Redefining Significance: Experiences of Humanities Faculty Engaged in Undergraduate Research

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REDEFINING SIGNIFICANCE: EXPERIENCES OF HUMANITIES FACULTY ENGAGED IN UNDERGRADUATE RESEARCH

by

Susan Mendoza

A dissertation submitted to the Graduate College in partial fulfillment of the requirements for the degree of Doctor of Philosophy Educational Leadership, Research, and Technology Western Michigan University December 2015

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Programs that actively engage students in research and scholarship are the touchstone for integrating undergraduate education with authentic scholarly inquiry. Recent empirical studies demonstrate that undergraduate research experiences (URE) are related to increased student learning and development, increased levels of retention, increased enrollment in graduate school, and increased understanding of research as a vocation and profession. However, these seminal studies focus on URE in the STEM (science, technology, engineering, and math) disciplines. Although there are some studies that explore undergraduate research in the social sciences and humanities, the accepted models and best practices of undergraduate research are entrenched in the disciplinary culture of science. When overlaying the models of disciplinary culture and paradigms of research, it is clear that structures that support the scholarship enterprise in biology, for example, will not be as successful in history or philosophy. This study utilized a phenomenological approach to explore how faculty in the humanities describe the meaning of scholarship, scholarly process, and how that process influences how they work with undergraduate researchers and scholars. The researcher conducted in depth interviews with seven faculty members in the humanities who actively mentor
undergraduate researchers. These interviews resulted in six themes that describe the essence of the faculty participants’ experiences. These themes include: the centrality of the humanities, the life of the mind, the importance of guided practice, the development of a scholarly voice, the intention and impact of UGR, and how scholarship informed by community. These themes illustrate how the very nature of the culture and epistemology of the humanities disciplines influences the nature of the undergraduate experience. In addition, faculty mentors emphasize the values and skills needed to engage in the “life of the mind” and how those skills benefit students’ ability to find their own scholarly voices and become engaged citizens. This study demystifies the nature of undergraduate research in the humanities from a faculty mentor perspective. The study also provides some guidance to faculty mentors for possible models for engaging with undergraduate researchers and administrators interested in increasing the capacity and depth of UREs for students in the humanities.
This dissertation is dedicated to my father, A. Rene’ Mendoza, for encouraging me to find my voice as a woman and a scholar, and to my daughters, Tegan and Caeli, for reminding me that only through using that voice will they learn to discover theirs.
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When I began to study and prepare for the Ph.D., I knew, conceptually, that as a single parent choosing to go back to school and pursuing my doctorate was an inherently selfish endeavor. I would need to be resilient, embrace humility, make personal sacrifices, and exercise my atrophied skill of focus. Despite my awareness of the challenges of pursuing the Ph.D., I did not anticipate, nor expect the outpouring of support and encouragement.

In the most trying parts of the scholarship process, I imagined myself as Sisyphus, pushing a rock up the mountain to only to lose my focus and energy as I reached the summit. I often felt a bit overwhelmed, weary, and devised fabulously creative ways to quit. Despite my exhausted mind conspiring with my weary heart, I was carried through the research and writing process by mentoring, coaching, kind words, and an insane amount of coffee. Much of this support appeared without my request, but simply because my need was anticipated and embraced. In these acknowledgements, I want to extend my heartfelt thanks to those who made the next 286 pages possible.

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Susan Mendoza
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CHAPTER I

INTRODUCTION

Programs that actively engage students in research and scholarship are the touchstone for integrating undergraduate education with authentic scholarly inquiry. Recent empirical studies demonstrate that experiences in undergraduate research (UR) are related to increased student learning and development (Hunter, Laursen, & Seymour, 2007; Seymour, Hunter, Laursen, & DeAntoni, 2004), increased levels of retention (Crowe & Brakke, 2008), increased enrollment in graduate school (Nagda, Gregerman, Jonides, von Hippel, & Lerner, 1998), and increased understanding of research as a vocation and profession (Seymour et al., 2004). However, these seminal studies focus on undergraduate research experiences in the STEM (science, technology, engineering, and math) disciplines. Although there are some studies that explore UR in the social sciences and humanities, the accepted models and best practices of undergraduate research are entrenched in the disciplinary culture of science. When overlaying the models of disciplinary culture and paradigms of research, it is clear structures that support scholarly development in biology, for example, will not be as successful in modern language studies. This study focuses on describing the experience of humanities faculty who work with undergraduate research scholars.
Background

Scholars trace the roots of scholarship and research in higher education back to the German model, or Humboldtian model, of the modern university (Hu, Scheuch, Schwartz, Gayles, & Li, 2008). This model embraced discovery through the scientific method as a core feature of the academic experience for both faculty and students. The German university model became a catalyst of American innovation and ingenuity in the industrial era when "America's leading colleges adopted parallel goals [to that of the German universities of the 19th century] and began giving advanced degrees, finding honor, excitement, and reward in the exploration in the intellectual frontiers of their faculties" (Boyer Commission on Educating Undergraduates in the Research University, 1998, p. 6). As a result, faculty members increasingly shifted their focus from teaching to scholarship and research.

This model flourished in the American system of higher education. However, as institutions became more specialized and higher education expanded, the focus on research as a way of knowing and teaching became lost. "Undergraduate research was constrained by the rapid escalation of the higher education enterprise and the increasing specialization of both faculty and students into narrow fields and tasks" (Hu et al., 2008, p. 15). Research universities became increasingly more focused on faculty research and training graduate students, departing from engaging undergraduate students in scholarship as a learning process. In contrast, small, private baccalaureate institutions were insulated from this pressure by their singular focus on providing a quality undergraduate education, which was supported by the absence of graduate education. Colleges, such as Kalamazoo College and Allegheny College, embedded the philosophy
and principles of undergraduate research and scholarship in their curriculum through establishing thesis requirements as a requirement for graduation (Allegheny College, n.d.; Kalamazoo College, n.d.).

The national focus on undergraduate research began in the mid 1980s in the wake of a public campaign highlighting the scientific illiteracy and lagging performance of American students in comparison to the international community (Kinkead, 2003). Fueled by the media, public opinion perceived that colleges and universities were failing to provide undergraduate students a quality education (Grobman & Kinkead, 2010). Among other factors, the National Science Foundation (NSF) attributed this gap to a chronic lack of federal funds dedicated to curricular reform and supporting undergraduate student research (National Science Foundation, 1986).

In response to these perceived deficiencies in undergraduate education, specifically, scientific literacy and performance, a number of national forums and reports called on higher education to reexamine the intent and effectiveness of the undergraduate curriculum in research-intensive universities (Association of American Colleges and Universities, 2002; Boyer Commission on Educating Undergraduates in the Research University, 1998; National Commission on the Future of Higher Education, 2006; Wingspread Group on Higher Education, 1993). Despite their size and resources, however, research-intensive universities failed to provide undergraduate students with a comprehensive, high-quality science education. Faculty narrowly focused their efforts on their own research at the expense of their teaching, and the subsequent learning of undergraduate students. “Advanced research and undergraduate teaching have existed on two quite different planes, the first a source of pleasure, recognition, and reward, and the
latter a burden shouldered more or less reluctantly to maintain the viability of the institution” (Boyer Commission on Educating Undergraduates in the Research University, 1988, p. 5). Quality undergraduate instruction was viewed as a necessity, but was not recognized at the level of research and scholarship.

The Boyer Commission called for “significant transformations” in the undergraduate curricula of research-intensive universities and questioned the assumption that research and teaching were exclusive endeavors. “Learning is based on discovery guided by mentoring rather than on the transmission of information” (Boyer Commission on Educating Undergraduates in the Research University, 1988, p. 15). Therefore, if faculty engaged students in the research methodology through inquiry-based learning, the commission asserted students would learn from faculty experts and become actively engaged in the discovery process.

With momentum from The Boyer Commission, the movement to embed curricular and co-curricular models of inquiry-based learning and scholarship took many forms, transcending institutional type, and soon became a growing curricular movement in the science disciplines (Kinkead, 2003). Supported by national associations and foundations, undergraduate research has become the touchstone for curricular innovation in the STEM disciplines since the late 1990s. UR developed into informal curriculum, such as independent studies, or through more formal program, such as institutional, regional, and national summer intensive programs. In this process, the accepted and operational definition of UR evolved into, "An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline" (Council on Undergraduate Research, 2013, para. 4). Faculty once solely
engaged in their own research agendas slowly began to bring undergraduate students into their scholarship.

Although UR is recognized and validated as an effective pedagogy and programmatic intervention (Kuh, 2008), the vast majority of research on UR has focused on programs within the STEM disciplines. This is for three primary reasons. First, the STEM disciplines were early adopters of the undergraduate research model because it provides a tangible, effective, and viable way to train future scientists (Healey, 2005). Second, the nature of STEM research allows for faculty to compartmentalized research into specific, achievable tasks that an undergraduate student could complete in a 12 or 15-week period. And third, influential organizations, such as National Science Foundation (NSF) and National Institutes of Health (NIH), provide substantial funding for program development and assessment (Behling, 2009). This funding has supported the foundational studies in undergraduate research, as well as much of the work of the Council on Undergraduate Research (CUR), the only professional association dedicated to undergraduate research. These factors resulted in a gap of financial and political support for the social sciences and the humanities. As the Boyer Commission (1998) states, “the sciences and engineering curricula are well ahead of the social sciences, humanities, and the arts in adapting undergraduate research as a teaching method” (Boyer Commission on Educating Undergraduates in the Research University, 1988, p. 75). The advance of STEM in UR is directly related to disciplinary differences in how research is constructed, as well as accessible federal funding.

The combination of accountability and heightened awareness of undergraduate research as an educational quality enhancement strategy led to the proliferation of
assessment and empirical studies. These studies demonstrated the value of undergraduate research on retention (Webber, Krylow, & Zhang, 2013), cognitive and social gains (Ishiyama, 2002; Lopatto, 2007), acceptance/persistence in graduate school (Nagda et al., 1998), and an increased skill set (Harsh, Maltese, & Tai, 2011; Lopatto, 2004a).

Furthermore, these studies led to a deeper understanding of the features, or markers, of a quality undergraduate research experience (URE) (Lopatto, 2007; Seymour et al., 2004). Researchers also developed a common understanding of the cognitive, personal, and professional developmental gains of UREs (Hunter et al., 2007; Lopatto, 2004a; Seymour et al., 2004). While these studies serve as the seminal works upon which further studies about UR are based, it is important to note that each study was based within the STEM disciplines.

Although the movement to increase opportunities in undergraduate research “has spread to all areas of academe, including the humanities” (Grobman & Kinkead, 2010, p. xii), the narrow focus on STEM models created a great imbalance in the literature. “Only a small percentage of the national dialogue has engaged faculty members in the humanities and fine arts, and relatively few of them have generated case studies of successful undergraduate research” (Behling, 2009, p. 3). As a result, very little is known about UR in the humanities. While, there has been significantly more discussion about the benefits and challenges of undergraduate research in the humanities, this discussion is anchored in faculty reflections and program descriptions, not in the research literature. Empirical studies are lacking and limited. (Borst 1992; Devries, 2001; McDorman, 2004; Rogers, 2003; Wilson, 2003; Schilt & Gilbert, 2008). An additional complication is that humanities scholars often peer from their disciplinary lens of
criticism and question the compatibility of undergraduate research and the types of research conducted in the humanities (Grobman & Kinkead, 2010). This critical approach demonstrates an awareness that UR is an important pedagogical and programmatic tool, but it does not create new models or approaches to UR that are supportive of the humanities.

The lack of rigorous, empirical studies of undergraduate research in the humanities is problematic due to the culture and paradigm differences in the academic disciplines (Braxton & Hargens, 1996; Beecher, 1994; Biglan, 1973a, b). Biglan (1973a, b) categorizes the academic disciplines on two main domains: the hard vs. soft domains and pure vs. applied domains. Hard disciplines, such as those in STEM, have a single, agreed-upon paradigm. This paradigm includes differences in foundational knowledge, epistemologies, and methods of inquiry. Soft disciplines, such as humanities, are idiosyncratic in nature, meaning that there is a lack of consensus within the discipline about methodology and content. "Soft fields embrace diversity of opinion and encourage students to play with ideas and stand toe to toe with ambiguity" (Schommer-Aikens, Duell, & Barker, 2002, p. 353). This lack of a dominant paradigm impacts how scholars engage with knowledge acquisition and generation.

If one juxtaposes the generally accepted definition of undergraduate research as defined by the Council on Undergraduate Research, "An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline" (Council on Undergraduate Research, 2013) with views on cultural and paradigmic differences in the disciplines, it is clear that this description does not take into account the epistemological considerations of the disciplines. Both the
pure-soft and the pure-hard disciplines have divergent perspectives on how knowledge is created, defined, and how place influences perspective. For students and faculty in the humanities, this distinction is critical.

The significance of contextual influences upon a student means that one’s locations within the broader world impacts the questions one raises, the approaches one uses, what one sees as a meaningful research agenda, and the goals and means through which one conducts and evaluates research (McNary-Zak & Peters, 2011, p.17).

How one comes to ascertain new knowledge is a completely different and dynamic process, in contrast to the static nature of the scientific method in the sciences.

Paulsen and Wells (1998) further explored the relationship between disciplinary context and students’ epistemologies. Their study noted that the most striking findings were the epistemological differences in Biglan’s soft and hard disciplines. “Students majoring in Biglan’s ‘soft’ fields were significantly less likely than those students majoring in ‘hard’ fields to hold naïve beliefs about certain knowledge” (Paulsen & Wells, 1998, p. 374). Braxton and Hargens (1996) report that faculty in the pure/soft disciplines, such as the humanities, vary their pedagogy from their pure/hard STEM peers, specifically, noting that faculty utilize multiple lenses and points of view; have a student-centered approach to teaching; engage students in dialogue that cultivates analysis and synthesis; and use methods of assessment that promote critical thinking.

Knowing that the disciplines vary by knowledge and epistemology begs the question of how this impacts not simply a research faculty member’s work, but also how they mentor
future scholars into the discipline. Are the traditional UR models of excellence appropriate in the humanities, or is a different approach more appropriate?

At the foundation of undergraduate research is the notion that undergraduate scholars learn the skills of inquiry, knowledge acquisition, and dissemination through the mentorship of their faculty members. Models of URs are based upon this premise (Hu et al., 2008). In *Undergraduate Research in the Sciences*, Laursen, Hunter, Seymour, Thirty, and Melton (2010) describe the role of the faculty researcher as foundational to student learning: “The research advisor’s role is critical in guiding the student’s work and inducting them into the intellectual and social ways of the profession” (p. 3). This relationship is described as an apprenticeship, which should ideally be both educative and productive. Students and faculty members engage in research and scholarship as a means of training and learning, regardless of whether they are studying to become scientists or historians.

Laird, Shoup, Kuh, and Schwartz (2008) examined student-learning practices that emphasized “deep learning”, meaning student went beyond superficial knowledge and examined underlying meaning and impact. Such practices include synthesis, interpretation, integration, and reflection. As Laird et al. (2008) examined the learning and teaching of students in various disciplines, they noted that students in the pure/soft disciplines were exposed to and employed deep learning practices more often than students in the hard/pure fields. This variance implies there is something about the context of the discipline that impacts the teaching and learning processes. If the types of learning that occur in the disciplines vary in this way, then the methods and techniques
used by faculty to teach undergraduate researchers the practice of scholarship -- from inquiry to dissemination -- must vary as well.

If there are possible variations to the means and methods by which faculty teach and mentor undergraduate students, than the UR models studied and promoted in STEM may not translate equally as well to other disciplines. Grobman (2007) reinforces this assertion by stating that the model of collaborative student-faculty research promoted by faculty in the STEM disciplines, and also regarded as models of best practice, are not ideal in the humanities. Humanities faculty are rewarded for scholarship that is inherently solitary and does not lend itself to collaboration with other experts, let alone undergraduate students. "While the solution [to including undergraduates in research] in the sciences is to find ways to bring students ‘into the lab’, few if any ready models exist to repair the situation in the humanities where the kind of scholarship for which we are rewarded trivializes student involvement" (Rogers, 2003, p. 132). Humanities scholarship emphasizes collaboration in an informal aspect of scholarship, such as brainstorming and reviewing a paper for feedback, but not in authorship or publication. The latter being where the greatest reward is for faculty. That being said, the models of undergraduate research in the humanities should not mirror established models in STEM, but as the literature is devoid of appropriate models, many humanities faculty turn to best practices in STEM.

As undergraduate research programs continue to grow and expand, it is imperative that we have a deeper understanding of faculty members’ understanding of UR in the humanities disciplines. We do know that students are conducting active research in these disciplines (Hu et al., 2008). Many sources that talk about best practices
of URE programs in the humanities rely upon data and studies entrenched in STEM culture and methodology (Behling, 2009; Grobman & Kinkead, 2010; Grobman, 2007). A deeper understanding of the URE experience of students and faculty in the humanities will allow undergraduate research program directors to create deep learning experiences that honor and support the learning, pedagogy, and content of the humanities, as opposed to superimposing a STEM framework. "Undergraduate research in the humanities should not be limited to models that replicate undergraduate research in the sciences" (Rogers, 2003, p. 132). Two disciplines with divergent approaches to learning, discovering, and knowing may not have similar models of UR. A description of how humanities faculty conceptualize and enact their work with undergraduate scholars would offer insight into the types of UR models that could be developed to suit the types of learning in those disciplines. This also may encourage faculty in the humanities to work with undergraduate students more consistently and "persuade all of our colleagues and peers that research is just as vital, just as sustaining, for the humanities and their students as it is for the natural and social sciences" (DeVries, 2001, p. 153).

**Problem Statement**

Undergraduate research is widely recognized as one of the most impactful educational experiences a student can have in their undergraduate academic career (Kuh, 2008). In the past ten years, researchers have been able to define and document the educational benefits of undergraduate research, as well as best practices. Unfortunately, the vast majority of this work has been based on UREs in the STEM disciplines. To date, there have been no empirical studies on UREs in the humanities, despite the fundamental differences in the disciplines. Although there is some literature available, it is often
anecdotal in nature or is limited to the study of one institution's program. The purpose of this study will be to understand how faculty at private liberal arts institutions conceptualize and make meaning of their work with students engaged in undergraduate research and scholarship. Specifically, the study will explore how faculty in the humanities describe scholarship and the process of scholarly work as a means to provide an initial understanding of URE in the humanities. Research questions include:

1. How do faculty describe what it means to be a scholar within the humanities disciplines?
   a. How do faculty describe their own research?
   b. How do faculty describe the research process, or process of inquiry?
2. How do faculty describe the experiences and learning process of undergraduate researchers?
3. How do faculty situate the work of undergraduate students within their own scholarly process?

In exploring these three questions with the participants, I will develop a better understanding of the meaning of undergraduate research within the humanities disciplines. This understanding will serve as a basis to compare the lived experiences of humanities faculty who participate in UREs to the STEM-laden experiences cited in the literature.

**Methodology**

As mentioned by Bloomberg (2008), the selection of a research tradition follows the research questions and the purpose of the study. Given that the research questions in my study explore the ways in which undergraduate faculty make meaning of student
scholarship and research, as well as how that meaning influences their perceptions of undergraduates in the research process, I chose a qualitative methodology rooted in the phenomenological tradition. The phenomenological approach aims to reduce a group of individual experiences to their essence. According to Creswell (2007), “Phenomenological study describes the meaning for several individuals of their lived experiences of a concept or phenomena” (p. 57). By describing the phenomena, or common experience, one can better understand what is occurring, and the phenomenology can provide a foundation for further research.

For the purpose of this study, I interviewed seven undergraduate faculty members selected from member colleges of the Great Lakes Collegiate Association (GLCA), a private, baccalaureate liberal arts school association. The GLCA member schools are both close in proximity, as well as have a rich tradition of undergraduate research. The faculty participants were selected through a nomination process. I contacted each college's provost to nominate humanities faculty actively engaged in scholarship with undergraduate students. From the list of nominees, I selected a random group of faculty to interview in depth. I conducted one semi-structured interview with each of the selected faculty members. Each of these interviews was transcribed and coded. This data served as the foundation for the analysis and findings.

Theoretical Framework

For the purpose of this study, I utilized theories that categorize and define variations in the disciplines as a theoretical lens. I believe that this disciplinary lens determines how faculty perceive research, and subsequently that perception impacts their approach to working with undergraduate research students. I utilized the disciplinary
classification theory of Biglan (1973a, b), as well as the work of Becher (1994) and Braxton & Hargens (1996), which describes the cultural variations of the academic disciplines. Each of these theories describe fundamental differences between the STEM and humanities disciplines, therefore, they provide a strong theoretical framework that UR in the humanities may also be fundamentally different than UR in the STEM disciplines. Craney et al. (2011) allude to this variation, "what you research strongly influences how you conduct and value your research" (p. 109). I use theories that describe disciplinary variations as a lens to understand how humanities faculty describe scholarship and research, how they conceptualize what it means to be a scholar, and how those perceptions influence how they work with undergraduate researchers.

The current research on UR models emphasizes the critical nature of faculty mentorship and guidance in the research experience, either through apprenticeship, or collaborative learning (Franz, DeHaan, Demetrikopoulos, & Carruth, 2006). If disciplinary variations exist, there would be an impact on UR experience for faculty and students. Deep learning practices anchor apprenticeship and collaborative models by encouraging students to integrate and synthesize "information with prior learning in ways that become part of one's thinking and approaching new phenomena and efforts to see things from personal perspective" (Laird et al., 2008, p. 470). The theoretical lens of disciplinary variation and culture will enhance the nuances in the humanities approach to UR.

**Limitations and Delimitations**

The limitations and delimitations of this study are reflected in the research questions and the narrow scope of the study. As this is a qualitative study in the
phenomenological tradition, it is not intended to provide sweeping generalizations, rather to provide a foundation to ask deeper questions about how faculty experience UR in the humanities.

The select group of institutions and subsequent faculty limits the study. In order to best describe the faculty experience, I will be using a finite group of faculty in similar institutions. In addition to the location of these institutions make travel feasible for interviewing and follow up conversations.

**Significance**

Although National Endowment for the Humanities and the National Science Foundation both provide substantial support for scholars, only NSF provides significant investment in future scholars through undergraduate and graduate student support. According to the NSF, "The United States should make a concerted effort to maintain its position as a world leader by supporting training for the next generation of scholars in every discipline" (Commission on the Humanities and Social Sciences, 2013, p. 43). Therefore, the proposed study would serve as an exploration of URs in the humanities and would provide insight into the essence of the experience of faculty and students engaged in UREs in the humanities. Many studies assume that faculty employ the same apprenticeship structures as STEM students, but this has not been demonstrated in the literature. A better understanding of URE in the humanities will allow practitioners to think more broadly about how UR is defined and possibly discover additional models for URs. It also could provide justification for a different approach to training future scholars in the humanities.
The UR literature is devoid of empirical studies examining the experience of faculty in the humanities who mentor and work with undergraduate researchers. As mentioned previously, all empirical studies defining UREs and the benefits of URE study primarily the STEM disciplines. Assumptions of knowledge creation, intellectual development, and pedagogy have accompanied practical applications of these studies. Craney et al. (2011) confirm that undergraduate research is a powerful, meaningful experience for students regardless of disciplines, but “students in the social sciences and humanities may experience the benefits of participation differently than science students” (p. 110). In addition to the benefits of URE, the experience itself may be fundamentally different. After examining the literature base, it is not clear whether some of the basic assumptions regarding undergraduate research, as defined in the STEM disciplines, would be upheld in the humanities disciplines. This study would explore this gap in the literature by describing the experience of students and faculty engaged in URE in the humanities.
CHAPTER II
LITERATURE REVIEW

Undergraduate research (UR) is viewed as a highly effective tool for educating undergraduate students in the content and methodology of the academic disciplines. In the past ten years, there has been an explosion of studies examining the primary and secondary impacts of undergraduate research, as well as descriptions of model programs, and efforts to standardize formal undergraduate research programs (Council for the Advancement of Standards, 2015; Council on Undergraduate Research, 2012). The purpose of this literature review is to describe and understand how undergraduate research (UR) is defined and operationalized, to review the literature about UR to date, to examine how the disciplines in the humanities intersect with undergraduate research, and to examine the literature that focuses on disciplinary culture and variation.

Defining and Understanding Undergraduate Research

Before diving into the literature surrounding UR as practice and pedagogy, it is important to define the term. Generally speaking, UR is defined as a method of actively engaging students in the process of inquiry. By engaging in research and inquiry, students are entering the academic conversation in a significant way that does not always occur within the traditional undergraduate curriculum. In the survey of literature, the most commonly cited definition of undergraduate research is crafted by the Council on Undergraduate Research (CUR). CUR defines undergraduate research as, “An inquiry or
investigation conducted by an undergraduate student that makes an original intellectual or
creative contribution to the discipline” (Council on Undergraduate Research, 2013). This
definition emphasizes the role of the student, the type of contribution (original), and the
recipient or benefactor of the work. Although this definition is the most common, it is
reflective of certain assumptions about UR, specifically, a student-centered, student-
driven approach. As UR practices are increasingly expanded and institutionalized, the
definition is evolving as well.

**Characteristics of Undergraduate Research**

As the research on UR has increased in breadth and depth, so has the understanding of UR as pedagogy and program. Henne et al. (2008) and Hakim (1998) include aspects of the CUR definition, but expand the definition of UR to better describe the role of the research and the faculty mentor on the growth of the student. Emphasis is focused on four aspects: originality, mentoring, authenticity, and dissemination. That is, students who participate in UR are pursuing an original idea or thought, and in the process of knowledge creation or creative output, students find their academic voice (MacNary-Zak & Peters, 2001). Faculty mentors guide the student research either with focus on the scholarly outcome of the work (Hu et al., 2008) or on the student’s learning (Hakim, 1998). The work needs to have an authentic research question that is supported by an acceptable methodology, or a disciplinary accepted way of engaging the research question (Hakim, 1998; Henne et al., 2008). Upon completion of the research, the student creates a scholarly product that can be externally disseminated, as well as critiqued by others in the field (Hakim, 1998). According to McNary-Zak and Peters (2011), “Public dissemination requires the student to engage with others outside the mentoring
relationship about the research process and product” (p. 8). Meaning it is not just the process of completing the research that is important, but also the dissemination and engagement with the disciplinary community.

**Types of Undergraduate Research**

UR includes a variety of activities, such as: laboratory or bench research, field research, music composition and performance, works of art, document analysis, oral histories, and other forms of scholarship acceptable within the academic disciplines (Ishiyama, 2002; Kinkead, 2003; Straussburger, 1995). Many models of undergraduate research rely on the ability to parse out components of a larger research study. This approach is most common in the experimental method due to the nature of the methodology. It allows for faculty to teach students in a scaffolding, progressive way, and allows students to develop the skills needed to conduct the research over the course of a research study (Hu et al., 2008).

In their foundational study, Kremer and Bringle (1990) note three common models of undergraduate research: the teaching model, technician model, and the colleague model. The student researcher and faculty member have a different orientation and responsibility for the research within each of the models. In the teaching model, the research is often predetermined through “canned experiments”. The intention of the research study is to teach the student the research process. Kremer and Bringle (1990) note that while this type has the appropriate elements of the research process (problem, hypothesis, data collection, and analysis), the research itself lacks authenticity. The faculty mentor already knows the result. This knowledge takes away the discovery part of the process for the student, as well as the faculty member. In the technical model, the
student is engaged in authentic inquiry, but in a utilitarian sense. The student is providing a service for the faculty researcher, for example, transcription, or creating part of a dataset. According to Kremer and Bringle (1990), “Faculty who use this model believe that students are not sufficiently skilled or trained to contribute in more substantive ways” (p.1). In this model, the student contributes to the end result, but only through providing technical support, not through engaging with the research question. Alternatively, the colleague model engages undergraduate students in the research at multiple levels. The faculty mentor brings the student into the project at an early stage that provides the student with a context for the project and a voice in the research process. Students are involved in major aspects of the design, methodology, and analysis. As a result of the colleague model, students become partners in the research process by learning with the faculty mentor, as opposed to working for them.

Not all models are as faculty-centric as the models described by Kremer and Bringle (1990). Franz et al. (2006) describe two additional models: Apprenticeship Model (AM) and the Collaborative Learning Model (CLM). These models hold student learning at the center, resulting in significant growth and a deeper understanding of the disciplinary content and method, as well as increased confidence for the student. The AM is the most traditional of UR experiences. In this model, undergraduate students join an existing research group and work underneath a faculty mentor. Faculty leadership drives the research and the student researcher learns method and technique by observation and repetition. In the CLM Model, a small group of students work together in student-driven research teams. Faculty members or post-doctorate fellows mentor these teams and guide them on how best to design and conduct experiments. Frantz et al.
(2008) found that both models facilitate undergraduate student learning and development, and as such, are models for URE in the STEM disciplines.

Within the humanities and qualitative social sciences, models such as the AM and CLM are not typically used. This is because, according to Hu et al. (2008), “scholarly work [in these disciplines] is performed in a more exhaustive and in-depth field research of social, political, and cultural phenomena that do not always lend themselves to quantification” (p. 9). In addition, the research process is often solitary in nature and does not encourage nor support collaboration (Schantz, 2008). Therefore, the models elevated as benchmarks of best practice in undergraduate research simply do not fit disciplines outside of the sciences.

Humanists and social scientists need to look beyond their STEM peers for models of undergraduate research and indeed have. Reflecting on his own experience with undergraduate students in the humanities, McDorman (2004) identified three types of research models in the humanities that take a more collaborative approach: the faculty-driven model, faculty modeling method, and the student-driven collaborative model. In the faculty-driven model, the faculty mentor structures and leads the research, while students work on components that support the final project. This support is based in dialogue with the faculty member throughout the research process, so the student is contributing to the direction of their part of the project, as opposed to providing a service, such as in the Kremer and Bringle (1990) technical model. The second model is the faculty modeling method. This approach focuses on the faculty member working on a piece of his or her research at the same time that students work on theirs. The faculty mentor and the students function as a supportive research group in which they encourage
one another’s process and product through peer review and discussion. The final method McDorman (2004) describes is the student-driven collaboration model. In this model, the student is responsible for all aspects of the research project. The faculty mentor provides guidance and suggestions, but has no active role in research process or the academic writing. Although McDorman’s (2004) models provide an alternative in the literature, they are anecdotal in nature and not anchored in empirical research.

Framework for Understanding Undergraduate Research

Healy and Jenkins (2009) organized the different types of undergraduate research into a comprehensive framework that categorizes undergraduate research experiences by the level of student participation in the research process and the degree to which the research project emphasizes the content vs. the process. As illustrated in Figure 1, this categorization led to four types of undergraduate research experiences: research-tutored experiences, which emphasize learning about the research content and are more passive in nature; research-based experiences, which emphasize actively conducting the research as inquiry; research-oriented experiences, which emphasize skills and techniques associated with conducting research; and, research-led experiences, which emphasize learning about the foundational or current research in a particular discipline. Undergraduate students can participate in one or more of these models in a scaffolded experience. These types of experience allow undergraduate students to learn research skills in a developmental, sequential way. The framework is of particular relevance to this study because it provides faculty mentors with language to describe the type of work they do when introducing students to research and inquiry (Healey and Jenkins, 2009).
Beckman and Hensel (2009) recognized the inherent conflict in how CUR defines undergraduate research. This conflict arises from the various forms and functions undergraduate research can take depending on the institutional and disciplinary culture. Although the definition is commonly accepted in the literature, many institutions and programs expanded the definition to be more inclusive of various approaches and ethos. The intent of this model “is to help those engaged in fostering and evaluating undergraduate research to become explicit about their values so that research opportunities can be developed that most effectively reach their students” (Beckman & Hensel, 2009, p. 40). This model integrates approaches from multiple institutions, as
well as multiple models described in the literature. As noted in Figure 2, Beckman and Hensel (2009) identify eight continua upon which undergraduate research is defined.

<table>
<thead>
<tr>
<th>Student, process centered</th>
<th>Outcome, product centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student initiated</td>
<td>Faculty initiated</td>
</tr>
<tr>
<td>All students</td>
<td>Honors students</td>
</tr>
<tr>
<td>Curriculum based</td>
<td>Co-curricular fellowships</td>
</tr>
<tr>
<td>Collaborative</td>
<td>Individual</td>
</tr>
<tr>
<td>Original to the student</td>
<td>Original to the discipline</td>
</tr>
<tr>
<td>Multi-or interdisciplinary</td>
<td>Discipline based</td>
</tr>
<tr>
<td>Campus audience</td>
<td>Professional audience</td>
</tr>
</tbody>
</table>

Note: Beckman and Hensel, 2009. Reprinted with Permission

*Figure 2: Tensions in defining undergraduate research*

Each of the eight criteria reflects how the value of undergraduate research is operationalized. These continua are helpful in understanding the programmatic variations correspond with institutional and disciplinary cultural values. For example, research expectations might differ by discipline with one department valuing the UR as a student-centered process, while another values the research product (Beckman & Hensel, 2009). The continua describe the purpose of the research (student learning or product creation/generation), the impetus of the work (student initiated and faculty need), who is able to participate (general student population or specific group of students), location in the formal academic program (curricular or co-curricular), the nature of the research (collaborative vs. individual research process; original to the student or an original
contribution to the discipline; research as interdisciplinary, multi-disciplinary, trans-disciplinary, or based within the discipline), and the intended audience for future presentations or other forms of dissemination (community audience or a professional/disciplinary audience). These continua demonstrate the level to which the discussion and operationalization of undergraduate research has become increasingly nuanced.

Prior to the work of Beckman & Hensel (2009) and Healey and Jenkins (2009), the emphasis in the literature was on research-based programs in the STEM disciplines. As additional disciplines became more involved in UR, researchers and faculty began to contest the traditional definitions and models of undergraduate research (Hakim, 1998; Kremer & Bringle, 1990). Beckham and Hensel (2009) assert that the intent, or the purpose, of UR drives the definition and, as a result, developed Figure 2 in an attempt to better understand and describe these tensions. Beckham and Hansel (2009) state, “the aim is to help those engaged in fostering and evaluating undergraduate research to become explicit about their values, so that research opportunities can be developed that most effectively reach their students” (p. 40). This model also captures the diversity in the types and categorizations of UREs providing a rich framework from which I can draw interview questions for this study.

**Outcomes of Undergraduate Research**

The literature on the outcomes of UR has exploded in the last 10 years due in part to the increased level of accountability from grant issuing agencies, such as the National Science Foundation (NSF) and the National Institutes of Health (NIH). These agencies are focused on how undergraduate research increases student learning and increases access and success in undergraduate and post-baccalaureate experiences in higher
education. Through a deep review of the literature, the studies naturally fall into two primary categories: outcomes for students and outcomes for faculty. Outcomes for students include both cognitive and non-cognitive gains, as well as socialization into academia. Faculty outcomes are focused primarily on the intersection of teaching and learning. Greater discussion is given to the intrinsic values of UR and the challenges in engaging faculty in the practice.

The drive to define undergraduate research and quantify its impact has come primarily from the desire to understand the process and replicate best practice in pursuit of a stronger undergraduate education in the STEM disciplines. This is evidenced in the focus of the research on the quality and efficacy of math and science education, and the concern that poor STEM education would lead to a weakening of the education sector and, ultimately, the economy. “Inadequate science and math education reflects and predicts low science literacy across the nation. Declines in science literacy jeopardize scientific advancement, future economic growth, and national security” (Franz et al., 2006, p. 175). This fear of the United States losing its position as a leader in scientific and technological advancement propelled engaged learning and innovative pedagogies, such as undergraduate research, from the periphery to the center of the discussion.

**Benefits of Undergraduate Research for Students**

Studies on the benefits of undergraduate research began emerging in the journals in the mid-1980s and 1990s (Fitzsimmons, Carlson, Kerpelman, & Stoner, 1990; Hakim, 1998; Hearn, 1987; Kremer & Bringle, 1990; Nagda et al., 1998; Sakalys, 1984). The initial discussion of undergraduate research and the benefits to student learning and engagement resulted from the studies evaluating the NSF Research Experiences for
Undergraduate (REU) program (Fitzsimmons et al., 1990), as well as Council on Undergraduate Research publications (Hakim, 1998) and STEM disciplinary journals.

In examining the research over the past ten years, three landmark studies are ubiquitous in the literature. Kardash (2000) examined the perceptions of undergraduate researchers and their mentors in relation to 14 research skills and how these skills were enhanced through an intense summer research experience. Lopatto’s (2004a; 2004b; 2007) work establishes and quantitatively validates a set of empirically based benefits of undergraduate research. Similarly, Seymour et al. (2004) describe six major categories of gains for students engaged in intense, summer undergraduate research in their longitudinal study.

