis. “Research using qualitative content analysis focuses on the characteristics of language as communication with attention to the content or contextual meaning of the text” (Budd, Thorp, & Donohew, 1967; Lindkvist, 1981; McTavish & Pirro, 1990; and Tesch, 1990; as cited by Hsieh & Shannon, 2005, p. 1278). In content analysis the focus is in the coding process (Hsieh & Shannon, 2005). Coding organizes text into groups of categories (Weber, 1990; as cited by Hsieh & Shannon, 2005).

Specifically, a directed approach to content analysis was used for this research. As Hsieh and Shannon (2005) explain, “The goal of a directed approach to content analysis is to validate or extend conceptually a theoretical framework or theory” (p. 1281). The theoretical framework for this inquiry, Edgar Schein’s (2010) ten dimensions of a learning culture, provided the themes for the researcher’s initial coding. Using prior research for predetermined themes as initial coding categories is a common process in directed content analysis (Potter & Levine-Donnerstein, 1999; as cited by Hsieh & Shannon, 2005). The collected interview data was coded using directed content analysis, because it provides the best paradigmatic lens with which to discover the learning that was taking place among this professional cohort of peers. The themes from Schein’s (2010) ten dimensions served as predetermined codes. However, some data could
not be initially coded into the ten dimensions; those were identified and analyzed later to determine if they represent a new category or subcategory. The researcher looked for emerging new themes and was open-minded to the possible absence of elements from Schein’s ten dimensions.

**Theoretical framework.** The theoretical framework involved in this research is both inter-disciplinary and multi-disciplinary in that it connects the social psychology and communication aspects of small group dynamics, organizational culture, and educational learning theory with particular attention to Communities of Practice (Wenger, 2000) theory and Schein’s (2010) ten dimensions of learning culture. The study of groups is important in addressing the cohort as a learning community. The expectations for learning outcomes can be found in the educational underpinnings of learning theory and the separate inquiry of distance education, including current conversations about delivery and quality. While the theory within the field of communication provides a wider understanding of group cohesion and learning, such cohesion may be natural in communities of learners. In addition, the curriculum taught to these cohort members closely connects to the humanist approach, in which a learner-centered and experiential model of learning was employed. As a result, the Communities of Practice (Wenger, 2000) theory and Schein’s (2010) ten dimensions of learning culture provided logical frameworks for this study. The importance of using these two theoretical frameworks lies in the possibility that the social practices of a group of professional graduate students, such as this cohort, may comprise a Community of Practice (Wenger, 2000) and the group may exhibit part or all of Schein’s ten dimensions of learning culture (Schein, 2010). This combination provided the best paradigmatic lens from which non-intentional learning among professional cohort peers was studied.
Participant demographics and researcher relevance. A medium-sized university that created and implemented an early model of distance education course delivery has provided an American Library Association (ALA) accredited Master of Library Science (MLS) program for over a century. The distance education model, dating back to the 1980s, involved faculty traveling from the main campus to a classroom in one of seven additional off-campus locations in the United States. To date, thirty cohorts have cycled through the professional degree program and a few states even boast alumni numbering over 500. The student body over the years has been composed of adults in the geographical region who were willing to travel for a weekend intensive program. The commute to the classroom meant half of the student population traveled more than 50 miles one way. Students were organized into cohorts that began their graduate degree program together, moved through their coursework, and then finished together, culminating with a local graduation ceremony.

The education delivery model had undergone changes as technology made it possible for online instruction. Recently, this school’s administration had begun conversations and strategies toward implementing a solely online program. This study represents a limited window of opportunity to investigate a cohort program in transition, where the blended learning delivery resulted in approximately 50% face-to-face instruction time and 50% online instruction. This new model required less travel for the faculty and cohort students, while providing an online instructional thread throughout the entire semester for each course. The amount of synchronous and asynchronous instruction varied, while faculty continued to teach the weekend intensives and the graduate students worked closely with a program director whose duties merged both the role of an administrator and an embedded faculty member. The researcher held this position. As
director, the researcher supported the graduate students’ academic and professional development, while administering the degree program and serving as the university liaison to the community.

The small group literature recognizes two sources of student resistance during a similar type of investigation. The first is a tendency of group members to keep quiet with a stranger and the second involves the researcher’s need to balance the role of being both an insider and an outsider (Mills, 1984). Both possible sources of student resistance identified by Mills were simply not an issue in this research study. The researcher and the students were provided the unique opportunity to extend their familiarity with each other through the creation of a comfortable interviewing experience. The familiarity enabled the students to open up to the researcher’s prompts, causing a robust exchange that uncovered assumptions and perceptions that lead to a deeper level of interpretation and analysis of the data.

This study was not focused on what the researcher as an observer perceived (Lewin, 1947), but rather on an individual participant’s subjective perception. As the student relayed his or her experience, those details gave meaning to the learning that occurred among peers. Due to the researcher’s proximity to the participants, it is important to recognize that the researcher was part of the world that was being investigated (Charmaz, 2009) and that credibility comes from the researcher’s “in-depth understanding of the phenomenon understudy” (Creswell, 2009, p. 192). In fact, as the researcher compared content, familiarity with the underlying context that aided in the analysis or interpretation.

**Data Collection Methods**

**Population and sampling.** The target population consisted of approximately 30 recent graduates of a distance education cohort program for Master of Library Science located in the United States. The students who completed the program and graduated were invited to submit
the Consent and complete the Survey Questionnaire (Appendix A). These forms were required for participation in the study. A random sampling of the graduates was conducted, and every other respondent was invited to interview. An initial five interviews were conducted with the addition of two more, for a total of seven interviews. The additional interviews were added to ensure as full a picture of the learning culture as possible. A total of seven interviews enabled the researcher to get to the point where new categorical data was no longer emerging.

**Survey design.** The Survey Questionnaire was made available via the online survey tool Survey Monkey (Appendix A). An email was sent to the graduates of one cohort notifying them of that fact. The Survey Questionnaire data was collected in a five point Likert scale (Figure 1). The survey’s broad results were then used by the researcher to facilitate the interview conversation.

**In-depth telephone interviews.** Interviews are frequently used in various types of qualitative research investigations. A semi-structured interview generates comments based on a script, but it still provides for the flexibility of improvisation as needed to probe for deeper explanation and description (Myers & Newman, 2007). The semi-structured interview was ideal for this investigation because the interview format encouraged the interviewees to expand on their perceptions and feelings about their cohort learning experience. The researcher had utilized a list of general prompts to probe for underlying assumptions held by the cohort while asking open ended questions (Appendix B). This qualitative method helped to ensure that the data gathered was based on the graduate’s impressions of his or her cohort experience. The graduates were guided to talk about their experience as it pertained specifically to their learning within this cohort model.
The in-depth interview methodology provided several benefits that assisted in the credibility of the study. First, the interviewer guided the interview conversation to probe deeper into graduate’s attitudes and perspectives during the natural flow of conversation (Babbie, 2010). Second, the interviewer clarified any communication misunderstandings and noted when clarification was given. The interviews were conducted in a familiar style of communication, either online or on the telephone. These communication modes added to a higher response rate as the graduates were familiar with both modes. These modes also made it more likely the study would include graduates who were dispersed across the region. Interviewing a random sample of the cohort presents a natural limitation to the study because of the possibility that not all aspects of the learning culture would be captured, since not every graduate was interviewed. However, this concern was minimized by the survey questionnaire, which was used to determine the relative intensity of each item and served to guide the researcher, who then relied on the general prompts during the interviews to further open up the conversation with each interviewee.

Implementation of Procedures

**IRB approval.** The procedure of data analysis for this study was conducted with a mix methods approach. This study’s methodology required approval from Dominican University’s Institutional Review Board for surveying and interviewing the cohort’s graduates. In addition, a proposal defense was prepared and passed through the Graduate School of Library and Information Science PhD Candidate process. This provided the opportunity for ethical consideration from the university with regard to the overall research plan.

**Invitation to participate.** The researcher emailed graduates from a professional Masters in Library and Information Science cohort program an invitation to participate (*Informed Consent*) that contained directions for the research inquiry. Next, the researcher contacted recent
graduates of a single cohort program and invited them to submit their Consent and Survey Questionnaire (Appendix A). Their consent and participation allowed the population under investigation to form for this research inquiry, for which a purposive sampling was selected. The one cohort identified served as a purposive sampling within professional graduate education in Library and Information Science.

The invitation contained the informed consent directions for participation and information on how to access the survey tool in order to complete the ten-minute survey questionnaire. The survey tool was hosted through Survey Monkey, and participants used the URL link to access and fill out both the online Consent Form and Survey Questionnaire, which were required for this research investigation. All of the cohort members in this graduating class were invited to participate. A total of 17 participated by beginning and completing the electronic survey form.

Survey. The survey questionnaire was designed with a Likert Scale that served as a standardized five point range. This range provided a quantitative measurement in this study’s mix methods approach. The scale enabled a broad analysis of the data by capturing the participants’ overall perception of the cohort as an organization. Figure 1 below presents the scale structure used for this study.
The Survey Questionnaire data that was collected in a five point Likert scale provided insights to the cohort as a whole organization. This then informed the researcher’s preparation for conducting the interviews.

**Interview.** The second phase of the research proceeded with a small number of cohort members that were selected randomly by taking every other consenting participant of the Survey Questionnaire. Of the 17 that responded to the survey, five (and eventually seven) members were invited to participate in an in-depth interview for approximately one hour. In order to randomly select the interviewees the researcher compiled a list of every odd numbered completer. Then from this list of potential interviewees, the researcher emailed and interviewed the first cohort member. Through this pilot the researcher recognized the need for additional ways to use the probing questions and then scheduled additional interviews. A minimum of five interviews were planned and a total of seven interviews were conducted. These additional interviews were added to ensure the random sampling provided as full a picture of the learning culture as possible and were stopped at the point where there wasn’t any new categorical data.

The invited graduates gave their consent to an interview, chose either Skype or telephone for their format, and followed a URL link where they scheduled their interview time on an online Doodle MeetMe calendar. Six of the seven semi-structured qualitative interviews were
conducted via telephone, while one was interviewed through Skype. Each interview was allocated a minimum of 60 minutes. The longest interview went for 94 minutes.

The interviews were recorded, through the use of a digital audio recorder separate from the telephone or Skype software. The researcher took note of any subtle “expressions, questions, and occasional sidetracks” (Leedy & Ormrod, 2010, p. 141) and acted to further direct the interview for additional exploration. The use of prompts served to guide each interviewee to reflect beyond their assumptions. This moved the interviewees to revealing more personalized thoughts and perceptions as the participants responded to the prompts. This engaged the interviewee in an interview process that probed further to encourage each cohort member to unpack their assessed values.

**Overview of Data Analysis**

The researcher’s analysis of data began during the data collection phase where the focus was on what the participants communicated through their surveys and interviews. The survey was designed and data was collected and initially analyzed to provide a broad overview of the graduates’ perception of the cohort as a whole. In addition to an overview perspective, the survey questionnaire also provided insights to the demographics that made up the cohort. The survey provided reliability as the results measured up against the semi-structured interviews.

The interview data was collected second and served to explain the experience from individual cohort members as it pertained to their individual learning within the cohort. A discussion of Schein’s ten dimensions on a learning culture (2010) provided the initial structure for coding the data. As Hsieh and Shannon (2005) note, “Newly identified categories either offer a contradictory view of the phenomenon or might further refine, extend, and enrich the theory [or prior research]” (p. 1283). It was both the researcher’s previous role with the participants and
the use of Schein’s dimensions that supported a content analysis method where a combination of predetermined and emerging coding provided an appropriate way to proceed.

The interviewing began when each of the five interviews was scheduled. Once the transcriptions and the first round of hand coding were compiled, the researcher recognized the imperative need to exhaust the patterns that had developed and to do so, conducted two additional interviews. A total of seven interviews were coded against the initial dimensions. An additional round of coding and analysis resulted in resonant themes that emerged beyond the initial dimensions. A total of seven interviews were conducted, transcribed, coded, and analyzed.

**Analytic steps.** The data analysis was carried out in a fluid or simultaneous process that is typical for qualitative research (Merriam, 1988; and Marshall & Rossman, 1989; as cited by Creswell, 2009). The six steps of Creswell’s data analysis are described in relation to this study:

1. Organize and prepare the data. The interview recordings were used to create a transcript, and the information in the field notes was typed and added to the transcription, because they may also provide meaningful cues.
2. Read the data. The researcher read the transcript to gain an understanding of the overall meaning, and then recorded in the margins thoughts about general ideas that the participants conveyed.
3. Beginning detailed analysis with coding. The researcher read through the transcription a second time, noting in the margins broad categories of thoughts or general ideas that the participants used to convey meaning.
4. Detailed coding. The data was coded initially using themes presented in Schein’s ten dimensions of a learning culture (Schein, 2010) while the researcher was sure to note when an additional category arose from the data.
5. Advanced narrative discussion of interconnected themes. The researcher considered how to clearly communicate the dynamic points by using text, visuals, figures, or tables.
6. Final interpretation analysis. The researcher addressed several different analyses such as the meaning of what was learned and how it fit or diverged from past findings, and suggested new questions that need to be asked. It was also important to note how the personal culture and experiences of the researcher played a role in the interpretation of the data. (Creswell, 2009)

These six steps began with hand coding and evolved to where the data analysis process was organized first in broad categories or dimensions and then in sub-categories. Schein’s ten
dimensions of a learning culture (2010) served as the beginning categories. The data was then further coded, listed, and sorted to reveal resonant themes. The use of these dimensions assisted with the process of identifying relationships or interconnected categories and ultimately supported the final step of interpretation analysis. This process of data collection, analysis, and interpretation led to understanding how the relationships among group members influenced the phenomenon of a cohort learning culture in a blended learning environment.
Chapter 4

Results

Introduction

This chapter addresses the initial analysis of the data collected, processed, and analyzed from the survey and interviews. The results from the data will be shown in relation to the research question and sub-questions. An integral part of the data analysis process involves various analyses framed around dimensions or themes about an organization’s culture of learning.