Kardash (2000): Study of Undergraduate Research Interns And Their Supervising Faculty. In her study, Kardash (2000) studied undergraduate research interns and their supervising faculty at a mid-western Research 1 institution. These students and their faculty were supported by either the Howard Hughes Medical Institute (HHMI), or the National Science Foundation (NSF). Kardash (2000) selected this particular population because the student experience most closely resembled a cognitive apprenticeship model, which grounds the student experience in a situated cognition model of learning. As students work alongside disciplinary experts, they learn the methods and skills needed to accomplish research in the discipline. According to Kardash (2000), “Through these apprenticeships, novices learn not only how to perform the task, but also to think about the task in the same way as do experts in that domain” (p. 193). She postulated that this contextual learning provided a richer learning environment.
In the study, Kardash (2000) examined three particular questions: 1) What research skills did student participants expect or hope to develop in the experience? And, if the skills were developed, to what extent did student attribute that skill development to the research experience? 2) How did the student participants’ perception of their research skills change as a result of participating in the summer research experience? 3) And, how do the student participants’ perceptions of their skill development differ or equate to their faculty mentors’ perceptions of their skill development? The study revealed that the undergraduate research experience positively influenced each of the student participants’ research skills measured in the study. The greatest gains were found in the skills of communicating research results through oral communication, observing and collecting data, connecting research results to the discipline, and understanding relevant literature in the discipline. Mild gains were noted in higher level conceptual research skills needed for STEM researchers such as: identifying a research question and developing that question into a testable hypothesis; designing an experiment to test the hypothesis; and adjusting the experiment based upon results. Kardash (2000) indicated that the modest gain in these types of skills is “disturbing in that many researchers in science education contend that the ability to pose questions lies at the very heart of the scientific enterprise and scientific thinking” (p. 96). Despite this shortcoming, the study was one of the first to document the positive effects on skill development for students who were engaged in authentic inquiry with a faculty mentor.

Lopatto: Survey of Undergraduate Research Experiences (SURE). Lopatto (2004a) initially developed a pilot study using the Survey of Undergraduate Research Experiences (SURE) as part of his research collaboration with Dr. Elaine Seymour,
Director of Ethnography and Evaluation Research at the University of Colorado at Boulder (Lopatto, 2004b). Similar to Kardash (2000), Lopatto’s study of the undergraduate research experience was funded by the HHMI; however, this study was an augmentation of his previous work (Lopatto, 2004a). This study extended the original pilot study by surveying 1,135 students at 41 universities and colleges. Respondents were from a diverse group of majors, including humanities and social sciences, but over 97% of those responding were from the STEM disciplines.

The SURE measured 44 variables, including demographic variables, learning gains, and program evaluation variables. Overall, students were overwhelmingly positive about their summer research experiences (Lopatto, 2004a; Lopatto, 2004b). This is evidenced by 87% of students surveyed indicating that they had a good, or better than expected, summer experience. Seventy-eight percent of students indicated their research supervisor was either good or outstanding. Lopatto also found that 91% of students reported that the experience in undergraduate research led them to develop sustained, or an increased interest in post-baccalaureate study, whether that is professional or graduate school. Lopatto found that students increased in their learning and developmental gains as well. This result validated previous pilot studies of both Lopatto (2004b) and Seymour et al. (2004).
<table>
<thead>
<tr>
<th>General Categories</th>
<th>Description</th>
<th>Supporting Studies</th>
</tr>
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<tbody>
<tr>
<td>Interaction and communication skills</td>
<td>Skill at oral, visual, and written communication; leadership; becoming part of a learning community; working independently; ability to collaborate with other researchers</td>
<td>Hunter, Laursen, &amp; Seymour, 2007; Kardash, 2000; Lopatto, 2007</td>
</tr>
<tr>
<td>Data collection and interpretation skills</td>
<td>Ability to collect data according to a plan; ability to analyze data; skill in interpretation of results; lab techniques; ability to solve technical or procedural problems</td>
<td>Denofrio, Russell, Lopatto, Yu, 2007; Hunter, Laursen, &amp; Seymour, 2007; Kardash, 2000; Lopatto, 2007; Swaner &amp; Brownell, 2008</td>
</tr>
<tr>
<td>Professional development</td>
<td>Understanding professional behavior in your discipline; understanding personal demands of a career in your discipline; understanding the research process in your field; understanding how professionals work on real problems</td>
<td>Hunter, Laursen, &amp; DeAntoni, 2004; Hunter, Laursen, &amp; Seymour, 2007; Kardash, 2000; Lopatto, 2007; Taraban &amp; Blanton, 2008</td>
</tr>
<tr>
<td>Personal development</td>
<td>Sense of accomplishment; tolerance for obstacles; self-confidence; interest in a discipline</td>
<td>Franz, DeHaan, Demetrikopoulos, &amp; Carruth, 2006; Gregerman, 1999; Kardash, 2000; Lopatto, 2007; Seymour, Hunter, Laursen, &amp; DeAntoni, 2004</td>
</tr>
<tr>
<td>Design and hypothesis skills</td>
<td>Ability to employ appropriate design methods; ability to integrate theory and practice; critical evaluation of hypotheses and methods in the literature</td>
<td>Hunter, Laursen, Seymour, &amp; DeAntoni, 2004; Hunter, Laursen, &amp; Seymour, 2007; Kardash, 2000; Lopatto, 2007</td>
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</table>
Lopatto’s (2004a; 2004b) research provided a common survey tool, the SURE, that quantitatively measured the impact of UR on a larger scale than previous studies. Furthermore, the SURE is currently one of the only measures for undergraduate research program directors to measure the success of their programs in comparison to national data.

Seymour et al.: Longitudinal Studies of the Benefits of Research Experiences for Undergraduates in the Sciences. Collectively, the researchers at the Center for Ethnography and Evaluation Research at the University of Boulder have conducted two extensive, mixed method studies on the benefits of undergraduate research. The first study (Seymour et al., 2004), commonly referred to as the four-college study, examined the experiences of faculty and students engaged in faculty-led, intense summer
undergraduate research experiences at four small private liberal arts colleges. This study includes over 360 interviews that explored the following questions:

- What are the benefits to students conducting UR – both immediate and longer term, and as viewed by both students and their research advisors?
- What is lost, if anything, by students who do not participate in UR?
- What are the processes by which gains to students are generated?
- What are the benefits and costs to faculty from their own engagement as UR advisors?

In their study, Seymour et al. (2004) developed a survey to accurately describe the benefits of undergraduate research. This survey allowed the research team to note the most commonly reported student benefits. These include, but are not limited to the following: increased confidence, collegial relationship with advisors, a better understanding of research through doing research, ability to work independently, deepened understanding of disciplinary knowledge and concepts, improved communications skills, and improved analytical and interpretive skills. This literature review inventory provided the framework for the development of the interview protocols, as well as the overall framework of the study. It is also important to note that Laursen et al. (2010) reexamined this literature review in their book, Undergraduate Research in the Sciences: Engaging Students in Real Science. They observed that no other research study or assessment had identified gains that they had not also observed in their original study, and that, furthermore, their original work continues to contribute in “both content and nuance to the literature on the student outcomes of UR” (Laursen et al., 2010, p. 34).
The pioneering four-college study was comprehensive in its measurement and categorization of student gains. Through interviewing and observation, Seymour et al. (2004) noticed six primary areas of student gains as a result of engaging in UR: personal/professional gains; gains in thinking and working like a scientist; gains in becoming a scientist; skill gains; enhanced preparation for career and graduate study; and clarification, confirmation, and refinement of career and educational goals and interests. These six categories represent 95% of the gains as noted by students. Table 2 describes each of the categories in relation to the student’s positive observations about their UR experience.

Table 2

*Seymour et al. (2004) Categories of Student Gains as a Result of Engaging in UR*

<table>
<thead>
<tr>
<th>Student Gain</th>
<th>Observable Positive Student Behavior</th>
</tr>
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<tbody>
<tr>
<td>Personal/ Professional</td>
<td>Increased confidence in ability to do research</td>
</tr>
<tr>
<td></td>
<td>Increased confidence in contributing real knowledge to science</td>
</tr>
<tr>
<td></td>
<td>Increased confidence in “feeling like a scientist”, due to:</td>
</tr>
<tr>
<td></td>
<td>• Being taken seriously by others</td>
</tr>
<tr>
<td></td>
<td>• Ability to do research</td>
</tr>
<tr>
<td></td>
<td>• Ability to contribute to science</td>
</tr>
<tr>
<td></td>
<td>• Increased understanding of the nature of science</td>
</tr>
<tr>
<td></td>
<td>• Presenting research</td>
</tr>
<tr>
<td></td>
<td>• Because of possibility of scholarly publication</td>
</tr>
<tr>
<td></td>
<td>• Because of gain in writing skills</td>
</tr>
<tr>
<td></td>
<td>Increased confidence (not related to “feeling like a scientist”)</td>
</tr>
<tr>
<td></td>
<td>• In presenting/defending research</td>
</tr>
<tr>
<td></td>
<td>• In being taken seriously by mentor and others</td>
</tr>
<tr>
<td></td>
<td>• In understanding of the nature of science</td>
</tr>
</tbody>
</table>
### Table 2—Continued

<table>
<thead>
<tr>
<th>Thinking and working like a scientist</th>
<th>Gains in the application of knowledge and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Critical thinking and problem-solving skills related to research</td>
</tr>
<tr>
<td></td>
<td>- Understanding how to frame research questions, develop/refine a research design</td>
</tr>
<tr>
<td></td>
<td>- Understanding nature of scientific knowledge: its open-endedness, the nature of scientific “fact,” science as “fallible,” how scientific knowledge is built</td>
</tr>
<tr>
<td></td>
<td>- Critical thinking/problem-solving skills, in general (i.e., nonspecific statements)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Gains in knowledge and understanding of science and research work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Greater knowledge; understanding in depth; understanding theory/concepts; making connections between/within science; solidifying knowledge</td>
</tr>
<tr>
<td></td>
<td>- Consolidating and deepening knowledge through presentation and teaching</td>
</tr>
<tr>
<td></td>
<td>- Increased appreciation of the relevance of coursework to understanding science</td>
</tr>
<tr>
<td></td>
<td>- Developing the temperament necessary for research work; increased patience and perseverance; increased tolerance for frustration, setbacks, and failure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Becoming a scientist (Changes in attitude in thinking and working like a research scientist)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Increased willingness to take on responsibility for the project; gains in learning to work independently, formulate own ideas, and contribute to project direction</td>
</tr>
<tr>
<td></td>
<td>- Greater intrinsic interest in learning: increased motivation, attention to detail</td>
</tr>
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<thead>
<tr>
<th>Skills</th>
<th>Communication skills</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>- Improvement of presentation skills/ability to defend oral argument</td>
</tr>
<tr>
<td></td>
<td>- Improvement of writing skills</td>
</tr>
<tr>
<td></td>
<td>- Lab/field skills: instrumentation, measurement, technical skills</td>
</tr>
<tr>
<td></td>
<td>- Work organization skills: time management, note-taking, details of lab management</td>
</tr>
<tr>
<td></td>
<td>- Computer skills</td>
</tr>
<tr>
<td></td>
<td>- Reading comprehension skills</td>
</tr>
<tr>
<td></td>
<td>- Collaborative working skills</td>
</tr>
<tr>
<td></td>
<td>- Information retrieval (library/internet research skills)</td>
</tr>
</tbody>
</table>
Table 2—Continued

<table>
<thead>
<tr>
<th>Preparation for career and graduate study</th>
<th>The UR experience…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Clarified/confirmed, student’s interest in field of study; aided student in deciding which area of study to pursue; provided concrete recognition of fit between own interests and field of study.</td>
</tr>
<tr>
<td></td>
<td>• Clarified/confirmed level of interest in graduate school.</td>
</tr>
<tr>
<td></td>
<td>• Increased probability that student will go on to graduate school.</td>
</tr>
<tr>
<td></td>
<td>• Increased student’s interest/enthusiasm for field of study.</td>
</tr>
<tr>
<td></td>
<td>• Introduced student to new field of study.</td>
</tr>
<tr>
<td></td>
<td>• Stimulated/confirmed interest in research career.</td>
</tr>
<tr>
<td></td>
<td>• Clarified that a research career is not what student wants.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clarification, confirmation, and refinement of career and educational goals and interests</th>
<th>The UR experience…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Provided “real-world work experience”</td>
</tr>
<tr>
<td></td>
<td>• Offers the opportunity to network with faculty, peers, other scientists.</td>
</tr>
<tr>
<td></td>
<td>• Enhances resume: good for graduate/medical school prospects.</td>
</tr>
<tr>
<td></td>
<td>• Provides exposure to new opportunities/experiences.</td>
</tr>
<tr>
<td></td>
<td>• Offers conference attendance which facilitates new opportunities for networking/exchange of ideas.</td>
</tr>
<tr>
<td></td>
<td>• Working collaboratively enhances career/graduate school preparation.</td>
</tr>
<tr>
<td></td>
<td>• Enhances career preparation.</td>
</tr>
</tbody>
</table>

*Note:* Seymour et al., 2004. Reprinted with permission.

Although many researchers are cautious of qualitative studies and may perceive them as idiosyncratic, the sheer size and depth of the study provides legitimacy. In addition to the four-college study, the research team also published a program evaluation of a structured summer research program that focused on serving students of color (Hunter et al., 2009; Melton, Pederson-Gallegos, Donohue, & Hunter 2005). This evaluative study was by far the most robust at the time of publication, and continues to serve as a seminal study for continued program assessments.
As noted previously, this typology of domain gains continues to serve as the benchmark for research on the benefits of undergraduate research on student researchers. It is important to note the level of commonality between Kardash (2000), Lopatto (2004a; 2004b), and Seymour, et al. (2004). Kardash (2000) identified and described the skills gains associated with UR. Both Lopatto (2004a; 2004b) and Seymour et al. (2004) used this study as a foundation to explore not only the skill gains, but additional cognitive/non-cognitive, and attitudinal gains associated with undergraduate research. Lopatto (2004a) began to make the connections between skills development, personal/professional development, and professional advancement. These intersections were blended and further described by Seymour et al. (2004). The potential relationship between “thinking and working like a scientist” and “becoming a scientist” begins to unfold and lay the ground work for additional research on epistemological change and development within the UR experience that Rauckhorst alludes to in a paper presented at the 2001 PKAL conference based on the work of Baxter Magolda (Lopatto, 2004b).

In addition to providing a strong empirical foundation for the benefits of UR, these studies led to the development of two assessment instruments. Lopatto designed the Survey of Undergraduate Research Experiences (SURE) as his main instrument for the 2004 study. The survey was then expanded to a group of 66 schools and over 2000 students (Lopatto, 2007). Since that time, the SURE has gone through two major revisions and is still used extensively by undergraduate research programs for both programmatic development and assessment. Similarly, Seymour, Hunter, and Laursen developed the Undergraduate Research Student Self-Assessment (URSSA) based upon their analysis of the literature and the core developmental outcomes from the four-college
study (Laursen et al., 2010). Both of these instruments were created as literature-based, validated assessment tools for the UR community. The assessment surveys also provide greater reach of both Lopatto’s and Sermour’s work.

**Humanities, Not Statistically Significant.** Before concluding this section, it is important to note that the three studies described did not provide any evidence for the benefits of undergraduate research for students in the humanities. The study was either focused solely on students in the STEM disciplines (Lopatto, 2004a; Lopatto, 2004b; Seymour et al., 2004), or the number of humanities student participants in the sample rendered and results statistically insignificant (Kardash, 2000). In the four-year study, Seymour et al. (2004) note that there was very little evidence of varying approaches to in the research mentor strategies, thus the findings can be generalized to any discipline. Although there may not have been variation within the results for that study, the participants were faculty and students in the STEM disciplines, or in behavioral social sciences, which traditionally employ quantitative methodology. Faculty and students engaged in research in the humanities or qualitative social sciences would be using qualitative methodology, which differs fundamentally from the positivist approach of quantitative methods. This does not nullify Seymour’s assertion that similar mentoring strategies allow for their research to generalized to any discipline, but it certainly calls it into question.

**Benefits for Faculty: Discovery by Proxy**

Although researchers have focused primarily on the benefits of UR for students, some studies speak to intrinsic and extrinsic rewards for faculty research mentors. Cooley et al. (2008) assert that the emphasis on UR as an emerging pedagogy places
enormous pressure on faculty to both produce scholarship, as well as mentor undergraduate researchers. “While it offers significant advantages for students, undergraduate research can be time-consuming and distracting for faculty when it interferes with personal scholarship” (Cooley, Garcia, & Hughes, 2008, p. 463). Lancy (2003) hypothesizes that faculty often engage in UR due to either win-win scenario and or mutual self-interest.

Although there are some career related benefits to mentoring undergraduate researchers, such as a potential increase in research productivity, more often than not, these benefits consume resources and time (Laursen et al., 2010). The literature shows that faculty mentor undergraduate students in research primarily for intrinsic reasons: personal satisfaction (Webber et al., 2013), satisfaction in seeing student success (Laursen et al., 2010), and as a means of integrating the research and teaching aspects of their roles (Jenkins & Healey, 2010). Without the additional motivation of extrinsic reward, participation in URE is inconsistent and often split along disciplinary lines, with more faculty participating in STEM rather than the humanities (Grobman & Kinkead, 2010).

**Undergraduate Research in the Humanities vs. STEM Disciplines**

Unlike UR in the STEM disciplines, little is known about UR in the humanities. Although the concept of academic apprenticeship is historical and foundational to the profession of academia, the literature speaks little to an undergraduate student’s experience as an apprenticing researcher outside of STEM. References are made to disciplinary spaces where students can contribute, but these references are in relation to the nuances of methodology (Ilisevich, 1972). In the past ten years, there has been
significantly more discussion about the benefits and challenges of undergraduate research in the humanities, however this discussion is anchored in faculty reflections and program descriptions. Empirical studies are lacking and limited (Devries, 2001; Ishiyama, 2002; Klos, Shanahan, & Young, 2011; McDorman, 2004; Rogers, 2003; Wilson, 2003; Schilt and Gilbert, 2008).

**Empirical Studies of UR in the Humanities**

Currently, there are two empirical studies in the literature that speak to the unique experiences of UR in the humanities. Each study has significant limitations in terms of understanding and describing the experience of students and faculty engaged in UR in the humanities. The first study, Ishiyama (2002) examined the experiences of humanities and social science students at Truman State University. Using the College Student Experiences Questionnaire (CSEQ), the study examined the impact of UR on students’ ability to think critically, learn independently, and integrate information. The study indicated that UR had a positive impact on these areas of learning and reinforced many earlier studies as noted previously. The weakness in the study is in the sample size and the aggregation of the humanities and social science students. Ishiyama (2002) notes in the study that, of the pool of students, only 15.2% indicated they had declared majors within the humanities and social sciences. Of this secondary pool, only 17.3%, or 27 students, had conducted collaborative research with faculty. No additional information was provided in regards to how many subjects were humanities majors and how many were social science. Furthermore, the ambiguity of definition of undergraduate research in the study, “worked with a faculty member in a collaborative way on a research project”
(Ishiyama, 2002, p. 383), does not provide insight into the type and depth of research conducted.

The second study (Craney et al., 2011) was more expansive and examined outcomes and learning goals of UR in STEM, social science, and humanities students from 2001-2005. This study had a greater number of humanities students and reported disaggregated data in relation to student outcomes. The greatest differences were noted in the pathways to undergraduate research, the research environment, and the types of skills that humanities students develop over their STEM peers. Craney et al. (2011) note that students in the humanities are much more likely to plan their own study, or to have a faculty mentor suggest a general area, and the student design the specifics. This is in contrast to STEM disciplines, where the three main pathways to research are faculty-inviting students to join an ongoing projected, students requesting to join an ongoing project, or a faculty member suggesting a specific project and design. The study also indicated the research environment varied depending on the student’s major. Students who did most of their work alone were more likely to be humanities or social science students, whereas, STEM students tended to work with groups. The researchers hypothesize that this variance has to do with the type of research methodology associated with inquiry in the humanities. Humanities students also reported an increase in the ability to “synthesize and integrate information” (Craney et al., 2011, p. 105). Craney indicates that this measure is reflective of Ishiyama’s (2002) observation that humanities students report a greater ability to “think analytically and logically” (p. 380) based upon their UR experiences. Each of these differences combined with Angelo and Cross’ (1993) observation that “what you teach has a good deal to do with how you teach” (p.
109), indicate that there is a fundamental difference in UR experiences in the humanities over the much-documented STEM experience.

Despite these small insights into the dynamics of undergraduate research in the humanities (Laursen et al., 2010; Lopatto, 2004a), humanities scholars have encountered unique challenges in engaging students in undergraduate research, citing that many of these challenges are connected to the nature of the discipline itself (DeVries, 2001; McDorman, 2004; Wilson, 2003). Klos et al. (2011) echo this concern by stating, "the differences found in undergraduate research in the arts and humanities, compared with that of other disciplines, arise from what makes each of our disciplines distinct in the first place: the methods, epistemologies, results even the sites of our inquiries” (p. 1). The combination of fundamental epistemological differences and methodological traditions with the functionality of the disciplines, structures, and cultures within the academy is what has limited the growth of UR. Although there are pockets of innovation where UR is thriving, the practice of UR is not nearly as accepted and pervasive as it is in STEM. The barriers to the humanities embracing UR is “simultaneously, disciplinary and structural” (Schantz, 2008, p. 26). Challenges exist from the fundamental foundations of epistemology, to the nature of scholarship and apprenticeship, and extend into the extrinsic reward systems of research support, grants, and the tenure and promotion process.

**Disciplinary Epistemological Challenges**

As the foundation of each discipline, epistemology determines what knowledge is valid and the methods and process to validate new knowledge. Each discipline’s approach to research and teaching is defined by the epistemology. As noted earlier, the
generally accepted definition of undergraduate research as defined by the Council on Undergraduate Research (2013) is, "An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline". Yet, this description does not take into account the epistemological considerations of the disciplines. Both the pure-soft and the pure-hard disciplines have divergent perspectives on how knowledge is created, defined, and how place influences perspective. In the pure-hard STEM disciplines, the research process is predicated on the scientific method and the quantification of data, as opposed to methods that expand creative capacity or deepen understanding of an intellectual culture (Donald, 2002).

As mentioned previously, UR is traditionally framed as a type of cognitive apprenticeship, or a way of actively engaging with the craft of research through experiential learning. Students learn the craft of research from their faculty mentors. Many begin with basic research tasks and move into more advanced level work, slowly building the skills of a researcher in a particular discipline (Healey & Jenkins, 2009). The focus on experiential learning shows how UR emphasizes “epistemological aspects [of the research process] such as knowledge production and dissemination, critical evaluation of existing knowledge and dealing with unforeseen problems and challenges” (Brew, 2013, p. 604). Generally, there is an agreement or convergence within the discipline on the process of knowledge acquisition and discovery (Donald, 2002). However, it is important to note that each discipline varies depending on the philosophy and tradition of the discipline. These variances in epistemology, specifically, what constitutes knowledge and new knowledge, are diametrically different between the
STEM and humanities disciplines. These differences impact both student learning and subsequent ontological development, "such as changing the being of students, developing their personal and professional capabilities and influencing their perceptions of themselves” (Brew, 2013, p. 604). The structures surrounding undergraduate research evolved from models in the STEM disciplines, and therefore, are based off of research traditions in those disciplines rather than the humanities.

**The Nature of Scholarship and Apprenticeship**

One of the ways in which humanities differs from the STEM discipline is the level of collaboration and engagement in the scholarship and writing process. In the STEM disciplines, the research tradition requires collaboration and teamwork in data collection and interpretation “where the involvement of many hands and viewpoints is the norm” (Malachowski, 1999, p. 127). One research scientist may have multiple students working on different aspects of the same project or research question over time. This is possible in research in the sciences because of the reliance on empirical data gathering and analysis as a means to advance a research agenda. This approach is in direct contrast to the humanities “where research is a more solitary enterprise and empirical results are neither the norm nor part of the goals of such projects” (Malachowski, 1999, p. 127).

As opposed to using the scientific method to test a hypothesis, faculty in the humanities are polymethodic utilizing Hermeneutical, exploratory, analytical, or critical methods to explore a particular idea, concept, or thesis. A scholar’s competence is defined by his or her ability to conduct a study on his or her own. This independence and tradition of self-reliance leaves very little space for an undergraduate novice. As such, many have found that "serious scholarship in the humanities makes very little place for
collaboration with faculty colleagues, let alone undergraduates” (Rogers, 2003, p. 132).

In addition, scholarship in the humanities is interpretive in nature, requiring a deep understanding of archival material and often-specific language dialects (Rogers, 2003). As a result, humanities research is not collaborative, but solitary in nature, punctuated with "lonely, but fascinating and often magical hours" (DeVries, 2001, p. 153). Schantz (2008) states that this disciplinary culture is reinforced by scholarly journals that focus on single-author submissions, and routinely reject works submitted by multiple authors, perpetuating the notion that “collaboration in the humanities and related fields is undesirable, difficult, or impossible” (Dean & Kaiser, 2010, p. 43).

In addition to the collaborative nature of research in the STEM disciplines, many undergraduate research students begin their experience on research teams. These research teams serve two purposes: they allow for a division of labor and sharing of the data collection process, and serve as a method of supervision and enculturation (Dean & Kaiser, 2010). Students learn the rules of the academic community by participating in the research and the preparation of results for dissemination with the faculty mentor. In addition to promoting collaborative research, these collaborative research teams facilitate the discovery process by determining the research question and assigning components to individuals on the team (Dean & Kaiser, 2010). This process facilitates a transfer of learning, as well as an introduction to the academic community of practice (Wegner, 1998).

Unlike the STEM disciplines, Wilson (2003) notes that there are different points of entry for undergraduate researchers in the humanities. Many students come to research much later in their academic careers after specialized coursework. In addition,
humanities researchers do not operate in a team environment where students can learn the particulars and nuances of research in the discipline; rather, they work in isolation and one on one with faculty mentors. This disciplinary segregation creates a real and perceived barrier to engaging undergraduate students in the scholarship process in the humanities (Wilson, 2003).

In addition to being engaged with the research and scholarly process, undergraduate research idealizes the notion of authentic research, and the quantification of these experiences. This process of authentic research and inquiry allows for students to pursue research questions for which they, nor their faculty mentor, know the answers. Ideally, this process leads to new knowledge and subsequent dissemination. One of the questions raised in the literature is, “What does authentic research in the humanities look like?” Schantz (2008) struggled with the value of authentic research in the humanities as being something that can be quantified with external measures, such as presentations at conferences, and is often done by the STEM disciplines. The perception of what is of value is determined by both the influence of the STEM model, as well as the replication of a paradigm from graduate school in the humanities, where only the best and brightest who display grit and academic prowess succeed. As Schantz (2008) worked towards resolution on the role of UR in the humanities, he emphasized on the role of “making meaning” in the scholarship process. Unlike the STEM disciplines, the humanities provide students with the ability to “locate themselves” in a body of literature that connects with the liberal arts, as well as larger community and societal issues. This notion of meaning making is one that is echoed often in the literature in student
development theory, specifically in the work of Baxter Magolda (1999), but is rarely cited in the STEM literature. This concept will be further explored in this study.

**Extrinsic Reward Systems and Structures**

The challenges faced by humanities faculty engaged in UR exist not only within the epistemology and limitations of traditional methods of humanistic inquiry. They are also pervasive in the extrinsic rewards and typical research support structures at many universities (Rogers, 2003). Within academia, few reward systems embrace UR, however faculty engaged in UR in the STEM disciplines "still find themselves in a culture that seems to understand, appreciate, and, in the long run, value what they do" (Wilson, 2003, p. 75). This value lends itself to finding support in a variety of areas, specifically, funding, access to resources, and institutional support and recognition.

Buckingham, Kinhead, Monahan, Olsen, and Torres (2012) note historically, funding for undergraduate research students in the humanities has been incredibly low, or nonexistent. Faculty in the STEM disciplines enjoy the support of the National Science Foundation's Research Experience for Undergraduates and various programs through the National Institutes of Health that fund UR. The NSF REU program provided over $97 million dollars in 2011 (National Science Foundation, 2012). This is in stark contrast to the National Endowment of the Arts and the National Endowment of the Humanities who, in their Challenge Grants, grant funds specifically focused on building the capacity of humanities scholarship, and explicitly disallow grant funds to be spend on any students lower than graduate level (National Endowment for the Humanities, n.d.). Schantz (2008) notes that “Administrative support – research stipends, summer research grants or institutes on pedagogy – represent the life blood of any research program” (p. 26).
Without support from the federal government, faculty in the humanities rely upon their individual institutions for support. Schantz (2008) further notes that this lack of research funding resulting in a lack of extrinsic motivation feeds a lack of intrinsic motivation. “What, other than the inherent goodness of working with talented students, is the professional incentive for faulty members to take on such daunting projects?” (p. 26). This lack of support further contributes to the marginalization of humanities faculty interested in participating in UREs.

As universities have emphasized the importance of research in the tenure and promotion process, many faculty have stepped away from working collaboratively with undergraduates. Rogers (2003) notes, "while the solution in the sciences is to bring students into the lab, few if any models exist to repair the situation in the humanities" (p. 132). This is especially problematic as pure humanities research trivializes undergraduate engagement and participation. Many researchers and faculty who advocate for increased undergraduate research in the humanities are keenly aware of the inequity in the disciplines, and that the STEM model is upheld as best practice. Schantz (2008) believes that humanities faculty need to look through the STEM model and see opportunities for students to make meaning in research while searching for the possible and probable outcomes for UR in the humanities. In order to realize that dream of increased engagement of undergraduate students in humanities research, faculty need to step beyond the shadow of STEM and recognize that the task "requires us to rethink many assumptions about the scholarly capabilities of undergraduate students and, more importantly, many assumptions of what constitutes scholarship itself" (Lee-Keller, 2009, p. 11).
Disciplinary Differences in Epistemology and Conceptions of Research

Epistemology anchors each discipline’s perceptions and definitions of scholarship. Essentially, a discipline’s epistemology is its theory of knowing. It drives how one understands scholarly questions and the type of methodological process a scholar employs to seek the answers. Genova (1983) distills the elements of epistemology into three key assumptions: the knower, the known, and the process of knowing. The differences in how these elements are defined are at the core of the epistemological debates in Western philosophy (Genova, 1983).

A faculty member’s home discipline determines not only subject and content, but also how they believe knowledge is created and validated. Although there are various elements that shape how a faculty scholar and an undergraduate student work together in a research context, the literature is devoid of studies that explore this relationship. Hu et al. (2008) assert that any impact in the environment, including the disciplinary environment, will have an impact on the outcomes, as well as the quality of the UREs. To better understand how the variance in the disciplines may impact UR, it is important to review the literature associated with disciplinary difference, the impact of these differences on epistemology, and how epistemology impacts the research process.

Overview of the Literature on Disciplinary Differences

The differences in the disciplines may be obscure to researchers outside the academy, but for those of us within the academy, the cultural and structural differences are paramount. It is important to note that a discipline encompasses a subject area, but also extends beyond the content into ways of thinking, cultural contexts, and modes of perception. Parker (2002) distinguishes the two by stating, “a discipline is a more
complex structure [than a subject]: to be engaged in a discipline is to shape, and be shaped by the subject, to be part of a scholarly community, to engage with fellow students— to become ‘disciplined’” (p. 374). The literature on disciplinary differences varies greatly, however, for the purpose of this study, I will be highlighting on paradigmic models and cultural interpretations.

**Paradigmatic Models of the Disciplines.** Clark (1963) first identified the cultural differences by categorizing scholars in three areas: local or cosmopolitan, pure or applied, humanistic or scientific. Kuhn (1970) took this work a bit further and examined how disciplines used different cognitive frameworks and how these frameworks were reflected in social structure. Kuhn categorized disciplines by the level to which there was consensus on these paradigms. Two primary categories emerged: disciplines with high paradigmic agreement and disciplines with low paradigmic agreement. Disciplines with high agreement were generally those in the physical sciences. These disciplines were highly structured in nature and had organized subject matter. The disciplines were in agreement as to what knowledge was and had very specific criteria as to how to pursue new knowledge. This is in contrast to those disciplines with low paradigmic agreement. Such disciplines were more on the humanities end of the paradigmic continuum and lacked consensus on the body of knowledge as well as the subsequent accepted modes of inquiry, methodology, and analysis.

Biglan (1973a, b) expanded and deepened Kuhn’s (1970) categories through a systematic analysis of the relationship between subject content and faculty department organization. Biglan recognized that there are significant paradigmic differences between the disciplines, but he also recognized that there are variations within disciplines
that required the knowledge of practical application, such as engineering and education. Ultimately, Biglan labeled three areas that distinguished the disciplines from one another: hard-soft, pure-applied, and life-nonlife. The hard-soft dimension is similar to Kuhn’s notion of paradigmic difference, or variations on the level of agreement on the body of knowledge and the process to define new knowledge. The paradigm is critical because it “serves an important organizing function; it provides a consistent account of most of the phenomena of interest in the area and, at the same time, serves to define those problems which would require further research” (Biglan, 1973b, p. 202). Disciplines in the hard dimension have highly paradigmic structures of knowledge and include the physical and the biological sciences. These disciplines are in contrast to disciplines where there is little agreement on a common paradigm. The “content and method in these areas tend to be idiosyncratic” (Biglan, 1973b, p. 202). These fields include humanities, education, as well as some social sciences and business. The second dimension Biglan identified is pure/applied. This dimension isolates how scholars view their discipline’s affinity with application to practical or societal problems. Disciplines such as education, engineering, and nursing fit within the applied dimension, whereas fields such as mathematics, chemistry, and history are situated within the pure dimension, with little emphasis on practical applications. The last dimension Biglan describes is the level to which certain discipline’s content area examines social or biological systems as opposed to theoretical or inanimate objects. This last dimension is described as the extent to which a discipline is concerned with life systems. This last example helps make the distinction between disciplines that study biological systems, or human systems. Biglan’s (1973a, b) work
laid the foundation for educational researchers to begin to examine aspects of each of the dimensions and how they impact the academy.

Building on Biglan’s work, Kolb (1981) examined learning style in relationship to the disciplines. Utilizing the work of Piaget on cognitive development (1970) and Kagan and Kogan’s (1970) work on cognitive style, Kolb (1981) developed a theory that each individual has a different approach to learning that is influenced by a natural ability, as well as environment and tasks. Kolb (1981) asserted that there were two primary dimensions of learning: abstract conceptualization versus concrete conceptualization, and direct observation versus reflective observation. Utilizing the Learning Styles Inventory (LSI) and observations, Kolb (1981) was able to determine that there are four statistically prevalent types of learning styles: Converger, Diverger, Assimilator, and Accommodator. The Converger style scored high both on the Abstract Conceptualization and Active Experimentation dimensions. These types of learners organize information in a systematic way and utilize that information to pursue a single problem or question through deductive methods. A Diverger style is quite the opposite. With strengths in Concrete Experience and Reflective Observation, a Diverger utilizes imagination, as opposed to logic. Kolb (1981) states that diversers “excel in the ability to view concrete situations from many perspectives and to organize many relationships into a meaningful Gestalt” (p. 238). Assimilators find their strengths in Abstract Conceptualization and Reflective Observation. They often employ inductive reasoning to take various observations to craft one coherent theory. Similar to the Converger style, Assimilators are focused on finding the correct answer, but move beyond application to abstract conceptualizations. Finally, accommodators score high in Concrete Experience and
Active Experimentation. They rely on trial and error to learn and are willing to shift, or adapt, their approach based on the results. Kolb (1981) states, “in situations where the theory or plan does not fit the facts they will most likely discard the plan or theory” (p. 238).

After identifying and labeling these learning styles, Kolb (1981) also juxtaposed the categorizations with Biglan’s (1973a, b) disciplinary dimensions. In doing so, Kolb (1981) observed that the learning styles identified by faculty in various disciplines followed the discipline’s method of inquiry. This correlated with Biglan’s (1973 a, b) classifications of the disciplines. Kolb (1981) noted that his scale of the abstract and the concrete, or the scientific and the artistic, mirrored Biglan’s (1973a, b) soft and hard domains. The areas of active and reflective paralleled pure and applied. This observation reinforced the notion that each disciplines, especially many of the science disciplines and the humanities, varies greatly in both knowledge structures and modes of inquiry as noted in Table 3.
As noted above, the variations in the sciences and the humanities from a paradigmic perspective directly relates to how the disciplines perceive knowledge and learning, beginning from how truth is defined and extending into methods of inquiry.