Survey Findings

Cohort demographics and logistics.

The Survey Questionnaire showed that 82.35% identified themselves as female and 17.65% identified themselves as male. The race that best describes the participants was 94.12% White/Caucasian, 5.88% Asian/Pacific Islander, and 5.88% Hispanic American. When looking at the participants’ prior experiences before joining the MLS degree program 31.25% reported they had completed previous graduate level coursework or a degree, 18.75% had experience in a cohort learning environment, and 31.25% had engaged in either a for credit or a non-credit online learning opportunity. Of the graduates who responded to the survey 68.75% worked full-time while pursuing their master’s degree, 18.75% worked part-time, and 12.50% were not employed. Figure 2 depicts the breakout of employment and the pursuit of the MLS graduate degree.
Employment and Pursuit of the Graduate Degree

The distance traveled to the intensive weekend classes varied widely among cohort members. A one-way commute for the majority of the cohort (52.94%) involved 10 to 30 miles. Figure 3 demonstrates the number of cohort members that were representative of the shortest commute of up to five miles and the longest commute of up to 75 miles.

Beyond the time spent on courses and their employment, cohort members found time for field experiences and meeting with mentors. The survey data findings showed that the majority of graduates (81.25%) took advantage of the opportunity to participate in the three credit hour field experience known as the Practicum and that half of the participants networked with a mentor or practicing librarian at some point in their program. Of this, half the frequency of time
with a professional mentor varied: 37.50% met weekly, 37.50% met monthly, and 25% met every two months. This is represented in Figure 4 below.

**Figure 4**

**Time Spent with a Mentor**

The survey questionnaire had 17 cohort members respond, of which seven were interviewed. Of these seven, all are currently middle to top level managers in library and information agencies, composed of the following niches: academic library, special library, a public library, a public school district library, and a private sector company. The findings in these demographics and logistic demonstrate the wide variety of libraries and information agencies or specialty niches this population of cohort members are working for within the library and information professions.

**Findings among Cohort Members**

The rest of the survey questions were based on Schein’s ten dimensions (2010) and provided a standardized range in which the graduates’ responses revealed the cohort experience. In brief, the results portray the cohort as an organization and serve as an overview of how the graduates perceived their experiences as a cohort. The survey verified, through the consistent ratings, that the graduates agreed among themselves on how they saw their cohort. In fact, the
majority of participants responded either True or Very True to the 16 questions related to learning in this cohort. The results are distributed below in Table 1.
Table 1

<table>
<thead>
<tr>
<th>Survey Questionnaire</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td>True</td>
</tr>
<tr>
<td>1. My cohort knew that asking questions in the face-to-face class sessions was desired and valued.</td>
<td>17.65%</td>
</tr>
<tr>
<td>2. My cohort knew that asking questions in the online platform/classroom was desired and valued.</td>
<td>35.29%</td>
</tr>
<tr>
<td>3. As a cohort we were engaged in seeking information for our own personal learning</td>
<td>17.65%</td>
</tr>
<tr>
<td>4. My cohort was supportive of our members as we worked through course assignments.</td>
<td>29.41%</td>
</tr>
<tr>
<td>5. My cohort worked as a group to share the responsibility of seeking information and contributing to discussions.</td>
<td>29.41%</td>
</tr>
<tr>
<td>6. In the research class we broke into small groups to design and explore a research question. My cohort discovered that the topics and issues regarding our profession are not linear, but complex and interconnected.</td>
<td>37.50%</td>
</tr>
<tr>
<td>7. My cohort members understood the notion that theory and practice work together to benefit our profession.</td>
<td>35.29%</td>
</tr>
<tr>
<td>8. Generally, student learning in the program was supported by adequate resources and time to accomplish the course assignments.</td>
<td>50%</td>
</tr>
<tr>
<td>9. My cohort represented different values, perspectives, and background experiences that added unique resources to our learning experience.</td>
<td>41.18%</td>
</tr>
<tr>
<td>10. My cohort was confident that everyone could learn.</td>
<td>47.06%</td>
</tr>
<tr>
<td>11. As a whole, my cohort took creative approaches to the process of learning when it came to completing class assignments.</td>
<td>52.94%</td>
</tr>
<tr>
<td>12. My cohort pursued professional development opportunities beyond the course assignments.</td>
<td>41.18%</td>
</tr>
<tr>
<td>13. By the end of the program, we recognized that our individual learning was intertwined with the learning of our cohort members.</td>
<td>29.41%</td>
</tr>
<tr>
<td>14. My cohort supported and maintained an open communication structure among our members.</td>
<td>47.06%</td>
</tr>
<tr>
<td>15. My cohort recognized the need to adapt and change as a group when necessary.</td>
<td>35.29%</td>
</tr>
<tr>
<td>16. My cohort, as a group, valued the process of learning new material as much as, or more than, simply completing an assignment or solving a problem.</td>
<td>35.29%</td>
</tr>
</tbody>
</table>

Table 1 Survey Questionnaire Data The Perception of Cohort Members and their Cohort as an Organization.
In summarizing the statistical data it makes sense to report that those responding to the survey made up a mean or average response of 86.025%, a median of 88.2%, and a mode of 88.3%. The mean, median, and mode are close in numerical range, therefore showing a normal distribution. The researcher considers the outlying values worthy of noting, as they are still within the majority and not outliers in the true sense. The statement, *My cohort recognized the need to adapt and change as a group when necessary*, prompted the response furthest from the median, scoring a response rate of 64.7%. This shows the question held the most disagreement out of all the questions, while also showing a majority of agreement. In contrast, there was a unanimous response, with a total of a 100% choosing either True or Very True to the following statement, *My cohort was supportive of members when they worked through their course assignments*. Overall the data showed a high level of agreement and consistency among the respondents.

The survey data added to the investigation by providing evidence for a broad understanding of the cohort through each member’s perspective. The consistent ratings of the survey questionnaire further demonstrated that the cohort functioned as a unified entity, an organization, within their blended learning environment. The survey findings will be connected to the interview data and discussed further in Chapter 5. The discussion will include additional specifics about the connections made possible as a result of the methodology.

**Interview Findings**

A total of seven graduates from one cohort were interviewed. The interviews provide detailed individual accounts of the graduates’ perceptions of their social involvement among the cohort members while in the program. These interviews include findings on the peer to peer influence regarding their behavior and work environment while participating in the cohort.
Some interviewees also mention current interactions and relationships with their peers since graduation. Schein’s ten dimensions of a learning culture provided the initial framework and themes for hand coding. A second round of coding added a list of resonant themes, while a third round of coding served to enrich and refine the resonant themes, as listed in Table 2.
Table 2

Resonant Themes Resulting from Thematic Coding with Schein’s Ten Dimensions

<table>
<thead>
<tr>
<th>1. Proactivity. As the rate of change increases people will need to be involved in the learning process because it creates proactive problem solvers and learners.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resonant Themes:</td>
</tr>
<tr>
<td>• (1.1) Technology was employed to maintain cohort communication for learning that was not related to course assignments.</td>
</tr>
<tr>
<td>• (1.2) Relationships of mutual social advantage actively enhanced the learning process.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Commitment to Learning to Learn. Members hold the belief that learning is a good thing and worth investing in. When an organization values reflection and experimentation, it ultimately supports members with time and the resources needed to become learners. This is done in the practical sense when one asks for assistance, gets feedback, then reflects and analyzes in order to create a new way of accomplishing tasks.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resonant Themes:</td>
</tr>
<tr>
<td>• (2.1) The learning process included the cohort actively using new technologies and resources to enhance their learning.</td>
</tr>
<tr>
<td>• (2.2) The members relied on cohort relationships as a resource to learning.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>3. Positive Assumptions about Human Nature. The basic belief that humans can and will learn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resonant Themes:</td>
</tr>
<tr>
<td>• (3.1) The willingness to learn in this cohort program was evident.</td>
</tr>
<tr>
<td>• (3.2) Members felt confident to achieve learning outcomes.</td>
</tr>
<tr>
<td>• (3.3) Members recognized that their relationships moved them beyond the individual experience and into the ease of collaborative learning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Belief That the Environment Can Be Managed. The adaptation to a quickly evolving environment rests on the thought that managing the environment is both desirable and possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resonant Themes:</td>
</tr>
<tr>
<td>• (4.1) The idea that the small group project environment can manage and solve problems.</td>
</tr>
<tr>
<td>• (4.2) Cohort members held the assurance that choices can be made when scheduling their obligations (time management).</td>
</tr>
<tr>
<td>• (4.3) The confidence that they were able to lead the group to a desired outcome.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Commitment to Truth through Pragmatism and Inquiry. First, it is critical for learning leaders to accept their own lack of expertise and to assist others to accept theirs. The learning task then becomes a shared responsibility. The learning organization can share the responsibility to solve problems through a flexible inquiry process.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resonant Themes:</td>
</tr>
<tr>
<td>• (5.1) The willingness of members to acknowledge they are a novice.</td>
</tr>
<tr>
<td>• (5.2) Members facilitated the exploration of those seeking a resolution.</td>
</tr>
<tr>
<td>• (5.3) The cohort members were committed to the process and pursuit of inquiry in a collaborative way.</td>
</tr>
</tbody>
</table>
• (5.4) Cohort members participated in the social aspects in pursuing learning.

Table 2 Continued

6. Positive Orientation toward the Future. It is necessary to balance thinking far enough into the future to assess the consequences of different options while looking to the near future to assess if the solutions are effective, thus supporting the best possible result.

Resonant Themes:

• (6.1) Cohort members actively strategized successful outcomes through planned scenarios.

7. Commitment to Full and Open Task-Relevant Communication. The organization’s communication system permits everyone to be connected. Openness with regard to information that is critical to effective problem solving and learning. A sensitivity to task-relevant information and being open in sharing it.

Resonant Themes:

• (7.1) The cohort communicates using course content delivery system.
• (7.2) The open communication by members in a face-to-face environment.
• (7.2) Members engage in inclusive communication through an outside communication system.

8. Commitment to Cultural Diversity. Diversity creates subcultures that provide additional and unique resources for learning and innovation which makes an organization more able to cope with unpredicted events.

Resonant Themes:

• (8.1) Cultural sub-groups in the cohort brought new and varying perspectives to their course engagement.
• (8.2) Geographically separated sub-groups provided additional learning through carpool discussions.

Commitment to Systemic Thinking. The ability to think systemically in order to understand that most things in the world are complex, non-linear, and interconnected.

Resonant Themes:

• (9.1) Cohort members undertake discussions recognizing that information management issues are elaborate, linked and dynamic.
• (9.2) The library profession is a small, established, and well connected profession that extends worldwide.

10. Belief That Cultural Analysis Is a Valid Set of Lenses for Understanding and Improving the World. It is the analysis and reflection on culture that supports the completion of tasks and also enables the understanding how an organization grows and evolves. This process is vital for a learning culture. Belief that analyzing and reflecting on their culture is necessary for the learning process.

Resonant Themes:

• (10.1) The idea that reflection on the learning experience impacts the cohort’s learning culture offers a significance for the culture’s growth.
• (10.2) Cultural stories of individual learning as it relates to the member’s experience of the cohort that impacted their learning.

Table 2 Cohort data pertaining to Schein’s ten dimensions and the resonant themes.
**Ten Dimensions and Resonant Themes Identified.** This research utilized the framework of Schein’s ten dimensions of a learning culture (2010) to begin the initial coding. Taken together, Schein’s ten dimensions are “a first approximation of what a learning culture should emphasize” (Schein, 2010, p. 373) and reflect Schein’s perspective that a learning culture “optimizes individual competition and collaborative teamwork” (Schein, 2010, p. 373). Schein recognizes that the concept of learning is affected and defined by cultural assumptions. Cohort members (as a group or system) create their own culture and so it is logical to use these ten dimensions as the lens for analysis from which resonant themes emerged.

**Dimension 1**

The first dimension, *Proactivity*, is the opposite of a more traditional learning culture which tends to emphasize limited student engagement and passive acceptance of the content presented. Proactivity recognizes the value of the learner being committed to the learning process, more than seeking out any one answer. When an organization is faced with complex problems it is more likely to adopt new solutions if the members have been engaged in a proactive learning process (Schein, 2010, p. 367). Proactivity was found in the interview data and can be best understood by explaining two specific resonant themes.

**Resonant theme 1.1.** The first resonant theme addresses communication by cohort members that took place outside of class time and outside of the course assignments. One interviewee provided insight about an active communication and learning process within the cohort:

I would call or email and say, ‘This is going on at work. What do you think?’ or, “Oh, my gosh, this is happening to me at work!’ and members of my cohort would write and say, ‘I had something like that happen at work,’ and I would write back and say, ‘What did
you do then?’, [they would say] ‘Consider, such and such’. So, that professional relationship was there and also a personal [one. Peers would ask,] ‘How are your kids doing?’ and ‘What is happening in their lives?’ (Interview E, 2013)

One remembered a second semester lecture that addressed the information professional’s need to use social media:

[W]e started writing to each other on Facebook….That added to our personal lives. Like seeing the picture of a wedding dress, [a] costume, etc. That was nice as we moved through the program and to keep up that way. It was good to know when others were sick and we knew what they were dealing with personally. If in a group project with that person, we realized it would affect their in class times. (Interview D, 2013)

These examples demonstrate that the learners were committed to the learning process and that such proactivity was evident outside of their course assignments and outside of the designated course time. In fact, their use of email and social media enabled them to be reflective and engaged in learning at all of hours of the day and night. Such commitment and dedication to their personal learning reflected a process that transcended traditional classroom hours. They were able to interact with each other when those conversations could take place and in the midst of other school, work, and personal commitments.

**Resonant theme 1.2.** The second resonant theme demonstrates that relationships which offer a social advantage to two or more participants actively enhance the learning process. This proactivity was articulated during the interviews through statements such as:
I could call one person whether they were in my [small] group or not…and talk about things frankly…not necessarily the content, but the process. Sometimes our instructors would just give you cart-blanc to work in a group or at figuring out how to work in a group…I like structure, and when it was not structured, I got very frustrated. (Interview F, 2013)

Another member expressed the social advantage this way:

I joined [an association] at beginning of the program. And there were others in my cohort that were already members of that organization and so it became, again, a relationship that became more [of an opportunity] beyond what we had in classes, a professional and personal relationship. (Interview E, 2013)

Those interviewed articulated that they communicated for reasons that extended beyond their course assignments, and this type of communication was often supported by technology. (Technology that was employed and maintained for task-relevant cohort communication is discussed as part of dimension seven.) Reports from interviewees such as these demonstrate that the cohort valued proactive and engaged communications involving family, work, and professional tasks that support the process of learning among cohort members.

**Dimension 2**

The second dimension, *Commitment to Learning to Learn*, occurs when the members hold the belief that learning is good and a worthy time investment. The belief that learning is evident when an organization values reflection and experimentation; it ultimately supports members with time and the resources needed to become successful learners. In the practical sense, the commitment to learning occurs when one asks for assistance, gets feedback, and then reflects, analyzes, and incorporates the new information in order to create a new way of
accomplishing tasks (Schein, 2010, p. 367-368). There were two prominent resonant themes that emerged from the interview data related to Dimension 2. The cohort fostered the members’ commitment to learning to learn through the use of new technologies and individual relationships among their cohort peers. These two functions demonstrated strong evidence that student learning was supported by the cohort.

**Resonant theme 2.1.** The first resonant theme, that the cohort actively used new technologies and resources to enhance their learning, is exemplified in the following interviewee’s story:

One of the things that I was pleased about in a couple of the groups that I had was that instead of just going to everyone’s strengths; like you speak well, so you go up…and you are the ‘Tech Guru’, so you do the tech part, like what usually happens in groups. In a couple of my groups, a couple of people said, I’m not good at this and I want to try to do this part. I felt that was courageous on their part and it really put learning ahead of just getting the project done…I was pretty impressed when they did that, as it was a stretch for them. [In the end.] I think they got a lot more support from the group when they did that, because we knew they were really trying to stretch their capabilities. (Interview B, 2013)

This story is evidence of the commitment to learning to learn new technologies as well as how individuals worked together to teach or to learn from the other cohort members. This supportive behavior influenced other cohort members to pursue learning new technologies. Another interviewee reported:

Throughout the entire program I guess things that were new and exciting and challenging to me was the technology. That was always, something new to me in every project,
either the technology that we were using to do a project or we were describing in our project. I remember a technology specifically in the school media course…Skype…Adobe Connect…ZoHo…Google Documents… [and] the SmartBoard… I learned how to use new technologies and how to do things… I’m still learning today! (Interview D, 2013)

These stories describe, in a practical sense, how cohort members provided support for learning new technologies.

Resonant theme 2.2. The second resonant theme involved the cohort relationships that the members relied on as a resource for their learning. The data demonstrate that the cohort members valued personal relationships and the support they provide toward one’s commitment to learning to learn. Relying on a peer was very evident in the findings, as noted by one such comment, “I could text or email or call someone and say, ‘Can you help me with this, I’m stuck!’ I think having that relationship established was very helpful” (Interview E, 2013). Another expressed it in a detailed story:

I didn’t buy into the cohort model, early. It was after, gosh, it had to be three semesters in that I finally got it. I got what that does for us as a class… we were able to lean on each other and it got better the more we got to know each other and the more we worked together… as we moved along in the program… And the period where it even started to click for me was when I figured out I could kind of lean on people, because I knew them enough to know they would be good coaches for me. For example… I would just call her and say, “I don’t get it…blah, blah, blah… and she would just bring it right back down and I wouldn’t have known that if I hadn’t gotten to know her throughout the course [of the cohort program]. (Interview F, 2013)
The members of the cohort served as emotional and intellectual resources for their peers and supported the collaborative completion of group work. Such reliance further demonstrated that being committed and investing time in learning was a value shared among the members of the cohort.

**Dimension 3**

The third dimension, *Positive Assumptions about Human Nature*, focuses on a trait that learning leaders must have. In brief, it is the basic belief that humans can and will learn. Such a core faith that people are good and malleable supports the idea that people can change and continuously improve. As networked systems and global collaboration drive organizations to solve complex problems in today’s driven world of information “control-oriented organizations…are certain to fail” (Schein, 2010, p. 367). In fact, Schein describes it this way: “A cynical attitude toward human nature is bound to create, at best, bureaucratic rigidity, and at the worst extreme, counter-organizational subgroups” (2010, p. 367). After all, it is the act of learning that stems from the fire of one’s passion driving them to make a difference, improve upon the circumstances and to grow. This dimension’s resonant themes entail a willingness to learn within this cohort program, the confidence to perform the learning outcomes, and the recognition that their relationships will enable collaborative learning.

**Resonant theme 3.1.** The willingness to learn in this cohort program was evident. As graduates, they remembered back to the beginning of the program and their early days together, “we didn’t really know each other well, [but] because we all had this same deep interest in learning it was easy to get along together and work together, so it all really kind of fell into place…it was a positive experience” (Interview G, 2013). Another reflects on the experience of owning a computer for the first time, and what it was like learning to use both the hardware and
software, “It was all new to me. I approached it [by thinking] ok, I’m going to press this and see what happens. Then if something goes wrong, then I will call tech support” (Interview D, 2013). These examples demonstrate a basic faith that they would learn and that their peers would learn.

Resonant theme 3.2. The second resonant theme that emerged from the interview data displayed the confidence of cohort members to achieve the learning outcomes. One participant reported:

I felt like I had a little something I could contribute too, like to the program and to my colleagues, learning to learn….I did feel confident that I could perform, could participate and [use] tools to perform to the level that was being required of me. (Interview A, 2013)

Another cohort member stressed that the cohort, as a whole, provided additional confidence:

I was intimidated to go into this program and to have the support from individuals who would say, ‘Yeah, you can do this!’ or ‘You know what you are talking about.’ or ‘Your experience is valuable!’, those kinds of things were really helpful to me, to boost my confidence level. So, when I had questions or needed to review there was that kind of support as well. (Interview E, 2013)

Thus, the findings show that individuals maintained a confidence in the capacity to learn and the confidence was shared by their peers, who encouraged and supported one another in their learning endeavors.

Resonant theme 3.3. The third resonant theme highlighted the member’s belief that their relationships moved them beyond the individual experience and into the benefits of collaborative learning. Members provided the following insight with regard to the positive assumptions that were at the core of their collaborations, “All the group interactions were real positive…it was such a change [from my previous educational programs] to have people that I
could count on and trust and they would get it done” (Interview D, 2013). A real reliance in working together and believing that everyone could and would contribute as they learned together in their small group was reflected in the data. One interviewee expressed it this way:

I found it to be so helpful working with the cohort….lead me to the position where I knew the other members, and I knew what some of their strengths and weaknesses were, and I knew how we could work together when we had group projects [and] it was helpful for me to know how we interacted. (Interview E, 2013)

All three resonant themes that emerged—the belief and willingness to learn in the cohort program, the confidence to do so, and the understanding that their long term familiarity provided the relationships that supported collaborative learning—embodied the basic belief that everyone in the cohort can and will learn.

**Dimension 4**

The fourth dimension, *Belief That the Environment Can be Managed*, recognizes that the capacity to adapt to a quickly evolving environment rests on a belief that a learning environment is manageable and is a shared cultural responsibility accepted by the organization as a whole. As Schein notes, “the more turbulent the environment, the more important it will be for leadership to argue for and show that some level of management of the environment is both desirable and possible” (2010, p. 368). Findings from the interviews indicate the following resonant themes: learning can be managed through problem solving, choices can be made when scheduling various obligations, and the cohort members are confident they can lead to desired outcomes.

**Resonant theme 4.1.** The idea that the environment can be managed to solve problems was most prominent from their experiences with small group projects. One cohort member reflected back:
We were new to the program, we weren’t exactly sure how we would work together, we weren’t sure how much depth we needed to go, what was exciting was one member had taken a course in project management and she was able to help us set the framework for how we would work together. For me that was particularly helpful. I have used it [again]. (Interview E, 2013)

Another interviewee provided the following insights:

[U]sually you hit a few obstacles and you try to get over those. Often times and this was true in this project too, often times when some group members weren’t contributing enough, and um a little bit of friction [developed]. And that was a project where we were able to overcome that [difficulty] to a very successful end. (Interview C, 2013)

This dimension is illustrated through these stories, because the cohort members managed their own learning by solving problems that developed during the group projects.

**Resonant theme 4.2.** This second resonant theme demonstrated that cohort members held the assurance that choices can be made when scheduling their obligations. In a practical sense, one member addressed learning time management skills:

I worked full-time, I had a son still living at home, he was finishing his last years at high school. I had another son that was in college. In fact, we all graduated in the same year, 2010. One from High School, one from College and me with my Masters, so there were personal demands on my time. I worked 40 hours a week…Balancing, and planning, and the time management was an immense challenge…In one of my earlier classes, I learned I had to limit the amount of time and effort I put into my coursework. That was when I learned time management…It was just such an immense challenge that I just had to find that balance. So that was probably the biggest challenge. (Interview E, 2013)
The development of time management skills as a result of needing to make choices on the demands of life was clearly stated in this cohort member’s explanation:

Finding a balance um, between what I wanted to learn and what I needed to learn, so that I wasn’t swamped by the program….So, finding that balance of do I want to put in a 100% or now if I put in a 100% how is that going to affect my personal life. So I think I went into it a 100%, I’ll go crazy with this, learning as much as I can. I had to obviously, I had to pull back. It was um, other realms of my life. Finding the balance, it was, um how much can I do and have a life…outside of the program? (Interview G, 2013)

Many cohort members recognized the importance of finding a balance in their workload. Juggling personal and professional tasks and responsibilities was not merely desired, it was possible, and they recognized that it was necessary in order to find success among their many obligations.

**Resonant theme 4.3.** Several interview comments illustrate the confidence that members held about their ability to lead the group to a desired outcome. For example, one story described the steps taken in a group project:

I remember the first meeting we had, we were trying to figure out what group to do…this was a way to be creative. I influenced my group way too much, because I got them super excited about it. We did all the research, collected the data, and then created a script, so we could perform it in class to deliver that information…it was an exciting thing to think that we could be creative in our actual class presentation style. I didn’t get to be creative in my job, so this gave [me] a very fun creative outlet. (Interview F, 2013)

Many more stories portray the comfort that cohort members had due to the familiarity of working with one another on numerous and widely varying group projects. One member
provided multiple perspectives in this shared responsibility that often occurred in small group work:

Sometimes it [the process of preparing our presentation] involved touching base online, I know where were times that we would set up that teleconferencing software and take turns and we would just run through, some people really really liked having notes and slides and very detailed so they could go off of it…other times more loose and organic and we would just say, alright we are all on top of this, we have been sending emails back and forth and we know we have all been doing our research on this project. You are going to present this, you are going to present this, you are going to present this…and we are going to have a quick 15 min. meeting during lunch the day before the presentation and we will be set to go. I have had it successful both [ways]. (Interview C, 2013)

Another member analyzed the process and provides details about the processes of online and face-to-face group work:

Sometimes it went smoother when we coordinated [the workload for a project] online. We realized, um. Ok, if we don’t agree and assign what we are doing then we could have a 100 posts. So we recognized we needed to be more open [willing to be flexible] to what we were doing and peoples thoughts. When we were in person there was much more back and forth. Online coordination was quicker [and] we broke it [the duties] down more…Where in a group [face-to-face] it wasn’t as broken down….Take the xml project….One person took the lead coordinating it online. [As a group] we accepted that person as a leader more than as we would have in a classroom setting. Face-to-face [it was understood] here we are all leaders, [where] online a person says do this and we go with it…. [However, it is] easier to know what others are doing when collaborating face-
to-face. [With online, we work to] communicate more formally, so no overlaps.

(Interview D, 2013)

These findings demonstrate different angles of understanding among the cohort members that their environment could be managed through problem solving, time management, and working with confidence toward a desired outcome. The stories told by the interviewees not only show these three resonant themes, but they also reveal a complex environment of blended learning where collaborative group work occurred.

**Dimension 5**

The fifth dimension, *Commitment to Truth through Pragmatism and Inquiry*, focuses on the importance of inquiry into learning and for that inquiry process to be flexible. Learning and knowing involves a flexible process of seeking answers that is organic and inclusive of a value system. When values are applied to learning, meaning develops. Culture is a system of knowledge and values that provide meaning on several interrelated levels. Culture creation and management are the essence of leadership. Schein discusses how leaders can influence culture, “the learning leader/founder must not only have vision but also be able both to impose it and to evolve it further as external circumstances change” (2010, p. 374). When a learning leader influences the culture, the learning task becomes a shared responsibility and, thus, learning is likely to continue. In an ever changing world, our methods for learning should also keep changing. Schein points out:

For some purposes, we will have to rely heavily on “normal science”; for other purposes, we will have to find truth in experienced practitioners…for still other purposes, we will collectively have to experiment and live with errors until a better solution is found…because no one will be “expert” enough to provide an answer. (2010, p. 368)
The organization will need to share the responsibility of solving problems through a flexible inquiry process. The willingness to acknowledge they are novices, the ability to facilitate the exploration of those seeking a resolution, commitment to the process and pursuit of inquiry, and the social aspects of pursuing certainty are the resonant themes that further identify a commitment to truth through pragmatism and inquiry.