**Cultural Examinations of the Disciplines.** Clifford Geertz (1982), the renowned cultural anthropologist, observed the differences in the disciplines as extending beyond paradigm. Rather, he described how each discipline functioned as an intellectual village with relationships between faculty colleagues. These relationships extended beyond the intellectual and disciplinary ties to political, moral, and personal connections. He believed that an ethnography of the disciplines would provide not only insight into the disciplines themselves, but the ability to create a vocabulary that would articulate the differences in meaningful and constructive ways. Becher (1981) recognized that differences in the functional and disciplinary approaches to research and teaching were
not just epistemological in nature, but were cultural phenomena as well. Becher (1981) hypothesized that it was this disciplinary culture that determined a distinctive code of conduct, set of values, and specific intellectual tasks. He also determined that this culture was deeply intertwined with epistemology and the two would are inextricably entangled. Beecher and Trowler (2001) state that the relationship between academic cultures and disciplinary epistemology is reciprocal in nature and involves a mutually dependent interplay of, on the one hand, the structural force of the epistemological character of the disciplines that conditions culture and, on the other hand, the agentic capacity of individuals and groups on autonomous action, including interpretive tasks. (p. 24)

Building on Biglan’s (1973a, b) and Kolb’s (1981) classifications, Becher & Trowler (2001) noted the epistemological variations between the natural sciences and humanities. The natural sciences, which Biglan (1973a, b) would describe as hard-pure disciplines are focused on the slow accumulation of knowledge that is linear in nature relying on universal quantities and classifications. The goal of such knowledge is explanation and discovery. This is in contrast to the humanities and pure social sciences that Biglan (1973a, b) categorizes as soft-pure. This type of knowledge is reiterative in nature and builds through recursive processes building layers over time, resulting in deeper understanding or interpretation. Becher identified these knowledge patterns as fundamental to the discipline and placed them on a continuum, labeling the extremes, “urban” and “rural” research styles. The urban research style echoes the meaning of the metaphor. Urban research styles tend to have a large population of researchers studying a small set of topics. Research questions are addressed through a rational, atomistic
approach allowing for larger questions to be approached in smaller pieces. This ability to research questions independent of one another illustrates the concentrated population in the metaphorical model. The rural approach denotes vast space and a smaller population. This type of research approach examines research questions holistically and doesn’t allow for the research question to be carved up and divvied out in the same way as the urban orientation. Rather, researchers approach questions in their own manner, echoing the low-paradigmatic descriptions of Kuhn (1970).

In a critique of Becher (1981), Lattuca & Stark (1995) “noted that discipline’s cultural features included differences in how arguments are typically generated, developed, and reported and how the work of others is evaluated” (p. 320). Lattuca and Stark did not point out, however, if these differences related to pedagogy or curricula. Becher and Trowler (2001) talk about socialization into a discipline and how it indoctrinates students and faculty into a particular means or method of teaching and learning, yet in the literature, there is no mention of how this indoctrination may impact UREs or the mentoring approach of the faculty scholar.

Impact of Disciplinary Structures on Educational Experience

As mentioned in the sections above, the variations in cultures and paradigmic structures ripple through all aspects of the disciplines. In order to better understand the disciplines, Dressel and Marcus (1982) and Lattuca and Stark (1995) segmented them from the whole into discernable parts and functions that they believed give each discipline their unique character. The authors characterized these disaggregated components as:
• *Substantive*, the concepts, assumptions, and relationships of what is known and what is studied in the discipline;

• *Linguistic*, the symbols and the language used to describe and communicate knowledge;

• *Methodological*, the process by which research questions are identified, pursued, and validated.

• *Syntactical*, the arrangement or the knowledge organization process;

• *Value*, what assumptions and values impact how we perceive what is worth studying and the process of studying it;

• *Conjunctive*, the nature in which disciplines relate to one another.

Each of these components is quite distinctive within the disciplines and, when threaded together, account for the manifestations of disciplinary differences in organizational structure (Dressel & Marcus, 1982; Lattuca & Stark, 1995), differing approaches to curriculum (Lattuca & Stark, 2011) and improving undergraduate education (Braxton, 1995; Braxton, Olsen, & Simmons, 1998), as well as approaches to scholarship, including inquiry, methodology, and knowledge creation (Donald, 1995).

Braxton (1995) utilizes the lens of Biglan’s typologies to illustrate the differences in how the soft and hard disciplines approach teaching goals, classroom practices, student assessment, and the relationship between teaching and research. Braxton (1995) noted that faculty in the pure-hard disciplines emphasized facts, concepts, and disciplinary principles. Lattuca and Stark (1995) also observed this emphasis on knowledge acquisition in how faculty in the pure-hard disciplines emphasized upon research as a teaching tool, but also a way to socialize students into the discipline. This approach is in
contracts to the pure-soft disciplines that had a greater emphasis on critical thinking types of skills, including: oral and written communication skills, critical reading and analysis, synthesis, as well as a student’s overall development. Braxton (1995) asserts that, “efforts to improve undergraduate education are more likely to be successful in soft disciplines than in hard ones” (p. 61). This viewpoint is informed by the differences in teaching practices rather than research practices. Braxton (1995) views the emphasis of the pure-soft disciplines on critical thinking and student-centered learning practices as an indicator the fields have a greater affinity to adapt pedagogies and practices that facilitate student learning and improved undergraduate education.

Braxton et al. explore this assertion more deeply in the 1998 study of how the disciplines utilize Chickering and Gamson’s (1999) seven principles of good practice. These principles provided a framework for universities and departments to improve the quality of the undergraduate experience. The principles include:

- the encouragement of student-faculty contact to help foster student engagement and motivation;
- the encouragement of cooperation among students to enhance and deepen learning;
- the encouragement of active learning which requires students to actively engage with class content and facilitates greater learning;
- providing prompt feedback, so students can accurately assess their skills and knowledge and work with faculty to improve their work;
- an emphasis on time on task, allowing students to focus on learning and applying course content;
• clearly communicating high expectations, not simply so faculty state the expectations, but also that students understand and meet those expectations;
• honor diverse talents and ways of learning, so students can utilize their talents and skills to demonstrate their knowledge and competency. (Chickering & Gamson, 1999)

For the quality of an undergraduate education to be enhanced, individual faculty members need to subscribe to each of the principles and incorporate them into the classroom. Chickering and Gamson (1999) asserted that the level of faculty participation would be determined by the institutional context and culture, with the organization’s structure, values, and reward structure creating conditions that would either support or dissuade faculty engagement. Braxton et al. (1998) asserted that the paradigmic development of a faculty member determined the level of participation. Their study concluded that three of the principles (prompt feedback, encouragement of cooperation, and time on task) were not influenced by a paradigmic development. Interestingly, faculty in pure-soft disciplines utilized the four remaining principles (student faculty contact, active learning, high expectations, and respect for diverse ways of knowing) more readily than their pure-hard colleagues. The authors attribute this difference to the impact of discipline paradigms and culture, labeling the soft-pure disciplines as “affinity disciplines”, meaning they have a predisposition to practices that enhance undergraduate education (Braxton et al., 1998).

This notion that pure-soft disciplines are predisposed to supporting pedagogies and practices supportive of student research runs contrary to the research on URE. As mentioned, institutions have been increasing the number of UREs available to students,
due in part of the work of Kuh (2008), who categorized undergraduate research as a “high impact practice” (HIP). HIPs utilize the same principles defined by Chickering and Gamson (1999), most notably high faculty expectations, frequent communication with student colleagues and faculty, and active learning. Despite the similarities between the two disciplines, the movement to adapt undergraduate research as both program and pedagogy has been led by the faculty in the pure-hard disciplines rather than the pure-soft. The incongruence may be attributed to a lack of understanding of the undergraduate research processes in the humanities and social sciences, as opposed to UREs not occurring or being adapted in these disciplines. To better understand if this is the case, there is a need to explore how faculty perceive research in their disciplines, the place of undergraduates in that research, and the structures needed for undergraduate researchers to be successful.

Academics’ Perceptions of the Research Process

Each of the disciplines approach the research and scholarly process in varying ways depending on the disciplinary paradigm and corresponding epistemology. As Schantz (2008) and Wilson (2003) noted in their discussions of the humanities lack of engagement in UREs, epistemology, paradigm, and disciplinary culture matter because they drive research methodology and the structure of academic units. In other words, each discipline has unique cultural differences in ways of thinking, perceiving, and creating new knowledge, and these differences affect how the disciplines engage with the business and function of academia. As such, each discipline has a set of processes, structures, and particular language that describes the research process. The level of agreement on these processes varies depending on the level of paradigmic congruency.
For example, disciplines with high paradigmic congruency have very specific criteria as to what may be considered appropriate research for the discipline. In disciplines with low paradigmic agreement, those criteria may need to be expanded to accommodate the variance within the discipline. Donald (2002) categorized the methods of inquiry into five specific areas: hermeneutics, critical thinking, problem solving, scientific method, and expertise. Each method is determined by disciplinary epistemology that corresponds appropriately to Biglan’s (1973a, b) and Kolb’s (1970) classifications and, as seen in Table 4 below, each method of inquiry is connected to a set of procedures and tasks.

Table 4

Methods of Inquiry in Varying Disciplines

<table>
<thead>
<tr>
<th>Method</th>
<th>Methods Employed</th>
<th>Disciplinary Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hermeneutics</td>
<td>Interpretation, a dialectic between understanding and explanation; circular process of hypothesizing and validation</td>
<td>Soft-pure (Humanities)</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>Questioning process, examination of assumptions and seeking evidence</td>
<td>Hard-pure (to some extent)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pure-soft (humanities)</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>Formulation, an approach to solving a problem, carrying out the solution as a means to validate process.</td>
<td>Hard-pure and hard-applied (STEM)</td>
</tr>
<tr>
<td>Scientific Method</td>
<td>Objective methods, common ownership of data, ability to replicate findings, and organized skepticism</td>
<td>Hard-pure Physical Sciences</td>
</tr>
<tr>
<td>Expertise</td>
<td>Deep study of a particular subject, allowing for an immediate understanding and interpretation of problem.</td>
<td>Hard-pure and soft-applied</td>
</tr>
</tbody>
</table>

Note. Adapted with permission from Donald (2002)
Donald’s (2002) research illustrates how these categories determine the type of methodology and thinking faculty expect of their students. For example, social science faculty had an expectation that students could think abstractly, which supports the critical thinking process. Physical science faculty expected students to be able to think logically and in formulaic ways, which supports the scientific method. The humanities faculty valued a student’s authenticity over abstract and logical thought, which echoes the process of hermeneutics (Donald, 2002). Therefore, as students in each discipline experience their respective faculty’s expectations ways of thinking and knowing, students learn the cultural and intellectual norms of their discipline.

It is also important to note that the differing paradigms and subsequent methodology are often in conflict with one another, rather than complimentary. This is especially relevant, as the greatest contrast is between the STEM disciplines and the humanities. As noted with hermeneutics, subjectivity is critical to the interpretive and dialectic process, where as objectivity does not allow for a depth of understanding or interpretation of meaning. The opposite is true, however, in the scientific method, where according to Sprague (2010), “subjectivity is an obstacle to knowledge: the observer’s personality and feelings introduce errors in observation. The practices of research are designed to minimize, and hopefully erase, any impact of subjectivity of the researcher on the collection and interpretation of data” (p. 79).

Although the connection between epistemology, methodology, and perceptions of research has been well documented in the literature, Brew (2001) asserts that this relationship is an assumption and antiquated. She points to the lack of empirical studies that specifically address a researcher’s conceptions of research. She also highlights that
definitions of knowledge and research are constantly changing within the changing context of higher education. Brew (2001) asserts that “questions about what counts as knowledge, and what counts as an appropriate method for generating it, are now known to be bound up with questions about the ownership and control of knowledge, including questions of power” (p. 271). Brew (2001) also states that, in the literature, research is used synonymously with science and as a result the work “leaves open to question whether researchers in other domains of inquiry share scientists’ conceptions of research” (p. 274). Therefore, faculty in non-STEM disciplines may have other conceptions of research that extend beyond, or are independent of the STEM biased perceptions.

Brew (2001) used a phenomenographic approach to study the conceptions of experienced research faculty. She crafted a study that teased out the variations in how faculty experience research, removing the assumption that concepts of research were driven solely by discipline. The study resulted the identification and definition of four variations in how academics understood research: domino variation, trading variation, layer variation, and journey variation. The domino variation focuses on the role of tasks, processes, experiments, questions, and ideas as points in a series. Each item drives and impacts the other in a linear way with an overall goal of synthesis. The trading variation keeps the focus on the products of research and the relationships needed to achieve those products. This particular variation in much more focused on the audience of the research as opposed to the research itself. The layer variation recognizes previous research and seeks to understand what lies beneath the known layers. Brew (2001) compares this particular variation to an artistic process that focuses on creativity rather than discovery. The last variation is the journey variation. The metaphor of journey is used because in
this variation the transformation of the researcher is the focus of the work. The research itself is less important than how the overall research question intersects with the development of the researcher and an individual and a scholar. This variation notes a departure from the research being the center of the metaphor to the scholar being the center (Brew, 2001).

Brew’s (2001) study provided a discipline-neutral framework for understanding how academics understand the research process. Her study also served as the inspiration and impetus for additional work on how research is conceived. Conceptions of research have been explored beyond Brew’s (2001) initial study, specifically looking at different types of researchers including, post-graduate students (Meyer, Shanahan, & Laugksch, 2005; Meyer, Shanahan, & Laugksch, 2007; Pitcher & Akerlind, 2009), faculty researchers (Brew, 2001; Akerlind, 2008), and supervising research faculty (Bills, 2004; Kiley & Mullins, 2005). For example, Akerlind’s (2008) study took a bit of a different approach in his research question. Akerlind (2008) described four categories that described academics’ perceptions of the purpose of research from more of an extrinsic lens. These perceptions are more functional in nature, describing the way in which being a researcher meets a need or purpose in their fields. The categories include: a focus on fulfilling academic requirements due to a focus on external dissemination; a focus on establishing oneself in one’s discipline, with the emphasis is on personal achievement and professional recognition; focus on developing oneself personally; and, a focus on broad change and an impact on the larger community, either the discipline, or the community at large. Akerlind (2008) presents these rationale in a “nested hierarchy of inclusiveness in that the characteristics of the earlier ones are also found in the latter
ones, thus representing a broadening of the researchers understanding of what research means and their attitudes towards it” (p. 162). This is demonstrated by initial categories in the model that emphasize a focus on the self, and the latter categories focus on the value of the research product. Although this model does not answer the question about how faculty perceive research beyond its value to themselves and the larger community, it does provide a context as to why faculty may embrace or dissuade the participation of undergraduate researchers in their work.

Despite the variances in the studies, each demonstrates great similarities in how research is understood by faculty, graduate students, and undergraduate students. In Table 5, I have compared the studies and how they describe conceptions of research along four over all goals: adding to current knowledge, seeking new knowledge, following a systemic process with a specific purpose/outcome, creating a product, or serving as means to explain and understand.

Table 5

<table>
<thead>
<tr>
<th>Studies Examining Researcher’s Conceptions of Research</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Adding to current knowledge</td>
</tr>
<tr>
<td>Akerlind (2008)</td>
</tr>
<tr>
<td>Author(s)</td>
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<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Bills (2004)</td>
</tr>
<tr>
<td>Brew (2001)</td>
</tr>
<tr>
<td>Kiley &amp; Mullins (2005)</td>
</tr>
<tr>
<td>Meyers, Shanahan, &amp; Laugksh (2005, 2007)</td>
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<tr>
<td>Pitcher &amp; Akerlind (2009)</td>
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**Layering Research Conceptions with Faculty Perceptions of URE**

In reviewing the literature on the epistemological and cultural variations of the disciplines, as well as the varied conceptions of research, the challenge of understanding URE within the humanities becomes a more complex and immediate endeavor. Each aspect of how URE is defined privileges the experiences of students and faculty in the
sciences leaving the humanities silent and unexplored. This study proposes, not a
discipline neutral description of undergraduate research, rather one that is situated within
the discipline of humanities, and open to the subtle variations that exist within it. Only
by exploring how humanities faculty scholars understand the research process, and the
place of undergraduate scholars within it, will we begin to understand how to provide
more consistent and intentional support of UREs in the humanities.
CHAPTER III

METHODOLOGY

As discussed in Chapters 1 and 2, the literature surrounding undergraduate research is deeply rooted in the epistemology and methodology of the STEM disciplines, specifically pure-hard disciplines, such as chemistry, physics, and biology. As such, there are few studies about UREs in the humanities, and no studies that examine the experiences of humanities faculty engaged in undergraduate research. The goal of this research is to capture these faculty voices, specifically how humanities faculty describe and make meaning of research, the research process, and how undergraduates are situated within it. It is my hope that this work provides a foundation to better understand UREs in the pure-soft disciplines, such as the humanities.

The research questions for this study are examined using exploratory and emergent approaches that allow for the research to “unfold, cascade, roll and emerge” (Lincoln & Guba, 1985, p. 210). The qualitative research tradition differs from quantitative methods in that it shifts the focus from the perception of the researcher to the perception of the research participant (Creswell, 2008). The voice and experiences of the participant become central to the nature of the inquiry. Qualitative research is emergent and inductive by nature (Creswell, 2007). It derives from fundamentally different philosophies of knowing than does quantitative research, specifically utilizing post-positivism, constructivism, advocacy, and pragmatism as fundamental foundations of
epistemology (Creswell, 2003). For example, in contrast to the positivist worldview, which relies on rationalism and science to understand the world, the constructivist worldview seeks to understand the human experience through understanding individuals’ meaning making of their experiences (Bogdan & Biklen, 2010). This meaning making is not intended to be unbiased in nature; rather it utilizes lived experiences as a way of knowing. “Researchers recognize that their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural, and historical experiences” (Creswell, 2009, p. 8). This ability to study experiences of humanities faculty, while simultaneously looking at the impact of the STEM disciplines on the creation and the operationalization of URE, will be of incredible value to the research process and the product. The foundation of URE programs and pedagogies are situated within the STEM disciplines. A better understanding of how faculty in the humanities approach scholarship and mentoring scholarship would potentially provide an alternate approach in the planning and design of UREs for the humanities. In addition, it would provide undergraduate research program directors with a better understanding of whether the models we emulate support or disadvantage our faculty in the humanities disciplines.

For the purpose of this study, I will be employing qualitative methodology in the phenomenological tradition. Wertz (2011) states that qualitative methodologies provide contextual knowing or a deep understanding of the "question of what" (p. 4). Answering this question is critical in providing voice to the humanities faculty, specifically describing their experience and understanding the role, process, and product of research and scholarship in the humanities. My role, as the qualitative researcher, will be to craft
a framework that will allow the faculty to express their worldview in an authentic and accurate manner (Patton, 2002).

**Overview of Methodology**

By using qualitative methodology in the phenomenological tradition, I will have the ability to deeply describe the experience of humanities faculty and how they make meaning of their role as a scholar, while also exploring how this experience impacts their mentorship of undergraduate researchers. The goal of phenomenology is to deeply understand the ways in which a group makes meaning of their experiences. This is achieved through describing and examining the lived experiences of a few members of that group (Creswell, 2007). The role of the phenomenological researcher is to collect data from those who have experienced a particular phenomenon, in this case humanities faculty who work with undergraduate research students, and develop a description of the essence of the experience. Two primary approaches to phenomenology include hermeneutic phenomenology and transcendental phenomenology. The defining factor in these approaches has to do with the level of interpretation of the researcher.

Transcendental phenomenology has historical roots in psychology and is focused on the description of the phenomenon (Creswell, 2007). The methodology is very specific and requires epoche, or bracketing, on the part of the researcher. The researcher works to intentionally remove any bias, or preconceived notions out of the research. The term transcendental emphasizes the need to look at the phenomenon with “fresh eyes,” or removed from bias. This emphasis solely on the phenomenon, and not the meaning of the phenomenon as interpreted by the researcher, makes this approach less appealing for this study. Hermeneutic phenomenology allows for the researcher to have more
flexibility in the methods and be engaged in interpretation of the phenomenon itself. Van Manen (2014) describes the research process as a “dynamic interplay” between aspects of the research: finding a phenomenon of interest; reflecting on essential themes that emerge from the data or interviews; and, describing/writing the phenomenon in an intimate way, rather than with the distance required by transcendental phenomenology. Interpretation is an integral part of the process, as is the perception of the researcher. This latter approach best suits my research questions, and the exploration of the problem as stated in Chapter One.

Participants

The participants in this study will include humanities faculty who are tenured, or tenure track, and serve as mentors or supervisors for undergraduate research students. I studied faculty from the Great Lakes Consortium Association (GLCA), specifically due to the institutions’ emphasis on undergraduate education, as well as a mirror of Seymour and Lopatto’s original 2004 studies, both of which drew their population from small liberal arts colleges. I identified participants using purposeful sampling to select a pool of participants. The power of purposeful sampling is in finding examples or participants who are information-rich. “Studying information rich cases yields insights and in-depth understanding rather than empirical generalizations” (Patton, 2002, p. 231). The GLCA schools provided a pool of information-rich participants because of their dedication to dynamic undergraduate programs focused on increasing opportunities for deep learning, such as UREs.

For this study, I had a two-step selection process. First, I contacted both Provosts and the CUR Institutional Representative from each of the GLCA institutions and invited
them to nominate faculty to participate in the study. An example of these emails are available in Appendix B and C. Both the Provosts and CUR representatives had a sense of which faculty are engaged in undergraduate research in the humanities. Of the 13 provosts contacted, five nominated faculty from their institutions. Upon receiving the nominations, I contacted each faculty member to invite them to participate in the study, as noted in Appendix D. In regards to sample size, Lincoln and Guba (1985) recommend having a sample size that is large enough to allow for redundancy. “If the purpose is to maximize information, the sampling is terminated when no new information is forthcoming from newly sampled units; thus redundancy is the primary criterion” (Lincoln & Guba, 1985, p. 202). Each potential participant was emailed the consent document and the Survey of Biographical Information. Of the 21 faculty who indicated interest in participating, nine returned some documentation. In order to achieve the point of redundancy, or saturation, I interviewed seven participants. In the process of analysis, it was clear that saturation was achieved through this number of participants.

**Data Collection**

Upon selection and consent to participate, I conducted in-depth, semi-structured, topical interviews with each participant. These interviews were 90-120 minutes in length and initially focused on the research questions with opportunity to probe emerging themes and tangents though a semi-structured format. In-depth interviews are the most common form of data collection in qualitative research (Marshall & Rossman, 2011). Generally, the researcher using semi-structured interviews has a list of questions and an interview guide. The interview guide allowed for consistency in what questions were asked, as well as delimit the questions asked by the researcher. The interview guide
approach provided a basic outline, allowing me to ask probing questions if a particular answer is not clear, or to follow-up on a particular answer. I kept this guide fairly brief, to reflect a topical model, to allow for the participants to frame and construct the answers in a way that is meaningful for them and their experience. The interviews were recorded via Skype and transcribed. I also took notes as a back up measure in case there were challenges with the recording technology during the interview or in the transcription process. Post-interview, I also immediately checked that the interview was indeed recorded, and recorded my own interview notes, background, and general impressions of the interview process.

**Data Analysis**

The intent and purpose of a phenomenological design is to capture the essence of the experience and distill that experience into a description and possible analysis. The first step of this process is to create individual narratives based off of each of the interviews. These narratives serve as the data used for the analysis. To best understand and describe the data, I utilized a primary and secondary analytical approach. First, I used a detailed reading approach to data analysis. This approach requires a close reading of the text in which I identified and captured “thematic expressions, phrases, or narrative paragraphs that increasingly let the phenomenological meaning of the experience show or give itself in the text” (Van Manen, 2014, p. 320). By seeking significant statements, I was able to cluster similar experiences across the interviews. These clusters of meaning are the essence of the data analysis.

In addition to the detailed reading approach, I also used a lens of metaphorical analysis. I chose to add this second approach due to preliminary interviews with
humanities faculty. In these discussions, faculty scholars struggled to define their experience and were only able to do so with the assistance of metaphor. Metaphorical analysis provided flexibility in this study, as it is emergent in nature, and allowed for metaphorical themes to emerge in the analysis process. Kuntz and Presnall (2012) describe metaphor as a means to “understand how we conceptualize our reality, how we make meaning – drawing from embodied experiences in material concepts – rather than simply stating the meanings we have made” (p. 738). By using this approach as a secondary analysis, I had the ability to cluster meanings within particular metaphors that emerge from the data. This technique was also used by one of the more recent studies conducted with faculty regarding their understanding of the research process (Brew, 2001).

**Validity, Credibility, and Dependability**

Qualitative approaches to research requires scholars to demonstrate that the data gathered and subsequent interpretations are credible, dependable, transferable, and confirmable (Lincoln & Guba, 1986). For the purpose of this study, I chose to use a holistic, recursive process-oriented view of validity as proposed by Cho and Trent (2006). This process utilizes both transactional and transformational approaches to controlling for and understanding threats to validity. Procedurally, I used using member checking and peer-debriefing. Member checking is defined as sharing the data, in this study the interview transcripts, with subjects (Marshall & Rossman, 2011). This allows the participant to verify and validate the accuracy of the data. Peer debriefing is a process in which the researcher engages in discussion with a knowledgeable peer about initial findings in the research. This process facilitates a dialogue in which the researcher can
validate that these findings are grounded in the data, as opposed to any presuppositions or impressions. Therefore, I selected a faculty member and history scholar with an understanding of the undergraduate research process, as well as a deep understanding of this proposal. In addition to these transactional approaches to validation, I also used the transformational approach of crystallization. Crystallization is similar to triangulation in that the researcher looks for confirmation of the data through various sources, such as interviews, document analysis, and observations. However, in contrast to triangulation, crystallization allows for more than three points of data, if needed, and provides space for reflection and introspection. Marshall and Rossman (2011) state, “the triangle is critiqued as a rigid structure with only fixed three points” (p. 43), whereas crystallization provides flexibility and requires a greater level of self-critique and self-reflexivity. I chose to add this particular approach as a means to mitigate researcher bias and reactivity, both of which are threats to validity in qualitative research (Maxwell, 2012).

Limitations

As with all research, there are limitations to this study. There was one primary area that could have limited this the study. This was the potential to encounter difficulty in identifying faculty to participate. As noted in Chapter Two, there are few faculty who actively engage in URE in the humanities, furthermore there is no one organization or structure that capture these faculty. To address this issue, I communicated with both Provosts and the CUR institutional representatives of the target institutions. These selected institutions are also data-rich in that they have strong traditions of pedagogies and approaches that support undergraduate education. As a result, I was able to identify more than enough participants for the study.
Summary

The selection of the methodological framework for this study was both pragmatic and philosophical. By selecting a qualitative approach in the phenomenological tradition, my goal was to describe and distil the experience of humanities faculty researchers who mentor and support UREs. I also intentionally selected a primary and secondary method of analysis. The first method, a detailed reading approach, is common for the type of phenomenological study I conducted. The second approach, metaphorical analysis, allowed me to cluster meaning around metaphors. These metaphors were also considered when describing the results of the study, which provide a more clear description of the phenomena. Philosophically, these methods honor and reflect the inductive approach in which humanities faculty conduct their own research, allowing for flexibility and the themes to emerge from the research.
CHAPTER IV
PARTICIPANT NARRATIVES

As noted in Chapter Three, in a qualitative study of phenomena, capturing the essence of the lived experience from study participants lies at the core of the research process. Because the voices of humanities faculty are often marginalized or missing altogether from conversations about the state of research and scholarship in the academy, I wanted to centralize these voices within this study. In the present chapter, seven participants’ experiences are represented. I captured their experiences by immersing myself in the interviews. This process included transcribing the interviews, checking the interviews for accuracy, and then listening and taking copious notes. I used thick descriptions and direct quotes whenever possible as I crafted the narratives. Knowledgeable peers reviewed each of the transcripts and narratives to verify that key elements were not missed. In addition, each participant reviewed their own narrative for accuracy and to ensure their anonymity.

It is important to note that despite the similarities in the narratives and common experiences, these participants speak to and from their own experience. They do not speak for other humanities faculty or other faculty from GLCA institutions. Their voices, in aggregate, provide a foundation for understanding the experience of many humanities faculty and provide a clearer understanding of the lived experience of a humanities faculty member engaged in undergraduate research.
Study Participants

Of the faculty who responded to the initial call for participants, seven individuals were selected for in-depth interviews. The participants included both men and women. They identified differently in terms of race, number of years in the academy, and how long they had been supervising undergraduate research students. Their specific demographics are detailed in Table 6. That data was drawn from the Biographical Information Survey noted in Chapter Three. This was the only information I accessed prior to the scheduled interview. In selecting this group, my goal was to represent the diversity within the humanities disciplines, as well as various positions in the tenure and promotion process.

The participant interviews that were used to craft the seven narratives that follow were especially rich sources of information. I introduce each participant with his or her biographical details. Then I briefly describe each participant’s research and their research process. The remainder of the narrative reflects four key theme: the path to becoming a humanities scholar, making meaning of being a scholar in the humanities, research with undergraduates, and the structure of UREs. Crafting the narratives in this way provides the reader with a greater ability to hear the voices of Elena, Jennifer, Robert, John, Anna, Elise, and Jonah.
Table 6

*Participant Demographics*

<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Sex</th>
<th>Race/Ethnicity</th>
<th>Rank</th>
<th>Discipline</th>
<th>Years in the Academy</th>
<th>Years Supervising UREs</th>
</tr>
</thead>
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<tr>
<td>Elena</td>
<td>Female</td>
<td>Hispanic</td>
<td>Professor (tenured)</td>
<td>Latin American Studies</td>
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<td>4</td>
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<tr>
<td>Jennifer</td>
<td>Female</td>
<td>White</td>
<td>Assistant Professor (non-tenured)</td>
<td>Communication/ Rhetoric</td>
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<td>4</td>
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<td>Robert</td>
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<td>White</td>
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<td>Philosophy</td>
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<tr>
<td>John</td>
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<td>Professor (tenured)</td>
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<td>13</td>
</tr>
<tr>
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<tr>
<td>Elise</td>
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<td>14</td>
</tr>
<tr>
<td>Jonah</td>
<td>Male</td>
<td>White</td>
<td>Professor (tenured)</td>
<td>Religious Studies</td>
<td>25</td>
<td>15</td>
</tr>
</tbody>
</table>

**Participant 1: Elena**

Elena is a full professor teaching in Latin American Studies, Theater Studies, and Gender Studies. Her work focuses on cultural production, literature, film, theater, and social art movements. She has been supervising undergraduate research for four years. Generally the environment in which the research takes place is both in and outside of the classroom, individually or in small groups. Elena began her formal education and
university in Latin America before immigrating to the United States and attending graduate school.

Elena describes the research process as being intuitive. She most commonly writes articles and book chapters. Elena is driven by her curiosity and interest in intellectual questions. She first begins by reading extensively on the topic. Books and items she reads include the historical, literature, cultural or artistic views of the topic. This reading serves as the data from which Elena crafts her outline or book chapter. As she put it, “I just build a little skeleton or a structure where I'm going to which I'm going to start adding information little by little. I believe that I work like doing a tapestry. I start creating the outlay and then all painting. Then I start building up on to it.” When creating this tapestry, Elena inventories what material she has available. If additional information is needed on a particular topic, she will return to reading and researching. As she crafts her writing, Elena also threads in theory and contemporary voices, if appropriate in order to more fully contextualize her historical subjects, and the significance of their lives and work, in time and place.

**Elena: Path to Becoming a Humanities Scholar**

Elena did not initially intend to become a faculty member in the humanities. She grew up in Latin America and upon graduating from university, she began to work as a translator in the interpreter field, following her love of languages. She came to the United States after finishing her undergraduate education and working for a few years. While here, she looked for work in a similar field. She calls her entry into a Ph.D. program in Arts and Letters as being a pragmatic choice because she believed that being a faculty member would sustain and nurture her love of the humanities as well as provide
benefits, like subsidized college education, to her family. Elena was unsure what academia would be like. She described her attitude in her new career as, "Well, I'm not sure where this is going to lead me. I'll just go follow it and I'll do it."

Elena describes a scholar as being someone who is mostly driven by love for learning and knowing more. She attributes her own path to becoming a scholar to her life-long love of reading and her insatiable curiosity. She sees more similarities between humanities and STEM scholars rather than contrasts.

I would imagine that the principle is the same. You have a topic of research. You have your thesis. You have to build an argument to prove your thesis. You have to construct it, proving, learning, and gathering data to prove your point of view or to challenge somebody else's point of view. You either use letters or numbers, formulas or data; I would say that they [STEM] use more quantitative data than I do, just more content data.

Elena credits her love of field research for shaping her scholarly approach. When she is able to interact with artifacts, she finds herself transfixed and curious to learn more about her subject. She also credits her strong visual memory. By researching what she loves, Elena avoids burnout and intellectual exhaustion.

**Elena: Making Meaning of Being a Scholar in the Humanities**

When describing what it means to be a scholar, Elena spoke to her love of learning and her intellectual curiosity. She disengages from the world, avoiding things like newspapers and social media and spends her time studying and reading. Elena also loves academic theory and thinking through new applications and insights.
Much of Elena’s understanding of who she is as a scholar is connected to her Latin American identity. She views her cultural framework as markedly different from U.S. culture. Elena describes Latin American culture as one where intellectual sparring is valued and a common part of everyday interactions. “You can see people for an hour arguing that this shirt is white and the other one would say, "No, this shirt is gray." One is going to try to convince the other with all different arguments and the other one is going to try to do the same.” Learning the art of argument extends beyond the cafes and is embodied in the language. Elena states, “We have the subjunctive tense which is very interesting… because you can construct a whole argument in a hypothetical situation, in a whole set of verbs that are not existent in English. It's a whole mood, the subjunctive mood of hypothetical. The what if's.” This openness to rhetorical and critical inquiry built a skills set for Elena that naturally positioned her to engage as a humanities scholar, as well as impact how she views her scholarly values and skills.

Elena finds that it is critical for researchers to know their scholarly skills and aptitudes. She defines these as research, organization, application of theory, and writing. She describes research as one’s ability to find things, or basic research skills. Whether one is using the library, Internet, or another tool, scholars need to be able to find the resources they need for their work. Elena also speaks to the need for scholars to organize the vast amounts of data that they collect. Like research, one may use a notes system, or something like Google docs, but the goals is to organize the data in such a way that the scholar can efficiently and effectively use it. Elena also mentions the need for scholars to understand and apply theory appropriately. She states that many scholars do not know how to use theory well. “I see it all the time because I am a peer reviewer for three
different journals and I see that [this through the] majority of those articles that I get to review, “Elena explains. “They throw some idea or some name but they don't really carry it through. There's a lack of knowledge on how to really build an argument through theory in a solid way.” Elena emphasizes the importance of writing and editing. She finds the writing process as generative and the editing process as recursive.

Elena observes that her students struggle with developing these scholarly skills. She describes the importance and the process, but also acknowledges that her students need to develop a “higher level of intellectual saaviness.” Although she offers instruction and direction on how to build an argument and structure an essay, her students find it challenging to learn the skills and often do not have the patience to develop them over time. Elena compared this process to learning to play the piano. One needs to practice diligently over time to learn the skill and sophistication of how to play. More than pounding on the keyboard, truly playing the piano requires paying attention to which finger goes where. It is impossible to succeed without passion and persistence.

If you're not driven and you don’t have that commitment to learning how it's done, then you're not going to do it. I think that there will be a very few people that are born and that just from one day to the next they can just come out and write an essay that will be perfect. I think it just required time and practice, pretty much as with anything. It's a skill but you develop although ... some [some students may be] are gifted but the majority of people are not.

Elena initially identified intellectual curiosity, a sense of criticism, and a commitment to, and passion for, learning as core scholarly values. These values are echoed in the experiences she describes as a scholar and faculty member. She
incorporates these values into her mentoring and training of young scholars. “[B]y showing enthusiasm for learning. By guiding them through the process of learning. By trying to help them be successful. Of course, by trying to give them the tools that they need to be successful and encourage them when they are not successful. Encourage them to continue and to try,” she explains. As she reflected more deeply on these processes, Elena refines these values to include additional skill sets of paying attention to detail, thinking in the abstract, and the ability to make connections.

Together, Elena views these activities as being core intellectual skills that allow for critical thinking and dynamic scholarship in the humanities. The ability to take in large amount of data through reading and studying, examine detail and nuance, and then construct new meaning or a novel argument are all central to how she defines scholarly practice.

**Elena: Research with Undergraduates**

Elena primarily works with undergraduate students doing research in her content and research courses. In these classes, the focus is on the learning process. Assignments focus on teaching students the basic steps of research and the topics are student initiated. During the summers, Elena works with more advanced students on larger research questions. These students are hand picked for their already developed skills in research and writing and their passion for learning. The students are mentored to help deepen their skills in the research process: gathering of data, data organization, and dissemination. “Usually they have to produce something when they have done research for me, or if they're going to be helping me create something like a digital archive. I want to see them
hands-on in not just doing the intellectual [work], the data gathering. I want to see process,” she explains.

Elena also indicated that she tries to nurture a passion for learning by discussing the learning process with the students in weekly meetings. As students learn more about a particular topic they are learning, they dig more deeply. This allows Elena to contribute her own insights allowing for discussions to become an exchange of ideas.

This process is reflected in how Elena balances her identity as a scholar and a mentor. She values collaborative scholarship and loves to share that with her students. She finds that collaborative work deepens students’ intellectual engagement. As she puts it, “Because to me that is perhaps the only way that I saw that I can reach them outside of the classroom and to get them to become researchers and scholars and maybe grad school candidates.”

**Elena: Structure of URE**

Elena structures her UREs by first determining the research area and giving the students specific tasks to engage more deeply with the content. In the data collection process, Elena guides students on how to organize the data and begin interpreting their findings.

I get them to have a general panorama, general overview, and then we get together we start talking about, ‘What is it that it's the most relevant? What is the important?’ I use them as readers too. ‘Okay. What is important to you might not be important to me. Why does this information need to be there?’

This preparation helps determine what should be included for dissemination opportunities via digital archives or other means. “That's when we start creating arguments in favor or
against of including this or that information,” Elena says. “We start tidying up and getting to the core of what is really important. Because, as I said pretty much at the beginning. Sometimes they get too much information; they don't even know what to do with it.”