**Resonant theme 5.1.** The first resonant theme in this dimension notes the importance of learning as a shared responsibility. When cohort members acknowledged their inexperience or lack of knowledge, they were open to an inquiry that supported a shared commitment to learning. Evidence of this was in the interview findings. One person commented, “I didn’t know what to expect with the online part [of classes] and I hadn’t ever taken online courses” (Interview G, 2013). While another person admitted, “It had been a number of years since I had been in school. The question of whether I could do it was big in my mind” (Interview E, 2013). Accepting that they are novices created a certain level of learning anxiety, which pushed them into investigating how best to proceed and, many times, this uncertainty necessitate relying on cohort members to share the work of learning.

**Resonant theme 5.2.** Cohort members often facilitated the exploration of those seeking a resolution. One member discussed the value of an interaction where a small group member provided project management skills and shared an infrastructure that “helped us set the framework for how we would work together” (Interview E, 2013). Another stressed her admiration for the group members who were willing to learn, teach, and learn together a new technologic skill when one who held that expertise could have easily completed the task for the small group. Further, that same member who held the technologic know-how was also willing to
teach and learn with the member who was a novice. During this reflection the interviewee remembered the learner stating:

I want to do this, because I need to learn how to do this. Um, so the one who was really good at it [the ‘Tech Guru’], helped her with it. In addition to what she [the ‘Tech Guru’] was doing, she also helped that other person. I think there was some cross working, you know, they kind of become a pair working on it, instead of an individual piece.

(Interview B, 2013)

This interviewee went on to conclude that facilitating exploration also took place while serving in the mentor role which was also tied to forming relationships among cohort members. “I really enjoy the opportunity to mentor and I think…unless you were in a cohort that you wouldn’t have that same kind of opportunity. You wouldn’t be together enough, to know each other enough, in order to mentor someone” (Interview B, 2013). The interview data provided many examples of individual cohort members speaking of how the cohort supported those who were seeking a resolution. This resonant theme addressed how the cohort members or their peers supported each other through the organic nature of inquiry, whether it transpired as guidance for group work, or the expertise to explore and use a technologic tool for a group presentation, or the act of mentorship by someone already experienced in the profession.

**Resonant theme 5.3.** The third resonant theme presents the idea that the cohort members need to problem solve and function as a collective. One interviewee addressed it this way:

We all challenged each other. I felt like everybody in the cohort was working at such a high level….I felt like we all challenged each other to do better. But, it was the kind of challenge where we worked together to do it. And we were also helping and supporting
each other to do it. It wasn’t [a] competitive kind of challenge. It was more of a supported challenge. (Interview D, 2013)

The commitment to the process and pursuit of inquiry came through in the following quote:

I learned from my cohort being comfortable sitting down with a group. I don’t necessarily know very well, but we all have a common goal and common passion, and kind of using that um to work together in a very easy way. There is an ease to it. I think it taught me the ease of working together with those that have a common interest. Um, goal. (Interview G, 2013)

Learning to do group work was important to members as they repeatedly reported their commitment to the process and pursuit of inquiry.

**Resonant theme 5.4.** Pursuing learning involves a social component that is evident in the literature. Social encounters provide opportunities for learning and developing social relationships. As peers learn together over time their shared experiences also provide an opportunity for sharing their values for the profession that they are joining, as well as what is of value to them in life. The interview data also provides evidence that the cohort members’ relationships grow out of their experiences. One group member explained a social activity and the support it gave those who attended a tour outside of class time:

I think I had four other students come visit my library while we were in school. All but one went into an academic or special library…I certainly wouldn’t have spent the couple of hours I did with them, if it had not been a cohort situation…there were a lot of people who visited other members of cohort’s libraries, just to get an idea of what it would be like. What the environment was like. Whether they, [the librarians and information
providers], liked their jobs. What the other people they worked with were like. What the patrons were like. I think this was a really big deal. (Interview B, 2013)

Another member reflected on the social component to learning in this story of a first visit to the statewide online library discussion list:

You could jump on to one of these listserves and it’s not just regular updates going out, kind of listserve. There were conversations happening all the time uh, from many different levels of the profession. People, [were] engaging in conversations. There was a lot of information exchange going on and I hadn’t seen that from other professions I had worked in before, so I think it was a much more um social dynamic. (Interview C, 2013)

The information exchange on a professional library electronic discussion list prompted this cohort member to understand that the social support of seeking and sharing information was something unique not simply to the cohort, but was also part of the wider professional culture. The commitment to truth through pragmatism and inquiry is focused on flexibility. This dimension’s resonant themes are reflected in the quotes mentioned above and is focused on providing the evidence that the cohort members adapted to accepting their own lack of expertise and aided others in their search to gain solutions. This occurred while being open to a flexible search process and to a shared responsibility that supported learning in a collaborative manner and collectively as an organizational activity.

Dimension 6

The sixth dimension, Positive Orientation toward the Future, focuses on the necessary skill to balance thinking far enough into the future to assess the consequences of different options, while looking to the near future to assess if the solutions are effective and thus
supportive of the best possible result. This investigation uncovered one Resonant theme which involves strategizing stable outcomes through planned scenarios.

**Resonant theme 6.1.** Many of the graduates interviewed talked about the role of planning and strategizing goals to enable them to find success. These discussions demonstrated thinking about the end result and were articulated by several members, as exemplified in this quote from one graduate:

Well, some people were very focused on having to do absolutely everything perfectly....Time constraints, that was one of things they were having to balance, how quickly they needed to absorb things and how quick they needed to go...we had a schedule and we were pretty ridged about it. This is when this is due. Are you going to get it done? We can’t move on unless you have this part done. So they really had to push themselves to be more productive....[they] really didn’t have a feel for knowing what it meant to be a librarian and the kinds of decisions and analysis that you have to make and you have to make it fairly quickly. (Interview B, 2013)

This member addressed balanced thinking to move the group out of procrastination and forward in their group work. Another interviewee talked of assessing a client’s request for customized digital information services and the need for a dependable outcome:

Actually, my supervisors have remarked that I have brought something extra to the work place, in terms of being concerned about people’s access to digital information and making it easier for them to get at the information itself in terms of designing interfaces and other tools, just to make it easier for self service, to make it more intuitive and sometimes it is just as easy as changing a field name, so that people understand this is what you are going to get when you click here. (Interview C, 2013)
Another cohort member considered tailoring the course assignment and learning to add to her own professional goals. The importance of planning for the best possible result was especially evident in the following quote:

I had to really challenge myself, as not all of the courses did I find interesting….I had to figure out how I would take something that would be applicable to my situation…out of the coursework I would be doing…and to do [work with the instructor to create] projects that I was very specifically needing to right then….Oh, my database class, perfect example. We do databases all the time here in the library. I had a project I really wanted to do for the library. There was no way I could ever ask anyone else to do it and no way I could do it on my own [time]. Um, it had to be done outside of work. That was just such a fabulous opportunity for me to be able to do it in school, because I wouldn’t have been able to get that done otherwise….I have improved it since then…I had a patron in the other day and so we used it. There was no way we could have done what she was asking, if I hadn’t had that database. (Interview B, 2013)

This member’s story demonstrated how creative negotiating and strategizing course projects can be of benefit to fulfilling course learning assignment requirements and to creating innovative products in their work place environments. These examples illustrate that a positive orientation or balanced thinking toward the future was evident in their thinking while progressing through the program.

**Dimension 7**

The seventh dimension, *Commitment to Full and Open Task-relevant Communication*, focuses on the organization’s communication system. The system enables everyone to be connected and open to ideas and information that are task-relevant and integral to effective
problem solving and learning. Schein stresses, “Full task-relevant information [sharing] can be achieved only if the members of the group have learned to trust each other” (2010, p. 370). In the data collected from the interviews, three resonant themes identified aspects of task-relevant communication: the university’s communication system, face-to-face communication, and other forms of communication including the use of social media.

**Resonant theme 7.1.** The first theme recognizes that the course management system (CMS) provided by the university aided in promoting open communication among group members. One interviewee who recalled having had a family medical emergency while in a course stated:

> I was able to talk to my group members…[and] I was able to reach out to the professors…and explain…what was going on in my life and what I needed in terms of getting things turned in on time….I do think that open communication is always key.

(Interview C, 2013)

There is additional evidence of open communication among cohort members as a result of the CMS:

> The technology part of the program really made the cohort cohesive presentation [possible] without seeing each other, but one time [in class]. The technology part of the program really helped the cohort work well together and made it better. Um, because we could actually communicate and as we progressed the technology got better. We [also] did get better at using that as a vehicle [for studying and meeting]. And frankly, it was a lot easier for most of us as it helped us and we didn’t have to have travel time to go meet someone, as timing is everything in grad school. (Interview B, 2013)
The CMS was a time saver that provided a level of convenience and increased communication. Another member stated:

> The discussion boards, where we posted a lot of additional material. We felt like…a lot of times students, and myself included, we would read an article and then we would see something to add to the discussion and then post it to the discussion board….I relied on the bigger cohort to help me….I would ask a question on the discussion board, then everyone would see it and know what I was thinking….[I was] more out in the open and [worked to share] more [content]. (Interview D, 2013)

As the participants continuously demonstrated in this study, the CMS fostered an ease of sharing and fostering course content discussion. Cohort members relied on the CMS for open online communication with regard to multiple perspectives and the reflection of content being learned in the class’ learning assignments required by their coursework.

**Resonant theme 7.2.** The second resonant theme noted open communication by the members that occurred in face-to-face environments. One group member addressed the importance of gathering around food, “you also look forward to seeing people you built relationships with…knowing that you will be able to work with them, hang out, share a meal, and some laughs” (Interview A, 2013). The notion of time together in person was expressed through much of the interview data. Another interviewee declared:

> I just have to tell you that I feel pretty strongly in the fact that I really like the combination of in person and online. I think the cooperation and group work was much better because we did have face-to-face time with each other. Then we could actually do in person presentations, because primarily that is what you are going to be doing. We do quite a few distance kinds of things, but for most people their presentations and workings
will be in a library and face-to-face. I do think. So for most people learning to be face-to-face in a professional manner is really important. And I also liked being – having face-to-face time with some of the instructors. (Interview B, 2013)

While the trend in higher education tends to be to increasingly move coursework online, the members mentioned that being in the room together enabled their learning, “Sitting in a discussion…I wasn’t planning to say anything, but someone would say something and it would resonate with me and I would say something. So there were light bulb moments in discussions” (Interview D, 2013). This last quote demonstrates how someone who was otherwise prepared not to add to the discussion, did so as a result of being influenced by the face-to-face discussion and felt able to contribute in an open and trusted environment.

**Resonant theme 7.3.** The third resonant theme notes that the graduates practiced inclusive communication through an outside communication platform that was not part of the university’s system. Such communication was possible through the use of other technologies that members used for communication either among the entire cohort or for their small group work. The technologies included the use of teleconferencing software and social media for the use of discussing their coursework related tasks. One cohort member recalled:

[B]ecause of the nature of the class, people were spread out geographically and what we had to do was…set up weekly meetings using online teleconferencing software to get together to talk…I was kind of doing the back end of the project and we also had people working on contacting artists to put their work on this site, cataloging the work, and working on the design aesthetics, [and] working on a legal form put together for a release of the website. (Interview C, 2013)
Yet another group member remembered an elective course where a couple of students from outside the cohort made up a group that explored new technologies to collaborate across geographic boundaries, “we were also learning how to use the technology and communicate in a group from a far [where participants were in other states]” (Interview D, 2013). Another cohort member stated specific platforms and social media that were used to connect online and extended beyond what the university provided:

In my groups we explored, Skype, Adobe Pro-connect, we figured it out maybe half-way through [the program]”, “I remember one time when I was stuck on a project for a course and I asked the question on Facebook….And within 10 minutes I had five people responding and that was a big help. I always felt like I could ask questions like that.

(Interview F, 2013)

The three resonant themes that emerged from the seventh dimension provided evidence that the cohort engaged in open coursework learning through discourse that resulted from the online CMS platform, face-to-face time together, and their use of social media.

**Dimension 8**

The eighth dimension, *Commitment to Cultural Diversity*, is in play when the subcultures provide additional and unique resources for learning and innovation. As diversity creates the subcultures in a learning culture, the organization is more able to cope with unpredicted events. There were unique resources shared in this cohort community that reflected the cohort members’ interests in numerous types of library and information agency environments, as well as their geographical separation. The interview data regarding cultural diversity was found in two distinctive resonant themes involving cultural sub-groups in the cohort and geographically separated sub-groups.
Resonant theme 8.1. This first category demonstrated the value of cultural sub-groups in the cohort, as their previous education, work, and life experiences brought new and varying perspectives and skills to their course engagement. The participants valued the previous learning that their peers had obtained and drew from this knowledge throughout the program. The evidence for this type of activity is seen in the interview data. One interviewee recounted the value of the many experiences and perspectives of cohort members and commented: I feel like a lot of my colleagues had a lot of different and broad perspectives to share to my learning in the classroom and from my textbooks. I could learn a lot from those who weren’t degreed librarians, as a lot of them had vast experiences that were in different professions. (Interview A, 2013)

Another also addressed the learning that took place as a result of diverse expertise:

My learning experience was enhanced by listening to the products of other group [members’] work, because you know, they all had different topics. They all approached them differently, presented differently, and the topics were all different. So, I think sometimes our learning was tripled, as we did our projects and we also got the benefit of everyone else’s project. (Interview B, 2013)

The cohort members valued cultural differences that relate to the use and sharing of new electronic tools. This member provided more detail:

Oh gosh, I learned a ton just from my classmates, and it was a wide range of things that I learned…I remember in particular one classmate she used GoAnimate. It was pretty intuitive, things like that to use a new technology or new project tool, or a new way of presenting. (Interview D, 2013)
GoAnimate is a tool to make a video for YouTube and Facebook. As sub-groups experimented with emerging technologies and demonstrated the resources, tools and skills through their face-to-face class presentations they also provided additional learning opportunities for their peers.

**Resonant theme 8.2.** The second category calls attention to the unique value of geographically separated sub-groups whose carpool discussions furthered their learning. One cohort member expressed the importance of this time together as follows:

I can tell you one of the biggest influences is probably...the group of cohort members that carpooled to our classes. We became close friends as well as studying together in the coursework. In fact, we called ourselves, [group name]...it was a way of identifying our group... we became very close friends. (Interview E, 2013)

Another member recognized that the online learning environment equalized the contributions of the students: “I don’t think it made much difference where we were located geographically; all our projects were created online. We could be five blocks or states away...It did [matter] when I was in class, but once online we were all online” (Interview D, 2013). The data shows that cultural sub-groups, through previous knowledge or geographic local, served to provide unique resources that aided in learning and innovation for the cohort as a whole.

**Dimension 9**

The ninth dimension, *Commitment to Systemic Thinking*, is the opposite of linear thinking. The ability to think systemically is valued and necessary in order to understand the world as complex, non-linear, interconnected, and multiply caused. Schein recognizes, “As the world becomes more complex and interdependent, the ability to think systemically, to analyze fields of forces and understand their joint causal effects on each other, and to abandon simple linear causal logic in favor of complex mental models will become more critical to learning”
A mental model is an internal scale model of the mind that serves as a representation of an external reality and which permits one to rehearse and evaluate a decision or behavioral response (Markham, 1999). The models can be understood as a problem solving strategy that is built upon prior knowledge and experiences. The mental model is a set of beliefs about how a system works. It can be created quickly and is able to change, as it is used to explain human behavior and our complex world. Two resonant themes emerged related to this dimension. The first theme notes that cohort members engage in discussions that recognize information management issues are complex or dynamic, and the second theme recognizes that the library profession itself is both small and established in a complex world.

**Resonant theme 9.1.** Cohort members had discussions recognizing that information management issues are elaborate, linked, and dynamic. Such discussions enable cohort members to mentally rehearse their intended actions in preparation for their future work in the profession. Evidence of this first resonant theme is reflected in this reference to the culture of the library and information profession:

> I think we are more cooperative, the library profession as a whole. People want to contribute and work together…I remember one instance, when I made the website, someone else linked to it from their website. Instead of being competitive or jealous, we were like how can I use this to help myself or other people. Librarians we are always looking for ways to help other people. Looking for the new technology, new information, to help and to share, all of that in the cohort was great. We were the model of sharing. [I remember thinking this is] Wonderful, there is another way to do this.

(Interview D, 2013)
Another cohort member provided an example of the value and commitment to think systemically:

This is our challenge in the world. Everyone is looking at the same thing differently, so I tried to flip it on its head and look at it differently. I could recognize that is how we will have to deal with it in the real world, however in the beginning it was very frustrating. It was different every semester…where the information is stored, how presented, etc.

(Interviews F, 2013)

This interviewee spoke with regard to a face-to-face class presentation on a service learning course and opportunity in another country stressing the complexities of the world and expressing it to the cohort:

I do think some wanted to know more and were impressed…with the recovery and the progress made by the librarians over there and with almost no resources whatsoever. To realize we have some things to offer them, but they have an awful lot to offer us….I think some of them had to think about it for awhile….Many hadn’t been exposed, before I had presented it. (Interview B, 2013)

This first resonant theme is represented by wider systemic thinking that involves members reflecting on situations when they realized and understood that issues in the information age are complex, have multiple causes, are non-linear, and interconnected.

**Resonant theme 9.2.** This second resonant theme is represented by evidence that cohort members understood the library and information profession to be a small, established, and well connected profession that extends worldwide. One interviewee shared the perspective of networking:
I also learned that the library world is a very small world. Our paths cross very often, not just related to classes, but also related to work. I run into people…oh you are also going to that convention…It expanded my view of who my colleagues are, my colleagues are not just people who are in the library location or situation of where I work. (Interview E, 2013)

Another interviewee noted that networking was of value:

I learned a lot more of the culture of the profession. Which is just in terms of how the professionals interacted. It is more of a tight knit community, much more than I had originally observed. Um, Librarians network a lot and that is something that I kind of learned and experienced while going through the program. It was kind of more outside the academic aspect [and one] of being indoctrinated into this culture of how Librarians interact. (Interview C, 2013)

Time spent on the professional listserves provided yet another cohort member with the opportunity to respond to peers’ questions. On interviewee provided additional insight:

In the second year [the topic of] listserves and how you work with them [came up]. Someone piped up, ‘Why would you ever do that?’ Of course, being a single librarian with no one to back you up [it is obvious] of course you, will do that. You could see the light bulb go on for those who never worked in a library or had only worked in a large public library. It never occurred to them that there might be a time when the library only has one person in it (Interview B, 2013)

The cohort members were able to discuss and think through issues in our complex world and create mental models to recognize that issues held multiple causes. This enabled members to understand the profession and the information management issues related to our complex world.
Dimension 10

The tenth dimension, *Belief that Cultural Analysis is a Valid Set of Lenses for Understanding and Improving the World*, recognizes the need for analysis and reflection in a culture that supports the completion of tasks—the organization itself. To be a learning culture this process is vital and enables a deeper understanding about the creation and evolution of groups. “In a learning culture, leaders and members believe that analyzing and reflecting on their culture is a necessary part of the learning process” (Schein, 2010, p. 371). A significant amount of interview data supports two resonant themes: the idea that reflection positively impacts the learning culture and that individual member’s experiences of the cohort’s culture affected their learning.

**Resonant theme 10.1.** The idea that reflection on the learning experience impacts the cohort’s learning culture contributes to the culture’s growth.

In the beginning our [cohort] had some 600 postings which was just an insane amount [for one class] and it was, you know, that we were all trying to keep up with what everybody was saying and to keep up. And after 2 years in the program the number of postings went down significantly to ten’s instead of hundred’s. Um, but the quality of the postings didn’t get any less, it was just the number. Um. And again, that’s the level of enthusiasm it probably went down a little, but that was also a level of discipline that we as students went up as well. So I guess the meaning that I would apply to that is well, it was sort of like watching an evolution of a student in a short period of time from going to unfocused to extremely focused and from being um, sort of undisciplined to disciplined, um. So I guess the meaning I would put onto that is um, it was a snap shot of the way people learn, in a way, in an online environment. (Interview G, 2013)
Another interviewee addressed how being open in a small group about her personal conflicts increased communication:

I was able to talk to my group members [about a family emergency] and it turned out it was kind of a very rough semester for many of us in that group…I kind of opened up and then we started talking emotions and I think, personally I got closer with those group members…There were a lot more personal conversations going on in terms of ‘hey, yeah I got to let you know. I have this situation going on, sorry if this means someone is having to pick up my workload because of this’….But then we had less time for the project, to put the project together. Towards the end of the semester we kind of ended up cramming a lot of the work in and I think that is where the problem was and why the assignment didn’t turn out well. Because early on, we were all very understanding of each other’s situations that there wasn’t time to be doing this work, and you know. More of a dismissive attitude from everyone…To have less of a professional attitude and more of a personal one toward the other people in the group. So I think that it definitely influenced the group dynamic to have that kind of thing going on and to have those kind of relationships also…However, I think also those relationships kind of helped us through a rough semester. I think it’s those relationships, if understanding wasn’t there, that I’m not even sure if I would have remained in the class. Because, I know I had a similar situation happen at [name of school], actually almost the same situation….I almost ended up failing a class there and I think it was because a lot of work in that program was more individually oriented. So, I think that having the group dynamic and having those relationships made the situation turn out better than it had in the other situation...I think
having those personal relationships allowed us to work together to receive better results rather than no results. (Interview C, 2013)

These examples demonstrate the belief that reflecting on the learning experience enables growth for the individual, the group, and ultimately the learning culture itself.

Resonant theme 10.2. The cultural stories of individual learning as they relate to the members’ experience of the cohort was a theme that affected the cohort’s learning. Several comments in the interviews reflect this theme. For example, one person explained:

So the cohort as my first exposure to it [the Library and Information Management professions] completely shaped my experiences. If I had gone to another program it would have shaped things too. I’m just really glad that I went to the one I did as it shaped me in the way that let me build upon it…explore different arms of the profession. (Interview F, 2013)

One cohort member had the opportunity to compare a cohort learning experience with a traditional classroom experience while being a student in both types of educational programs. That experience adds to the value of this reflection:

The other Master’s I was doing at the time was not cohort oriented. So, you know. I definitely, saw myself forming um, more substantial relationships with people I was attending classes with. I think, [that was] because we had to go to so many classes with the same people over and over. I guess, I got to know people better. I have definitely kept in touch with people from that program [MLS] than from my other program.

(Interview C, 2013)
One cohort member reported that it was the autonomy and the ability for individual learning within the cohort that was of high value. Reflecting back on the atypical experience, the member reported:

I felt like my own person. The group setting, especially helped that [feeling] because I could initiate [communication] and them with me…[I have a] new set of communication skills from all my time working online. I touch base regularly…I’m to the point and clear. [My project management] skills grew when I learned to communicate online. It was very helpful. (Interview D, 2013)

This cohort member valued the program and the skills gained through online communication as it provided the opportunity for a new way of working and now telecommutes.

The cohort’s learning culture was improved through reflection on learning experiences, especially as a group of individuals retold their stories and learning experiences. Examples from the interviews show this reflection and the group analysis that occurred. A notable piece to dimension 10 was that the reflection that took place was echoed by others.

**Unique Findings**

Further interpretation of the interview data shows many dimensions occurring together. Throughout all seven interviews, the participants answered questions with the use of storytelling. As they told their stories it was evident that more than one of Schein’s dimensions was articulated. The research data shows that Schein’s dimension’s seven and ten are found together at times and in more than one cohort member’s experience. For example, one participant talked about communicating and working in a small group on a class project and how that made them more efficient in their next class or next small group assignment. In fact, it was reported by participants that they couldn’t help but learn from others. They reported learning project
management skills, presentation, and technology techniques. Several interviewees also mentioned that those skills are part of the skills they use today as information professionals leading their organizations.

**Findings Related to a Learning Culture**

The survey questionnaire results show that overall the cohort members, as a group, view the cohort as an entity (i.e., a whole organization). This discovery of the cohort as an organization also matches results from the individual interviewees who viewed their experiences and talked about their perceptions of learning in the cohort as an organization. Thus both the survey questionnaire and the interviews support the findings that this cohort had created a culture of a learning organization.

**Notable Survey and Interview Findings**

The findings in the survey data that prompt the most diverse ratings among the cohort members occurred as a result of the statement, *My cohort recognized the need to adapt and change as a group when necessary.* The responses to this survey statement reinforce a cohort member’s interview comments regarding a change in the University policy and procedure that increased the amount of online learning:

I would say one thing that I found very interesting about the program was the amount of change that was going on, um and the level of passion that some of the students had with some of the changes that took place in the program….For example, when we first started the program we were still doing Friday, Saturday, and Sunday and when the university decided to stop doing the Sunday classes, some people were very incredibly upset about that and as [I’m] looking back it was probably the extroverts that wanted and really needed the face-to-face type [of] contact. I can say it didn’t bother me at all, when they
decided to drop Sunday, cause I have always been an introvert and self-directed in my learning. So that didn’t bother me at all, but it was interesting to me to have these relationships with people who really cared at that point, that we were not going to be seeing each other for that extra day. And to me it was just; I was like, well, what is the big deal? We can get together online, we can go for coffee on Sunday, I didn’t see what the big deal was. For some people, [they] felt like it was very meaningful and it was very telling that [some] felt like they were getting less education, because they would be receiving less time face-to-face. (Interview C, 2013)

This example provides some evidence from the interviews conducted as to why this question was rated lower among those cohort members who submitted responses to the survey questionnaire. This quote references the policy change that took place during the cohort’s first semester when the amount of face-to-face class time was being decreased and the online instruction components were being increased. The result was a blended learning model with a fairly even split of instruction through both online and face-to-face environments. The researcher also noted the evidence, in the previous quote, that the cohort bond was already developing. A cohort member expressed it this way, “it was interesting to me to have these relationships with people who really cared at that point, that we were not going to be seeing each other for that extra day” (Interview C, 2013). This interviewee was remembering back to the first four to six weeks of the program. Additional evidence comes later in the interview as the cohort member reflected on the influence of having relationships with cohort members:

I think there was a lot more of sharing of individual passion and I think that since we all were in contact more frequently (than I have been in a more traditional environment) that it became more evident. And since you are seeing those individuals more regularly, you
start to care about the things that they care about, and I can definitely see I was
influenced that way. (Interview C, 2013)

This story demonstrates a high level of cohort bonding early in the program. To develop a better understanding, the researcher asked another participant in this study, “Did your time in any of those practica add to the experience with your peer group?” The interviewee’s response reflected the notion that the cohort functioned as an organization. It was expressed this way:

Uh, yeah I think that…it added a level of intimacy that wouldn’t have been there if it had just been classroom work. Um, because we were we were physically and mentally immersed in an environment, in a new environment, that was exciting, new and um even slightly unpredictable. And it is kind a like people that are thrown into traumatic experiences, you know combat experiences. They go through something and come out the other end, um kind of changed. And otherwise connected in a way that in any ordinary situation wouldn’t happen. I think in those two experiences, part of the reason they are so memorable is that and poignant is that I came out the other end of it with this intimacy with these people that I was with and I know I wouldn’t have had ordinarily and in fact, those are the people that I am still in contact with, because I went through these experiences with them. (Interview G, 2013)

These stories demonstrate that early in the graduate program the cohort members in this investigation formed a bond. The cohort’s interactions influenced social relationships that grew over the course of their educational experience involving their personal and professional lives. The relationships grew out of both individual and small group interactions and experiences, while the literature recognizes that simply because a cohort delivery model is carried out does not guarantee that the members will function in the ideal sense as an organization. It is evident
that this cohort’s level of interaction and reliance demonstrates that its members have in fact bonded and created a culture of learning.