Elena takes the approach of a project manager and helps the students in the research process, challenging and directing them as they learn the process. She encourages them to develop their own argument and voice, so they begin to believe that they have something to contribute to the project and the discipline.

Elena believes that future humanities scholars need to exhibit behaviors such as demonstrating commitment, being focused, and paying attention to detail. The combination of these behaviors provides students with the skills, values, and a voice in order to be successful. Elena says that students often do not see their own abilities.

I think [that] a lot of students don't believe that they can produce anything of value because they are not taught to see themselves as intellectuals mainly because there is the idea that if you're an intellectual, you're a nerd, you're not cool. I hate that. That goes against [the way] it should be.

Elena views her role as encouraging students to embrace their intellect and nurture it.

**Participant 2: Jennifer**

Jennifer is a female assistant professor. She is a communication scholar trained in methods of rhetorical analysis. She has been at her college for less than five years in a tenure track position. Jennifer supervises undergraduate students on research, students both during the academic year, and during their summer internship. Her scholarship uses humanistic, critical interpretive methods to analyze public discourse in the United States.
Currently, a subfield of her work examines public discourse controversies and deliberation.

Jennifer describes her approach to inquiry as driven by research questions or by texts and artifacts. In describing a process with a research-driven question, Jennifer frames the approach as being guided by a particular question about public discourse that she is seeking to answer. In contrast, she describes a text driven approach as being more organic in nature. “Sometimes there's an interesting artifact that I encounter that prompts me to consider doing research … and then I'll start to investigate what are specific research questions,” she explains. Regardless of whether the impetus for the research was question-driven or text-driven, the process remains the same. “Then at that point, I select particular methods to help to analyze and understand particular aspects of public discourse, how meaning is created, how arguments are used or not used as the case may be, what values might be present in the discourse,” she says.

Jennifer identified one of her current research collaborations as exemplifying her process and also being a point of scholarly pride. This particular project is community driven and an interdisciplinary collaboration. Jennifer and her collaborators are using a variety of methods, both humanistic and social scientific, to analyze a public deliberation. Their analysis spans the process from generating ideas, through the convening of the public deliberation event, to how people communicate about that particular issue under discussion. In describing the project, Jennifer states:

I think I'm particularly proud of it because the project addresses a significant issue. It emerged from the community in a real partnership between several groups, and I think it shows the potential that humanistic methods have to help us
understand the world in which we live. I think … as humanists, we're able to give a narrative that is compelling in a different way from numeric data.

Jennifer views this an example of how the humanities contributes to the conversation on public controversy and understanding how we talk about public problems in general.

**Jennifer: Path to Becoming a Humanities Scholar**

In reflecting on her path to becoming a humanities faculty member and researcher, Jennifer identifies herself as being a humanist who works collaboratively with interdisciplinary teams. But her core identity is as public humanities academic. Her path to the humanities was shaped by doing her work in public and by intentionally combining aspects of public work with more traditional studies and analysis.

This approach to combining teaching and research developed from her undergraduate experiences. Jennifer was able to participate in many experiences that would be defined as “High Impact Practices”. She pursued internships that allowed her to experience the world outside academia as well. “I was very fortunate to have several different internships in industries like politics, working on campaigns, working for the government, working more on the PR or marketing side for a non-profit, a lot of different really interesting internships,” she reflects. In addition to her internship experiences, Jennifer also engaged in an URE that examined historic aspects of political communication and how those continue to influence public discourse and politics in contemporary society. Jennifer states:

For me, doing that project, I recognize that the tools I was being taught as an undergraduate could contribute to our contemporary understandings of particular rhetorical artifacts and phenomenon like presidential debates, candidate speeches,
and political campaigns. In graduate school, that continued. I have a real passion for teaching and for also I think then bringing students into real world research.

While in graduate school, Jennifer had the traditional academic training that one would find in rigorous graduate study, but she also affiliated with civic education organizations. The intersection of the practitioner and scholar had an enormous impact on Jennifer. As she recalls. “[The] hybrid component of my professional life where on one hand I was studying political communication, and then I was thinking about what does that mean for 21st century high school students? Why does this matter to them?”

While completing her dissertation, Jennifer spent one year working at an organization that studied aspects of democracy. While in that role, Jennifer came into contact with other scholars that were pursuing innovative research in their fields, while also engaging with the public in a meaningful way. It was the intersection of her formal academic experience with the real-life application that honed Jennifer’s identity as a public humanities academic. “My path to the humanities is very much through doing work in public and combining aspects of public work with more traditional studies and analysis that creates knowledge,” she says.

In reflecting on her path to scholarly work, Jennifer stated that she learned not only to be a public humanist, but also to be a public scholar. For her, some of her drive to do research comes from sharing results with the public, as well as a scholarly audience. She looked for guidance and models of what a public scholar would look like in the field of rhetorical studies. Jennifer recognized her doctoral advisor as being very influential in her rethinking of scholarship and scholarly production.
Jennifer: Making Meaning of Being a Scholar in the Humanities

Jennifer defines a scholar as, “someone who is focused on asking questions and answering them to promote greater understanding.” She hopes that this definition includes scholars from all disciplines, though understands that she speaks from her own scholarly perspective. Jennifer notes that faculty answer questions by drawing on the humanistic tradition. She states that, “part of being a humanities scholar can be using methods that are theoretical, that are critically interpretive, in order to answer questions that we have about the human existence. That's the human in the humanities.”

Again, Jennifer’s identity, not simply as a communication scholar, but a public humanities scholar, is central to where she finds the most meaning in her work. She emphasizes this distinction because it provides clarity, direction, and conviction. As a public humanities scholar, she says that her work is…

really based in public life because it analyzes the very ways that we communicate and make meaning to one another… so bringing humanistic methods to that situation … allow[s] us to see a different perspective of what otherwise might be more of a quantitative statistical representation.

Jennifer underscores the importance of this type of work by referencing contemporary debates about public issues. She notes that sometimes it is not the side with the best evidence that is most likely to sway public opinion, but rather the side with the most compelling narrative. Trying to understand this public response from a purely scientific or rational perspective, then, may result in misunderstanding or the analysis falling short.

What a humanities scholar can do is start to look for where the underlying values are in this conversation, [noting] where's the evidence coming from to break down
the parts of an argument, for example, and to start to assess how the meaning is being created [and] if it's not created through a clear hypothesis, research, evidence, conclusion, [then] how is it being created, and to start to pull that apart. So the analysis of public discourse gives us more information about how people are reasoning their way through public decision-making.

Jennifer views her role as a faculty member and researcher as a way to serve the larger public. Coming from a family of civil servants, she notes that she is motivated by the intrinsic reward of creating shared knowledge and understanding. She shares this perspective as she works with students. “I feel like I want to push myself to be a scholar who is trying to serve [the public good],” she explains. “I'm not doing a great job if I push all those questions [about public discourse] to the side. I can't take them all alone, but I view that I need to be doing my part to start to answer some of those questions for the public good.”

In regard to her scholarly values, Jennifer emphasized seeking knowledge, collaboration, persistence, and innovation. Jennifer explains that she values the quest for knowledge and understanding. She strives to seek knowledge that helps us understand challenging aspects of communication, locally, nationally, and globally. For her, this means not being content with the status quo, or what is generally accepted as “common knowledge,” and digging deeper into why and how something might be true or have come to be. Collaboration, she believes, is often an important part of her work because scholarship that speaks to multiple audiences, public and academic, is not created in a vacuum. Scholarship is not created or completed alone. There is a scholarly audience and a scholarly community that determines where you begin your work and how your
work impacts where someone else takes theirs. Being aware of, and engaging with that audience is critical to how she defines herself as a scholar. Jennifer also notes that collaboration extends into co-production, especially with students.

I am motivated to do my work because I'm sharing it with the undergraduate students I teach. That's more of a “me” thing, but I think it's made me a much more productive scholar in some ways because I want to provide those opportunities for inquiry and innovation for the students that I serve.

Persistence and resilience are also critically important. Being a scholar in the public humanities is not easy. Jennifer engages multiple audiences, a variety of content, and multiple disciplines. Like any discipline, a scholar takes a risk in not knowing if someone has read her book or monograph. Not knowing if your work has been read can be disheartening and frustrating. However, as Jennifer noted, that type of scholarly production has less intimacy than “standing up at the front of the room in a local community center.” In that situation, a public humanities scholar immediately knows who is engaged with her or his work. “When doing public work, you want it to impact the community,” Jennifer explained, “and so when it does not influence in a significant manner, that’s challenging. You have to go back through your research and assess how you could have done better.” Resilience is a requisite value. To Jennifer, innovation is the product of the desire to seek knowledge, collaboration, and persistence. The willingness to take intellectual risks is the result of each of these values, and also facilitates an environment where she can be authentic and honest with her inquiry and research, thus modeling for her undergraduate students.
In support of these values, Jennifer noted a number of scholarly skills that extend from these priorities. These skills followed the process of scholarship in the humanities. First, she noted the need for scholars to have historical research skills. This begins with knowing how to situate research in the current scholarship through reading, researching, and cataloguing relevant literature. Scholars also need to have well-developed methodological skills to conduct rigorous historical research. Examples include working on the archives, cataloguing, and creating massive databases. Moving through the data collection requires skills in synthesis and analysis. As Jennifer explained, “Being able to take long, complicated vernacular, multi-voice artifacts and analyze them has drawn on all of the skills and more that I learned in graduate school.” Finally, faculty who engage in collaborative research cannot be successful without knowing how to facilitate project management. Without the ability to manage a large project in pieces, as well as in aggregate, collaborative work is cumbersome and time-consuming or else it is never seen to completion.

**Jennifer: Research with Undergraduates**

Jennifer works with undergraduate students in both a class setting and an independent research setting. In the class setting, this research most often is collaborative, undertaken in small groups. Students learn about some aspect of theory or communication principles, and then take that knowledge and operationalize it through real-life examples on and off campus.

Outside of the curriculum, Jennifer also supervises summer student research interns. She directs her student researchers to dive deeply into the literature reading and discovering the larger body of scholarship. Together, they formulate the research
questions associated with the project. Jennifer does note that she guides this process, especially as methods of investigation and analysis. At the point of analysis, Jennifer works collaboratively with students. She specifically noted that students, when operating in a research team, rely on one another.

We talk about how it's going and what are we seeing and where's the big interpretations, and I work then with students to create outlines of particular arguments that we're going to make about the text and judgments that we're going to draw, and then again, divide up the writing and have different people write different parts in order to create a final essay.

Much of the research Jennifer conducts with students during the summer is derived from her own work and investigations. However, she sees students as having ownership of the project and describes the approach as a collaborative project situated within faculty-driven research. “My goal for undergraduate research is that it's collaborative. I think that role develops over the course of the project and the capacities of that student,” she explains.

I think there's the potential in a research experience with me to become a full collaborator. I think that early in the project, there's a lot of guidance that I have to give them. The hope is as we get in to later stage of the project, they are more in that collaborative role recognizing that there's a limitation in terms of exposure to particular scholarly fields and knowledge. This is not the only way to pursue undergraduate research, of course, but that’s my personal framing.

Jennifer describes her mentoring approach as “advocacy based” in the sense that shows and teaches others that humanistic inquiry matters. She does this through
engaging students in authentic inquiry by talking through the process of research. Jennifer also strives to “empower students and give them agency to define their own learning goals and outcomes for the project.” This level of dialogue sets a stage where the student can learn the importance of inquiry through a humanist lens. For Jennifer, she finds that sharing her scholarship and scholarly process with undergraduate students helps her to become a better scholar. The immediacy of working with undergraduate students facilitates greater accountability for her work and creates opportunity to reflect on her scholarship.

**Jennifer: Structure of URE**

In structuring URE, Jennifer structures the students’ work in a way that honors the learning outcomes and skills that each student defined, as well as teaching the method of the discipline. Jennifer noted that she has modeled much of her structure off of a science lab, because when she attended scholarship of teaching and learning conferences on URE, most of the examples of best practices were science-based. She structures her students’ work in physical proximity of one another. Jennifer notes, “You're accessible to the other people that are working on this project is important. I think that it encourages sharing of knowledge, of process, of struggle and that is a learning experience for the undergraduate students.” Jennifer also allows space for her students to fail, or “fail forward,” feeling empowered to do better work after coming out of the failure. The scholarly community she builds allows for her to be present in moments of struggle, helping her students to reflect on their learning, while keeping their eye on the project itself. This level of mentoring is quite labor intensive and not present in curricular UREs, but in the summer intensive research internships. For that reason, Jennifer focuses on
doing this scholarly type of research in the summer with students to allow her more time to mentor and support the student learning.

**Participant 3: Robert**

Robert is a male assistant professor. He has been at his institution for less than five years in a tenure track position. Robert supervises undergraduate research students during the academic year, and works one-on-one with students during the summer.

Robert is a philosopher. As a researcher, he works primarily in the fields of metaphysics and philosophy of science. His subfield is typically referred to as “analytic philosophy”. This field is similar methodologically to the disciplines of math and science in that it utilizes logical formalism and “models the precision of the sciences in trying to deal with these perennial philosophical questions about time, existence, possibility, objects, identity and the laws of nature,” Robert explains. Robert indicated that his work is focused on modality. He describes modality as the inquiry into the nature of possibility and necessity.

Some of Robert’s work explores counterfactual conditional. As an example, Robert uses the modal claim of, *If Hitler hadn’t taken power, the U.S. wouldn’t have invented the A-Bomb.* “This is a modal claim, in so far as it says, if Hitler hadn't taken power than it wouldn't have been the case that we invented the A-bomb, and this sort of difficult questions,” he says.

How do you assess whether the claim is true or false? One of the things you have to do is evaluate and consider alternative possibilities and what would be the case if those alternative possibilities were obtained. There is a rich and interesting
semantic and logical structure to those sorts of claims that we as language users haphazardly stumble through without realizing it's really complex and interesting.

The research process for Robert is solitary in nature. Much of his work centers upon responding to issues that are present in the philosophical community, or responding to a question that may have been sparked by reading a paper published by a colleague or research group. Robert begins with a comprehensive literature survey. The literature review leads to writing a longer survey paper, which is edited and honed, into an individual paper that is then submitted to conferences and journals. Robert emphasizes that his approach to research is fairly standard within the humanities disciplines in both process and the individual nature of the work. He also indicates that the primary product of scholarly production is a research paper that is generally between eight and 30 pages in length.

Robert: Path to Becoming a Humanities Scholar

Robert describes his path to becoming a humanities scholar as beginning his freshman year of college in an undergraduate philosophy course. He found this course to be simultaneously challenging and enjoyable. Robert notes that he found his mind would teeter on the precipice of something new and potentially profound. Philosophy seemed to provide the quickest route to this type of cognitive pleasure. Ultimately, Robert described this experience as the “phenomenology of having your mind blown.” From there, he took more and more philosophy courses finding that he liked analytic philosophy because “it has a kind of reverence for rigor and deductive methods that maybe make it a little bit different from other parts of the humanities.”
Robert doesn’t see himself as a humanist, but as a philosopher. He notes that philosophy predates many disciplines and has points of contact with humanities, social sciences, science, and math. He sees these points of contact as being foundational and not easily disentangled from the other disciplines. He further notes that, “It was only very recently that I really started to think about myself and philosophy as situated in the humanities, rather than it’s this kind of nebulous thing floating a little bit distant from all the other things.” This shift is directly related to his experiences as a faculty member at a small private university where he has observed that certain approaches to the humanities are conducive to a strong humanities faculty and discipline.

Robert learned to be a philosopher by spending time as an undergraduate student in the philosophy library and philosophy lounge. When in this space, he was able to observe and participate in discussions about complex philosophical issues in a focused way. These “early exchanges with other people who were… committed to having concerted and thoughtful conversations about tough questions, I think that’s when I really got excited about doing this forever,” he says.

Robert explains that there is an inherent contradiction and tension in his work, because it is solitary in nature, but also relies upon community for idea generation and momentum. He describes the need for an “ambient level of philosophical discourse.” That ambient level is essentially people thinking, speaking clearly and carefully about large complex issues. Robert labels this as “a type of commitment to a reasoned argument.” He believes that the ambiance this commitment creates leads to questions being generated for the philosopher; but individual work is so highly specialized, that no
potential collaborators are available. So although the question and curiosity was created in community, the work itself is not.

Robert notes that academic training in philosophy essentially teaches a student a repertoire of questions for philosophical debate, a “tool box of arguments and standards of evaluation.” These include: asking for key points of clarification or understanding; deploying an argument back on itself or considering a theory that accommodates a particular phenomena, and extending it beyond, into another area; or, comparing questions through different theories. Together, these skills and approaches can be used across aspects or domains of philosophy.

Robert: Making Meaning of Being a Scholar in the Humanities

Robert generally defines a scholar as someone who pursues novel understanding or knowledge through a focused and concerted effort. In his interview, he made a clear distinction between scholarship and teaching by noting that one informs the other in both content and approach. Robert also explains that scholarship does not necessarily guarantee publication, but rather “since we learn so much in trying to write and publish stuff that publication is a natural outgrowth of successful scholarship.” In reflecting on his work and identity, Robert defines scholarship, not as a thing in and of itself, but rather as a reflection of his work. “Thinking about myself as a scholar, I guess I think about myself as someone moving from intellectual project to intellectual project in a concerted, thoughtful and committed fashion,” he says.

Robert sees his work as a philosopher as being situated between STEM and the humanities. One of his primary philosophical commitments is to philosophical naturalism, which is the idea that science is a model for natural inquiry. He states:
Philosophy is super tenuous science or the part of philosophy that I'm working in is super tenuous science, in so far as it's trying to use some plausible constraints about reason and rationality, and trying to figure out some really difficult questions that we might not get empirical support for one way or another.

In many ways, he continues, philosophy is uniquely positioned to “tie together a bunch of strands of inquiry.”

Robert’s experience in graduate school shaped who he is as a scholar. As a master’s student, Robert felt very isolated due to the location of his institution. Despite the isolation, he says, “It was a sort of an experience where I realized that, I can be reasonably content doing this [being a scholar], even though other parts of my life are probably unsatisfactory. That was really influential as I think a lot of people's early graduate career is, as well.” In his doctoral work, Robert noted that he had a good working relationship with his dissertation advisor. In his third year, he was invited to a small conference for graduate students where he was able to “hang out” with five or six senior faculty. This experience connected Robert to the philosophical community, but more importantly to a community of scholars with similar interests and a similar path. He noted:

"I mean it served as kind of a nice benchmark to just speak with and interact with peers working in a comparable research area, and just get calibrated with an appropriate level of seriousness and get a sense of what else is going on in the discipline. I think it was useful to develop a sense of a peer group that was going to slowly move up through the remainder of graduate school and onto the job market."
When asked about scholarly values, Robert stated that he holds both rigor and humility as two values that anchor his work. He defines rigor as recognizing the difficulty of philosophy and the pursuit of answering, or better understanding, some of life’s most challenging questions. He also notes that the rigor of philosophy needs to be counterbalanced with humility. Ideally, one pursues philosophy in a “suitably modest way” in which the question itself is enjoyed for giving the philosopher a “distinctive cognitive pleasure,” as opposed to leading with ego. These values were shaped by Robert’s undergraduate curriculum and his study of philosophical history. Specifically, he noted that the value of humility grows out of the knowledge that philosophers who lived thousands of years ago could say what might now seem to be bizarre or implausible things, but if “you walk through the reasoning and the sort of paucity of information at the time and you're like. ‘Okay. Yes, I'm on board.’” The logic and reasoned argument is sound despite the simple absurdity of the idea.

These values frame the scholarly skills that Robert notes are critical for philosophy scholars. He states that scholars have a toolbox, or more appropriately, a family of cognitive skills, which include reason and argument. These skills can be expected of undergraduate students, but they need to be “ratcheted up a few levels” for the work of philosophy. Skills such as the ability to evaluate theories or compare two theories are critical. Robert describes these as “philosophical go-to’s” and including the scope of a theory’s application, the plausibility of the explanation it delivers, and the merits of its competing explanations. These skills are developed in the scholarly process, beginning with the solitary work of writing a philosophy paper, engaging in dialogue in the classroom, and then taking that dialogue into a common space that extends outside
the classroom and is pursued as a result of curiosity and intellectual pleasure. Robert notes the importance of “just being part of a community of people [that] are interested in questions and willing to try and pursue them in an earnest and thoughtful and patient fashion.” As a mentor to undergraduate students, Robert tries to model these virtues and skills for his students through facilitated and spontaneous discussion, as well as formal assignments.

**Robert: Research with Undergraduates**

Robert works with undergraduate students on culminating senior projects, in which the student spends a year preparing for on campus dissemination. “Students are asked to write basically a 12- to 15-page paper and develop it over the year beginning with a proposal, draft, proposal defense, an initial draft, a bunch of revisions to that draft, and culminating in a presentation in a conference-style setting at the end of the year,” he explains. In this process, Robert tries to model the scholarly process by meeting with students every, or every other, week to discuss how to formulate a good scholarly question, develop the project, and anticipate “prospective counter objections.” One of the goals of this process is to encourage students to choose a question to which they are not wedded and about which their peers are not passionate. This allows the student to set emotion aside and “deploy and develop their skills.” These particular questions may be on “the periphery of their own personal values, but still closely connected enough that they are still interested in it,” Robert explains.

Due to the level of specialization required for the type of work Robert does, he does not situate his mentorship of undergraduate students within his own work. He notes that this is not due to the intellectual capabilities of his students, or their desire to do
scholarly research, rather in order for Robert to align his work with his mentorship of undergraduate students, “it would have to be a radically different curriculum.” The current curriculum at his institution does not include his research areas. As a result, his work and his student’s work are independent in nature.

The mentorship of undergraduate students is both formal and informal. In addition to the formal interaction through meetings and project discussion, an informal mentoring appears in departmental socials and through dialogue in the “philosophy lounge”. This lounge is a common space and place in which faculty and students can discuss relevant philosophical questions and students can learn to deploy their cognitive skills. It is also important to note that this lounge is an anchor for the ambient philosophical dialogue to which Robert often refers.

As an early career scholar, Robert does not feel that he balances the role of scholar and mentor well. At this point in his career, he often will choose his scholarly work over mentoring, if working with a student would provide low or no reward. He notes, “There is a sort of threshold of adequacy that one needs to meet with respect to mentoring, and I believe I meet it handily. But, if you ask me what I am working on when I have a spare hour for work, it is almost certainly the scholarship stuff.” Robert clarifies that he sees the roles of mentor and scholar as separate in nature. His work as scholar is one of personal achievement and personal reward. His role as mentor is one where he is supportive of his students and is invested in their success, but not necessarily one where he is training future philosophers. Robert states, “More than anything, I just want them [undergraduate students] to be decent and happy people who are satisfied with their education and are well-positioned to move on with their lives.”
Robert: Structure of URE

As mentioned in the past section, the primary forum in which Robert mentors undergraduate research students is the senior project, or culminating experience. Robert notes that this particular model has a structure in which students are in dialogue with other students about their projects. This interaction is facilitated by a series of student workshops that provide both skill development and content, but also provide an opportunity to bring students together in community to work with one another.

Robert notes there are two primary areas in which he works to challenge undergraduate students. First, he challenges students to develop a deep understanding of the “general conceptual terrain” through a literature review and deep study. Robert sees this work as a key component of rigor and necessary to the scholarly process. Second, he challenges students to think about the argument they have made, specifically to have them sit and think through the argument itself. “It’s not like wandering around in the lab, and it's not like just reading more secondary sources,” says Robert. “It's just actually thinking hard about something for a while. So that's the kind of rigor I'm looking for, that someone's really reasoned out, really burned some calories trying to think about these questions.”

Robert notes that students often struggle with that level of critical rigor, as well as taking their internal dialogue about a particular question and transferring it to paper. He has noticed that students are often racing to completion, and he believes it is the role of the professor to walk them back and encourage deeper thinking. Many students come to college intellectually immature and have habits of mind that focus more on the important,
yet inconsequential details, such as basic editing of a paper, rather than significant revision of an argument or assertion, he argues.

When posed with the question, of what behaviors are critical to future humanities scholars? Robert emphasizes the balance of rigor and humility, not simply for philosophy, but all disciplines in the humanities. Humanities scholars “need to get better at engaging in substantive disagreement, locating disagreement, and trying to reason past it, and being willing to own up to being wrong,” he says.

**Participant 4: John**

John is a male, tenured, full professor. He has been teaching at his institution for over 10 years. John has mentored undergraduate students in summer research projects and during the academic year, since arriving at his institution.

John’s research is grounded in the philosophy of religion. When John began his career, he was focused primarily on theological method, specifically a type of philosophical lens called the transcendental argument. In recent years, John’s primary focus has been a collaborative project with another humanities faculty colleague that examines 17th and 18th century Catholic mysticism. John begins his work by first determining which question he would like to explore. “Usually in my experience, the kinds of questions that have interested me have come organically out of things that I thought about or written about previously,” he explains. “I’ve often found myself circling back to some of those loose ends in an ongoing dialog with myself and the kinds of things that I want to explore.” After generating the question, John begins an extensive review of the literature, determining what books or articles may inform his question. He then reviews his detailed notes to see which themes emerge around his particular topic. If
he feels that he has something new to add, he frames his argument with an outline and utilizes that outline to craft a manuscript.

**John: Path to Becoming a Humanities Scholar**

John was a religious studies major as an undergraduate. In describing that experience, John notes that he enjoyed exploring life’s big questions in dialogue with faculty and fellow students. He did explore other disciplines and topics, but he was not nearly as interested in, or passionate about, the sciences or social sciences. John applied for graduate school and was fortunate to receive funding. Without the funding, John explains, he might have made another choice because although he enjoyed religious studies, he was not willing to incur significant debt to pursue a graduate degree. Essentially, the funding opened his path to the humanities. As he explained:

> I went to graduate school, and I continue to consistently enjoy it. I had aptitude for it. I did pretty well at it. As I moved through the program from a Master’s degree, this is a natural point where you take stock and evaluate before you apply for the PhD program. I decided that it was still fulfilling, still enjoyable at that stage, and I applied and continue to be funded. It’s been a fairly consistent process for me to keep trying and enjoying it.

John underscored that family members had a significant impact on his choice to study the humanities. John had an older brother and a cousin who were religious studies majors as undergraduates. “Even as a high school student they would come back and talk to me about the religious studies classes that they were taking in college,” he recalls.

> “The discipline of religious studies, the academic approach to religious questions was on
my radar screen even from the time I was in high school.” This awareness of the discipline facilitated his early interest in religious studies.

In his religious studies program as an undergraduate, John took a series of courses with two faculty members, both of whom were talented teachers and sowed his interest in the discipline. In addition to traditional academic courses, John was able to take a research course that was team taught by two faculty members. The course focused heavily on theory and medieval religious texts. It was also a dual-listed course, meaning both undergraduate and graduate students were enrolled. John notes, “That was a memorable transition for me, to see the way that graduate students approach this material with a focus on theoretical frameworks, rather than it being so focused on the content of the religious traditions themselves.” As part of this course, John wrote a single term paper that was more akin to a graduate student seminar paper than an undergraduate paper. In reflecting on the course and the writing process, John states, “That was a very important undergraduate experience that gave me the idea that I could pursue scholarship in a sustained and intense way that was fun and engaging.”

John learned to be a religious studies scholar through these cumulative educational experiences. His training and enculturation began with directed studies with his mentor in college. This training emphasized the scholarly process: determining the research question or area of inquiry, talking one-on-one with his mentor about the argument and the relevance of particular texts, and learning how to write in a scholarly way, including receiving feedback on drafts. John summarizes:

There was a process of modeling and dialog that was meant to help me think through the methodology of the scholarship that I was trying to do that taught me
how to do it. I learned how to do it by doing it, and by getting critical feedback from an expert practitioner.

In graduate school, John became more interested in the philosophy of religion. He noted that the methodology of studying religion from an analytic philosophical perspective differs greatly from the historical approach he used as an undergraduate. In learning this new approach, John drew heavily on the learning processes he learned as an undergraduate, even though research methods he was using as a graduate were different. Watching and modeling, with guidance from a faculty expert, were central to this experience.

There is no substitute for reading a lot of that work and then sort of slavish imitation of how other people are doing it, and then slowly finding your own voice, your own voice as opposed to over relying on imitation of other peoples’ approaches to those questions.

Through his observations and modeling of the faculty, John began to develop his own voice as a scholar.

**John: Making Meaning of Being a Scholar in the Humanities**

John defines a scholar as being someone who contributes new knowledge to a culture. As a scholar of religious studies, he defines this “new knowledge [as] either in the case of a philosophical work, clearly and effectively constructing argumentative justifications for conclusions that are relevant and interesting, hopefully for some question of religious importance.” John views his work as being different than the pursuits of scholars in the social and natural sciences. Research in the humanities, he explains, includes a hermeneutical moment, meaning that “humanity is reflecting on
human efforts at communicating meaning.” To do this type of work, a unique set of interpretive skills is needed to interpret human communication, as opposed to data gathered by scholars in other disciplines. “That can be summarized as the difference between the fact that human communication involves intentionality and aboutness, whereas the data that social scientists and natural scientists study is looking for law-like patterns that are, in some respects, independent of particular intentions to communicate meaning,” John explained. He notes that the data utilized in the humanities is not separable from the human life that expressed them, rather the meaning is intertwined and fundamental and as a result, “you need a different methodology to try to reconstruct and sympathetically, creatively imagine the mental life and intentions of the person who communicated the relevant texts or data.” It is this methodology and approach that gives meaning to the humanities scholar.

In reflecting on what has shaped him as a scholar, John notes a number of transformative experiences. First, being a student in humanities allowed John the opportunity to “experience of dialog and interaction with faculty members and students in classes that is practiced for the kind of dialog process that makes for good humanities scholarship.” Second, John recognizes his experience of reading deeply as being central to who he is as a humanist. This ability is required of all scholars in the humanities and highly influential in his work. Third, John notes that close mentoring relationships with faculty, as both an undergraduate and as a graduate student, were critical to his understanding and development as a young scholar. Through observation, practice, and dialogue, he was able to develop an understanding of what it meant to be a humanist. Fourth, John mentioned his recent experience of cross-disciplinary collaboration. This
collaboration taught him the benefit of employing a multidisciplinary approach for some research questions. Fifth, John highlighted the writing and dissemination process. “The exercise of writing and rewriting and submitting my work and getting critical feedback on it also [was] central to that process,” he explained.

As a scholar, John holds several values dear. The first is academic honesty. He states that in humanities “scholarly enterprise involves entering into a conversation about a topic that was already going on before you joined it.” To acknowledge and recognize other’s contributions to the conversation is critical. John also highlighted integrity. He defined integrity as following the scholarly arguments in a way that supports the best, not the most comfortable, argument. John clarifies:

There is maybe a temptation, for example, in philosophy of religion for people to suppress arguments that might take them in uncomfortable directions if it doesn’t cohere well with their faith commitments, or to shy away from conclusions that are unorthodox. It’s important to go with the best argument rather than to be committed to a conclusion rather than the true premises.

Finally, John mentions creativity, meaning originality in one’s scholarship. This supports John’s definition of scholarship, which he sees as producing something novel as opposed to a summation or regurgitation of existing work. He notes that because professional scholars are very privileged to be doing the type of work that they are doing, he believes it is critical that they steer away from topics that are solely esoteric and self indulgent. Instead, John believes they should have a sense of public responsibility and responsibility to the field. “A scholar should be aware of their audience and should seek
to investigate questions that will have an impact on a discussion of some relevance to other people, too,” he says.

These values were shaped by “an academic application of values that are important to me in other aspects of my life,” John continues. He also notes that these values were modeled in people he respects and trusts, as well as trial and error, and an attempt to be relevant as a scholar by not being as esoteric and pursuing scholarship that has relevance to others in the scholarly community. Instead, John believes scholars should have a sense of public responsibility and responsibility to the field. “A scholar should be aware of their audience and should seek to investigate questions that will have an impact on a discussion of some relevance to other people, too,” he says.

When shifting the discussion from values to skills, John notes, “The most important skills for me are charitable interpretation, careful reading, clarity of argument and clarity of expression.” In describing the skills of being a charitable interpreter of texts, John states that it is critical for a scholar to be able to understand someone else’s argument in a way that honors their intent and approach to a scholarly argument. This requires careful and deep reading. By “clarity of the philosophical argument,” John means the need to construct an argument that has true premises, which are logically sound. The final skills of clarity of expression relates to the ability to write in a “way that is not excessively technical, jargonistic or dull.” This, John explains, “is important to the piece about relevance, and about not being excessively esoteric.” Writing clearly makes one’s work more accessible to a wider audience and allows for the scholarship to extend beyond the scholar him or herself. John learned these skills in the process of doing scholarship and honed these skills through his academic training. “It’s almost entirely
been in a process of trial and error of doing it and getting careful feedback from people who are experts in it,” he says.

As a faculty mentor, John tries to model these values and skills for his undergraduate students. In all of his upper level courses, he includes a significant writing component that involves scholarly research. John intentionally scaffolds ways to support his students to do this type of work. “I do try to be pretty explicit about where students should go to look for resources, how to go about finding an appropriately narrow topic or question for a paper. I try to present to students a fairly clear set of expectations for their scholarship,” he says. This process is supported by a workshop format. This format allows for students to review and offer feedback to one another about the arguments and the papers. John concludes this activity with reviewing each student’s paper and providing substantive feedback. “That process of inculcating scholarly values and skills by modeling it, and then now being the expert giving them that feedback showing them how they might consider doing it differently next time or in the next draft. It’s definitely part of my teaching process,” he explains.

**John: Research with Undergraduates**

John works with undergraduate students conducting research in academic courses. However, he notes, because his department’s courses serve the university’s general education, many of their classes have non-majors. This shapes how he is able to teach. Many of the papers in his classes are shorter in length and are based on secondary sources. John has worked with summer intensive research programs, in which he has mentored undergraduate students. He also works with honors students on their theses. He approaches each of these projects as a directed study. Students meet “with me weekly to
share what they are working on to write as they go, and then also to get detailed feedback on drafts as they go along.”

In more than a decade of mentoring undergraduate students, John has only had two students whose topics have intersected with his own work. The first student was a double major in religious studies and psychology. “She was bringing together some of her interests in both of those to ask questions about the voluntariness of belief and the nature of religious doubt,” he explains. These interests intersected with John’s specialization in religious epistemology. The second student was working from readings that John had used in graduate school. For John’s other mentees, their scholarship was not connected to his scholarly expertise, but was born out of the students’ coursework and interests.

John describes his role as a mentor as one of a sounding board and a generalist. In these mentoring relationships he focused on the research methodology by keeping an eye on the big picture of argument effectiveness and methodological structure. “My role was usually to address questions of the logical coherence of their argument, the appropriateness of the kinds of evidence or arguments that they were deploying to try prove their point, the overall organization of their writing and the clarity of their thesis, and the extent to which their way of arguing for the thesis was effective, so the rhetoric of their argument,” he explains.

John does note that the way that he mentors undergraduate students is very different from that of his colleagues. “It really is directly into that person’s area of content expertise,” he says. “I’m not able to have students take a piece of my research or at least I haven’t found a way to do that yet.” He notes that it is not possible for students
create a product that is helpful for him. “It’s almost exclusively my taking time away from other things that I would be working on to work with them on their projects,” he says.

John balances his work as a scholar with his role as a mentor by framing his mentorship as teaching. He prioritizes his time, focusing on supporting student scholarship first and then fitting his scholarship around it. Most often, he works with students whose topics are familiar and the burden of mentoring students is minimal. However, mentoring becomes more challenging when the topic is a complete departure from his work. In these cases, he offers direction, but does not read alongside the student and learn with them. John prefers not to turn away those who are hoping to do independent research.

**John: Structure of URE**

In speaking to how he structures directed study, or more immersive student research, John describes a multi-stage process. The first stage is focused on helping the student to describe and hone their scholarly question in a way that allows for a manageable and fruitful scholarly project. “I’m just talking and getting them to move from the massively abstract big picture to something that’s doable as an original contribution to knowledge, an original scholarly project,” he explains. The second stage focuses on teaching students how to do research in religious studies. Each student begins with a different skill set in regards to doing research and they are not always aware of the major journals and databases in religious studies. John notices that it is hard for students to identify a topic that is narrow enough for them to deeply study the relevant literature,
find that relevant literature, and ultimately find an open question in the literature where there is genuine disagreement.

Then in the later stages of their work, once they are working with those sources and finding their voice in that conversation, it comes down to them submitting drafts, criticizing their arguments, pushing back against what they are saying and getting them to defend it, or revise it accordingly in an iterative process, not unlike what I experienced myself as an undergraduate.