Another unique finding lies in a consistent response to the fourth statement on the survey. Of those surveyed, 100% responded True or Very True that the cohort was supportive of members when they worked through course assignments. One interviewee had this to say, “When I had questions or needed to review there was that kind of support…I could text or email or call someone and say, ‘Can you help me with this, I’m stuck.’ I think having that relationship established was very helpful” (Interview E, 2013). The evidence reinforces that the members felt supported by each other in their coursework. It also demonstrates that the interview data supports the survey data’s broad overview of the cohort as an organization and the conclusion from the data of both instruments is complementary.

The findings in the survey data give a broad perspective of the cohort as an organization, while the interview data verifies Schein’s ten dimensions (2010). The dimensions provide a framework for the perspective of individual learners and their personal experiences related to learning in a professional graduate degree program that was delivered in a blended learning environment. The following chapter will provide additional discussion about the results and general observations regarding the literature review and the use of Schein’s ten dimensions (2010). More detail regarding the implications of the results and directions for future research from this study will also be provided in Chapter 5.
Chapter 5
Discussion and Implications of the Findings

Introduction

In this final chapter, I address the implications of the study’s findings. This discussion focuses on key findings that arose out of the methodological framework, their relationship to the literature, and recommendations for further research. In addition, this study holds implications for professional practice, particularly when a learning culture is desired for a group of people or in higher education where a cohort delivery model may contribute benefits to the students’ learning experiences beyond the intended curriculum.

Discussion

**Overview of the Key Findings.** Chapter 4 discusses the survey and interview data in relation to Schein’s ten dimensions of a learning culture (2010) and presents the resonant themes that emerged during the data analysis. Although it is not this study’s aim to explore the full spectrum of theories and concepts that provide the foundation of Schein’s work about organizational cultures, his ten dimension of a learning culture (2010) did provide a useful framework for an investigation into the learning experiences of a cohort. Five findings, in particular, are highlighted in this chapter, because they contribute to the research literature in unique ways and some have implications for professional practice.

- Schein’s ten dimensions of a learning culture provide a compelling framework for research about the cohort model of learning.
- The cohort developed a culture of learning.
- The cohort structure facilitated the members’ integration into the LIS community of professional practice.
Indicators of the development of Systemic Thinking were evident in the cohort’s culture of learning.

This cohort model, which functioned in a blended learning environment, resulted in a viable and robust education delivery model.

Schein’s ten dimensions of a learning culture provide a compelling framework for research about the cohort model of learning. The literature review of learning theories presented in Chapter 2 highlights the complexities of the learning process. As David Kolb (1984) states, “knowledge results from the combination of grasping experience and transforming it” (p. 41). Schein’s construct of the ten dimensions of a learning culture is a lens through which the learning process can be studied, and the dimensions became the focal point for the data analysis of this investigation. It appears that this research effort is the first to use Schein’s ten dimensions as a lens to examine the learning relationships and activities that emerge and function in a cohort environment. Learning is both an individual and a social activity, so a cohort by its very nature can be viewed as a social group, or organization, consisting of individuals whose primary goal is learning. Schein is particularly interested in organizations and their capacity to foster learning as a means to address change and encourage innovation. His ten dimensions of a learning culture became an effective framework for researching this cohort as an organization or system that functioned as an integrated whole. The dimensions helped to describe and identify aspects of the culture of learning that developed in the cohort. As a result, this study contributes to the literature by expanding our knowledge about how groups of people learn together. Furthermore, this study demonstrates how Schein’s theory about the development of learning cultures is a concept that can be used as both a theoretical and a practical framework for researching the learning that occurs in groups. This approach could be further refined in future
studies that investigate learning cultures in different environments, including professional and educational settings.

**The cohort developed a culture of learning.** Schein’s concept of a learning culture emphasizes not a static destination, but rather a culture that is always in evolution (2010). The process of developing such a culture requires the fostering of learning and knowledge through the seeking and transmission of information in and among the members within the group. One means for sharing information is storytelling. Storytelling is one of the fundamental ways groups create culture. The power of story in creating culture was noted several times in the interview data. Stories told by the cohort members provided context and meaning when they described and explained the learning experiences while in the cohort. It was through this use of story that they conveyed who they are. For example, it’s interesting to note that one interviewee retold another member’s reflective story about learning. This retelling of a story occurred twice and in the act of retelling, the interviewee added her own meaning and reflection into the story. As the interviewee explained:

(Note: Pseudonyms are used in place of actual names.)

[Sonja] said that when she started the program she had her nose down in her book and was kind of like, “I am just going to knock this out. I’m not here to make friends…just here to get the job done.” And I [the interviewee] think I walked into [the program] not the same way she did, but I definitely had an agenda, and wasn’t thinking about the social…the connection piece. You know me, [I related with every cohort member]…that came out and allowed me to get more information…and gain access to more insight [for learning]. (Interview F, 2013)
The telling of story highlights the social nature of learning in a cohort and the powerful role it has in building culture. Story was used to capture and transmit learning and information, some of which became organizational knowledge—that is, knowledge available to all members of the group—thus conveying who they are through the stories they have told and contributing to the culture creation and learning among the cohort members.

The results of the study indicate that the cohort did organically develop into a culture of learning. This organic form evolved as the students progressed together through the degree program. Their shared experiences and sense-making through the use of story created cohesion. Such cohesion involved growth that was not linear, but organic. As the cohort worked together they bonded, creating a culture of learning that not only promoted each individual’s professional and personal growth but also the group’s capacity to support learning and professional competence. When Schein describes the ideal learning culture, he notes that it “optimizes individual competition and collaborative teamwork” (2010, p. 373). This cohort’s culture emerged through the dynamics reflected in Schein’s ten dimensions: proactivity, commitment to learning to learn, positive assumptions about human nature, belief that the environment can be managed, commitment to truth through pragmatism and inquiry, positive orientation toward the future, commitment to full and open task-relevant communication, commitment to cultural diversity, commitment to systemic thinking, and belief that cultural analysis is a valid set of lenses for understanding and improving the world (2010). This study discovered that while all ten dimensions were found to some degree in the data, some dimensions were much more evident than others. This finding points to the need for additional research about the role of Schein’s dimensions in promoting learning in cohort situations.
The cohort structure facilitated the members’ integration into the LIS community of professional practice. The students in the cohort learned the core competencies necessary to become LIS practitioners. In addition, the cohort experience provided the students with a means to engage in professional conversations and transition into a community of professional practice. The literature about communities of practice discussed in Chapter 2 highlighted the value of social engagement and shared experiences to promote one’s professional competencies and the profession’s practice in general. The cohort experience demonstrated many aspects of a community of practice, because the group promoted building knowledge and skills essential to participating in the profession. Many of the elements found in communities of practice relate to Schein’s ten dimensions of a learning culture in that they highlight the ways that the social practices and learning within an organization promote professional growth and innovation. As such, the cohort supported this process and facilitated the members’ integration into the LIS community of professional practice.

Students pursuing professional graduate education are often adults who have made a conscious and considered decision to join a profession, and one goal of most professional graduate education programs is to produce graduates who have learned to operate with both theoretical and practical wisdom to support their professional work. As Marsick and Watkins (1990) points out, “If they are too linear in their thinking, they may miss rich opportunities. The unexpected may lead to…trying out alternative ways of working” (p. 123). Schein also recognizes that a learning culture is at its best when it accommodates change, remains flexible, and is open to innovative approaches to handling new challenges. The cohort demonstrated these characteristics and showed an ability to bridge theory and practice as they encountered
professional opportunities and challenges. One interviewee recounts the experience in an archiving practicum and the important role of the cohort as a community of practice:

*So we spent the week in [geographic location] at the museum there…we were going to put all the materials that the museum owned…in containers, because they were all meshed in drawers. I can remember walking into the museum there and we were all just sort of in awe, not in the materials themselves, but in the fact that we were there and we were being given the responsibility of taking care of this stuff….That was pretty amazing, and we hadn’t even started yet. Gosh, when we started it was even more amazing, but that common knowledge that we were responsible for something so important was very meaningful.* (Interview G, 2013)

This reflection provides the insight that the cohort functioned as a community focused on applying what they were learning in their courses to their field experience. This cohort member remembers the experience from the viewpoint of the *group* and conveys the group’s shared pride.

Schein’s second dimension, *Commitment to Learning to Learn*, emphasizes the importance of reflection and experimentation. These elements are also essential to a community of practice and to maintaining one’s professional competencies. The organization benefits when it learns from the collective experience and applies that learning, sometimes in a creative new way, to the next challenge (Schein, 2010). The survey data in this study finds that 94% of the responding cohort members reported that, as a whole, the cohort took creative approaches to the process of learning when completing class assignments. The creative approach to the process of learning was also evident during the interviews, as several members talked about using alternatives to PowerPoint presentations. One member, for example, encouraged the small group
to write and act out a script when reporting on information needs for a user population (Interview F). This type of creative approach may be seen as taking opportunities and expanding on them to achieve one’s professional goals. One member retold the story of how she worked with faculty to create a course assignment that enabled her both to explore and to create a database for work while also meeting the requirements of a course (Interview B). These examples all demonstrate a commitment to learning, a characteristic that prompted the cohort members to seek and support creative approaches to learning.

**Indicators of the development of Systemic Thinking were evident in the cohort’s culture of learning.** Systemic thinking is an essential component of a learning culture, but it is often difficult to discern and slow to develop. The survey responses and interview data of this study, however, document some development of systemic thinking within the group. Schein defines systemic thinking as the capacity of the “the learning leader [to believe] that the world is intrinsically complex, nonlinear, interconnected, and ‘overdetermined’ in the sense that most things are multiply caused” (2010, p. 371). Systemic thinking is difficult to uncover as it requires a deep level of insight and understanding of assumptions that an individual holds, and these assumptions generally reside in the subconscious. For this reason, only an indication of systemic thinking in the data analysis can be presented, but its occurrence should be noted.

On the whole, the survey statements indicated a strong consensus among the cohort members. However, in the statement producing the largest variation, 64.7% of the cohort did not agree that the cohort adapted and changed as a group when necessary. This finding is important, because the interviewees reported, without prompting, that there was dissention within the cohort as a new policy was announced late in their first semester (Interview C, D, & G, 2013). The policy involved shortening the face-to-face weekend instruction time by eliminating Sunday
class time and increasing online instruction. This change in policy, by the larger home institution, was an issue evident in the interview data. As cohort members brought up the event they reflected on how a significant number of the members reacted passionately. Of those interviewed some were for the change and others against, but the interesting aspect of this pattern is the amount of reflection cohort members engaged in about this issue, aside from the policy itself. Several cohort members described their feelings of concern around the policy discussion and in particular how their cohort members responded. One comment exemplifies these feelings:

The level of passion that some of the students had with some of the changes that took place in the program….For example, when we first started the program we were still doing Friday, Saturday, and Sunday and when the university decided to stop doing the Sunday classes, some people were very incredibly upset about that and as [I’m] looking back it was probably the extroverts that wanted and really needed the face-to-face type contact. I can say it didn’t bother me at all, when they decided to drop Sunday, cause I have always been an introvert and self-directed in my learning. So that didn’t bother me at all, but it was interesting to me to have these relationships with people who really cared at that point, that we were not going to be seeing each other for that extra day.

(Interview C, 2013)

As cohort members grew to know and respect their colleagues this policy argument caused concern, as members wanted to support their peers when they expressed their vehement and impassioned cry for more face-to-face time. This finding demonstrates how cohort members began to think systemically early in their academic program.

As has been noted above, systemic thinking tends to be a difficult dimension to assess as well as to engage in. However, in this cohort investigation the majority of the interviewees
mention the policy change event and how the group responded to it. This event is readily brought up in various interview sessions and was not related to one specific question asked by the researcher, but instead is evidently on the minds of the interviewees. This issue resonated with the cohort, and one could interpret this pattern as a unifying moment early in the cohort experience when members realized they were making decisions together and were part of a larger system. The development of such touchstone experiences that all members of the group understand, at a symbolic level to be shared, is a hallmark of culture development. This also demonstrates that they bonded as a group and had done so early on in the program. The fact that systemic thinking was just beginning to develop is the result of the culture development within the cohort and therefore is a unique finding for the cohort.

This cohort model, which functioned in a blended learning environment, resulted in a viable and robust education delivery model. The ideal blended environment uses the best of both face-to-face and online instruction to create a transformational learning experience, one that fosters student growth and development (Allan, 2007). The cohort delivery model investigated in this study shows promise because it capitalized on the strengths of both learning environments. The research data reveals that the cohort developed a culture of learning which spanned both the face-to-face and online environments early in the program. One interviewee commented:

The technology part of the program really helped the cohort work well together and made it better. Umm, because we could actually communicate. And as we progressed [in the program we got] better at using that as a vehicle [for communicating]. And frankly it was a lot easier for most of us…as we didn’t have to have travel time to go meet someone, as timing is everything in grad school. (Interview B, 2013)
She went on later in the interview to describe this learning experience in more detail:

I just have to tell you that I feel pretty strongly in the fact that I really like the combination of in-person and online [learning]. I think the cooperation and group work was much better because we did have face-to-face time with each other. Then we could actually do in-person presentations, because primarily that is what you are going to be doing. We do quite a few distance kinds of things, but for most people their presentations and workings will be in a library and face-to-face. I do think. So for most people, learning to be face-to-face in a professional manner is really important. And I also like being – having face-to-face time with some of the instructors. (Interview B, 2013)

This cohort member noted that the different platforms were effectively used for presentations and for time with faculty during the face-to-face weekend intensives, and the technology gave students the ability to discuss and communicate between the class weekends regarding readings, issues, and other personal and professional topics. As a result, this cohort model incorporates features that seem to demonstrate a viable and robust education delivery model. The learning that occurred through this cohort’s experience resulted in positive learning outcomes and much of its success stems from the administrative and technological structure and support system established for the cohort.

**Generalizability of the results.** The qualitative methodology used in this study identified resonant themes that describe and explain the development of a learning culture among cohort peers. This is an important contribution to the body of research on cohorts, learning cultures, and also to the learning literature in general. In keeping with qualitative methodologies, however, the interview findings cannot be generalized (Babbie, 2010) to another Masters in
Library Science (MLS) cohort, nor another similarly situated professional program in higher education that is also using a cohort delivery model.

The use of standardized response categories in the survey questionnaire provides a means of reliability when seeking an accurate representation of the group. In addition, this study surveyed as many members from a single cohort as possible. An analysis of responses provided a broad or global perspective of the cohort as a group. The survey findings (Table 2) gave direction for the interviews, allowing the researcher a means for checks and balances of what was being shared in the interviews. The survey also uncovered specific insights that permitted the researcher to probe deeper during the interviews to understand the underlying cultural assumptions revealed during the in-depth qualitative interviews. One example was number 12 on the survey, *My cohort pursued professional development opportunities beyond the course assignments*. When cohort members brought up anything related to professional development opportunities outside of the course learning activities, the researcher would pose probing questions to prompt the cohort members to consider the issue or topic at a deeper level, thereby unpacking aspects of the learning experience they initially described.

This study’s interview questions were ideally suited for descriptive responses from the participants in which the discovery, understanding, and depiction of cohort learning was the focus. Question three, *Describe a class project you worked on with a small group. As you prepare to tell me about the experience, note if it involved something exciting or challenging*, required the interviewee to reflect back to a specific event and talk about his or her experience. One interviewee recalled how their small group worked together to build a website project on a digital collection that related to a current event and noted the group’s challenges with being geographically dispersed:
The project was to create a collection…that was an interesting project, because of the nature of the class, people were spread out geographically and what we had to do was um we set up weekly meetings using online teleconferencing software to get together to talk about um, who was where with which part of the project in order to get together. Because um, I was kind of doing the back end of the project and we also had people working on contacting artists to put their work on this site, cataloging the work, and working on the design aesthetics, working on a legal form put together for a release of the website. (Interview C, 2013)

Another interviewee reflected about a specific situation that involved learning a framework for project management. The small group dynamics were a challenge since they did not know each other well and they also had to reorganize quickly after losing a group member:

For the beginning theory class…the project was working with councilors to see how they gathered and disseminated information. There were four people in the group. It was, um-challenging initially. We were new to the program, we weren’t exactly sure how we would work together, we weren’t sure how much depth we needed to go, what was exciting was one member had taken a course in project management [previously] and she was able to help us set the framework for how we would work together. For me that was particularly helpful. I have used it later, in my coursework and in work, um- there is always some kind of project…so to have a framework was exciting. The project itself was exciting too because at each step the four of us learned something more and it helped us to solidify what we were learning about theory and helped us in the program with information [management]. Another challenging part of it was that in that period of time one of our members in the group elected to leave the program. So
now in our group instead of four people there were now three people that would be 
involved in completing the project. That too was a challenge to pick up where she left 
off, to reassess, to go in a new direction, and again I think that has application for life in 
general, as things like that happen. So it was a challenge, but it was rewarding to get 
past that. (Interview E, 2013)

This question seemed to provide the opportunity for the interviewees to pause and 
reflect on an event and to open up as they proceeded to answer the rest of the questions. The 
cohort members took time to pause at different times during the interviews, often intent on 
finding examples specific to their own learning experiences. Thus, the semi-structured 
interviews were beneficial to revealing reflections from the cohort members and provided 
opportunities to probe deeper in conversation with the researcher, who used a mode of open 
inquiry. As the researcher explored nuances of the members’ perceptions and recollections about 
their own learning and their experiences in the cohort, descriptive data emerged that contributed 
to the study’s findings.

**Recommendations for further research.** There is value in continuing to study 
cohorts and the culture of learning that may develop for this type of educational experience. 
Developing a culture of learning is a highly dynamic evolution and Schein’s theories are 
expansive and complex. While this study focused on Schein’s ten dimensions of a learning 
culture as the specific framework for analysis, the findings invite a deeper exploration. Further 
research, for example, that focuses directly on Schein’s work in organizational culture as it 
relates with cohorts has potential. A future study might use the data from this investigation to 
investigate and analyze aspects of Schein’s expansive work on organizational culture.
In addition, future studies could continue the unique methodology of this study while focusing on different cohort populations. A theoretical study that considers how groups commit to learning to learn might reveal specifics about the complexity of Schein’s dimensions. Another research study could serve as a replication study with more emphasis on the uses of story as a formative tool for creating culture within a cohort. A third study could investigate a blended learning cohort the membership of which has a sub-group that is geographically located. Further, a fourth study might take a deeper look at systemic thinking among cohort members. All of these recommendations for further research could use the methodological frameworks implemented for this study. I discuss each potential study below in greater detail.

The first investigation is of value because each cohort is distinctive as a result of its culture. So a replicated study would begin to determine what dimensions and resonant themes are unique or consistent with the learning culture in programs with the cohort delivery model investigated in this study.

The second inquiry would also be a replicated study that might explore the use of storytelling in a learning cohort. It could focus on the role that story plays in the formation of culture and in the strength of that culture when faced with challenges both internal and external. What was evident in this study was that one member would develop a story that addressed what was meaningful to that member. A story then might be retold by another member. Storytelling in its most rudimentary form occurs as people talk about who they are. A story is developed and then passed on as a form of communication, but more importantly, as a way of interpreting occurrences and an investigation into the world around the group in question. The connection of storytelling to the development and maintenance of a learning culture would raise interesting questions. How quickly do hallmark stories—those stories that any member can tell and retell—
form in a cohort? Does the telling of stories regarding experiences of the group and its members help the cohort to develop a norm that then empowers their learning?

Stories or explanations that surround unique events from learning in a cohort could be further explored with the use of focus group discussions. The focus group methodology would expand this study’s methodology to resemble Schein’s Cultural Assessment process where group reflection and discussion prompt discovery. Such a methodology could be a shared group analysis in which cohort members reveal collective perspectives of specific events enabling hallmark stories to be captured and compared. In planning to conduct a focus group, the researcher would proceed by identifying important aspects of the stories told, resulting in findings about the role of shared stories and the group’s values and assumptions. The researcher could also focus specifically on the stories of organizational culture. What do they reveal regarding the basic underlying assumptions that are communicated by those stories?

The third study could be designed to follow up with the sub-culture group in this study that named itself to learn more about their social relationships and the influences of these relationships on learning. Some important questions that might guide this type of study include: How do these small groups function? Are Schein’s ten dimensions of a learning culture present within the sub-culture organizations? What role does organizational culture have to play in this area? Answers to these questions would expand our understanding about how a sub-culture group functions in a learning environment.

A fourth suggestion for future study could look specifically at systemic thinking among cohort members. The evidence from this study’s interview data supporting early development of systemic thinking came from one event. As a result of the external event of the policy change that occurred early in the cohort’s experience, the group’s culture and integrity was challenged
and that challenge caused them to pull together, ultimately seeing themselves as part of a bigger whole. While this happened at the beginning of their academic program, it was only one event. It seems to be more than bonding and cohesion: it is fundamental to the development of culture as the cohort forms these ‘group’ responses. Therefore, this study only scratched the surface of uncovering systemic thinking. A further investigation is needed to more fully explore this sub-culture and the issues to understand systemic thinking in the development of a culture of learning among cohort members.

The possible research endeavors mentioned above would enable future investigations to expand this study’s findings and build upon the methodology and frameworks used. Such replication of research would provide a research agenda where possible similarities in research results may eventually lead to the development of a theoretical model.

**Implications for Professional Practice.** The findings show that this cohort model was successful in creating a culture of learning in which students connected with the wider community of practice in the library and information professions. Cohort members shared the responsibility to learn, were willing to expose their vulnerabilities, and were willing to teach, mentor, and share their own expertise, resources, and time management strategies to support the growth of peers both academically and professionally. This study demonstrates that the cohort delivery model may provide a successful learning environment for non-traditional learners. Furthermore, the blended learning environment gave the students the added benefit of engaging in graduate professional education, while pursuing entry into the profession and balancing their numerous roles of student, employee, parent, family care giver, and community member. It was during this dynamic time of personal growth that the cohort members could identify with each other and rely on the relationship with their peers as a source of support that assisted them as
they navigated their new tasks, ideas, and the complex issues of the profession. The interview data showed a collegiality develop that was unlike what cohort members had in their previous educational experiences.

In an attempt to investigate the cohort population and its perceptions of learning, this study indicates possible new information about the character of student life and learning that is likely to be interesting to higher education administrators and those overseeing cohort-based delivery models. A successful cohort experience provides a group of students with additional learning benefits through their active learning engagement as well as their social interactions that extend beyond the traditional education model.

This cohort experience in particular was supported by the consistent use of a curriculum that served as a stable framework for teaching what is required in the profession as articulated by professional advisory groups. Such requirements involved theoretical underpinnings while full-time faculty and national faculty taught theories, tools, and applied coursework. The teaching philosophy for the cohort program in this study evokes learning theory including constructivist theory, learner-centered philosophies, experiential learning, and the pursuit of cultivating professionals who can engage in a balanced approach to theoretical and practical wisdom as leaders during a time of paradigmatic change.

In addition to the teaching faculty, other support systems were in place, including the directors for each location, the central administration, a technology director, a technology design and support laboratory, and the established relationships that have over time developed from local library and information management leaders. These various agents advise, supervise, and mentor students during their coursework and field experience, and hire them after graduation. There might be additional variables that contributed to the cohort’s culture of learning.
It is important to note that this cohort delivery model can and should be improved. This group of non-traditional students reported their need for face-to-face time and faculty feedback. These are improvements that can be made to the administration and delivery of this model, not to mention the constant re-evaluation of the curriculum for content currency and that the consideration of new professional issues can be ongoing strategic plans for this cohort program just the same as any program in the country.

While there are many models for delivery in higher education, this cohort model shows great promise. It was revealed through this study that the cohort developed a culture of learning beyond what could have existed in the blended learning environment provided by the university. The relationships among cohort members influenced their behavior and work as they accomplished their goals in a LIS cohort environment. The social relationships empowered learning and reflected all of Schein’s ten dimensions of a learning culture in varying degrees. This is a viable and robust model that produced key findings in this study, ultimately demonstrating that the methodological framework will be of value to future investigations on cohorts and learning. It is through the development of a culture of learning that the impact of social relationships and systemic thinking can add value to the curricular learning. Graduate degree programs can serve as a gateway to professional practice by assisting students to be active in workshops, conferences, and associations where entry into their community of practice will assist their professional development, and by instituting the support structure for an organization where the culture of a learning is valued and the members are encouraged to explore, reflect, and engage in the components that make up Schein’s ten dimensions of a culture of learning (2010). This study reveals that the cohort learning experience fosters that type of learning experience.
References


Appendix A

IRB Approval

October 30, 2012

To: Kelly Visnak and Karen Brown

Project: A Cohort's Culture of Learning

IRB # 12-20

The IRB has received and reviewed the materials for the protocol listed above. This project has been Approved.

This project has been approved through October 30, 2013. If you need to request a renewal of this project, please do so three months prior to October 13, 2013.

If you have any questions or concerns, please do not hesitate to contact me at dkirchen@dom.edu or Kathleen Mallaney, the IRB Administrator, at IRBAadmin@dom.edu

Sincerely,

Dr. Dennis Kirchen
Appendix B

Informed Consent

Consent for the Survey Questionnaire:

Please click on the SurveyMonkey link below (or cut and paste the URL into your browser). By selecting the “I give my consent” button on the screen, I confirm that I have read and understood the information. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this survey questionnaire for the study. [SurveyMonkey link]

Consent for the Interview:

Please click on the SurveyMonkey link below (or cut and paste the URL into your browser). By selecting the “I give my consent” button on the screen, I confirm that I have read and understood the information. I understand that I have been randomly chosen to participate in an interview that will last for approximately one hour. I realize the interview is a research oriented conversation which involves responding to an email invitation to schedule the interview and then choosing to connect via Skype or by telephone. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in an interview for the study. [SurveyMonkey link]
Appendix C

Survey Questionnaire

Instructions:
Thank you for your willingness to complete this survey. There are 16 questions that will take approximately 10 minutes. You were part of Cohort [X]. Please put yourself back in that environment. Reflect on your experiences as a graduate student and then rate each of the following questions by choosing: (1) Not at all true, (2) Not always true, (3) Somewhat true, (4) True, or (5) Very true.