In reflecting on the important behaviors that future humanities scholars should exhibit, John references skills noted earlier in this narrative, especially careful and critical reading, the effective writing and dissemination, and using sources in meaningful ways. These behaviors and skills are framed by the “need to be capable of introducing their [the students] own scholarly voice into a discussion. That doesn’t happen until they have grappled with the majority of what other people have said on their topic,” he says. “That’s what makes undergraduate research very, very difficult in a way in the humanities.” In contrast to the natural sciences and social sciences students have the ability to gather quantitative data on a particular topic and write a paper about it with some knowledge of the scholarly literature, but not exhaustive knowledge. John continues:

In undergraduate humanities research, if you don’t know what other people have said about your question or your philosophical argument or this proof of the existence of God or whatever, or this view of faith, the nature of faith, then, chances are someone has already said it, or chances are there are already several other arguments in the literature against it that you are not adequately addressing.
Your work isn’t original or relevant, or it’s a bad move in the ongoing conversation. It falls flat. It’s bad form and it’s sort of irrelevant. We need to teach students to be able to enter into the conversation in a meaningful and responsible way, but that’s half art and half science. There is an element of being a good listener and having a sense of where the conversation is going, and having the creative insight to take it in a provocative new direction.

**Participant 5: Anna**

Anna is a female, associate professor. She has been in her position at her institution for over 8 years and is tenured. Anna has mentored individual student research projects. She also teaches her department’s senior seminar that requires independent research projects. She has not mentored summer research students.

Anna is a historian. She is currently examining how the Black Power movement manifested on the campuses of women’s colleges. Her scholarly approach to this topic includes examining what other historians have written on the topic, reading the secondary literature, and doing archival research. Anna noted that she relies heavily on oral histories in her work as well. When collecting oral histories, Anna locates participants, conducts the interviews, transcribes, and analyzes the information within the context of her archival work.

**Anna: Path to Becoming a Humanities Scholar**

Anna’s path to humanities was not linear in nature. She entered her undergraduate studies thinking she would be a scientist. She had excelled in science during high school and became a double major in biology and American studies in
college. She elected to add a minor in African-American Studies because it sounded interesting. As she worked her way though her undergraduate career, she realized that she was more interested in her minor and had the greatest aptitude for that type of work. As she approached graduation, Anna connected with one of her professors to talk about graduate school possibilities. She was considering a doctorate in African-American studies or ethnic studies. Her professor suggested history because it would offer more broad foundation. After graduating from college, Anna worked at a non-profit research and education institute. After two years of archival research experience at the institute, Anna applied for and was accepted into graduate school.

In reflecting on the most significant experiences along her path to becoming a humanities researcher, Anna highlighted her experience in archival research as being pivotal. Although she completed her undergraduate training with a major in American Studies, in addition to her major in Biology and African American Studies, Anna had very few history courses and no training in historical research. Her experience after college, working full-time for a research institute, gave her the skills and experiences necessary to be competitive for graduate application. Anna also underscored the importance of faculty encouragement in helping her to pursue her field of choice and post-baccalaureate studies.

Anna began to learn what it meant to be a historian in graduate school. In many ways, she felt as if when she made the choice to become a history professor, she did not truly understand what that meant. In her graduate program, she had “the opportunity to work with some really amazing historians” and it was this work that began to introduce her to what it meant to be a historian and a future scholar. “Having them [graduate
school mentors] as professors and as role models really introduced me to the profession,” she says.

Anna also spoke to the “sink-or-swim reality of being junior faculty” as being important to her learning, specifically what it meant to be a historian and a faculty member. “I'm still in the process of learning, especially being at a liberal arts college, which is very teaching intensive and very small,” she says. “I'm still learning about how to balance teaching and service and scholarship and, also, how to establish professional networks outside of the school.” Anna also spoke to the challenge of moving from graduate school to a professional position. In her graduate program, she was able to work and interact with faculty and students who had similar research interests. However, in her current position she does not have colleagues who share her content expertise. This reality has pushed Anna to prioritize expanding her professional networks beyond her institution to connect with colleagues at other institutions.

**Anna: Making Meaning of Being a Scholar in the Humanities**

When posed with the question of what it means to be a scholar, Anna distinguished between being a scholar versus being an active scholar. A scholar is someone who is trained to be a scholar and has produced the scholarship necessary to meet the requirements of tenure. However, she notes, not all scholars remain active after tenure. Some faculty members shift their focus to teaching and service opportunities. In contrast, an active scholar maintains an active research agenda by creating original work and continuing to disseminate their work. For Anna, it is “not just thinking and not just doing the research, but actually producing, writing articles, writing books, depending on your field, doing exhibits, so that the knowledge that you're putting out there is getting
consumed. Being a scholar, if nobody actually knows what you're doing, I don't think it really counts.”

Anna does not see the work that she does as a historian as being fundamentally different from that of other humanities and social science scholars. Across the humanities and social sciences, she notes, the focus is on the human experience. She sees the difference as being in the methodological approach, across and within disciplines. She provides an example of this diversity by noting different approaches to doing historical research.

Sometimes, I get the impression from [other historians] who, especially, due to subjects that [they study and are] much further back in time, that they might not think that my work is as challenging as theirs because instead of trying to extrapolate from the archives things like motivation, I can, literally, just go ask somebody. I'm not sure they recognize the challenges of doing a type of history where your subjects can argue with you.

One of the experiences that had a positive impact on Anna’s identity as a scholar was finding a cohort of people who are also researching and publishing on a similar research area. Working at a small, liberal arts institution does not afford the level of diversity in scholarship found at large institutions. By finding a cohort of colleagues, Anna was able to develop a professional network that nurtured her scholarship. The importance and meaning of her work was supported “partly by reinforcing that what I'm doing is important and is part of a broader conversation.” She further developed her skill sets as a scholar. “We're on panels together all the time,” she says. “We were sending drafts to each other, sharing some sources, just generally bouncing ideas off of each other.
and that helped crystallize a lot of my ideas.” Her cohort also provided the criticism needed to deepen her work. She notes that she and one of her closest colleagues disagree “not completely, but his analysis of black/brown coalition building is significantly more negative than mine and, so, even though we disagree in our analysis, as I said, we are both part of this larger conversation and acknowledge the importance of different viewpoints and being able to argue with him has sharpened my analysis.” As a result of the work she has done with her colleagues, she feels that her work is getting more recognition.

People have cited my work; people have mentioned my work in the acknowledgements of their own book. When we have done panels together they're generally well attended, depending on the conference. There seems to be an interest in the work that we're doing, so that's really done a lot to shape myself as a scholar.

Anna defines her scholarly values as “going along with the objectives of being a historian.” These are accurately representing the sources, striving for objectivity, giving voice to marginalized groups. Anna describes the representation of sources and objectivity as being connected. “Our goal [as historians] is to provide an objective analysis that's not colored by our own emotions or our own contemporary situations,” she says. “I don't know about a scholarly value, but, as I said, a historical value is that sense of objectivity, is that sense of accurately representing the sources.” As a scholar of African-American history, she deeply values giving voice and agency to marginalized groups. “My work is very much from the bottom up,” she says. “That is important to me. And then also, as a social historian, something of value is the experience of everyday
people. I'm not focusing on, though I certainly acknowledge…the leaders, the big, important people. I'm trying to look at everyday people as well.”

These values were shaped in great part when she learned about the discipline of history. Much of her training as a historian emphasized representing the sources accurately and the notion of objectivity. Her value of giving voice and agency to marginalized groups was learned from her dissertation committee. On the committee were two social historians and a scholar of Chicano history. “They're all about giving voice and agency to marginalized groups. That's just been engrained in me from pretty early on,” Anna explained.

As a historian, Anna thinks the skills of research, reading, and writing are critical. Historians need to find “enough sources, be able to locate sufficient sources and sources that others may have overlooked, so that is, finding the sources that aren't necessarily the obvious sources.” Historians need to then take the time to read those sources deeply, carefully, and thoughtfully. “Accurately representing in terms of oral history, listening carefully, giving voice to people, sensitivity to your subjects, and then I guess, finally, clarity of writing,” she says. Anna feels that she learned these skills from graduate school, but also from the process of revising her dissertation into a book. She notes that the amount of changes she made in that process made it feel as if she wrote two books. In her words:

I added so much new research and completely changed the focus. That whole process of revision, I think, especially helped to develop my skills as a writer. Constantly revising, getting feedback either from my network or from my editors definitely clarified … and definitely the work of my editor because questions that
arose in the publication process lead me to find new sources and clarify my writing and strengthen my analysis.

As a faculty mentor, Anna teaches many of these types of skills and values to her students both inside and out of the classroom. The best example of this her capstone course for history majors. In this class, students create their own piece of historical research. Students begin with “identifying a substantive primary source.” They then develop their research questions based upon that source. Anna stated that this process “accurately conveyed how we [the department] work as historians. We might have some broad ideas for topics, but a lot of times our projects come along because we stumble upon a collection. My students and I jokingly refer to it as, ‘The Magic Box’, where you find a dusty box in an archive.” After identifying the source and the questions, Anna works with her students to create their own historical work. She puts great emphasis on the writing, sharing, reviewing, and editing parts of this process. Anna wants students to understand that “you don't just write something and then it's just put out there. There's this process of revision that involves other people. What we do in the senior seminar conveys that.”

Anna: Research with Undergraduates

Anna’s main contact with undergraduate students doing research is within the context of her senior seminar, however she also works with students on independent senior projects. These differ from the senior seminar in that they are more in-depth and are completed over two semesters rather than one. “I do give them guidelines, and there's certain assignments they have to do like an annotated bibliography and different things like that, but it's much more independent work, so it tends to be our stronger students
who do that,” she explains. Anna does note that in these yearlong senior projects, there is no collaboration on the project beyond guidance and mentoring. “I know in some fields undergrads might co-author a paper with a professor, but that's just not done in our field, so as far as scholarly work with students, it's always their scholarly work. It doesn't have any relation to my own,” she says.

Although the students’ research does not inform Anna’s own scholarly work, she feels that her scholarship informs their research. As she explains:

[Specifically] thinking about how to reshape the senior seminar. One thing I've been thinking about recently is that a lot of our students, especially here at a small liberal arts college where we don't have things like big archives, like a Research I would have, is that some of our students I realize are missing out on the archival research process. They're doing research, but it's not like we do, where we're ...

[in the] archive with a box, looking at everything in the box, page by page. Anna has been thinking through how best to model archival work for students, either through an archival methods course or another approach.

Anna’s mentoring process for undergraduate research students varies depending on the needs and skills of the student. Some students struggle with locating resources. Some students have located resources, but struggle with identifying viable research questions. Some students have both solid resources and good research questions, but struggle with writing an argument. “I've [had] some students who were really accomplished, who needed very little mentoring. Others need quite a bit more, but it really is guided by the particular needs of the student, so I guess it's very crafted for the individual,” she says.
The balance of being a mentor and a scholar at a liberal arts college where the emphasis is on student learning is challenging for Anna because it “doesn’t leave time for scholarship.” This is not necessarily true for faculty in the sciences at her institution. During the summer faculty scientists have the ability to have students in their lab that assist with that faculty member’s research. As she explains,

The students are learning and their learning something about science, but they're, ultimately, contributing to the scientist's research. Whereas, for me, if I take on summer research students, they're doing they're research and I'm doing my research, but they're actually detracting from my scholarship because the mentoring that I'm giving them is something different than what I'm doing.

As a result, her identity as a teacher is more salient during the academic year, and her identity as a research scholar is engaged during the summer.

Anna: Structure of URE

In structuring research experiences for her students, Anna models her own research process. She begins with thinking “about the field on the topic, identifying primary sources, and then the research process, and then the writing process. It is a similar process to my own scholarship, which is very condensed.”

Anna identified cross-disciplinarity as a critical skill and needed behavior of future humanities scholars. She notes that this may be related to her training in African American Studies, which is inherently cross disciplinary. However, she notes that with the many criticisms and public discussions about the humanities being irrelevant or in peril, humanists need to move beyond their traditional disciplines. “A scholar needs to
show that their work is relevant beyond the handful of people in their field who are going to read it. And it needs to have relevance to other fields and disciplines as well,” she says.

Participant 6: Elise

Elise is a female, associate professor. She has been at her institution for over 15 years in her position and is tenured. Elise has mentored undergraduate students since she began this job and trains approximately three to five students on research each year. Generally, she works with students in small groups during the academic year and one-on-one over the summer. In the past four years, Elise has been doing more intensive research mentoring than in previous years due to her involvement with a summer scholars program.

Elise has her Ph.D. in American Studies and is a biographer. She specializes in crafting biographies of individuals of historical importance from New England. As a biographer, Elise publishes her work primarily in the trade press, as opposed to the academic press. The trade press publishes peer-reviewed books that are intended to have a wide, non-specialist audience, as opposed to academic presses that publish primarily for the scholarly community. Elise emphasized this point because her work as a scholar and biographer is not always comparable to her faculty colleagues. “My career is somewhat shaped… differently from some of my colleagues in the academy because I have one foot in the academy and one foot in trade publishing, which are somewhat different in humanities,” she explained. “It’s also because my audience is wider, more varied than an academic audience. That also shifts how I tell that story. In fact, I talk in terms of story instead of arguments.”
Elise’s methodology begins with her curiosity. She finds a particular individual who has a compelling story, and then determines whether or not their story is one she would like to tell.

You have to do what moves your heart and it [the research project] has got to touch something deep inside you. It's got to be something that you got something to say about. It’s got be something that’s going to motivate you to sit through the very long hours that you’re going to spend at your desk.

After this first step, Elise reviews secondary sources for context, before diving deep into the archives.

You spend a lot of time going through files, transcribing materials that you may or might not use. It's from there that the story starts to emerge. Like I do not have too many preconceived notions about the person I am writing about or about how I should be thinking about it.

Elise states that she works a lot with primary sources as these sources provide rich layers of detail. It is these layers in the archives that speak to her. From there, she writes the story.

**Elise: Path to Becoming a Humanities Scholar**

As an undergraduate, Elise originally studied math and science. She found that she was good at these subjects, but also felt that, as a woman attending a Christian College in the 1980s, there were not many opportunities available to her studying these subjects. As part of her general education curriculum, she was required to take a humanities class. She selected a class that examined the art and architecture of ancient Greece and Rome. The class captivated Elise. She notes that it was the combination of
having a gifted faculty member instruct the course, but also “it was this world this ancient
world, that wasn’t the Biblical world. For a kid who had grown up in Christian school
and then going on to a Christian college. I was desperate for conversations that were not
within that frame.”

This class changed everything for Elise. “I dreamt about it, I absolutely loved it,”
she recalls. She immediately became a classics major. “What I loved so much about
being a classics major is that I didn’t have to decide between history, literature, art,
history of architecture, mythology, [or] religion. It was everything,” she says. With the
instruction of skilled faculty, Elise learned how to productively engage in the humanist
tradition and how to write.

After graduating, Elise decided she wanted to move west and pursued a masters
program in American studies. “American studies is similar to classics because you get to
study all of it. You get to study all the politics, religion, arts, literature, and history. All
of it. Only instead of the ancient world, it was the American world,” she explains. Being
raised in a conservative, Midwest community, American studies offered Elise the same
intellectual thrill that her classics major did. She was offered a teaching graduate
assistantship during her masters program. Although Elise was hesitant and uncertain
about how to teach initially, one of her faculty mentors handed her syllabus and
essentially a script of the first class and encouraged her to try. Elise recalled how one
day, as she was walking home from teaching her fifth or sixth class, she stopped and said
to herself, “Oh my goodness. I am going to be a professor.” She explains, “I had been
very unsure of what path to take. It’s as if... it was a flash. I have found what I love. I
have found what I love! I taught Black Boy that day by Richard Wright for this American
study class, and I thought, this is totally what I want. I just never looked back.” After finishing her PhD, Elise returned to her childhood home to teach. She indicates that the adjustment was initially tough, but it was tempered by her love of teaching. “I never wanted to leave school… even when I was a little kid, I hated spring because it was the end of school,” she recalls. “Now, I found a profession where I never have to leave it. I even like the word teacher. I liked it as a noun. I liked it as a verb. I like it!”

Elise identified three experiences as being particularly significant to her development at a humanities scholar: her study of the classics as an undergraduate student, her ability to move away from her hometown and go to graduate school out West, and writing her first book for trade publication. As a classics student, Elise was able not only to discover what she loved, but also to explore it. Without encouragement from her faculty and the quality of her undergraduate education, she would not have discovered the humanities. Elise also labels the importance of leaving her hometown and experiencing life elsewhere. Moving across the country gave Elise the ability to shift her geographic framework, similar to how her first classics course shifted her intellectual framework. She deeply values having the experience of living in multiple regions of the United States and also notes the importance of writing her first book. Elise secured an NEH fellowship that allowed her to work in Boston for a year. During that period, Elise met her publisher who purchased her first book. She emphasizes the importance of this experience for her as a scholar.

Writing a book for trade and working with my editor enabled, pushed me to think of the humanities in a much broader way than what I had been doing prior to that. I'm very interested in public history. I'm very interested in removing some of the
barriers between what the public thinks of this history and what historians or literary scholars do. That conversation that’s happening [in the humanities] and I'm very interested in that conversation.

Elise began to learn what it meant to be a biographer simply by doing biography in graduate school. “I was a biographer in training; I just didn't put a word to that. I thought I was critiquing facts, but I was actually writing small biography for these two women [her masters’ thesis],” she says. Elise used a similar structure for her dissertation. As a new scholar, she presented her dissertation work as part of a panel at a national conference. “It happened to be a well-attended panel,” she recalls.

Fifty people were there and I was showing some of the photographs [taken by the subject of her biography] and people started to gasp in the audience. Someone came up to me and said, ‘That doesn’t happen so often, the gasp. That’s a sign.’ She said, ‘I love your work and if you want to write, or if you want to apply for an NEH grant, I’ll be one of your letter writers.’ She happened to be a very well known historian of photography. That is how it started.

As Elise began working and writing, she sought the advice and mentorship of other biographers. She notes one Pulitzer Prize winning biographer in particular who “was very influential in understanding how to tell a biographical story. She read early chapters of what I've written and gave feedback. Then, I had a fantastic editor who had edited a lot of biography and so I learned from her. I learned from anywhere that I [could]. I try not to stay only within the academy. There are a lot of smart people who don’t necessarily write or work within the academy. I like to try to learn from a lot of different arenas,” Elise says.
Elise: Making Meaning of Being a Scholar in the Humanities

Elise is admittedly ambivalent about the word “scholar.” She identifies as a literary biographer and writer. A literary biographer demonstrates the historical research they have done within the biography itself. With this approach and her training, she feels connected to the academy, but works not to be trapped by it. “I feel much more comfortable with the tag of writer than scholar, because scholar feels like a box to me a little bit,” she says. “I would never publish a biography without copious footnotes and endnotes in the biography. In that way, I use all the scholarly apparati that’s available to me.” However, Elise notes that as a writer, her colleagues extend well beyond the academy and she doesn’t perceive all of these colleagues as being less scholarly than her faculty colleagues; rather, they are often as scholarly.

When asked about what it means to be a scholar in a generic sense, Elise identified scholarly products: book reviews, manuscripts, journal articles, writing letters of support for the NEH, and writing books. She also noted the importance of audience. “It is about communicating with some audience, whether it’s an audience of your peers, or your students or your writing for a text book or you’re creating material that will further the field,” she says. This traditional definition shifts a bit when asked how the definition relates to how she sees herself. Elise described her work with trade books, book reviews, and blogging. In reflection, she notes “I have actively absented myself from some of the tasks of scholar as it’s defined in my department and typically defined within the academy. Simply because I want to put my energies elsewhere.”

When expanding the definition of scholar and scholarship to encompass other disciplines, Elise immediately identified the marginalization of the humanities. She notes
that she has been engaging colleagues in conversation about how the humanities is including too many of the social science definitions and measures of success and failure. “In the field of humanities…we just don’t work with numbers, we’re an anecdotally based practice and there are things that happen in a humanity classroom or a humanities scholarship that can’t be measured in statistics or data,” she says.

I think that’s what makes humanities so vulnerable right now. How do you prove that you taught a student how to read a poem or helped a student read poem? How do you even measure that? Now, I know from my very creative social science colleagues that it’s not all just numbers and data and analysis, for [them] it is interpretation and strategy. It is not as black as white as it can sometimes feel when you’re in humanities, but it’s just how you argue for the enlargement of a student’s inner [intellectual] life and then measure with an assessment tool. You will sound like a nut if you try.

Elise acknowledges that the humanities are shrinking in terms of the number of majors and the perceived, and real, applicability of the majors within the humanities. She attributes much of this to the consumer nature of higher education, the emphasis on technology, and an overall cultural change that she labels the “perfect storm of pressure” that devalues the knowledge generated by the humanities by the attempt to quantify learning that is qualitative in nature.

When shifting the discussion to reflect on the experiences that impacted Elise as a scholar, she spoke to how her studies expanded her worldview, underscored the importance of mentors, and having a supportive partner. Growing up in a house that valued “the stuff of the humanities,” Elise states, “I was blessed to have to be in a house
full of books, where both my parents were great readers, my mum in particular we went
to the library every week, we went to the opera, we went to art museums.” In
contradiction to her rich home environment, she was also raised in a very conservative
community in which her options were very limited and were in conflict with her passions
and ambitions. Elise emphasized that when she left for graduate school and began
studying history and women’s studies, her world of possibilities exploded. “That
[process] was pretty crucial. I am very grateful that I was just after the second wave of
feminism,” she explains. “My students anxiously ask me, ‘Are you feminist, professor?’
I’ll say ‘I wouldn’t be standing here today. How do you think this happened?’” Elise
talked about the importance of her faculty in graduate school. “They recognized my
passion for what I did and encouraged me at just the right moment.” She also highlighted
her husband who understood and supported the work that she does. By having this
congruence in her work and home life, she is able to balance her work and be more
productive.

Elise noted that, as a scholar, she values honesty and authenticity. As a teacher-
scholar, Elise feels that students have an expectation of these values and that she is
obligated to stay authentically connected with the students. Elise also spoke to the value
of “a good learning curve.” She defines this as learning new skills and new information,
but also learning from errors and mistakes. The last value Elise noted was resilience.
“You have to be very resilient in the culture industries like the arts and the humanities.
You are going to get a lot more no’s than yes’s. You’re going to get a lot more rejection
than acceptance,” she says. Elise formed these values from her family, specifically her
mother, who modeled the “good learning curve” and resilience and instilled that in Elise.
She remembers learning as a child that “it doesn’t matter that you fail, it’s what happens after you fail, that’s what counts in life. Then I learned from her.” Elise also spoke about earning from her teacher-mentors, the safety the classroom provided her as a student, and the importance of reading and reflecting.

As for scholarly skills, Elise noted a number of points that she feels are critical. These include: the ability to have clarity of expression, especially in writing, the ability to synthesize a large amount of information and create something from it, and the ability to pay attention over a long period of time. This skill she also described as, “the ability to sit in the chair when you don’t want to.” She also highlighted the often “unheralded ability to be uncomfortable” that is taking intellectual risk. As a faculty mentor, she does her best to model these skills and values for students on a daily basis. She also emphasizes the importance of practice. “You put them in situations where they're going to get uncomfortable and then give them the experience that if they stay with it they're going to lose that discomfort and it's a mastery,” she says.

**Elise: Research with Undergraduates**

Elise pulls undergraduate researchers in both her literature and creative writing classes. In her literature courses, Elise utilizes a 10-page paper as a culminating for her classes. In preparation for this paper, she scaffolds smaller assignments. Each of them builds towards this larger paper. She notes,

> Because I have a series of writing workshops, they read each other’s work, they come in to my office for office hours. It becomes the occasion where all these other things get taught. Because writing is the principal thing, I want to teach in all my classes it just really works for me.
In her creative writing classes, she takes the students into the archives and works with them on how to write fiction and non-fiction stories that are inspired by, and rooted in, historical artifacts.

Elise also utilizes students within her own research, as research assistants. “When I was sure of the shape of the project, and sure of the research questions that I could have my students research, then I started to ask students to participate,” she says. This is the primary way in which Elise situates students within her own work, but she also recognizes that she can connect them more deeply. “I’m going to have to think about how to involve them even more than I did with my first book, but I certainly love having a research assistant,” she reflects.

When asked how students learn how to do research, Elise immediately responded. The best way you learn how to swim is if you get pushed in the deep end of the pool. There’s a little bit of that. You [the students] are going to get lost. You’re going to get confused and that is okay. For me, the challenge is to give to give them [the students] enough instruction so they don’t despair.

Elise sees her role as one in which she works with the students to provide an appropriate level of support to counterbalance the challenge of the research. She also noted the importance of students working on something that they truly care about, as opposed to crafting a research project that simply meets the requirements of the assignment.

When asked about mentorship and mentoring, Elise noted that the term “mentor” strikes her as being perhaps a bit patronizing to her students. She was more comfortable with the term, “coach” or “coaching.” As a coach, she believes that it is important for students to choose her as their coach. She finds that students love to be around by people
who love their work. With her research assistants, she will work with her students during the research process through sharing drafts, providing feedback, and engaging in deeper conversation about the project.

The balance between being a scholar and a mentor, or scholarly writer and coach, is challenging for Elise. She notes that the balance is critical. In her words:

When I'm writing well, I'm teaching better. When I’m teaching well, I'm writing better. I just feel like they go together. And in fact, my life would be a lot less complicated if I could step away from the classroom, but I don't want to step away from the classroom because I still feel like it's just filled with ideas. It keeps me fresh. It keeps me current. It keeps me from being stuck in my own box.

Elise finds that this balance can be achieved with clear boundaries for her students, but her rigid teaching and research schedule also allow for the space needed to be a productive scholar and still teach.

**Elise: Structure of URE**

Elise works to maximize her students’ learning by holding the balance of giving students too much direction and too little. She feels that students will only learn the skill sets if they are pushed to their learning edge. Elise notes that you want students to feel a little lost, overwhelmed, and confused. She does emphasize:

I don’t make it so programmatic that they don’t have that sense of discovery and that sense of mastery. They are not going to get a sense of mastery unless they themselves do it. If I do all the intellectual work for them and then they just fill in the blanks, then that’s not really learning to me.
It is process of working through the discomfort that Elise feels is critical to learning the craft of research. She also utilizes a workshop framework in which the students work in groups and provide one another critique and support on their writing, as well as their projects.

When asked what skills and behaviors are critical to future humanities scholars, Elise again stated the importance of courage, perseverance, and curiosity. These attributes were described earlier in this narrative. Elise did raise two additional skills that students need. The first is an interest in digital archives and digital dissemination. This is where much of the work in the humanities is at the moment, as well as job prospects. She also spoke to the need for future humanists to speak to a generalist audience. This allows the humanities to be accessible to a general audience, as opposed to academics speaking to one another. Elise pulls these skills into her classroom by engaging students in digital archives and utilizing blogs for dissemination. She also works with students on their technical writing, as well as removing the jargon so the work is more accessible.

In reflecting on student learning, Elise notes that one of the most difficult pieces for students to learn about the craft of research is simply negotiating the amount of information available. “[We are] drowning in access [to information], so I think it's realizing how you navigate ever-changing and ever-expanding sources of information.” Students also struggle with writing a substantive paper. She continued:

They have access to know more because they can look anything up, anytime, but the depth of what they know… that I think is a challenge. They need to go deeper. I'm always saying go deeper. What do I mean when I say go deeper? Make it less factual. Make it more interpretive. Make it more connected to the

It is these skills that Elise believes can only be learned through practice.

**Participant 7: Jonah**

Jonah is a male, full professor. He has been in this position at his institution for 25 years and is tenured. Jonah has mentored student research for over 15 years. He mentors two to three students per year. During the academic year, he generally works with students in small groups. Jonah mentors students doing intensive research during the summer, as well.

Jonah’s research is in the fields of ecological and environmental theology, philosophy, and ethics. He publishes on ecological virtue, endangered species, ecological theology, and various other topics. He primarily publishes scholarly manuscripts and books. Jonah noted that much of his research “grows out of my teaching and vice versa. Teaching and research, I think are sort of mutually dependent or they reinforce each other, [and] feed each other in various ways.”

Jonah describes his research process as starting with a question. Once identified, he initially explores the question by

…reading as widely as possible, primary and secondary literature that is to say books, monographs, anthologies, journal articles, et cetera, to try to figure out what's been written. And if there's a certain unfilled niche, and if there is then, I'll dive deeper in terms of my own research. And along the way, formulate a thesis to go with the topic.
Jonah indicates that he generally has a sense of what point he will make at the beginning of the process, but research and reading process fleshes out the argument. From this point, Jonah begins to draft an outline. “Once I've got an outline that I'm happy with, I'll break it down and do research on the various chapters and parts, and kind of flesh out the details of the book,” he says. Jonah’s most recent books have been collaborations with other scholars. Jonah is proud of each of his books for various reasons, but he notes that he is proud of one book in particular “because it has had a fairly wide readership and reception, and it's a book I use in a number of classes that I teach.” His pride in his work is connected to the quality of the work itself, but also to the extent others find the work as being useful and helpful. “[It’s] a way of extending your reach and capacity as a teacher beyond the physical classroom, and allowing your research to, again, be of use to other people,” he says.

**Jonah: Path to Becoming a Humanities Scholar**

As an incoming college freshman, Jonah intended to be a math or computer science major. He was programming computers in high school and wanted to continue that work in college. Jonah elected to go to a small liberal arts college so that he would have an opportunity to pursue these interests, but also have a liberal arts education. When Jonah was completing his math major, he began to take upper level courses in the philosophy of math and the philosophy of science, both of which captivated him.

[It was] particularly questions about relativity theory, and about different kinds of geometry, non-Euclidean geometry, parallel lines that touch, for example, like longitude lines at the poles, the fact that matter and space worked and related to each other [that captured his attention]. All kinds of interesting philosophical
questions, and those were the ones that I found really of interest to me. Solving problems and writing computer programs, paled in comparison to kind of philosophical questions raised by the natural sciences.

Jonah began to take additional courses in philosophy, religion, and psychology to further explore these interests. He still graduated with a degree in math and computer science.

After a couple of years, Jonah elected to go on to graduate school to pursue a master’s degree in philosophy. He then pursued a second master’s degree in divinity at another institution. After completing that second program, Jonah entered a prestigious religious studies program to pursue both an MA and PhD in religious studies. He entered his first teaching position after passing comprehensive exams and his dissertation proposal defense. “So, it’s a rather odd and kind of strange story, but it was kind of a step by step move from the natural sciences to philosophy, to religion and religious studies,” he recalls.

[While in graduate school] I continued to read, I still do, in the sciences and a lot of what I [do with] ecological theology, philosophy and ethics, requires knowing a lot of biology. I’m, so people tell me, a rare humanities scholar who isn’t afraid of numbers and loves science, so it’s a good mix for me.

The most significant experiences for Jonah as a humanities scholar involve teachers and mentors. He notes that he had wonderful professors in the math, psychology, and kinesiology departments that always offered advice and council. Through this experience, Jonah realized he wanted to teach, but after spending some time in a high school classroom, he realized he wanted to teach at the collegiate level. As he began his graduate work, Jonah mentioned that he wasn’t sure if he would be able to
make the transition from a STEM undergraduate degree into a rigorous humanities program. “After two years, I was very confident I could, at least at the master’s level, but then as most students, you go to a doctoral program and you have wonderment as to whether you will have what it takes to compete and do well in such a program,” Jonah says. He emphasizes that at each of the schools he attended, there were faculty mentors who helped to form him in various ways.

A lot of that, frankly, comes from not necessarily their direct advice, as much as emulation of them as people. Teaching in a classroom, advising students, just being wise, caring people. Then trying to do the best I can to learn from that, and emulate that in various ways.

This mentorship also provided Jonah a sense of what it meant to be a philosopher, or religious scholar. “You learn the language, you sort of learn the body language, what that [being a philosopher] means. You read a canon of literature, in the humanities. Just like you are tutored in the sciences into the scientific method, specific to your given discipline or sub-discipline,” he says.

Jonah notes that in choosing his PhD program, he wanted to work with a particular scholar who was both a religious studies scholar, but a philosopher as well. “You sort of imbibe a way of doing scholarship from being around people, philosophers, theologians, religious studies scholars, whatever in my case could do that,” he explains. “You apprentice yourself to a carpenter if you want to learn carpentry.” He summarizes that he learned the craft from spending years being an apprentice to people who are “really good at doing philosophy and being philosophers.”
Jonah: Making Meaning of Being a Scholar in the Humanities

Jonah defines a scholar as someone, “who has dedicated him or herself to a particular academic discipline or sub-discipline for a significant length of time, such that he or she has mastered a certain subject matter, a certain body of knowledge and mastered the appropriate strategies, techniques, approaches, for doing research in that particular field or sub-field.” He notes that this process requires knowledge of specific, or technical languages in relation to that discipline. Scholars have an understanding of the “broad contours of a body of knowledge well enough to explain it coherently and clearly to someone who knows nothing about that area of expertise.” Jonah notes that not all good researchers are good teachers, and not all good teachers are good researchers. A scholar, however, has to be good at research. “For me, a scholar is someone who has a kind of deep knowledge of a given field of inquiry and is able to competently do research,” he explains.

The competence is not just sort of self-acknowledged, but it's an acknowledged competence from among peers in one's field. You know you're competent when you're publishing periodicals and journals in your field or presenting your research in various ways, so you're not liable to self-deception, [that is] think you're confident, when in fact, you may not yet have the knowledge or skill base. So, there's a social validation that typically happens in graduate school when you realize, yeah, I really know something here, and I can do research in this area.

In conclusion, Jonah also spoke about scholars having a sense of scholarly humility as part of his definition of scholar. “There is an intellectual or scholarly humility that comes with being a scholar, because you realize that there is so much more to learn that you
don't know and some of it you never will. But that's one reason for collaboration, too,” he says.

For Jonah, the meaning of scholar has a personal dimension as well. Competence, inquiry, and scholarship become more salient.

There's a sense of satisfaction that I think you get when you feel competent doing something. That's not just germane to being a scholar. Anyone who has worked hard on achieving some skill or set of knowledge could be, not just scholarship, that is, I think a form of meaning. We often take our identities from those areas of competence.

Inquiry, he adds, provides “a meaning making piece that's part of advancing knowledge in human inquiry.” The process of exploring questions that have not been answered or explored is empowering and challenging. The final characteristic is scholarship, itself. Jonah notes that “advancing knowledge in human inquiry” is valuable, but the process of creating scholarship, contributes to what I and other Christians call ‘Shalom’, a version of creation.”

Jonah feels that the humanities are the “most important of all the disciplines,” although he notes that he would “expect my natural science, social science, and arts colleagues to say the same thing about their disciplines.” To be a scholar in the humanities is to ask some of life’s most practical and profound questions.

I think humanities disciplines are about what it means to be human, what it means to live a Good life, not the goods life, small g plural, but the Good life, capital G singular. Learning from the past, that's philosophy, history, religion, lots of other
disciplines, as well as the present, can help us figure out some of those questions, which are ultimately practical questions, not just theoretical ones.

These questions influence how we live our lives, how and why we make the consumer decisions we do, as well as how to move through our lives in a way that support our values. Jonah notes that, “And those questions are going to be with them [students], regardless of what they do with their careers. And these are questions that every parent thinks about, every community member thinks about, every human, ultimately, I think, has to think about, regardless of what you do for paid work.” So being a humanities scholar is to explore these questions, to engage in “long and deep conversations” that have been going on for a long time.

When reflecting on the diversity of the disciplines, Jonah sees his work being similar to the sciences and social sciences. He notes that all scholars, regardless of discipline, are “engaged in the pursuit of knowledge and truth.” Each discipline has a different emphasis and a different method of exploring this truth. “But there are many dimensions to reality, many different ways of arriving at knowledge and truth,” he explains. “They are often complementary in different ways and again, getting a well-rounded education, I think is important, since you learn different ways of knowing the world and different kinds of ways of viewing the world.” He values the ability of the liberal arts to provide his students with multiple ways of seeing the world and different ways of viewing the world. Sometimes, the disciplines are in contradiction with one another, but more often than not, they are complementary to one another. “Each [discipline is] looking at the world in different ways and different dimensions and getting as full bodied a picture or portrait as possible, and I think it is a very good thing,” he says.
“Also, reminds me of the need to be humble, each of us in our own discipline, and it reminds us of the need for each other.”

The most salient experiences as a scholar, for Jonah, surround his experiences engaging with faculty and the scholarly community. He notes that in his undergraduate experience, he became a lifelong learner, always curious and wanting to learn more about the world around him. This continued into graduate school. “I caught a love of learning and it didn't really matter what it was learning about, just a kind of perpetual curiosity about the world and how it works and people and culture and history and religion and all the rest,” he says. “I think that's something that's caught more than taught.” Jonah notes that at each of the institutions he attended, from undergraduate to the doctoral level, his was surrounded by a community of scholars who loved to learn and were perpetually curious. He says of his doctoral institution “that place is just intellectual inquiry on steroids.” Jonah’s experiences as a future scholar reinforced his belief that curiosity, inquiry and scholarship was critical “not only for its own sake, but for the usefulness that one's learning may provide for the world.” He notes that this is one of the reasons that he works at an undergraduate institution with a mission of teaching. He wants to be able to create that environment for his students, as well.