1. My cohort knew that asking questions in the face-to-face class sessions was desired and valued.
   Not at all true  Not always true  Somewhat true  True  Very true
   1  2  3  4  5

2. My cohort knew that asking questions in the online platform/classroom was desired and valued.
   Not at all true  Not always true  Somewhat true  True  Very true
   1  2  3  4  5

3. As a cohort, we were engaged in seeking information for our own personal learning.
   Not at all true  Not always true  Somewhat true  True  Very true
   1  2  3  4  5

4. My cohort was supportive of our members as we worked through course assignments.
   Not at all true  Not always true  Somewhat true  True  Very true
   1  2  3  4  5

5. My cohort worked as a group to share the responsibility of seeking information and contributing to discussions.
   Not at all true  Not always true  Somewhat true  True  Very true
   1  2  3  4  5
In the research class we broke into small groups to design and explore a research question. My cohort discovered that the topics and issues regarding our profession are not linear, but complex and interconnected.

- My cohort members understood the notion that theory and practice work together to benefit our profession.

- Generally, student learning in the program was supported by adequate resources and time to accomplish the course assignments.

- My cohort represented different values, perspectives, and background experiences that added unique resources to our learning experience.
My cohort was confident that everyone could learn.

<table>
<thead>
<tr>
<th>Not at all true</th>
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<th>True</th>
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- As a whole, my cohort took creative approaches to the process of learning when it came to completing class assignments.

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<th>Not at all true</th>
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<th>Somewhat true</th>
<th>True</th>
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- My cohort pursued professional development opportunities beyond the course assignments.

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<tr>
<th>Not at all true</th>
<th>Not always true</th>
<th>Somewhat true</th>
<th>True</th>
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- By the end of the program, we recognized that our individual learning was intertwined with the learning of our cohort members.

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<th>Not at all true</th>
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<th>Somewhat true</th>
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- My cohort supported and maintained an open communication structure among our members.

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<tr>
<th>Not at all true</th>
<th>Not always true</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
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My cohort recognized the need to adapt and change as a group when necessary.

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<tr>
<th>Not at all true</th>
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<th>True</th>
<th>Very true</th>
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<td>5</td>
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</table>

- My cohort, as a group, valued the process of learning new material as much as, or more than, simply completing an assignment or solving a problem.

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<tr>
<th>Not at all true</th>
<th>Not always true</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
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<td>5</td>
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List of Demographic and Profile Questions

1. What is your gender?
   Female
   Male
   Please specify
   Prefer not to respond

2. Which race best describes you? (Please choose all that apply.)
   American Indian or Alaskan Native
   Asian
   Native Hawaiian or Other Pacific Islander
   Black or African American
   Hispanic American
   White / Caucasian
   Other description (please specify)
   Prefer not to respond

3. List your beginning month or semester, and year.
   January, Spring Semester [year]
   If you began at a date different from the cohort (please specify).

4. List your date of completion.
   December [year]
   Different date (please specify).
5. Distance you traveled for class (mileage one way).

6. Did you complete previous graduate level coursework or a degree

   Yes
   No
   If yes, in what subject? (please specify)

7. Before entering the MLS degree program, had you participated in any cohort learning experiences?

   Yes
   No
   If yes, in what subject? (please specify)

8. Prior to beginning the MLS did you participated in an online credit or non-credit learning opportunity?

   Yes
   No
   If yes, in what subject? (please specify)

9. Did you complete a certificate in addition to the MLS?

   Archive Studies Certificate
   School Media Program
   Other (please specify)

10. Did you complete a practicum or volunteer?

    Yes
    No
    If yes, please describe.

11. Did you have a mentor?

    Yes
    No

    If yes, how frequently did you meet with your mentor?

    Weekly
    Monthly
    Every two-months
13. As a student, did you work?

Full-time
Part-time
Not at all
If you worked, what was the job title for your position?

14. Before entering the program how many years of experience did you have volunteering or working in a library or information agency?

15. Please briefly explain in detail your experience. (The situation, title, etc. associated with your work.)

16. At which organization are you currently employed?

Please Specify
Prefer not to respond
Appendix D

Semi-Structured Interview Questions

Instructions:
First, let me thank you for your willingness to voluntarily participate in this study. As a reminder, your participation is voluntary and you are free to withdraw at any time, without giving a reason and without cost. This interview will sound formal as it won’t be in the advisory style that you are used to hearing from me. Instead, it will be a conversation that is research oriented, I will be asking questions and you will find yourself doing most of the talking.

1. Take a moment to remember back to when you were a student in the MLS program. How were you feeling? What were your thoughts beginning the program?

2. Tell me what it was like moving through your coursework with the same group of students. What was it like studying in a cohort program?

3. Describe a class project you worked on with a small group. As you prepare to tell me about the experience, note if it involved something exciting or challenging.

4. Aside from class and assignment requirements, what kinds of things did you learn as you worked with your cohort?

5. Now go back to that very project and your group members. As you think about your experience, how did you feel about the community of your peer group?

6. You have addressed course assignments. Now talk about other situations where your cohort relationships or interactions influenced your learning.

7. What were the challenges you faced regarding learning?

8. In working on a group assignment, how did you prepare for a group presentation? Explain the process and types of interactions, especially where group members were geographically dispersed. Or times when group members held differing values or had different perspectives.

9. In what ways, if any did (or has) the cohort experience influenced you as an information professional? Or in your professional life?

10. What is the nature of your contact with your cohort peers now? How? In what manner? Why?

11. What other strong memories or recollections of your experience do you have that we haven’t touched on?
Appendix E

General Prompts
Used throughout the interview to unpack and get at the individual’s underlying assumptions.

- Can you give me an example?
- Tell me more.
- Talk more about that experience.
- Describe more when you say...
- What meaning did you attach to that?
- What did the group do then?
- How did you interact with your peers at that point?
- Why do you think that happened?
- How did this affect your learning?
<table>
<thead>
<tr>
<th>Survey Questionnaire</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Questions</strong></td>
<td><strong>True</strong></td>
</tr>
<tr>
<td>1. My cohort knew that asking questions in the face-to-face class sessions was desired and valued.</td>
<td>17.65%</td>
</tr>
<tr>
<td>2. My cohort knew that asking questions in the online platform/classroom was desired and valued.</td>
<td>35.29%</td>
</tr>
<tr>
<td>3. As a cohort we were engaged in seeking information for our own personal learning</td>
<td>17.65%</td>
</tr>
<tr>
<td>4. My cohort was supportive of our members as we worked through course assignments.</td>
<td>29.41%</td>
</tr>
<tr>
<td>5. My cohort worked as a group to share the responsibility of seeking information and contributing to discussions.</td>
<td>29.41%</td>
</tr>
<tr>
<td>6. In the research class we broke into small groups to design and explore a research question. My cohort discovered that the topics and issues regarding our profession are not linear, but complex and interconnected.</td>
<td>37.50%</td>
</tr>
<tr>
<td>7. My cohort members understood the notion that theory and practice work together to benefit our profession.</td>
<td>35.29%</td>
</tr>
<tr>
<td>8. Generally, student learning in the program was supported by adequate resources and time to accomplish the course assignments.</td>
<td>50%</td>
</tr>
<tr>
<td>9. My cohort represented different values, perspectives, and background experiences that added unique resources to our learning experience.</td>
<td>41.18%</td>
</tr>
<tr>
<td>10. My cohort was confident that everyone could learn.</td>
<td>47.06%</td>
</tr>
<tr>
<td>11. As a whole, my cohort took creative approaches to the process of learning when it came to completing class assignments.</td>
<td>52.94%</td>
</tr>
<tr>
<td>12. My cohort pursued professional development opportunities beyond the course assignments.</td>
<td>41.18%</td>
</tr>
<tr>
<td>13. By the end of the program, we recognized that our individual learning was intertwined with the learning of our cohort members.</td>
<td>29.41%</td>
</tr>
<tr>
<td>14. My cohort supported and maintained an open communication structure among our members.</td>
<td>47.06%</td>
</tr>
<tr>
<td>15. My cohort recognized the need to adapt and change as a group when necessary.</td>
<td>35.29%</td>
</tr>
<tr>
<td>16. My cohort, as a group, valued the process of learning new material as much as, or more than, simply completing an assignment or solving a problem.</td>
<td>35.29%</td>
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</table>

Table 1 Survey Questionnaire Data The Perception of Cohort Members and their Cohort as an Organization.
Table 2

Resonant Themes Resulting from Thematic Coding with Schein’s Ten Dimensions

1. Proactivity. As the rate of change increases people will need to be involved in the learning process because it creates proactive problem solvers and learners.

Resonant Themes:

- (1.1) Technology was employed to maintain cohort communication for learning that was not related to course assignments.
- (1.2) Relationships of mutual social advantage actively enhanced the learning process.

2. Commitment to Learning to Learn. Members hold the belief that learning is a good thing and worth investing in. When an organization values reflection and experimentation, it ultimately supports members with time and the resources needed to become learners. This is done in the practical sense when one asks for assistance, gets feedback, then reflects and analyzes in order to create a new way of accomplishing tasks.

Resonant Themes:

- (2.1) The learning process included the cohort actively using new technologies and resources to enhance their learning.
- (2.2) The members relied on cohort relationships as a resource to learning.

3. Positive Assumptions about Human Nature. The basic belief that humans can and will learn.

Resonant Themes:

- (3.1) The willingness to learn in this cohort program was evident.
- (3.2) Members felt confident to achieve learning outcomes.
- (3.3) Members recognized that their relationships moved them beyond the individual experience and into the ease of collaborative learning.

4. Belief That the Environment Can Be Managed. The adaptation to a quickly evolving environment rests on the thought that managing the environment is both desirable and possible.

Resonant Themes:

- (4.1) The idea that the small group project environment can manage and solve problems.
- (4.2) Cohort members held the assurance that choices can be made when scheduling their obligations (time management).
- (4.3) The confidence that they were able to lead the group to a desired outcome.

5. Commitment to Truth through Pragmatism and Inquiry. First, it is critical for learning leaders to accept their own lack of expertise and to assist others to accept theirs. The learning task then becomes a shared responsibility. The learning organization can share the responsibility to solve problems through a flexible inquiry process.

Resonant Themes:

- (5.1) The willingness of members to acknowledge they are novices.
- (5.2) Members facilitated the exploration of those seeking a resolution.
- (5.3) The cohort members were committed to the process and pursuit of inquiry in a collaborative way.
(5.4) Cohort members participated in the social aspects in pursuing learning.

**Table 2 Continued**

6. Positive Orientation toward the Future. It is necessary to balance thinking far enough into the future to assess the consequences of different options while looking to the near future to assess if the solutions are effective, thus supporting the best possible result.

Resonant Themes:

- (6.1) Cohort members actively strategized successful outcomes through planned scenarios.

7. Commitment to Full and Open Task-Relevant Communication. The organization’s communication system permits everyone to be connected. Openness with regard to information that is critical to effective problem solving and learning. A sensitivity to task-relevant information and being open in sharing it.

Resonant Themes:

- (7.1) The cohort communicates using course content delivery system.
- (7.2) The open communication by members in a face-to-face environment.
- (7.2) Members engage in inclusive communication through an outside communication system.

8. Commitment to Cultural Diversity. Diversity creates subcultures that provide additional and unique resources for learning and innovation which makes an organization more able to cope with unpredicted events.

Resonant Themes:

- (8.1) Cultural sub-groups in the cohort brought new and varying perspectives to their course engagement.
- (8.2) Geographically separated sub-groups provided additional learning through carpool discussions.

9. Commitment to Systemic Thinking. The ability to think systemically in order to understand that most things in the world are complex, non-linear, and interconnected.

Resonant Themes:

- (9.1) Cohort members undertake discussions recognizing that information management issues are elaborate, linked, and dynamic.
- (9.2) The library profession is a small, established, and well connected profession that extends worldwide.

10. Belief That Cultural Analysis Is a Valid Set of Lenses for Understanding and Improving the World. It is the analysis and reflection on culture that supports the completion of tasks and also enables the understanding how an organization grows and evolves. This process is vital for a learning culture. Belief that analyzing and reflecting on their culture is necessary for the learning process.

Resonant Themes:

- (10.1) The idea that reflection on the learning experience impacts the cohort’s learning culture offers a significance for the culture’s growth.
- (10.2) Cultural stories of individual learning as it relates to the member’s experience of the cohort that impacted their learning.

Table 2 Cohort data pertaining to Schein’s ten dimensions and the resonant themes.
Figure 1

Standardized 5 Point Range Scale

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Not always true</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
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</table>

Standardized 5 Point Range Scale
Figure 2

Employment and Pursuit of the Graduate Degree

Employment

- Full-time Employment
- Part-time Employment
- Not Employed
Figure 3

One-way Commuting Distance for Cohort Members

The figure illustrates the distribution of one-way commuting distances for cohort members. The x-axis represents mileage traveled one-way, with categories ranging from 5 to 75 miles. The y-axis shows the percentage of cohort members. The data is divided into three categories: short, medium, and long distances. The chart indicates that a significant portion of the cohort travels medium distances, with smaller percentages for short and long distances.
Figure 4

Time Spent with a Mentor

Mentored