When asked about scholarly skills and values, Jonah notes three primary areas that he feels are critical. First, he notes the importance of traditional rhetorical skills. This begins with knowing a good argument and having the ability to “sniff out the BS that often accumulates with bad arguments.” Scholars need to have the ability to understand what good evidence is, and how that evidence can support particular assertions or positions, culminating into the ability “to clearly and articulately make a
persuasive case for something or against something.” The second skill Jonah noted is the ability to write and speak clearly to both scholarly and lay groups. He notes that although this is a skill, it supports one of his values. “So basically, the large skills clear communication skills, clear thinking skills, and beyond that, knowing what's important amidst all the things that you could as a scholar do research on, commit yourself to, what is of more lasting value in the larger scheme of things,” he says. The final value -- and supporting skill -- that Jonah notes is doing scholarship for the public good and sharing that scholarship with everyone. He clarifies this as “work[ing] for Shalom, a flourishing of all creatures, of all creation. It's not just those skills that I think are important for a scholar are not just kind of rhetorical skills, but about knowing how to do scholarship and weigh evidence appropriate to your field and make arguments and so on.” As a scholar, he notes, one must mentor and teach others, both future scholars and lay people. “How do you make the bridge between technical esoteric scholarship and the proverbial person in the pew, or the common educated person?” he asks. Jonah notes that this balance is what is troubling many natural scientists in today’s political atmosphere, especially on issues such as climate change and diversity loss. He asks:

How do you translate scientific studies in such a way that people in the halls of Congress and state legislature and other people who aren't involved in politics that simply need to know these things, how do you translate that knowledge in a way, communicate it in a way that's understandable and persuasive to people who don't have PhDs in genetics or ecology?

Jonah recognizes that many of these values and skills are taught in classes. This is especially true of the skills in communication and rhetoric. Jonah also believes that the
learning is “a combination of explicit instruction, but also mentoring and modeling.” He states that while a student is apprenticing a faculty researcher, they absorb and learn many of the skills by watching, asking questions, and eventually practicing the skills themselves, emulating their faculty mentors. “Some faculty are, I think, better, more intentional at doing that sort of thing. Passing on their research skills and knowledge to graduate students or undergraduate as the case may be,” he says. “Although less intentional, but a lot of it, I think again, is a kind of quasi apprenticeship to different people along the way where you learn how to do scholarship by watching scholars do scholarship.”

As a faculty mentor, Jonah tries to create this learning rich environment by giving student’s individual attention. He notes that he only works with one student at a time. This model allows him to focus on understanding where the student is in his or her level of knowledge, and then tailoring the work and learning for that student. He also notes the most challenging part is giving students enough freedom and guidance in the process to determine their own intellectual curiosities and their own scholarly questions. He notes:

The tricky part is trying to find, within that student, what their real interest and passion is. Rather than simply handing them some grunt work of your own that you want them to do, what are they interested in, and how can you help them find that interest and passion?

**Jonah: Research with Undergraduates**

Jonah works with both summer research students and students during the academic year. During the summer, students work intensely for about eight weeks of the summer. “Typically, those students work on some aspect of whatever book I’m working
on, but it's really quite free flowing,” he says. “I don't, again, try to stipulate things, but I try to have their research in some way be at least in tandem with my own.” During the academic year, Jonah works with students on independent study projects. He notes that these are a bit different because the students’ projects do not need to necessarily line up with his own research. He notes that this is supervised research, but the projects are quite independent. Often by the end of a project, the students have greater knowledge about the topic than he does. “Which is fine, I don't know everything, and it's great to learn from your students. Especially undergraduates who often think that you, as a professor, are the one who always know more than they do,” he explains.

Jonah states that the learning process for the research students is based on doing; still, many students need guidance or models of how the scholarship process works. He begins by having students read articles related to the particular topic and then works with the student to understand how the argument was framed and supported by the author. From this point forward, many of his students work with library faculty to better understand how to do scholarly searches, as well as understand what scholar sources are. Jonah notes that starting out slowly with students is critical.

Giving them things that they can digest and understand, and slowly start moving up to more challenging reading material, and again, in the case of the humanities scholar, contrasting points of view on a given issue, longer works that require more reading comprehension, and more analytical skills, and eventually to the point where their hook may be coming out with their own voice, conclusions, thesis, you know, of their own with respect to some particular topic.
Jonah then works on the students to communicate this voice, conclusions, and thesis through a coherent research paper.

Initially as a faculty mentor, Jonah says that he struggled to connect his research with the work of his students. More often than not, the two projects were quite independent. In recent years, he has worked to connect summer research students with his book projects. Although that process has worked well, it is still not as common as he would hope.

Jonah believes that the mentoring process begins with recruitment and training. In many of the introductory courses he teaches, he keeps an eye out for possible research students. He notes that working with a research student often takes a bit of time. He provided the example of one of his research students. “She wasn't doing as much research [the first summer], as simply reading to get a sufficient background in the field to have some sense of the kind of high altitude view of ethics, both philosophy and theology of ethics,” he says. The second summer this student was well positioned to do research independently. She had a sense of the scholarly literature and was more self-sufficient. “I would try to work on, especially the first summer, different skills, point her in the direction of a knowledgeable librarian, if necessary. A lot of it is trying to, for me, trying to develop the kind of judgment and discernment about literature,” he recalls. They would then meet on a weekly basis to discuss the literature and engage in the larger scholar community on campus.

Jonah believes that the roles of mentor and scholar are not disparate, but entwined. “Fundamentally I think mentoring is simply acknowledging that if you're a classroom teacher there is a responsibility and privilege of being involved in the lives of
students at an important time in their lives.” He notes that, when working with undergraduate students, mentoring can take various forms. “Mentoring is a big tent. It's much bigger. One kind of mentoring is mentoring for scholarship, but there are other kinds of mentoring that I think faculty do. Some faculty, maybe begrudgingly, [mentor students], but others [do] quite enthusiastically and willingly,” he says. Jonah ensures that he knows every student’s name in his class. He invites each student to come to his office the first two weeks of class so they see who he is beyond the classroom. It’s about opportunity and authenticity. “Those are little ways of trying to mentor students into intellectual inquiry and life of the mind,” he explains.

**Jonah: Structure of URE**

When reflecting on the structure he provides for his research students, many of Jonah’s strategies reflect his desire for students to have space, both literal and figurative, to focus. This begins first with place. Jonah ensures that summer research students have a place to work. “They've got their own office, they've got a computer, they've got access to the library. They're physically close to me, so I don't have to walk half way across campus to find them, nor they me. There's just some real practical stuff like that,” he says. Second, he thinks it is important that students get paid a fair wage for their work and have the opportunity to engage with a scholarly community. “Having a free lunch every week with a bunch of other students and faculty there, and simply being available as a faculty mentor to the students. Not leaving them all by themselves, alone to their own devices, but come around, answer questions, provide guidance,” he says. He also notes that students need to have the flexibility and space to take on the responsibility of
their own learning and research. He is not only there to provide support and guidance, but also provides the students with the intellectual space to grow and discover.

Reflecting on future humanities scholars, Jonah believes that they need to be intellectually curious, hardworking, and collaborative. These are students “who love books, physical or online, they love reading, they're intellectually curious, they ask lots of questions, you can't shut them up in class. There's a whole cluster of behaviors that goes with a student who is intellectually inquisitive or curious,” Jonah says. The students are hard working and have a strong work ethic. Often these students are efficient with their time, and work until a task is completed. Students also need to get along with others and feels comfortable when engaged in collaboration. “A lot of research shows that the research that comes out of groups of diverse people at whatever level, undergraduate, doctoral, is better research than work of either one person or a homogeneous group,” he says. Jonah tries to include opportunities for students to learn these attributes in both his classes and with his summer research students. He feels that the process to learn these skills is individual to each student. “I don't have a set regimen of exercises or drills or assignments as much as a variety of things for it in my hip pocket or tool box that I might use in a given situation with a student,” he explains.

In reflecting on his student learning, Jonah notes that many of the skills necessary to be future humanities scholars can be learned, such as research and writing skills; but the task that students struggle the most with is the ability to ask a question. “One that's answerable, but not too easily answerable. One that if you're a grad student is fund-able,” he says. He notes that this can also be learned, but that occurs best when engaged in apprenticeship with another scholar, or engaged in a scholarly community. The
combination of the intellectual environment and the student being tenacious in their practice of the craft of scholarship will lead them to learning how to ask important questions that satiate their own curiosity, but also contribute to their ability to be an active engaged citizen.

Chapter Summary and Reflection

This chapter described the narratives of each of the study’s seven participants. The narrative format frames the experiences of Elena, Jennifer, Robert, John, Anna, Elise, and Jonah. In aggregate, the experiences of the faculty participants were similar in how they perceived their experiences when working with undergraduate students. Although many of the questions were recursive in nature, they did illicit rich descriptions of the participant’s experiences. I found that during the interview process, faculty participants struggled to answer questions about what it means to be a scholar, how they learned that meaning, and how it impacts their teaching and mentorship. Each participant found his or her voice as the interviews progressed, but it was clear that the questions being asked prompted reflection and self-discovery. In the interview process, not all participants were able to respond to questions about being a “humanities scholar or humanities faculty member” at the level of clarity and precision as they could when substituting “humanities” for their sub discipline. I found that in describing the research process, the participants agreed upon processes that were common in the humanities with certain disciplinary nuances, such as whether theoretical analysis (as noted in Elena’s narrative) or data analysis (as noted in Jennifer’s narrative) were used.

When discussing their foray into the discipline and academia, the faculty participants described powerful undergraduate experiences where a phenomenal faculty
mentor inspired them, or rather they described finding a love for the discipline and its approach to inquiry. It is important to note that most of the faculty participants, despite their passion for their subjects, were not trained to be research mentors. Their knowledge of the mentoring process was through a combination of modeling their experiences as undergraduate or graduate students and trial and error, learning the best approach through working with various students.

There were some differences in the level to which working with undergraduates was valued. For some of the faculty participants, their work with undergraduates was central to their identity and purpose being faculty. For others, mentorship is part of being a member of an academic community, as well as being part of a liberal arts college. I did not find much disparity in regards to discipline, gender, or status (meaning being tenured, or tenure track). The narratives did provide incredible insight into the experience of humanities faculty who work with and mentor undergraduate researchers through their reoccurring themes and the diversity of perspectives.
CHAPTER V
EMERGENT THEMES

The purpose of this study is to examine how humanities faculty who are engaged in undergraduate research make meaning of what it means to be a scholar and how this meaning impacts how they guide, mentor, and supervise their undergraduate research students. As mentioned in Chapter Three, a phenomenological approach was taken in the research process. Through interviewing seven participants, I was able to distill their individual voices and perspectives into narratives, presented in Chapter Four. These narratives in aggregate serve as the data for thematic analysis.

Phenomenology, as an approach to qualitative research, focuses on the lived experience of a particular group of people. A phenomenological approach distills the experiences of a group of individuals into emerging fundamental themes. It is these themes that will offer the researcher deeper insight and understanding into the lived experience of her participants. That premise was realized through this particular study. When disentangling the experiences from the individual and reforming them along thematic lines, particular similarities emerged. Each of these themes, despite substantive and nuanced differences, was embedded in the epistemological context and culture of the humanities. In this chapter, I explore six themes that emerged from the faculty narratives; the centrality of the humanities, life of the mind, guided practice, development of a scholarly voice, intention and impact of UGR, and scholarship informed by
community, as well as reflect on the meaning of these themes in light of the research questions.

**The Epistemological Context and Culture of the Humanities, “Humanity Is Reflecting on Human Efforts at Communicating Meaning”**

In Chapter Two, considerable attention was paid to the disciplinary differences between the humanities and other disciplines in higher education, such as the social sciences and STEM. Despite bracketing pre-conceived notions of the humanities, the fundamental differences between how scholars perceive and engage disciplines within the humanities and their own disciplines framed all the participant interviews. Although participants noted that their general definition of being a scholar was inclusive of all disciplines, each participant clearly described how their work varied. This is best seen through Jonah’s description of what a scholar was in comparison to a humanities scholar. He describes a scholar as, “someone who has a kind of deep knowledge of a given field of inquiry and is able to competently do research. The competence is not just self-acknowledged, but it's an acknowledge competence from among peers in one's field.” However, when asking about a humanities scholar, the definition becomes more rich and laden with the humanist worldview. Jonah describes scholarship in the humanities as being more than simply the pursuit of knowledge, but rather studying what it means to be human. He notes:

… learning from the past … can help us figure out some of [life’s] questions, which are ultimately practical questions, not just theoretical ones. Questions that have concrete implications for how we get from point A to point B, what food we
eat and don't eat, in what structures we live, and how we do and don't do things together in communities and so on… And those questions are going to be with them [students], regardless of what they do with their careers. And these are questions that every parent thinks about, every community member thinks about, every human, ultimately, I think, has to think about, regardless of what you do for paid work.

This intersection of scholarship and meaning making framed many of the participant interviews and is entwined with the participants’ narratives, as well as the themes noted below. Scholarship, for these participants, extended beyond the mechanics of research and scholarly production; rather, by engaging in the scholarly process, they were translating meaning for themselves, as well as their scholarly community, and in some cases the general public.

The themes echo this approach with terms such as the “good life”, “life of the mind”, and “scholarly voice”. The themes also illustrate the humanities in transition, as society gravitates to scholarly products and processes that have tangible meaning and commercial worth, as opposed to ephemeral weight and idealistic value.

**Emergent Themes and Sub-themes**

The themes that emerged in the analysis include: relevance of the humanities, importance of the life of the mind, guided practice, the development of a scholarly voice, the intention and impact of UGR, and the scholarship informed by community. The sub-themes of each of these thematic groupings are noted in Table 7.
### Table 7

**Emergent Themes and Sub-themes**

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<tr>
<th>Theme</th>
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<tr>
<td>Centrality of the humanities</td>
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<td>Inability to quantify learning in the humanities</td>
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<td>Marginalization of the humanities</td>
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<td></td>
<td>Importance of a humanistic perspective to STEM</td>
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<td>Efforts to make the humanities relevant</td>
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<td>Importance of the life of the mind</td>
<td>Intellectual engagement as a pathway</td>
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<td>Disciplinary rigor and epistemological kinship</td>
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<td>Significance of dialogue</td>
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<td>Self-discovery</td>
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<td>Development of a scholarly voice</td>
<td>Nurturing agency through shared goals</td>
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<td>Strength of voice within the discipline</td>
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<td>Importance of authenticity</td>
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<td>Developed in tandem with community</td>
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<td>Intention and impact of URE</td>
<td>Variance in structure of UREs</td>
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<td>Balance of challenge and support</td>
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<td>Emphasis on transferrable skills</td>
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<td>Tension between mentoring and scholarly production</td>
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<td>Scholarly process in proximity to community</td>
<td>Culture of intellectual engagement</td>
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<td>Scholarly process</td>
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<td>Scholarly home</td>
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**Theme One: Centrality of the Humanities**

In the interviews and subsequent narratives, each faculty participant spoke to the importance and centrality of the humanities and humanistic inquiry in contemporary, pragmatic society. An understanding of the humanistic traditions was “important for citizenship and being a good person,” according to Robert. This understanding would be realized through being in dialogue with people who are “committed to having concerted
and thoughtful conversations about tough questions.” Three of the faculty participants specifically noted the Socratic notion of the “good life”, or the “examined life”. This approach to life being one in which an individual examines his or her mind through criticism and reflection. In this process, there is a congruence of knowledge and action that leads to praxis. Jonah highlights that this process of reflection often begins in college. He notes:

I think teaching religion, philosophy and ethics courses and humanities is just really, really important for living a good life and for thinking about deep and profound questions. At least once in one's life, in college, every student ought to wrestle with. Because [those questions] will come up in one-way or another. The nature of the human condition when you read the obituaries in the local paper, or someone you know and loved dies. We ask these questions. Why do bad things happen to good people? Is there a God, is there any comfort or solace in that God in that religion, et cetera. So, those kinds of worldview questions, or religious and philosophical questions are darn near inescapable in almost any life. College and university, I think is a good time to think about those things. And the humanities, as I said, I think are an especially good place to address how humans in the past and present have sought to answer those questions. Not that they don't come up in the social sciences and natural sciences, but I think they do more often in the humanities.

In both their descriptions of their paths as scholars, as well as their approach to mentoring, faculty emphasized the importance of humanistic inquiry, the values the humanities espouse, and the skill sets needed for this type of work. For most mentors,
this belief was most evident in their descriptions of their teaching and mentorship of undergraduate researchers, which will be discussed in subsequent themes.

**Sub-theme: Relevance of the Humanities in Contemporary Society: “The Humanities Matter, People!”** Each faculty participant talked about the relevance of the humanities in today’s culture and society. In their interviews, some participants wanted to explain and defend the validity of the questions asked in the humanities, as well as the process of answering those questions. Jennifer illustrates this perspective, “I do view that [advocacy for the humanities] as a part of my mentorship. The humanities matter people! This is not just a data-driven world. Humanistic inquiry matters, too. Gaining an appreciation for the humanities is part of my mentorship, which maybe makes it more advocacy mentorship, I'm not sure.”

At the core of this defense of the humanities is the belief that they are the foundation of a liberal education, as well as other disciplines. Robert noted, “I tend to think about philosophy as slightly conceptually prior [occurred before based upon intellectual history] to maybe all disciplines. Conceptually prior to some issues in the social sciences, the humanities and the sciences… as I think philosophy has a lot of points of contact with logic [and logic is] inseparable from mathematics and some of the sciences.” The humanities is connected to all disciplines, as opposed to being isolated and obscure.

Jonah views a liberal education, or general education, as including an understanding of multiple ways to approach finding truth and understanding the world around us.

Jonah reinforces, “there are many dimensions to reality, many different ways of arriving
at knowledge and truth. They are often complimentary in different ways and again, getting a well rounded education, I think is important, since you learn different ways of knowing the world and different kinds of ways of viewing the world.” This well-rounded education includes an education and understanding in quantitative reasoning and a deep understanding of the scientific method, but also includes an understanding of how to engage in criticism and the recursive nature of humanistic inquiry.

**Sub-theme: Inability to Quantify Learning in Humanities: “How Do You Measure ‘Engaging The Life of the Mind’?”** Despite the centrality of humanities to a liberal education, the skills and attributes learned in these disciplines are difficult to measure within the quantification culture of higher education. With the constant quantification of learning outcomes for assessment and accountability in higher education, the humanities struggle to demonstrate their contributions. Elise notes that:

… in the field of humanities…we just don’t work with numbers, we’re an anecdotaly based practice and there are things that happen in a humanities’ classroom or [within] humanities scholarship that can't be measured in statics or data …How do you prove that you taught a student how to read a poem or helped a student read [a] poem? How do you even measure that?

Elise explains that the attempt to quantify the learning that happens in the discipline feels “non-native”. Learning within the humanities is not “black and white” and easily quantifiable. The growth a student experiences cannot easily be captured in current assessment practices.

Four faculty participants said that this difficulty in measuring learning and student transformation made them feel that their disciplines were not valued in the same way as
those of their STEM colleagues. This feeling was rooted in the vantage point that humanistic methods of inquiry are not perceived as “real research” by society and/or that the humanities disciplines are less attractive to students as potential researchers and majors.

**Sub-theme: Marginalization of the Humanities: The “Perfect Storm of Pressure”**. Five of the faculty participants noted that the perception that humanities research and scholarship is not “real research” places them in a position of marginalization, within the academy and society in general. When thinking of this place of marginalization, it is important to note the work that humanists do. These are scholars in philosophy, English literature, religious studies, cultural studies, and history. They work to answer some of life’s most challenging questions. Jonah clarifies:

I think humanities disciplines are about what it means to be human, what it means to live a Good life, not the goods life, small g plural, but the Good life, capital G singular. Learning from the past, that's philosophy, history, religion, lots of other disciplines, as well as the present, can help us figure out some of those questions, which are ultimately practical questions, not just theoretical ones. These questions influence how we live our lives, how and why we make the consumer decisions we do, as well as how to move through our lives in a way that support our values. These are the questions that every individual thinks about at some point in their lives regardless of gender, class, race, or vocation.

In a society where this type of inquiry is not perceived as important as empirical studies, and larger data sets that give the illusion of objectivity, the “gaze” of the humanities is not realized and appreciated and, as a result, neither are the products of
humanities scholars, whether those product are articles and books, or introducing students to the life of the mind. Elise notes that:

There is a perfect storm of pressure in the humanities of the field [to quantify learning]… we end up deferring to the numbers, and I wish we didn’t do that as much… there are things that happen for students in our classrooms and in their learning that resist numbers. It’s about insight, cultivating curiosity, creating the lifelong readers, expanding your inner life. It’s about empathy. It’s about all these things and not being so embarrassed by the fact that you can’t measure [them].

Unfortunately, the combination of the inability to quantify student learning, produce products that are valued by contemporary society, and have scholarship that is viewed outside of the academy as valid and important research has left many of the faculty participants feeling that their work is often set to the side. This was most evident in the faculty participants’ discussion of funding for graduate school. Funding was fundamental to their ability to pursue graduate school and develop their scholarship. Every faculty participant mentioned how he or she was fortunate that his or her current institution helped fund scholarship with undergraduate researchers. To receive such funding is a rarity and treasured.

**Sub-theme: Importance of a Humanistic Perspective to STEM: “Statistical Evidence… Has Limits.”** In the interviews, each faculty participant described the similarities between scholars of all disciplines. Six of these participants described how the disciplines were complimentary to one another, specifically the STEM disciplines and humanities. John illustrates this distinction in the data and interpretive methods of the disciplines. The STEM disciplines look for universal laws and truths, whereas the
humanities are reflecting on human efforts at communicating meaning. To get at the difference between the methodology of the humanities’ scholarship versus the methodologies of the social and natural sciences, we have to get at what’s different about human communication versus the kind of data that you are interpreting in other disciplines. That can be summarized as the difference between the fact that human communication involves intentionality and aboutness, whereas the data that social scientists and natural scientists study is looking for law-like patterns that are, in some respects, independent of particular intentions to communicate meaning.

This varied perspective on the same research question or topic adds a deeper understanding of the issue at hand. Both Jennifer and Jonah spoke to the political climate and the public conversation of such issues as climate change and sustainability. Although scientists have significant and compelling data that indicates humans are impacting the Earth’s climate, the data is not enough to change public opinion. According to Jennifer:

What a humanities scholar can do is start to look for where the underlying values are in this conversation, [noting] where's the evidence coming from to break down the parts of an argument, for example, and to start to assess, how the meaning is being created.... So the analysis of public discourse gives us more information about how people are reasoning their way through public [discussion and decision making].

By understanding both the data and scientific evidence, as well as how humans making meaning of and interpret the data, researchers have a better understanding how
public opinion is crafted, understood, and shaped. Jennifer notes that, “it shows the potential that humanistic methods have to help us understand the world in which we live. I think … as humanists, we're able to give a narrative that is compelling in a different way from numeric data.” Jonah reinforces this perspective by stating, “Each [discipline is] looking at the world in different ways and different dimensions and getting as full bodied a picture or portrait as possible, and I think it is a very good thing.” He adds, “Also, reminds me of the need to be humble, each of us in our own discipline, and it reminds us of the need for each other.” The STEM disciplines need the contextual and moral knowledge that the humanities provide.

Sub-theme: Efforts to Make the Humanities Relevant: Making a Bridge. In the discussions about the meaning and role of scholarship, five of the seven faculty participants spoke to the need to connect their work with a larger community, either the public or other disciplines. In aggregate, these efforts were intended to demonstrate how the humanities are relevant within the context higher education and society at large. These efforts take many forms, including: collaboration with other disciplines, public humanities projects, integrating humanistic methods into lower division courses, trying to communicate scholarship to a lay audience and efforts to do UGR.

Anna illustrated these efforts in the dissemination of her work. “A scholar needs to show that their work is relevant beyond the handful of people in their field who are going to read it. And it needs to have relevance to other fields and disciplines as well,” she says. Making the humanities relevant is a key part of how Jennifer pursues her work. Making those connections was a formative part of her graduate experience. She enjoyed the intersections of scholarship and public engagement. “I started to really just push
myself,” she says. “I was able to come into [contact] with a lot of different scholars who were simultaneously pursuing really important research in their field but [who] were also engaging the public, and I started to just push myself into, How can I take what I learned and really provide an opportunity to engage with the public?”

Elise’s work bridges the humanities and popular literature, as her work is produced not within the confines of scholarly publication, but in the trade press. This bridging of two worlds impacts both her reach as a scholar, but also how she talks about her scholarly process. “My career is somewhat shaped… differently from some of my colleagues in the academy because I have one foot in the academy and one foot in trade publishing, which are somewhat different in humanities,” she explained. “It’s also because my audience is wider, more varied than an academic audience. That also shifts how I tell that story. In fact, I talk in terms of story instead of arguments.”

Theme Two: Importance of the Life of the Mind: The “Phenomenology of Having Your Mind Blown”

Each faculty participant spoke to the moment in which they fell in love with the humanities. For four of the faculty participants, they loved their disciplines, the content, and the method before arriving to their undergraduate institutions. The other three faculty intended to be STEM majors, but found their way to the humanities through a general education course. The course content coupled with engaging faculty drew them into the humanities. Jonah remembers, “I caught a love of learning and it didn't really matter what it was learning about, just a kind of perpetual curiosity about the world and how it works and people and culture and history and religion and all the rest,” he says. “I think that's something that's caught more than taught.” Robert describes a moment in one
of his philosophy courses where he found his “mind teetering on the precipice of
something.” This moment was a juxtaposition of intense academic rigor, original
scholarship, and the emergence of a scholarly voice that Robert referred to as the
“phenomenology of having your mind blown.” This moment was common among the
participants and led to their journeys in becoming scholars and pursuing a life of the
mind.

Sub-theme: Intellectual Engagement as a Pathway: “Suddenly, My World
Exploded”. As noted, one of the primary pathways for this group of faculty into the
humanities is the experience of engaging with the content and the methodological process
of the humanities. The balance of the rigor of the work with the approach to generating
new knowledge captivated faculty. John notes in reflecting on one of his more
challenging undergraduate courses, “That was a very important undergraduate experience
that gave me the idea that I could pursue scholarship in a sustained and intense way that
was fun and engaging.” Elise described the moment in her first classics course where her
“world exploded”. In that moment she found agency in knowing that there was a world
outside her own conservative upbringing that offered knowledge and understanding that
she hadn’t been exposed to before that course. Jonah noted that his goal was to be a
computer programmer and he loved to think and ask questions about theoretical
mathematics, “[p]articularly questions about relativity theory, and about different kinds
of geometry, non-Euclidean geometry, parallel lines that touch, for example, like
longitude lines at the poles, the fact that matter and space worked and related to each
other.” But then he took his first philosophy and religion courses. His swiftly changed
his academic interest “solving problems and writing computer programs, paled in
comparison to kind of philosophical questions raised by the natural sciences.” It is important to note that this is a pathway to the humanities due to the faculty members’ love of the humanities and the humanistic tradition, and how they model this love through enjoyment and sheer pleasure in engaging the life of the mind.

**Sub-theme: Disciplinary Rigor and Epistemological Kinship: “Intellectual Inquiry on Steroids”**. In the theme of intellectual engagement, I noted that faculty were either connected to the content of the humanities or the methodological approach. Robert and John noted their pure enjoyment in how difficult it was do the work in the humanities. Jonah described his graduate program as “intellectual inquiry on steroids” and how pushing the boundaries of his own knowledge were fundamental to his development as a scholar. Elena noted an epistemological connection in her interview and that she could have pursued other disciplines, but the humanities chose her. The approach to humanistic research felt comfortable and “right”. It involved intense reading and a love for learning, as well as a critical lens and a drive to know more. In aggregate, the approach to learning provided an epistemological home and a method of inquiry that fit each of the faculty participants whether that is biography, oral history, philosophical argument, or rhetorical analysis. These factors alone drew in many of the faculty participants, however that attraction was deepened when the faculty member shared an epistemological kinship with others in the community. Robert shared:

> It's really easy in the face of these enormous strong questions about life, meaning, death and stuff like that to just throw up your hands and say just go your own way or whatever. But I think early exchanges with other people who were kind of committed to having concerted and thoughtful conversations about tough
questions, I think that's when I really got excited about doing this forever. This kinship, inherent connectedness, in how one discovers knowledge provided an intellectual home for faculty participants and placed them on their path to becoming faculty scholars.

**Sub-theme: Engaging Others: “Do What Moves Your Heart”**. Each of the faculty participants talked about the importance of sharing what they love. In the context of the interviews this was either through sharing their own research through the dissemination process, or through engaging in UGR and how those mentoring and teaching relationships provided an opportunity share their passion and love for the humanities. Elena describes sharing her research as fulfilling. She notes “[it] motivates me… [when] I do presentations or people read what I have written, or I can share what I have learned with my students. When I see people's reactions in general then I go, ‘Well, this is pretty cool. This person is reading what I wrote.’ or ‘Wow! This review is great.’ Things like these are very helpful and encouraging to continue with your research.” These types of responses reinforce her vocation.

For some faculty, this process is about finding students who naturally connect with the work of the humanities. Jonah shares that these are students “who love books, physical or online, they love reading, they're intellectually curious, they ask lots of questions, you can't shut them up in class. There's a whole cluster of behaviors that goes with a student who is intellectually inquisitive or curious.” Jonah, Elise, and John described working with these students and helping them to find their identities as a student and scholar. This is often done through encouragement in their academic work, as well as experiences such as UGR.
Sub-theme: Defining Scholarly Values and Skills: “Balance of Rigor and Humility”. When speaking with the faculty participants about values, behaviors, skills, and knowledge that scholars in the humanities should have, each faculty member described habits of the mind that were reflective of their reverence for the life of the mind, the active process of discovery and inquiry, and content knowledge itself. Six of the seven faculty described traditions within the discipline, and specific skills that were needed in these disciplines, such as deep reading, archival skills, contextual awareness, and knowledge of rhetorical argument. This same group of respondents talked about the importance of such values as humility, rigor, tenacity, “stick-to-it-aveness”, courage, and authenticity. This gaze of the faculty, that keeps the life of the mind in the center, drives their scholarly approach and subsequent skills, and in turn, impacts how they mentor undergraduate researchers. Jonah notes, “There is an intellectual or scholarly humility that comes with being a scholar, because you realize that there is so much more to learn that you don't know and some of it you never will.” This embrace of humility, or Socratic ignorance (Plato & Woohead, 1953), was evident among faculty respondents.

Theme Three: Guided Practice: “Imbibing Scholarship”

In discussing their paths to becoming scholars, the faculty participants described learning the craft of scholarship. I use the word “craft” intentionally because the faculty descriptions of this process were rich with metaphors. The process was described as weaving, constructing, painting, building, and playing the piano. The skills and tasks associated with humanistic inquiry are not developed in isolation; rather, they are taught by an experienced scholar through apprenticeship and guided practice and honed with a careful balance of criticism and encouragement.
Sub-theme: Modeling: “Apprentice Yourself”. Each of the faculty participants described the process of learning the craft of scholarship as beginning with modeling. This modeling occurs in the classroom, but most often when a student is engaged in individualized research or advanced study. Students emulate the behavior, values, and skills of their mentors, as well as look to examples of good work, such as mentor texts. This process was evident for all aspects of the scholarly process, from idea generation to final publications and dissemination. Jonah notes the importance of modeling over a faculty mentor providing explicit direction. He stated, “A lot of that [learning from a faculty expert], frankly, comes from not necessarily their direct advice, as much as emulation of them as people. Teaching in a classroom, advising students, just being wise, caring people. Then trying to do the best I can to learn from that, and emulate that in various ways.” He concludes, “You sort of imbibe a way of doing scholarship from being around people, philosophers, theologians, religious studies scholars, whatever in my case could do that. You apprentice yourself to a carpenter if you want to learn carpentry.”

Six of the seven faculty interviewed spoke to this modeling process being a critical part of how they learned to become scholars. Their experiences as apprentices began as undergraduates and continued through graduate school. John describes his graduate school experience, “There was a process of modeling and dialog that was meant to help me think through the methodology of the scholarship that I was trying to do [and] that taught me how to do it. I learned how to do it by doing it, and by getting critical feedback from an expert practitioner.” Robert uses this technique in his introductory courses. He notes that learning the skills of a philosopher comes from observing the method of a scholar and wading into the dialogue. Robert explains, “I'll try and just
introduce a [philosophical] claim and then I'll back track through the claim and explain why it would end up being a reasonable [idea] for someone to hold at a certain period of time, and in some sense kind of stick up for it.” He concludes, “by the end, if I've successfully shown [that the claim could be valid. Students realize], oh yeah it's not so crazy. It's a way of working towards this idea of the importance of thinking through other kinds of perspective if they had different information about the world.”

Elena adds that this modeling needs to include some scaffolding of research tasks, as well showing a deep love for the process. She mentors her students “by showing enthusiasm for learning, by guiding them through the process of learning, and by trying to help them be successful. Of course, by trying to give them the tools that they need to be successful and encourage them when they are not successful. Encourage them to continue and to try.”

**Sub-theme: Learning through Doing: “Burning a Bunch of Calories”**.

Faculty noted that, in addition to observing the scholarly process, students need to engage within the process and “jump into the deep end.” The best, and most efficient, learning occurred when students were immersed in the iterative process of scholarship. Robert described this process in philosophy as “burning a bunch of calories,” when a student steps away to think deeply about a particular argument or position. Elena borrows a metaphor from music to highlight the importance of practicing the skills of scholarship. “I always tell my students, if you want to learn how to be an excellent pianist, you're going to have to sit at the piano and pound on it for hours and hours and hours and then make sure that you put the finger in this note right here and do it this way and not the other way. If you're not going to be paying attention to the detail and putting your passion
in it, it's not going to happen.” Practice and intentionality is critical to developing scholarly skills.

This immersion in the practice of scholarship allows for the development of specific skills, but also for a more holistic understanding of the methodological approach. “It’s almost entirely been in a process of trial and error of doing it and getting careful feedback from people who are experts in it,” John says. “In the later stages of their work, once they are working with [their] sources and finding their voice in that conversation, it comes down to them submitting drafts, criticizing their arguments, pushing back against what they are saying and getting them to defend it, or revise it accordingly in an iterative process, not unlike what I experienced myself as an undergraduate.” This process of producing scholarship, receiving feedback, and recreating is how each faculty participant learned their own craft.

**Sub-theme: Significance of Dialogue: “I Am Always Telling Them To Go Deeper.”** Distinct from, but complimentary to, students immersing themselves in the process of scholarship is participating in the dialogue that occurs when crafting and sharing their work with the faculty mentor, or disciplinary expert. The role of the faculty mentor is to ensure that the process and the methodology is well developed, but also developed deeply. Elise explains, “I'm always saying go deeper, and what do I mean when I say go deeper, make it less factual, make it more interpretive, make it more an active to the human experience, make it deeper, more rounded, more compelling, more three-dimensional...” This deepening of the intellectual process is done through discussion and revision. “My role was usually to address questions of the logical coherence of their argument, the appropriateness of the kinds of evidence or arguments
that they were deploying to try prove their point, the overall organization of their writing and the clarity of their thesis, and the extent to which their way of arguing for the thesis was effective, so the rhetoric of their argument,” John explains. “The experience of dialogue and interaction with faculty members and students in classes is practiced [and models] the kind of dialog process that makes for good humanities scholarship.” The essential technique for developing this scholarship is dialogue and discussion with a faculty mentor.

Sub-theme: Self-discovery: “Slowly Finding Your Own Voice”. In the process of modeling, doing, and discussing, faculty participants reported that they began to learn more about themselves and who they wanted to be as scholars. Six of the seven participants talked about how this self-discovery was an impetus for the formation and refinement of their scholarly identity. Elise will describe this to students as finding their passion and interests as a scholar. One of her goals is to challenge students who are hesitant to stretch themselves as scholars and individuals. “You put them in situations where they're going to get uncomfortable and then give them the experience that, if they stay with it, they're going to lose that discomfort,” she says. This willingness to be uncomfortable helps students to discover their potential, both as scholars, but also individuals. John emphasized the importance of dedication and focus on the process of research during this self-discovery phase noting that there is no substitute for finding your own voice by studying the scholarly approach of others. This development and importance of scholarly voice also became a theme in the participant interviews, in addition to being central to the notion of self-discovery within guided practice.
Theme Four: The Development of a Scholarly Voice

One of the themes that appeared in the interviews was the development of a scholarly voice for both the faculty participants, but their students as well. Faculty define "scholarly voice" as being the particular analytical gaze one develops through the craft of scholarship. Voice is developed by deeply understanding particular content within the discipline and by having a specific perspective on that content. Voice is honed by engaging in the scholarly process and critical inquiry, and communicated through publications, presentations, and other means of dissemination. Most often this was mentioned in the discussion of what scholarly skills and values were necessary, but the theme was also threaded through the role of faculty participant as mentor. Faculty perceived their role in facilitating the development of the student’s scholarly voice as absolutely critical because they essentially serve as a proxy for the discipline. John describes this as “finding their voice in [the larger disciplinary] conversation”. The role of the faculty is to guide the student on what has been said, and unsaid within the discipline. This notion of scholarly voice is intellectual in nature, the development of a scholarly persona. Each faculty participant highlighted how their ultimate goal for their students was to develop a scholarly voice and a sense of place within the discipline.

Sub-theme: Nurturing Agency Through Shared Goals: Defining What They Want to Get out of the Scholarship. Five of the seven scholars interviewed described aspects of their mentorship that allowed students to articulate and share their goals for their UGR. Jennifer describes her process, “I think as a mentor, I try and give students a lot of agency in defining what they want to get out of the internship within the pursuit of scholarship, right? They've already signed on to try and answer these research questions
and to pursue scholarship, but what else are they trying to get out of the undergraduate research experience.” She explains, “I think that’s a broad answer in terms of mentorship, but I think I work very much to try and empower students and give them agency to define their own learning goals and outcomes for the project.” Jennifer describes this process with student research teams managing the timeline and revising their learning goals based upon project progress.

**Sub-theme: Strength of Voice Within the Discipline: “Knowing That They Have Something to Say”**. The development of a scholarly voice for both the faculty participants, as well as their students included a strong sense of identity within the discipline and a belief that they had something to contribute. Both John and Elise described disciplinary conversations as being similar to being at a dinner party and walking into a conversation that had been taking place. The challenge is finding something to contribute and having the courage to join. John explains, “We need to teach students to be able to enter into the conversation in a meaningful and responsible way, but that’s half art and half science. There is an element of being a good listener and having a sense of where the conversation is going, and having the creative insight to take it in a provocative new direction.” He continues, “[the students] need to be capable of introducing their own scholarly voice into a discussion. That doesn’t happen until they have grappled with the majority of what other people have said on their topic. That’s what makes undergraduate research very, very difficult in a way in the humanities.” The development of this voice takes time and sustained effort.

Undergraduate students do not often have the depth of knowledge needed to speak with authority on topics within the discipline; however that is not the most challenging
aspect of joining the disciplinary dialogue. It is courage, perseverance, and strength of will. Elena stated in her interview, “I think a lot of students don't believe that they can produce anything of value because they are not taught to see themselves as intellectuals mainly because there is the idea that if you're an intellectual, you're a nerd, you're not cool. I hate that. That's the sheerest stupidity. That goes against what it should be.”

**Sub-theme: Importance of Authenticity: Not a Fake.** Two of the faculty participants commented that it is important not to be fake when sharing their passions and interests in research. One faculty member saw her authenticity as being critical to her teaching and mentoring. “Students can know it if you are a fake.” Elise reiterates, “If you are a fake, they can just smell it.” Elena felt that this feeling of fakeness, or saccharine, disengaged students from the learning process. “They’ll go a long way… if they know they can feel your passion for what you do. I absolutely think it’s my job to make sure I stayed connected to that.” Jennifer looked at her approach to research and choice of projects not as passion, but as a need to be authentic in engaging students. She recalled attending a conference where authenticity in research was emphasized.

[The] keynote was really about doing innovative research with students and that, if you're going fake research where students aren't really at the edge of innovation and fail, then you're not doing as full of a service to them as you could be, and that really convinced me to think about, Am I too safe with my projects with students? I think students sometimes think that I have the answer to the research before we start and they quickly find out that no, I don’t, and sometimes we have to throw out whole methods and start over because it didn't work, and so that doing collaborative innovation I think is an important value because I think that
you're more authentic and honest with the students that you're working on that research with.

Authenticity in asking the research question facilitates both student learning and the students’ ability to develop their sense of self as a scholar.

**Sub-theme: Develop in Tandem with Community.** The development of this scholarly voice is something that cannot be developed in the perceived isolation of humanities scholars. One’s voice as scholar is defined within the discipline, but also in response to the encouragement and criticism of a faculty mentor and disciplinary community. Some students develop this in the writing and editing process. Robert explains, “I guess it's maybe the idea of taking that internal dialogue and really running through that as your methodology. Really being like, ‘No, no, I'm thinking really hard about this and I need to rewrite this section because it doesn't make sense to me.’ You know what I mean?” He continues, it is “really getting [them] to internalize this critical rigor that you want them to have and this kind of humility that they themselves could be wrong, and they're willing to take their own views or ideas to task over time.” For some disciplines, actual engagement with the discipline through presentations and other forms of dissemination is more rare for undergraduates. The faculty participants often spoke of their own experiences in developing their voice in graduate school.

For John, this development of voice happened when he was a graduate student, “There is no substitute for reading a lot of that work and then sort of slavish imitation of how other people are doing it, and then slowly finding your own voice, your own voice as opposed to over relying on imitation of other peoples’ approaches to those questions.” John explained. In observing his students engaged in this process of developing their
voice, he noted that the process is challenging for his students because they are not always willing to spend the time needed to allow their voices to develop. “I think there's this kind of sense that students are racing to completion, and the job of the professor is walk them back from that and, as lame as it sounds, have faith in the process,” he explains. This emphasizes the importance of student dedication and focus on the process of scholarship, as they facilitate the self-discovery process. When students take that step back, they are able to engage in scholarly conversations with their faculty mentor, the academic departments, and the larger discipline.

**Theme Five: Intention and Impact of UREs**

In discussing the experience of mentoring students in humanities research, it was clear that although there were similarities with other disciplines, there were fundamental differences that impact not simply the structure of the experience, but the foundation as well. I delineate the similarities and differences into the “intent”, or the goal of URE in the humanities, and the “impact” of URE, meaning how the URE impacts the learning of the undergraduate students. Jennifer noted in her interview that there was a lack of models of how to do URE in the humanities. Anna compared her experience mentoring students to that of her STEM colleagues. She explained that she doesn’t have the ability to have students work on her scholarship during the summer because humanistic scholarship is fundamentally different than work in a lab. She notes that the undergraduate students working in labs “are learning something about science, [and] ultimately, contributing to the scientist's research. Whereas, for me, if I take on summer research students, they're doing they're research and I'm doing my research, but they're actually detracting from my scholarship because the mentoring that I'm giving them is
something different than what I'm doing.” Jennifer also spoke to how URE is done in the sciences. She views the students’ work in the sciences as being supportive. Ultimately, the students are doing research that directly supports the faculty member. Jennifer does not see how this model fits who she is as a scholar, as well as her type of scholarship. “I think there are people out there who do more of a support [model] and they do it really well. I haven't figured it out how to do that yet. I don’t get as excited about it.” She concludes, “I [am someone] who really sees the practice of a faculty-driven research project with undergraduate collaboration [as] really valuable.” This distinction between URE in STEM, and what is possible in the humanities evolved into a theme in the narratives.

Sub-theme: Variance in Structure of URE: “It Isn’t the Typical Model.” In describing the models of UGR employed on their campuses, all the faculty participants spoke to three types of models: traditional coursework, independent or directed study, and summer intensive program. Although the UREs existed on all campuses, not all faculty participated in these programs. The internal structure and mentorship of these programs were internally consistent, but very different from traditional models of UREs. The faculty participants were also aware of the differences. Jonah commented, “The humanities, I think is harder, because that isn't the typical model. You learn by watching, and asking questions. You learn [from] not just faculty, but other students.” Although this type of learning does happen within STEM learning experiences, these faculty participants saw the learning in the humanities UREs as different. Jonah noted that students interacted with one another in a collegial way, taking responsibility for one another’s learning, because they were not working on the same project, but rather very
different projects with similar methodologies. Students assisted one another in thinking through the best ways to approach their work. Although this level of collaboration does occur in the STEM disciplines among faculty, it is rare between student peers. In addition, Jonah noted that his research students were not working on projects that were within his area of expertise. John clarified this perspective when talking about directed study, “I have had students working on things that I really don’t know all that much about, but I know enough about the process of researching and writing and constructing an argument that I’m able to be helpful to them in that way, and provide a kind of sounding board for them even though I don’t know that much about the content area. That’s more the norm actually.” This is one of the unique aspects of UREs in the humanities, as described by the participants. When the context is outside a classroom, the faculty mentor serves as a methodological guide, essentially guiding the students through the process of inquiry as opposed to being an expert on the content of the study, as well as the process.

Sub-theme: Balance of Support and Challenge: “Give Them Enough Instruction So They Don’t Despair.” All seven of the faculty participants spoke to balancing their approach to mentoring and supervision as a balance of knowing the students’ skillset and the ability of the students with the appropriate level of challenge. This balance varies depending on the student and their relationship with the faculty mentor. Elise speaks to this holistically. “The best way you learn how to swim is if you get pushed in the deep end of the pool. There’s a little bit of that. You [the students] are going to get lost. You’re going to get confused and that is okay. For me, the challenge is to give to give them [the students] enough instruction so they don’t despair.” Success in
mentoring is balance.

This process also includes scaffolding the challenges and training in a way that mirrors what the students need in that moment of research. “I've [had] some students who were really accomplished, who needed very little mentoring. Others need quite a bit more, but it really is guided by the particular needs of the student, so I guess it's very crafted for the individual,” Anna explains.

Both Elise and Jennifer referenced the need for some discomfort and failure in the research process. Although this tipped the scales a bit, they noted the importance of being present in that failure and creating a safe place for failure. Jennifer explains:

Letting students fail is really hard and it slows down the research and it shows when an argument is not working and you have to start over. I think that I certainly have experienced that as a humanities scholar, and so sharing that with students you have to find the line where they can fail productively without getting too behind in a limited time research project, and also where they can feel empowered coming out of that failure.”

She continues, “I think that's the line that's really important to make sure that they don’t feel demoralized but rather come to understanding and knowledge. That's one component of what that balance is. Being present in those moments of struggle to affirm that struggle is part of the process.” Faculty mentors normalize the struggle of scholarship, as well as provide the students support.

**Sub-theme: Emphasis on Transferrable Skills: Training Minds.** Faculty respondents talked about helping students to develop transferrable skills that are applicable outside of university life, such as project management, archival skills, data
organization, and writing skills. When discussing what attributes and skills they wanted to imbue their students, only one faculty participant talked about preparing his/her students for graduate school. Faculty also focused on teaching students about what it means to be human and engage in the life of the mind, essentially training the mind to work in particular way and adopt a particular gaze that embraced skills such as critical thinking, problem solving, and contextual knowing. Jennifer explains, “It's about equipping students for Democratic citizenship, and I think that as a [communications] scholar, an awareness of the nuances and the potentiality of meaning-making is really important whether they too become an uber nerd and go to grad school, or whether they take these skills [into the workplace]. It's part of the way that they're able to help their company and hopefully make more ethical decisions because they're not just concerned with what it is the company needs, but they think about that shared communication and shared values.”

**Sub-theme: Tension Between Mentoring and Scholarly Production:**

“Running Cross-purposes”? The intersection of teaching and scholarship, or rather mentor and scholar, was raised by each participant and that is where the commonality ended. The faculty participants struggled with the balance of being at a liberal arts college that valued URE, and having the demands of tenure and the pressure to publish. Some faculty participants were able to utilize student mentees to work on their own research, but others struggle with how to do this without significant negative impact on their own work. In an initial analysis, there did not seem to be an approach in which faculty were able to embrace URE without compromising their research and vice versa. The most senior faculty viewed engaging with undergraduates as being fundamental to
their process. Elise states, “When I'm writing well, I'm teaching better. When I’m teaching well, I'm writing better. I just feel like they go together. And in fact, my life would be a lot less complicated if I could step away from the classroom, but I don't want to step away from the classroom because I still feel like it's just filled with ideas. It keeps me fresh. It keeps me current. It keeps me from being stuck in my own box.” Jonah also sees the intimate connection of his teaching, mentoring, and research. Research “grows out of my teaching and vice versa. Teaching and research, I think are sort of mutually dependent or they reinforce each other, [and] feed each other in various ways… A scholar as part of being a mentor, or mentor as being a scholar. I don’t see those as in any way running cross-purposes.” Jonah concludes. He views his work as scholar, teacher, and mentor as being mutually reinforcing.

This is in stark contrast to other faculty participants who are balancing workload demands and their desire to support students. Robert clarifies, “I think there is a sort of threshold of adequacy that one needs to meet with respect to mentoring, and I believe I meet it handily. But, if you ask me what I am working on when I have a spare hour for work, it is almost certainly the scholarship stuff.” Anna notes the fundamental differences in how the structure of URE can benefit the STEM disciplines, but disadvantage the humanities. “The students are learning and they're learning something about science, but they're, ultimately, contributing to the scientist's research. Whereas, for me, if I take on summer research students, they're doing their research and I'm doing my research, but they're actually detracting from my scholarship because the mentoring that I'm giving them is something different than what I'm doing.” She makes an important distinction between STEM and her discipline of history. “I know in some fields
undergrads might co-author a paper with a professor, but that's just not done in our field, so as far as scholarly work with students, it's always their scholarly work. It doesn't have any relation to my own.” In contrast to Jonah, Anna sees her work as scholar and mentor as being separate.

In reexamining the data from the interviews, there is a clear distinction in which faculty members juxtapose their scholarship with their student’s scholarship. If a faculty member, regardless of rank, has a workload plan, or receives formal recognition for the added work of mentoring student scholarship, the tension is far less than for those scholars who are mentoring due to institutional culture and personal ethic. Each faculty participant was clear, as noted previously, that their institutions provided generous support of their work and work with undergraduate students.

**Theme Six: Scholarly Process in Proximity to Community**

This is the most emergent theme of the six noted in this chapter, meaning the theme was present in the data, but not as pronounced as the previous five themes. This theme is also the most difficult, and perhaps controversial, to verbalize. In the interviews, all of the faculty participants noted that they engaged in scholarship that was very solitary in nature; however, they were connected to a community at various points of the scholarly process. The community varied depending on the scholar. Most faculty mentioned their disciplinary communities and the audiences for their writings and presentations (either scholarly or the lay audiences). One faculty member highlighted her connection to the local community; another faculty member was connected to an ethnic community. The level of engagement varied by faculty member and by the particular scholarly project. For some participants, they fully immersed themselves in the needs of
the community, and scholarship became a mode of public service and public engagement. For other faculty, they developed their scholarship in proximity to community and their main connection was through the dissemination process. Regardless of the level of engagement, each faculty member was cognizant of the importance of their disciplinary and local communities, in addition to audience, in their work.

**Sub-theme: Culture of Intellectual Engagement: “Ambient Philosophical Temperature”**. Two faculty participants spoke specifically to the importance of a culture and community that valued intellectual engagement. They saw part of the scholarly process as being engaged in a community where scholarly discussions are vibrant, embraced, and welcomed. Robert explains.

You pick up this kind of ambient philosophical temperature, but when it comes to doing research on your own, because it's the case people are typically working on really narrow questions, and the level of specialization required is often kind of remarkable, it is very rare to have people around you that are well positioned to talk through the specific questions that make up your research. And so in that sense, it is really solitary when you're trying to put pen to paper to try and sort out what you're arguing for or what your doing in a paper.

Robert further explains that engagement in a scholarly community provides support and encourages scholarship by “just being part of a community of people [that] are interested in questions and willing to try and pursue them in an earnest and thoughtful and patient fashion.”

This community provided encouragement and support in their development as young scholars.
**Sub-theme: Scholarly process: “You don’t finish it by yourselves”**. In the discussions of the scholarly process, five of the seven faculty participants talked about how their scholarship was informed, or deepened by the work of others. Three of these faculty participants labeled this connection with others as “collaborations” either with other scholars or with the local community. Jennifer elaborates, “I think for me a big value is also collaboration both in terms of formulating research questions and then giving out answers. I think that you don’t start research by yourselves. You don’t finish it by yourselves. There's always an audience and you're drawing on you are the audience for our previous research that you're then drawing on to make the next advancements. I think being aware of that relationship is important in the research that I do and in my identity as a scholar.”

**Sub-theme: Scholarly Home.** By scholarly home, I am referring to a space (physical, intellectual, and/or emotional) where faculty members could share, discuss, and refine their research in a meaningful way. Two faculty members spoke specifically about their academic, or scholarly home, as existing outside their institution. This connection with kindred disciplinary spirits at different institutions and professional associations allowed for much needed learning and development, as well as that feeling of kinship. One faculty member noted that he was able to connect with a group of philosophy graduate students from different programs at a meeting.

I think that made me feel like that, even while at the individual level, we are working in general isolation, but there'd be a community of scholars to talk across distances a little bit. Maybe not on a regular basis with the development of
papers, but just in the sense that, oh yeah there are people out there who care and will be working on this stuff even if I don't get to talk to them very often.

Another faculty member talks about a small group of colleagues that have similar research areas. She clarifies, “We're on panels together all the time. We were sending drafts to each other, sharing some sources, just generally bouncing ideas off of each other and that helped crystallize a lot of my ideas. It was really helpful because I am in such a small department and such a small college most people here don't know what I'm talking about, so to have this cohort… has really been helpful and has really shaped my scholarship.” She concludes, “partly by reinforcing that what I'm doing is important and is part of a broader conversation.” This connection to the larger conversation provides a disciplinary support system that is not provided at her institution.

**Insight into Research Questions Through Emergent Themes**

The intent of describing and distilling the faculty participants’ narratives into themes was to provide insight into the research questions as noted in Chapters One and Three. Essentially, the research questions for this study were the following: a) How do faculty describe what it means to be a scholar in the humanities, through describing their research and the scholarly process? b) How do faculty describe the experience and learning process of undergraduates? and, c) How do faculty situate UGR within their own scholarly process? Each of the themes illuminated my understanding of the experiences of humanities faculty in UR.
How Do Faculty Describe What It Means to be a Scholar in the Humanities?

As the faculty participants described what it means to be a scholar in the humanities, the themes of “centrality of the humanities” and “life of the mind” resonated the most. In each of the descriptions by the seven faculty participants, they spoke about the reverence they have for their disciplines. Despite the messaging in the public sphere that the humanities is not as valuable as science, the faculty participants clearly stated that humanities research and the research process have value, not simply for the researchers, but for society at large. Most notable sub-themes in relation to the research questions are the feelings of marginalization, efforts to make the humanities relevant in contemporary society, epistemological kinship, and the desire to engage others.

The faculty noted in their narratives that they truly enjoyed their work, both mentoring and scholarship, and found that by working with undergraduates they are able to connect a new generation of students with a love for the humanities, regardless of whether or not students pursued graduate school. “I love seeing them pick up on themselves, I love to see their writing improve, I love to see them develop their own interests, it's sometimes scary for a student when they realize in the process of working with you that they thought they wanted to go to graduate school [and then realized that] they want to be in digital communications [instead],” says Elise. She continues and explains that through the research process, students learn not just about humanities research, but also about their own interests and abilities.

By sharing their knowledge and love for learning, they are able to energize and excite students, as well as revitalize and invigorate their own work. Four of the seven participants noted that working with undergraduates helped to keep them active and
productive in their scholarship. This activity was either related to serving as research assistants, or alternatively to bring a new perspective about the faculty member’s research. In her discussion about the research process, Elena noted that working with undergraduates enriches her work. “[Working with undergraduates] help[s] me too as a scholar and a researcher to see, ‘Oh! This is important for them. Why is it important for them?’ Is this because they are from another culture or they're from a different generation?” Through observing her students and engaging them in the scholarly process, she learned as well.

**How Do Faculty Describe the Experience and Learning Process of Undergraduates?**

The second research question asks how faculty describe the experience and learning process of UGR. This question is best understood through the themes of guided practice, development of scholarly voice, and intent and impact of URE. Faculty participants were consistent in their descriptions of the scholarly process for students. Generally, the process began with question generation and moved through a significant literature review stage. This stage provided a disciplinary context for the scholarly argument, or research question. Students would then visit archives, collect artifacts, or in the discipline of philosophy, begin to construct their arguments. After assembling new information, each student would begin to assemble a larger scholarly argument, or narrative, and then move into the writing process. In learning the craft of scholarship, the faculty noted that students could not navigate the humanities’ process of scholarly inquiry alone and having a faculty scholar and mentor to help teach and hone their methodological skills was critical, as described in Theme 3 above.
The theme of the development of scholarly voice was threaded through the description of the URE experience, but also in how the faculty participants learned the craft as young scholars. This discovery of who they were as scholars connected to both the belief that they had something to contribute to the discipline, but also their responses to direction and supportive criticism from their mentors. This notion of voice is related to identity development, a sense of who they are as scholars, and how they are situated within the discipline. Three faculty participants talked about the vast history of their disciplines, and how they were part of something more than just their research. John spoke to this when describing the research process for his undergraduate students. In discussing the literature review process, John noted:

… if [the undergraduate researchers] have scholars who disagree with their point of view, hopefully by grappling with the other side, they should be able to identify some areas of synthesis between the competing voices, or maybe new directions to take that might overcome the disagreement. Then, they are contributing in a new way to that dialog and in a new way to knowledge and then it’s something original.

This contribution extends beyond what is possible within the classroom, and connects the students to the discipline itself.

**How Do Faculty Situate UGR Within Their Scholarly Process?**

The theme of intent and impact of URE spoke to two research questions, how faculty describe URE and how they situate URE in their scholarly process. Faculty talked about the scholarly process needs to provide students with skills that were reflective and supportive of a life of the mind, but were transferrable as well. The
emphasis on transferrable, marketable skills was clear in descriptions of how faculty mentor students through the scholarly learning process. Jennifer illustrates this well.

One of the things that I think [about when creating a URE] is how does the research process translate inside and outside of the academy. It's the foundation of how I'm designing these activities, of how I'm providing opportunity, activities in the classroom, how I'm providing opportunities for undergraduates to reach out and do research.

Also of note in creating UREs is the need to balance the learning process for students. Faculty most often did this through scaffolding the challenge of independent research and providing support in the presence of both their mentee’s successes and failures. The most divergent subtheme is the tension between mentorship and scholarly production. I found that this particular topic was incredibly salient with each faculty member, but there was little agreement on the overall impact on his or her work. The factors in play were the nature of the scholarship, where the faculty member was in the tenure and promotion process, and more importantly the extent to which their work with undergraduates was recognized in their workload. In discussing the URE, three faculty noted either the lack of URE models in the humanities, or the challenge of crafting models that were different from STEM approaches to UREs. This was particularly notable because these particular faculty were identified as successful in mentoring students in research in and out of the classroom.

The last theme of scholarship informed by community is emergent in nature. Faculty participants talked about the nature of community and collaboration in a variety of matters and contexts. Robert described the importance of community generally when
he spoke about the importance of ambient level of intellectual engagement. Anna talked about colleagues at different institutions that nurtured and shaped her scholarship more so than anyone at her home institution. Although research in the humanities is solitary in nature, there are places where the faculty connect to communities, whether communities of scholars, the general public, or the discipline as a whole.

**Emerging Metaphors**

In Chapter Three, I describe conducting a secondary metaphorical analysis. In reviewing the narratives for metaphor, I have found that the faculty participants utilized imagery and metaphor when talking about the research process. The most common metaphors emphasized the recursive nature of research in the humanities. These metaphors included: building a skeleton or structure, weaving a tapestry, the layering of oils when crafting a painting, the placement and purpose of signs during a long journey, and catching a bug, or illness. When re-examining the data, there was not enough data to support the metaphorical analysis. Some of the metaphors appear in this chapter and in Chapter Six as support for the themes and highlights for the analysis.

**Chapter Summary**

This chapter describes the themes that emerged from the faculty participant narratives described in Chapter Four. These themes include: centrality of the humanities, life of the mind, guided practice, development of a scholarly voice, intention and impact of UGR, and scholarship informed by community.

The first theme is titled ‘centrality of the humanities’. In the interviews, the faculty participants emphasized the centrality of the humanities in a holistic education.
They described the humanities as a vehicle for understanding, valuing, and pursuing a “good life” and an engaged citizen of the world. This belief serves as the foundation for the value faculty see in the humanities.

The second theme speaks to the “life of the mind”. Faculty participants describe the “life of the mind” as the natural curiosity and pursuit of knowledge demonstrated by someone who deeply values learning. Faculty participants stated that this intellectual approach embodies the rigor of the humanities disciplines, but also emphasizes the skills and values needed to be a successful scholar within the humanities, which are different than skills and values needed in other disciplines.

The third theme, guided practice, emphasizes how faculty participants described learning and teaching the craft of scholarship. Their descriptions emphasized the importance of apprenticeship with a faculty scholar, practice, dialogue, and self-discovery.

The fourth theme, the development of a scholarly voice, is unique in that one’s awareness of the discipline and their place within it as a scholar is critical to the scholarship enterprise in the humanities. This is in contrast to the STEM disciplines, where the scholarly process is deductive in nature. Deduction emphasizes absolute truths from which a hypothesis can be made. In the humanities, faculty utilize an inductive or critical approach, both of which require a deep understanding of knowledge from which arguments are made. Faculty described the development and assertion of scholarly voice as both a value and a skill critical to the scholarly process. This scholarly voice is the unique perspective of the scholar from which they contribute to the discipline.

The fifth theme of intention and impact of URE demystifies the structure of URE
within the humanities. The models used within the humanities vary from traditional models in URE, in addition the intent of URE is wholly different. Faculty participants emphasized the importance of developing skills that support the “life of the mind” and are transferrable in nature.

The final theme, scholarly process in proximity to community, distills the place of community within humanities scholarship. Although much of the scholarship creation is done in isolation, humanists derive inspiration, feedback, criticism, and assistance from various communities. These communities include, specific disciplinary communities, scholarly audiences, and communities local to the faculty participants’ college. In addition, the importance of the academic and lay audience is described.

The chapter also examined the research questions through the lens of the themes. In describing what it means to be a scholar in the humanities, the themes of the centrality of the humanities and the life of the mind emphasize the importance of making the humanities relevant to contemporary society, as well as finding epistemological kinship with others doing similar work. In describing the learning process and experience of undergraduates the themes of guided practice, development of scholarly voice, and intent and impact of URE were salient. Each of these describes aspects of how students learn the craft of scholarship and develop a sense of self within the process. The last research question emphasizes the balance of URE within the faculty participants’ scholarly process. Faculty clearly articulated the need for balance within the mentorship and scholarly process, however this balance was felt differently by participants who felt that their work with undergraduates and valued by their departments and colleges, and those who did not.
CHAPTER VI
DISCUSSION AND RECOMMENDATIONS

As noted in throughout this work, this study intends to capture the experiences of humanities faculty who mentor and work with undergraduate research students. The existing literature on UREs focuses on the experience of students and faculty in the STEM disciplines, giving little insight and voice to how faculty and students experience UREs in the humanities. Knowing that the epistemology of the disciplines varies, I wondered whether there might be differences in how faculty approached the craft of scholarship for themselves and their student researchers. Specifically, this study explored the following questions: How do faculty describe what it means to be a scholar within the humanities disciplines? How do faculty describe the experiences and learning process of undergraduate researchers? How do faculty situate the work of undergraduate students within their own scholarly process? In pursuing these questions, my goal was to better understand the experiences of faculty in the humanities who work with UREs, providing me with a foundation to make programmatic recommendations and suggestions for future research. The themes described in Chapter Five provide insight into the experiences of humanities faculty and provide a common ground from which the faculty and academic administrators can engage in key conversations and hone their practice of student engagements. This chapter will describe those conversations, insights, and directions for further research.
Discussion

In preparing the discussion and recommendations component of this study, I found myself distilling what I learned from the faculty participant interviews into a series of questions, or statements, to consider. As a qualitative researcher, I intend for my research to provide insight and context, rather than a list of quantifiable recommendations and compartmentalized analyses. That being said, my results are best framed by the following considerations: How are the themes expressed by humanities faculty similar to and different from the literature base? What new learning and insights do the themes provide? And, where do we (humanities faculty members and research administrators) go from here?

Similarities and Differences from Current Scholarship

Reflecting on the scholarly literature, there are many similarities between the experiences of the faculty participants and the seminal studies described in Chapter Two.

URE Scholarship. Interviews resulted in rich, thick description of faculty participants’ research and scholarly processes. Although they had perceived their research processes differently, faculty described perceptions of their work similar to Brew’s (2001) study, which categorized these perceptions into metaphors. Brew’s research examined conceptions of research from a non-disciplinary lens. She noted that there were four conceptions, or variations, of how faculty described their research, including the domino variation, the layer variation, the trading variation, and the journey variation. The domino variation focuses tasks, processes, experiments, questions, and ideas related to research. These items are sequential and impact one another in a linear manner leading to synthesis. The trading variation focuses on the products of research
and the processes needed to achieve those products. The layer variation involves a deep understanding of previous research and seeks to understand and uncover new layers of scholarship. The last variation is the journey variation. This variation focuses on the transformation of the researcher. The research itself is less important than how the overall research question intersects with the development of the researcher and an individual and a scholar. This variation notes a departure from the research being the center of the metaphor to the scholar being the center (Brew, 2001). Examining the interviews in aggregate, all four of Brew’s conceptions of research were noted, although the layer variation was most common.

In the faculty descriptions of UREs, specifically descriptions of the mentoring process and the attention devoted to methodology and content, the UREs traversed the eight continua described by Beckman and Hensel (2009). Beckman and Hensel’s (2009) work focuses on describing and understanding the tensions that occur when trying to define undergraduate research. The diverse forms and functions undergraduate research reflect the institutional and disciplinary culture and can create this tension. The model described by Beckman and Hensel (2009) integrates approaches from multiple institutions, as well as multiple models described in the literature. As noted in Figure 2, Beckman and Hensel (2009) identify eight continua upon which undergraduate research is defined. These continua describe the following; the purpose of the research (student learning or product creation/generation), the impetus of the work (student initiated and faculty need), who is able to participate (general student population or specific group of students), location in the formal academic program (curricular or co-curricular), the nature of the research (collaborative vs. individual research process; original to the
student or an original contribution to the discipline; research as interdisciplinary, multi-disciplinary, trans-disciplinary, or based within the discipline), and the intended audience for future presentations or other forms of dissemination (community audience or a professional/disciplinary audience). I did not find that the humanities UREs distributed differently across this framework; rather, the continua represented the varying approaches of the faculty participants. For example, the one exception I found was the emphasis given particular elements of research among humanities faculty. Faculty participants emphasized the process of research (student centered) and the need for the research to be original to the student, rather than the discipline. In contrast, their STEM-based colleagues emphasize the importance of the research being original, or novel to the discipline (Lopatto, 2004a; Seymour et al., 2004).

The URE models described by the faculty participants did not fit the STEM models as described by Kremer and Bringle (1990) and Franz, et al. (2006), but rather the models as described by McDorman (2004). McDorman (2004), in describing his own research, identified three types of research models in the humanities that take a more collaborative approach: the faculty-driven model, faculty modeling method, and the student-driven collaborative model. These models are based upon a collegial approach, in which the student communicates with the faculty member throughout the research process. This approach is more collaborative than those described by Kremer and Bringle (1990) and Franz, et al. (2006). McDorman’s (2004) models include: the faculty-driven model, faculty modeling method, and the student-driven collaborative model. In the faculty-driven model, the faculty mentor structures and leads the research, while students work on components that support the final project. The faculty modeling
method focuses on the faculty member working on a piece of his or her research at the same time that students work on theirs. The student-driven collaboration model places responsibility on the student for all aspects of the research project. The data generated from this study reinforces these models as they are inclusive of the types of UREs the faculty participants utilized when working with their students. This finding is substantive because it validates a potential framing for URE in the humanities. Despite these similarities between McDorman’s (2004) models and this study, the data also illustrated areas unexplored by the current scholarship on UR.

**Scholarship on Disciplinary Variation and Culture.** The scholarship about the disciplines’ paradigmic variance (Biglan, 1973a, b; Kolb, 1981) and culture (Beecher, 1981; Beecher & Trowler 2001) provide some explanation and description that echo themes noted in the previous chapter, as well as the notion that the discipline, itself, is impactful on the URE. In Chapter Two, I asserted that the nuance of the disciplinary epistemologies and how those approaches are taught impacts the experience of URE for both faculty and students. I began constructing this argument by describing how the relationship between disciplinary context and students' epistemologies may vary the outcomes in the learning process (Paulsen & Wells, 1998). Specifically, I aligned my argument with Paulsen and Wells (1998), who noted the striking epistemological differences between Biglan’s soft and hard disciplines, essentially humanities and STEM. This difference was noted in their observation that “students majoring in Biglan’s ‘soft’ fields were significantly less likely than those students majoring in ‘hard’ fields to hold naïve beliefs about certain knowledge” (Paulsen & Wells, 1998, p. 374). This notion supports Braxton and Hargens’ (1996) observation that faculty in the pure/soft
disciplines, such as the humanities, vary their pedagogy from their pure/hard STEM peers, specifically, noting that faculty:

- utilize multiple lenses, and points of view;
- have a student-centered approach to teaching;
- engage students in dialogue that cultivates analysis and synthesis;
- and use methods of assessment that promote critical thinking.

In knowing that the disciplines vary by content and epistemology, I was curious if this made a difference, not simply in how a faculty member approaches his/her own scholarly work, but also in how faculty mentor students into the discipline. The data, and subsequent themes, from this study indicate the answer is a resounding “yes.” There is significant difference between the faculty in this study and those represented in STEM-focused studies on UREs (Kardash, 2000; Lopatto, 2004a; Seymour et al., 2004) with respect to the intent and impact of UREs, the methods and techniques of mentorship, the emphasis on dialogue as part of learning the process of scholarly inquiry, and the centrality of developing a scholarly voice.

Faculty in this study emphasized the importance UREs as a means to develop habits of mind, as well as specific skill sets. Their intention in creating UREs is to provide both of these. For example, the faculty participants emphasized in their interviews that the learning for their undergraduate students included tangible skill sets, such as writing, presentation skills, data collection, and literature review skills. Each of these skills is reflected in the work of Lopatto (2004a, b) and Seymour et al. (2004). What is not mentioned in those seminal studies, but was mentioned by the faculty participants in this study, is the importance of developing the “life of the mind” and
giving relevance to the gaze, or scholarly perspective, and the humanistic method of inquiry. The importance of developing a love for learning and discovering through the humanistic tradition was critical to each of the faculty interviewed. By developing a love for learning and engaging in the “life of the mind” students develop an appreciation for the role of the humanities and the humanistic role of inquiry. This is not to say that UREs in the STEM disciplines do not provide some experiences in developing the “life of the mind”. Students do pursue rigorous research and develop strong scholarly skills in the STEM disciplines. However, due to the deductive nature of inquiry and use of the scientific method, students do not have to immerse themselves in the discipline in the same manner as humanities students. STEM students learn content through their research experiences. Humanities students need to understand the content prior to forming a research question. Schantz (2008) described this process as students developing an understanding and appreciation of the literature, so they can find their voice within it. Faculty in this study perceive that this ability to find oneself in the literature is transferable to finding one’s place in life and thus leading to living more intentionally, more deeply, and with a sense of self, or voice. Faculty participants identified this as one of the intangible values and skillsets that are developed by engaging in UR in the humanities.

I found through the data that this type of learning and intangible skill set is nurtured by the varied approach that this group of faculty uses to teach the methods and techniques of humanistic scholarship. The goal of knowledge generation in the natural sciences is explanation and discovery, focusing on the slow accumulation of knowledge that is linear in nature relying on universal quantities and classifications (Biglan 1973a,
b). The goal of knowledge generation in the humanities and pure social sciences is an ever deeper understanding or interpretation. Thus the approach is reiterative in nature and builds through recursive processes building layers over time. Faculty in this study describe humanities methodology as requiring that students deeply explore one particular topic searching for an argument or perspective to uncover, or engage in critique, and then, striving to make sense of how this new information is situated in the current knowledge base. Some faculty participants utilized approaches that rely primarily on students employing criticism. By engaging in criticism, students use a particular theoretical lens from which one can interpret, analyze, deconstruct, and evaluate a particular topic or piece of work. This exercise in critical thinking, understanding knowledge in context, and recognizing that the knowledge is malleable fundamentally impacts how students in humanities understand and react to the notion of “certain” knowledge, perhaps explaining Paulsen and Wells (1998) observation that a higher proportion of STEM students held naïve beliefs of certain knowledge than humanities students.

Prior to this study, the bulk of scholarship on UREs has emphasized the role of the mentor as a master scholar teaching the student the research process. This is true to some extent in the humanities. However, there is an important difference in how humanities faculty describe the mentorship process, underscoring the centrality and importance of the mentoring process has greater weight among humanists than in the STEM disciplines. This difference may describe Craney’s et al (2011) observation that students in the humanities are much more likely to design their own study, or to have a faculty mentor suggest a general area, and the student plans the specifics. Faculty
participants in this study perceive that UR students learn techniques and research skills in the humanities, but the nature of asking a question in their discipline requires a level of disciplinary understanding and humility that is not requisite in STEM. Undergraduate students in the STEM disciplines are often engaged in a faculty member’s research and do not need to have the depth of understanding of the larger project. Essentially, the students are completing a piece of a larger study; as a result the student does not always see the larger study and how it is situated in the discipline. In contrast, the humanities student researcher is weaving and crafting an argument anchored in the literature, archives, or in previous scholars’ work. That argument, or story, is then subject to criticism and questioning by the faculty mentor. The mentorship, then, is rooted deeply in dialogue and that dialogue is the foundation of the student’s scholarship. The student’s thinking process is the center of the discussion. That dialogue cultivates analysis and synthesis, as noted in Chapters IV and V, but also facilitates the student’s development of a scholarly voice and the need to balance of rigor and humility that is not addressed in any other study about URE.

The final area of distinction between humanities and STEM faculty is intent. Simply asked, what is the intent of URE in the humanities? Generally speaking, students engage in UR because they want to have a deeper experience in the research and scholarly process. For some students, this may be because they intend to go on to graduate school or perhaps pursue a research career. Within the humanities, faculty noted that graduate school is something they do not mention to students because of the limited career prospects, specifically the scarcity of faculty positions in the humanities. Instead, the focus of UR in the humanities is to provide some foundational and
transferable skills, such as writing and archival skills, but more importantly to help students deepen the love of learning by developing their research skills and feeding their curiosity with the hopes that they will continue to love learning and the process of inquiry.

**New Insights**

The themes generated from the interviews in the present study provide a number of new insights into how faculty in the humanities perceive and engage with scholarship and teach that scholarly process to undergraduate students. The themes describe the scholarly perspective of humanist researchers and reinforce my assertion that the scholarly literature on UR has created a language and culture around UR, which, in general, marginalizes the work of humanists and the humanities disciplines. Scholars who have written about UR in the humanities, often position themselves from a place of criticism (Malachowski, 1999; Schantz, 2008; Wilson, 2003). This place allows faculty to illustrate the flaws in the UR scholarship by illustrating how they are not inclusive of other disciplines, but does not provide new scholarship or models. This approach is natural within the humanities discipline, but it does not allow for UR to be defined and imagined without the specter of the STEM disciplines. An example of this perspective can be seen in Schantz’s (2008) assertion that the barriers to UR in humanities are “simultaneously, disciplinary and structural” (p. 26), precluding further development of UR programs in the humanities. While this observation is critical to understanding the challenges of engaging the humanities in URE, it does not offer resolution or direction for resolution.

While there are significant challenges in creating URE in the humanities, this
perception that significant barriers prevent URE in the humanities is generated when looking through the lens of the current UR STEM-biased scholarship. If one sets aside the assumptions about UR and examines the experiences of faulty in the humanities, UR has existed within the disciplines successfully for many years in various forms. In trying to understand UR in the humanities, I have found four insights that illuminate many of the challenges and assumptions. First, UR is not generally discussed in the humanities disciplines. Second, the faculty mirror their own mentoring experiences as graduate and undergraduate students as they create UREs for their own students. Third, the values of humanistic inquiry, espoused by humanities faculty, drive the URE structure. And finally, the STEM-biased assumptions made within the existing scholarly literature about high-quality UR experiences perpetuate the marginalization of the humanities. I will elaborate on each of these insights in the following paragraphs.

**Lack of Discussion of UR in the Humanities.** In their work, Dressel and Marcus (1982) and Lattuca and Stark (1995) allude to an underlying value of URE within humanities and to the absence of a language to describe these experiences and processes. My findings support this argument. The faculty participants with whom I spoke are deeply committed to engaging students in the craft of scholarship. The number of students they mentor and their care in constructing the URE illustrates this. Despite this commitment to UR, however, humanities faculty I interviewed rarely talk about UR in their own work and departmental conversations. To complicate this lack of dialogue, the recent literature on UR in the humanities is bracketed by discipline, focusing on specific disciplines such as English or Religious Studies (Grobman & Kinkead, 2010; McNary- Zak, & Peters, 2011). The research does not extend the conversation in
an interdisciplinary or trans-disciplinary way, allowing for faculty from across the humanities disciplines to better understand each other’s approaches, find commonality, and create space for collaboration. This environment, devoid of engaged dialogue, isolates faculty who do support UR and limits the ability of faculty to learn from one another within and outside their departments and disciplines. References in the faculty narratives to epistemological kinship and the need to find a place to engage in dialogue about UREs are examples of this isolation.

**Faculty Mirror Their Student Experiences as Models for UREs.** The training that faculty members receive within graduate school, generally speaking, is within the content and method of their respective disciplines, and not in teaching and mentorship. For some, their experiences provided a roadmap for what not to do. Faculty learn skills in teaching, mentoring, and supervising students through trial and error, as well as modeling their own experiences as former students. It is important to note that for the faculty participants in this study, many of those experiences as a mentee were positive and resulted in positive growth as scholars, but this was not always the case. Faculty participants were critically aware of how they were mentoring their students, but this awareness was of their own practice rather than being anchored in the scholarship of UR mentorship or in the conversations within the discipline.

**Values of Humanistic Inquiry Drive URE Structure.** The approach to mentorship and UR, in general, was driven by each faculty member’s values as a scholar. These values precipitate the URE and intended outcomes, but are disconnected from any structure anchored in the discipline. Faculty participants easily describe how they teach skills in the discipline through deep reading, the informed construction of an argument,
scholarly writing skills, and the skills of dialogue, for example. These skills support the process and values of humanistic inquiry, however they were not derived from the literature. I found for these faculty participants successful URE models in the humanities are essentially islands of innovation that work for that particular faculty member, but those successes are not communicated to other interested and engaged faculty. Rather, they exist in isolation and devoid of a larger context. While this isolation meets the immediate needs of the particular faculty member and his or her students at that time, it also keeps those voices and insights from generating, or contributing to the larger discussion of URE.

**STEM-Biases About UREs Marginalize the Humanities.** With a scholarly literature that is focused on the experience of STEM UREs, humanities faculty often do not engage in national conversations about UREs. Faculty participants noted an awareness of a larger conversation about URE through such organizations as CUR, but also noted feeling isolated and disengaging when examples of humanities UREs were not offered. Without humanities faculty sharing their experiences and engaging in a dialogue about URE, the perception and assumption that URE in the humanities is not as feasible as it is in the STEM disciplines due to the differences in how research in the humanities is conducted. In order for faculty in the humanities to welcome and recognize undergraduate scholarship and scholarly apprenticeship, they need to openly engage in dialogue and discussion about URE within the disciplines, and across disciplines. Only then can scholars step beyond the shadow of STEM and “rethink many assumptions about the scholarly capabilities of undergraduate students and, more importantly, many assumptions of what constitutes scholarship itself” (Lee-Keller, 2009, p. 11).
Where Do We Go From Here?

As a scholar-practitioner, I recognize that research serves two purposes. The first aspires to contribute new knowledge and expand human understanding of the world and its inner workings. The second purpose is to shape and inform our work as faculty and practitioners, allowing us to move beyond comfort and complacency to reexamine the effectiveness of our practice. This study illustrated that despite our best efforts to increase the number and depth of URE opportunities across the disciplines, we unintentionally marginalize faculty and students in the humanities by not facilitating UR opportunities and structures that are more appropriate for these disciplines. So, the question becomes, where do we go from here?

**Key Conversations for Faculty.** The themes derived from the faculty narratives are useful in seeing how current models and approaches towards UR may be limiting and not fully developed in the context of the humanities. These flaws in our practice and programs are not intentional: these flaws are created by allowing STEM disciplines to dominate the conversation about UR, and by not supporting a strong collective voice in the humanities. To address the silence and isolation, faculty from across the humanities need to engage in intentional UR conversations within their own disciplines, across disciplines, and across departments about UR. There are four primary questions that are informed by this research, but necessitate further discussion: What are the best practices in UR for the humanities? How can faculty be stronger mentors? How can faculty more fully incorporate the practice of UR into their scholarly lives? And, how can we create stronger departmental structures that support UR?
What are the best practices in UR for the humanities? The participants in this study described four basic elements to good practice in UR. The first element is a contextual awareness of the URE, that is the URE should be designed around what is possible within that particular context. For example, faculty recognized the level and quality of work that was possible in an independent study might not be feasible for a 10-week summer project, or a classroom assignment.

The second element of good practice is scaffolding the elements and tasks of the scholarly process. Students are often not aware of the steps of research. Some UREs are intended to take a research question from development to dissemination, while others are only focused on data collection and organization. Faculty need to be explicit with students about the process as a whole, and describe which elements will be completed as part of the URE. This will allow students to see the bigger picture of the scholarly process, while keeping them on task.

The third element of good practice is facilitating student authenticity in the research process by modeling it. By authenticity, I am referring to the exercise of critically thinking through the scholarship, and engaging the student fully in the process. Faculty participants described this authenticity, as a genuine interest in the research, as well as creating a question or argument that is novel to the student, or to the discipline. This approach is in contrast to studies that are superficial, or replicative in nature. This authenticity should begin with asking the question, or crafting the argument, and persisting through the research process. Through this process, the student will develop a sense of self as scholar, but also a sense of intellectual agency.

The final element of good practice is the creation of a scholarly product that
honors the research process and the subsequent knowledge that was created. This product should be celebrated by both the faculty and the student, and presented to the disciplinary or university community. This product is both tangible and metaphorical in that a student can present their work, but also the product symbolizes the completion of the research process.

**How can faculty be stronger UR mentors?** Mentoring undergraduate students is very individualized to the personality and disciplinary philosophy of each faculty member. That being said, the study uncovered a few elements of mentorship that may deepen the URE for both the faculty and the student. First, the faculty mentor needs to be cognizant of their mentoring philosophy and approach. For many faculty, their approach is more intuitive in nature. They are enacting their own experiences as mentees, making small changes as needed. By bringing that approach from a place of informed serendipity to intentionality, faculty can engage in conversations with one another and their mentees about how they are teaching the craft of research and guiding their mentees. The second element is the concept of balance and support. Originally developed by Sanford (1967), the theory of challenge and support acknowledges that true student learning and development occurs when the challenge of the task is balanced with adequate support. In the UR process, faculty need to adapt their mentoring based on the task at hand. This will allow students the space to take intellectual risks and push their skill set, while also having the knowledge that the faculty mentor will offer guidance and redirection when needed. The final element of mentorship to be considered is engaging students in a dialogue, not simply about the research and the research process, but connecting it back to the life of the mind. As a practitioner, I find that undergraduate students have an
understanding that they should engage in research as part of their college experience, but they don’t necessarily have a sense of why. In the humanities, the value of engaging in scholarship is in the transferable skills, but also in having the gaze, or scholarly perspective of a humanist. Faculty participants note that this scholarly perspective provides a deeper understanding of what it means to be informed and educated, from a humanist perspective, and that student can bring that knowledge to their everyday lives.

In thinking deeply about faculty mentoring and support of UREs, I want to emphasize the theme of guided practice. This theme indicated that faculty learn how to be a mentor from their faculty advisors in their graduate school experience, rather than engaging with the literature on mentoring or best practices in UR. Most institutions of higher education have offices or individuals who support new and seasoned faculty in both teaching and advising. Through engaging with campus experts on teaching and learning, faculty members aspiring to deepen their work with UR will find additional support and resources on mentoring practices and approaches.

**How can faculty more fully incorporate the practice of UR into their scholarly lives?** One of the challenges for faculty, regardless of discipline, in engaging in undergraduate research is in fully incorporating the practice in their scholarly lives. This is particularly difficult in the humanities because most faculty are not mentoring students in their own content areas, or sub-disciplines, but rather mentoring students in the process of inquiry. This process is quite different and more time intensive than mentoring in the STEM disciplines because it requires mentoring in method, but also the faculty member learning a new content area. Humanities faculty members cannot teach a singular technique, which is the same regardless of the research study, rather they are teaching
methods that are inseparable in some ways from the content of the study. Faculty participants noted that URE is often synonymous with a STEM lab model. In this model STEM faculty, give student researchers a small piece of a larger research project. This piece often includes learning specific techniques required to engage in STEM research. Through these techniques, students learn about the larger project and the subsequent content. Students are not required to have a sense of the larger research question and how their work is situated within it. Humanities faculty struggle with this approach because it is antithesis of their inductive process.

In determining how best to incorporate UR, humanities faculty need to ask themselves the following questions. First, a faculty member needs to determine if UR fits in their own scholarship and where it is most appropriate. Although rewarding, UR is time intensive for many faculty. Faculty interested in incorporating UR in their scholarship should determine where and how it may fit, as well as needed resources. Second, a faculty member needs to ask him or herself, what are my boundaries? These boundaries may include how many UR students a faculty member is willing to support, the types of projects they are willing to mentor, and the amount of time that can be dedicated to each project. The final question a faculty member should consider is what resources are available in the department, college or university, and nationally. Resources are often available either in the form of professional development, grants, or professional associations. Faculty members should become familiar with what is available to them. If resources are limited, then faculty could initiate a conversation with like-minded colleagues across departments in the humanities to ask for additional resources and support.
How to can the humanities create departmental structures that support UR?

Finally, faculty should engage in a conversation with their colleagues about departmental structures and how those structures support or impede UR. This conversation may clarify what is valued or rewarded in the unit, and if changes can be made to recognize and normalize engagement in UR. For many faculty this may be a challenge, depending on their rank and time at the institution. Faculty may find an ally in their research administrators, or in associations such as CUR. Each of these may have models and examples of how best to incorporate UR into workload or tenure and promotion documents.

Key Conversations for Undergraduate Research Administrators.

Undergraduate research administrators are central to developing the climate and culture of UR on their campuses. By using the term “undergraduate research administrators” (URAs), I am referring to the individuals who have responsibility for organizing, developing, and managing the undergraduate research programs and policies for a college or university. These individuals may be faculty members, academic administrators, or student affairs practitioners. In addition, these individuals come to the role of URA with a diversity of experiences, values, skill sets, and disciplinary orientations.

Regardless skill set or location in the institutional structure, URAs often determine how resources are allocated and UR research programs are designed. Due to the expansive gaze that URAs have and the external funding disparity between STEM and the humanities, URAs do not often engage in conversations with the humanities disciplines about how to provide structural support and resources. Faculty participants echoed the scholarly literature in their observation that there are inequities in the
opportunities for URE in the humanities. URAs need to recognize this imbalance and work to ensure that opportunities in URE cut across disciplines.

URAs should ask the following questions when examining the research climate on campus and how it nurtures or marginalizes research in the humanities: What institutional boundaries are there to UR in the humanities? Do the current programs on campus marginalize or disadvantage the humanities disciplines? What funding resources are available to faculty in the humanities? Do we provide mechanisms or tools for assessing the type of learning that takes place during URE in the humanities? What opportunities are available for faculty development on the topics of mentorship and UREs? Are there venues for faculty in the humanities to engage in institutional conversations about scholarship?

*What institutional barriers are there to UR in the humanities?* As faculty in the humanities are encouraged to engage in collective conversations within their discipline, but also across humanities disciplines, research administrators need to be willing to listen to those conversations and take action to address perceived institutional boundaries to URE in the humanities. Some of these items, such as promotion and tenure guidelines, may not be easily changed, however other items may be easily remedied. These items may include perceived bias in internal grant guidelines and review processes, adjustments to campus celebrations of undergraduate scholarship to include scholarly products in the humanities, and creating UREs with the humanities in mind, as opposed to adapting a STEM model. Research administrators need to critically examine their portfolio of research support programs and services, and ask the question, “Do these current programs on campus marginalize or disadvantage the humanities disciplines intentionally or
unintentionally?"

**What funding resources are available to faculty in the humanities?** The availability of funding and support is critical to any research agenda. This was reflected in the faculty interviews in Chapter Four. Research administrators should examine the internal funding opportunities available on campus to see what is available to faculty. In addition to examining the internal resources, URAs should become familiar with external funding opportunities, either through federal and private grants, or through donor support. Many URAs are familiar with programs that fund UREs such as the NSF Research Experience for Undergraduates, the Beckman Scholars Program, and programs through the Howard Hughes Medical Institute, but have not investigated avenues to fund humanities research and scholarship. The mechanisms for supporting research in the humanities may indeed be very different from how we support research in the STEM disciplines. Regardless of the difference, URAs need to investigate what options are possible and inform faculty of the funding available for their own work and possible UREs.

**Do we provide mechanisms or tools for assessing the type of learning that takes place in the humanities?** In a climate that embraces quantification of student learning as main indicator of URE impact, campus research administrators need to work with faculty, professionals in teaching and learning, and student affairs colleagues to determine models of assessment that measure the type of learning pursued in UREs in the humanities. This inability to capture the knowledge and skills gained from humanistic inquiry limits the development of UREs and impedes faculty and student participation. It also perpetuated the perception that STEM-based UREs are the only model for substantive student
learning. Developing a holistic approach to assessment that balances the quantification of learning, while honoring the recursive nature of humanistic inquiry, would be beneficial not only to the faculty, but to the institution at large.

*What opportunities are available for faculty development on the topics of mentorship and UREs?* Research administrators have the ability to tackle the questions of institutional barriers, funding, and measuring the learning that happens in UREs, but they also need to think about the levels of training and support that faculty members receive developing their mentorship skills and approach to UREs. Multiple associations can provide support in this area including CUR, the Professional and Organizational Development (POD) Network in Higher Education, and individual disciplinary associations. Research administrators should work with campus offices and individuals that support faculty development to offer programs and services that will enhance faculty mentorship, as well as support learner-centered UREs.

*Are there venues for faculty in the humanities to engage in institutional conversations about scholarship?* Finally, research administrators should scan the institution for opportunities for faculty members to engage, as a collective, in conversations about research and scholarship. Often faculty in the humanities are brought into committees and taskforces as a voice of the disciplines, but these voices are dominated by other disciplines. Administrators should look for opportunities for humanists to engage, not just as individuals in a campus conversation, but as a collective within their departments, and as epistemological kin. If no venue exists, administrators should work with faculty and department chairs to create one. Only through conversation and intentional, incremental effort will equity in UREs be realized and the approach and
model of the humanities be recognized.

**Limitations**

Two elements of how the faculty participants were selected limited this study. As noted in Chapter Three, faculty participants were nominated by the provosts at their respective institutions. After receiving the nomination, I emailed each faculty member nominated an invitation to participate in the study. After conducting the interviews and analyzing the data, it became clear that not all faculty who are engaged in UR in the humanities would be known by their provost. With the knowledge that many faculty do not talk about their URE in the department, certain faculty may have been unintentionally left out of the participant selection process. It is important to note that this was unavoidable due to the lack of knowledge about this particular group of faculty. Future studies will take this factor into consideration. The second limitation of the study is the timing of the invitations to participate. Due to a delayed timeline, the invitations to participate were sent to faculty at the end of the academic year. Many of the faculty participants were not checking email regularly, or had summer commitments the precluded them from participating. Although the sample was not compromised and is representative of the breadth of the humanities, a solicitation at a different time in the academic year may have provided a different participant pool.

**Future Research**

This study provides a foundation for understanding how humanities faculty who actively participate in UR make meaning of their work as scholars and mentors. Despite this foundation, there is more work that can be done that would tease out the nuance of
institutional culture, the student learning gains for humanities URES, testing exemplar URE models in the humanities, as well as expand upon themes from this study.

The participants for this study were selected from small, baccalaureate liberal arts institutions in the Midwest. Their experiences as mentors and scholars represented their experiences as humanists, but also faculty within this instructional context. One avenue for further study is to examine the experience of faculty at other institution types. Specifically, the experiences of faculty at Masters Large and Research Intensive institutions may be significantly different due to the greater importance of scholarship over teaching and mentoring undergraduate students, as well as the size and the greater diversity of sub-disciplines of the faculty member’s academic departments.

In addition to examining other institutional types, future research should explore the experiences of students who participate in UREs in the humanities. This particular study was limited in scope, however bringing in student perspectives would have offered another level of insight into the URE. Much of the research on URE in the STEM disciplines emphasize on the learning and impact on student learning. Future studies would be able to examine if these gains also appeared for humanities students.

As mentioned previously, this study corroborates McDorman’s models of URE in the humanities, but further study is needed to validate these particular models. Exploring these models through examining the faculty experience, the student experience, or examining student outcomes such as increased retention and matriculation in graduate school would provide a substantive contribution to the existing scholarship.

Themes described in this study could be studied further. Specifically, a better understanding of the development of scholarly voice may contribute to campus
conversations about student self-efficacy and retention. A deeper understanding of scholarly home, or the idea of epistemological kinship may provide insight into how to best facilitate conversations about URE in the humanities across disciplines and institutions. Also, as noted in Chapter Five, the themes and subthemes the described the relationship between scholar and community were emergent in nature. Although these themes were clear, their meaning was more fluid. A further examination of the role of the disciplinary and local communities would be beneficial.

Finally, one component of the research that necessitates further attention is metaphorical analysis. Although metaphors punctuated many of the interviews and provided insights into the participant narratives, the data available for analysis was not as robust as I had hoped. The interview questions could be redesigned with only this type of analysis in mind and may yield more rich results. The subsequent analysis would provide additional insights that would be helpful in understanding the experience of URE in the humanities.

**Conclusion**

By capturing the voices of faculty engaged in research mentoring in the humanities, this study provides a foundation for new understanding the potential of URE on campus, as well as asking critical questions of faculty and undergraduate research administrators on campus. These questions require that faculty in the humanities begin to articulate their challenges and needs in a collective way, and research administrators hear those voices and begin to adapt the campus research culture and climate to be inclusive of humanistic inquiry and scholarship as part of the URE portfolio.
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Appendix A

Informed Consent
Western Michigan University
Department of Educational Leadership

Principal Investigator: Dr. Andrea Beach
Student Investigator: Susan Mendoza
Title of Study: The Experience of Scholarship in the Humanities: Engaging Undergraduate Students in the Scholarly Process

You have been invited to participate in a research project titled The Experience of Scholarship in the Humanities: Engaging Undergraduate Students in the Scholarly Process. This project will serve as Susan Mendoza’s dissertation for the requirements of the Ph. D. in Educational Leadership. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?
The purpose of this study is to understand the experience of humanities faculty as scholars and how that experience impacts the undergraduate research experience for students. The study is being conducted to better understand undergraduate research in the humanities disciplines.

Who can participate in this study?
Participants in this study are to include tenure, and tenure track humanities faculty who work at one of the Great Lakes College Associations schools and also mentor undergraduate researchers.

Where will this study take place?
There are two aspects of the study. The first is a survey that will be sent to participants via email. After the survey, some participants will be invited to participate in interviews. The study interviews will take place over Skype using audio only.

What is the time commitment for participating in this study?
The time commitment for this study will be no more than 3 hours in total length.

What will you be asked to do if you choose to participate in this study?
As a participant, you will be asked to complete a short questionnaire, approximately 10-15 minutes in length, that asks biographical information, such as your race/ethnicity, gender identity, level of education, faculty rank, number of years on the faculty, discipline, area of research, and confirmation that you mentor undergraduate students in research and scholarship. After receiving and reviewing the survey, you may be invited to participate in one individual interview, approximately 90 to 120 minutes in length. The interview will be conducted via telephone. During this interview, you will be asked
questions about your experience of scholarship and research, and how you work with undergraduate students who are actively engaged in research and scholarship. This interview will be transcribed. The student researcher will craft the transcription into a narrative. All participants will be able to review, and make changes to their narrative.

**What information is being measured during the study?**
The information gathered in this study is for phenomenological, qualitative research purposes. The information provided will be crafted into narratives and analyzed for common themes.

**What are the risks of participating in this study and how will these risks be minimized?**
As in all research, there could be unforeseen risks to you as a participant. There is the possibility that the reflection may be unsettling or disconcerting.

**What are the benefits of participating in this study?**
You also may benefit from this activity by having the opportunity to talk about how you view scholarship and the role of undergraduate student engagement in the scholarship process. Upon completion, this research may provide a deeper understanding of research and scholarship in the humanities and its impact on undergraduate students, which currently is not available in the literature.

**Are there any costs associated with participating in this study?**
There are no costs associated with this study.

**Is there any compensation for participating in this study?**
There is no compensation for this study.

**Who will have access to the information collected during this study?**
Please note that ensuring the confidentiality of the interview data is a critical part of the process. Neither your name, nor institution, will be used in the dissertation dissemination process. Pseudonyms will be used for participants and institutions. I will have a key of participants and the corresponding pseudonyms. As mentioned, after the interview is transcribed and a narrative is crafted, I will provide you a copy of the narrative, so you can review and request changes or modifications. Once the interviews have been collected and analyzed, the master list will be deleted and destroyed. At the end of the study, materials will be retained on an encrypted hard drive and retained in the PI’s locked office for three years. Results of the study will be disseminated in the student PI’s dissertation and possible conference presentations as a result from that study.

**What if you want to stop participating in this study?**
You can choose to stop participating in the study at anytime for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either professionally ally or personally if you choose to withdraw from this study.
The investigators can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact the primary investigator, Susan Mendoza at 616-331-8065 or mendozsu@gvsu.edu. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

_____ I would like to participate in the survey and the interview, if I am contacted.

_____ I would like to participate in the survey, but not the interview.

Please Print Your Name

___________________________________

[Signature]

Participant’s signature Date
Appendix B

Initial Email to Provosts Soliciting Faculty Nominations to Participate
Provost (insert name):

I am conducting dissertation research on how faculty in the humanities disciplines experience scholarship and the scholarship process, and how that experience impacts undergraduate research. Specifically, I am studying the GLCA institutions, due to their emphasis and dedication on the undergraduate experience.

As part of my study, I am soliciting recommendations from Provosts for possible faculty participants. Specifically, I would like to interview tenure-track faculty members in the humanities disciplines that actively mentor undergraduate researchers. For the purpose of this study, the term humanities includes history, English literature, religious studies, classical languages, modern languages, and philosophy.

Upon your recommending faculty members from your institution, I will contact them via email and invite them to participate in the study. I will not be able to confirm whether or not the faculty members you recommend agree to participate, or the level of their participation. I will be able to share the study upon its review and endorsement by my dissertation committee.

This study is of particular value to the field of undergraduate research, as it will provide a more clear understanding of how research experiences vary for students in the humanities from other disciplines. In addition, participants will be asked to reflect on their approach to scholarship and how they make meaning of their discipline. This process alone may positively impact their depth and level of engagement with undergraduate research.

Please consider recommending a few of your humanities faculty colleagues for this study. If you have any questions, please feel free to contact me via email or phone, mendozsu@gvsu.edu or 616-331-8065

With deepest appreciation,

Susan Mendoza
Appendix C

Initial Email to CUR Institutional Representatives
Soliciting Faculty Nominations to Participate
(Sample e-mail announcement sent to CUR Representatives)

Dr./ Professor (insert name):

I am conducting dissertation research on how faculty in the humanities disciplines experience scholarship and the scholarship process, and how that experience impacts undergraduate research. Specifically, I am studying the GLCA institutions, due to their emphasis and dedication on the undergraduate experience.

As part of my study, I am soliciting recommendations from CUR Institutional Representatives for possible faculty participants. Specifically, I would like to interview tenure-track faculty members in the humanities disciplines that actively mentor undergraduate researchers. For the purpose of this study, the term humanities includes history, English literature, religious studies, classical languages, modern languages, and philosophy.

Upon your recommending faculty members from your institution, I will contact them via email and invite them to participate in the study. I will not be able to confirm whether or not the faculty members you recommend agree to participate, or the level of their participation. I will be able to share the study upon its review and endorsement by my dissertation committee.

This study is of particular value to the field of undergraduate research, as it will provide a more clear understanding of how research experiences vary for students in the humanities from other disciplines. In addition, participants will be asked to reflect on their approach to scholarship and how they make meaning of their discipline. This process alone may positively impact their depth and level of engagement with undergraduate research.

Please consider recommending a few of your humanities faculty colleagues for this study. If you have any questions, please feel free to contact me via email or phone, mendozsu@gvsu.edu or 616-331-8065

With deepest appreciation,

Susan Mendoza
Appendix D

Initial Email to Potential Faculty Participants
Dr./ Professor (insert name):

I am conducting dissertation research on how faculty in the humanities disciplines experience scholarship and the scholarship process, and how that experience impacts undergraduate research. Specifically, I am studying the GLCA institutions, due to their emphasis and dedication on the undergraduate experience. I received your name from Rich Ray as a humanities faculty member who is engaged in undergraduate research and actively mentors students.

The study I am conducting is qualitative in nature. As a potential participant, you will be asked to complete a short questionnaire that asks biographical information, such as your race/ethnicity, gender identity, level of education, faculty rank, number of years on the faculty, discipline, area of research, and confirmation that you mentor undergraduate students in research and scholarship. Upon completion of that survey, a group of participants will be selected to participate in one interview, approximately 90 minutes in length. The interview will be conducted via Skype. This interview will include questions about your experience in scholarship and research, and how you work with undergraduate students who are actively engaged in research and scholarship.

The study will explore how faculty experience and describe research and scholarship in the humanities and how that experience informs and impacts how they engage and work with undergraduate researchers. The intent of the study is to be descriptive of the experience and build a deeper understanding of how humanities faculty make meaning of their scholarship.

If you are interested in learning more about participating, or if you have questions about the study, please respond to this email, or contact me at 616-331-8065.

Warmest regards,
Susan Mendoza
Appendix E

Survey of Biographical Information
Project: The Experience of Scholarship in the Humanities: Engaging Undergraduate Students in the Scholarly Process

Participant’s Name: ______________________________

Participant’s College: ______________________________

Thank you for your consenting to participate in this study. This survey is a precursor to our scheduled interview. The information requested below is preliminary in nature and will provide me with basic biographical and professional information prior to our interview. As a reminder, this information is confidential and will be protected as noted in the informed consent form.

1. Your name:

2. Your institution:

3. Your race/ethnicity:

4. Your gender identity:

5. First generation college student: yes/no

6. Your level of education and discipline or field/ interdiscipline:

7. Your tenure (and/promoted) status:

8. Your years in department/as a faculty member, and previous institutions:

9. Your current area of research:

10. Your confirmation that he/she supervises and mentors undergraduate students in research and scholarship. (yes/no)

11. How long have you mentored undergraduate researchers?

12. How many other faculty members in your department work with undergraduate students?

13. Would you describe the research your undergraduate students do as being focused more on the research process and problems, or on the research content?

14. Would you describe the student role as active or passive participation?
15. How many students do you work with over the academic year? Does you work with students one on one? In small groups? Large groups or lab settings? Where does the work take place?

16. How many students do you work with in the summer? Does you work with students one on one? In small groups? Large groups or lab settings? Where does the work take place?
Appendix F

Interview Protocol
Project: The Experience of Scholarship in the Humanities: Engaging Undergraduate Students in the Scholarly Process

Time of Interview: ______________________________

Date of Interview: ______________________________

Location: ____________________________________

Participant: _________________________________

Participant’s College: __________________________

Thank you for your consenting to participate in this study. As a reminder, I am recording the interview so the data collected can be transcribed and reviewed. You may request that the recorder be paused at any point during the interview. During this time, the recorder will be paused, but I will continue to take written notes of the discussion.

The purpose of this study is to explore how faculty experience and describe research and scholarship in the humanities. I also want to understand how that experience informs and impacts how they work with undergraduate researchers. The intent of this study is to describe these experiences and build a deeper understanding of how humanities faculty make meaning of their scholarship and transfer that meaning to undergraduate students.

The research questions guiding this study are: (1) How do faculty describe what it means to be a scholar within the humanities disciplines? (2) How do faculty describe the experiences and learning process of undergraduate researchers? (3) How do faculty situate the work of undergraduate students within their own scholarly process?

As I mentioned previously, these questions are expected to take about 90 minutes. If at any point the question is unclear, please let me know and I will clarify for you.

1. Current research
   a. Describe your research.
   b. Describe your research process.
   c. Is there a particular piece of research you are proud of… why?

2. Path to Becoming a Humanities Scholar
a. Describe your path to becoming a humanities faculty member.
b. What experiences were significant to you in this process?
c. How did you learn what it means to be a “historian” (for example, us the appropriate term based on discipline)?

Listening cues: academic training, informal training, and enculturation

3. Making meaning of being scholar in the humanities
   a. How do you define scholar? What does being a scholar mean to you?
   b. What does it mean to be a scholar in the humanities?
   c. How do you see you work as being similar to, or different from other disciplines, such as STEM or social sciences?
   d. What experiences have shaped who you are as a scholar?
   e. What scholarly values and skills are most important to you? Why?
   f. How were these values shaped? How were the skills learned?
   g. How or do these values and skills influence how teach and mentor aspiring scholars?

4. Describe the type of scholarship you do with undergraduates. (refer back to pre-interview discussion)
   a. Describe the experience and learning process of undergraduate researchers (in learning the process of research)?
   b. How do you situate the work of undergraduate students within your own scholarly process?
   c. Describe the mentoring process?
   d. How do you balance being a mentor and a scholar?
   e. Do you make particular meaning that you make of these two identities (scholar and mentor)? Is one more salient or important to you than the other?

5. Structure of UREs
   a. How do you structure your student’s scholarship in a way that maximizes their learning?
   b. From your perspective, what are the behaviors you think are necessary to future humanities scholars?
   c. How do you structure/set up the research experience so students can learn the skills and attitudes that you think are important?
   d. What are the most difficult aspects of learning the research process for students? Causes? Are some/all of these skills and attitudes that you can teach?
   e. What helps students to understand how research in the humanities is done or how knowledge in the discipline is constructed?
Appendix G

Thank You Card to Participants
Dear (Insert name):

I wanted to extend a warm thank you for your help with my dissertation research. I enjoyed our conversation about your scholarship and your experiences as a faculty mentor, specifically your experience as a humanities faculty member at a liberal arts college. Each participant brings new insight into the experience of humanities faculty scholars. I look forward to reviewing our discussion to bring your insights into the study.

A reminder about the process, the transcription and review process will take a month or more to complete. When I have finished with the proofs, I will forward to you a copy of the transcription so you may review it for accuracy. At the completion of the study, I will also forward you a summary of findings.

Once again, thank you for sharing your experiences, thoughts, time with me.

Best,
Susan Mendoza
Appendix H

HSIRB Approval Letters
Date: March 11, 2015

To: Andrea Beach, Principal Investigator
    Susan Mendoza, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 15-02-38

This letter will serve as confirmation that your research project titled “The Experience of Scholarship in the Humanities: Engaging Undergraduate Students in the Scholarly Process” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., you must request a post approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study”). Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: March 10, 2016
Institutional Review Board Authorization Agreement

Name of Institution or Organization Providing IRB Review: Western Michigan University
IRB Registration #: IRB00000254  FWA #: FWA00007042  Expiration Date: 04/09/2017

Name of Institution Relying on the Designated IRB: Grand Valley State University (GVSU)
IRB Registration #: 2615  FWA #: 2829  Expiration Date: 11/13/2018

The Officials signing below agree that GVSU may rely on the designated IRB (WMU) for review and
continuing oversight of its human subjects research described below:

☐ This agreement is limited to the following specific protocol(s):

Name of research project: The Experience of Scholarship in the Humanities: Engaging Undergraduate
Students in the Scholarly Process

Principal Investigator: Dr. Andrea Bosch, ELRT
Student Investigator: Susan Mendoza, Ph.D. Candidate

Sponsor or Funding Agency:

The review performed by the WMU HSIRB will meet the human subject protection requirements of
GVSU’s OHRP-approved FWA. The IRB will follow its written procedures for reporting its findings and
actions to appropriate officials at GVSU. Relevant minutes of IRB meetings will be made available to
GVSU upon request. GVSU remains responsible for ensuring compliance with the WMU HSIRB
determinations and with the terms of its OHRP-approved FWA. This document must be kept on file by
both parties and provided to OHRP upon request.

Signature of Signatory Official for GRAND VALLEY STATE UNIVERSITY

[Signature]
Date: 2/25/15

Full Name: Paul J. Reitemeier, Ph.D  Institutional Title: Chair, Human Research Review Committee
Contact information: Phone 616-331-3417 or email: reitemep@gvsu.edu

Signature of Signatory Official for Western Michigan University IRB

[Signature]
Date: 2/25/15

Print Full Name: John M. Dunn  Institutional Title: President
Contact Information: Phone: 269-387-2351 or email: john.dunn@wmich.edu
Appendix I

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John Wiley & Sons Inc.
111 River St. MS 4-02
Hoboken, NJ 07030-5774

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I would appreciate your permission. If you require any additional information, do not hesitate to contact me at the address and number above.

If you agree with the terms as described above, please either sign the letter where indicated below and return one copy via mail, or please provide email confirmation that permission has been granted.

Sincerely,
Susan Mendoza

Permission is hereby granted:

Signature: ______________________
Name & Title: ___________________
Company/Affiliation: ________________
Date: __________________
Subject: RE: Copyright Permission Request - CUR Quarterly
Date: Tuesday, October 13, 2015 at 5:23:55 PM Eastern Daylight Time
From: James T. LaPlant
To: Susan Mendoza

Susan,

Thanks so much for the clarification. You most certainly have permission to reproduce the figure from the Beckman and Heusel article in the 2009 CUR Quarterly. In your dissertation, just be sure to clearly cite the original source underneath the figure and all will be fine.

Best wishes,

James LaPlant
Editor-in-Chief
CUR Quarterly

From: Susan Mendoza [mailto:mendozsu@gvsu.edu]
Sent: Tuesday, October 13, 2015 3:42 PM
To: James T. LaPlant
Subject: Re: Copyright Permission Request - CUR Quarterly

Thank you for your response. I would like to reproduce the figure only.

Apologies if I was not clear in my original query.

Susan

Susan G. Mendoza
Director of Undergraduate Research and Scholarship
Office of Undergraduate Research and Scholarship
230 LBB
1 Campus Drive
Allendale, Mi 49401

E-mail: mendozsu@gvsu.edu
Phone: 616-331-8100

“Establishing comprehensive services and programs which support students in their pursuit of inquiry, creativity, scholarship,”
From: "James T. LaPlant"
Date: Tuesday, October 13, 2015 at 3:39 PM
To: Susan Mendoza
Subject: RE: Copyright Permission Request - CUR Quarterly

Susan,

Sorry if your email got lost with our National Office. Yes, I am the correct person to contact. Are you looking to reproduce this article as an appendix to your dissertation? It is no problem of course to cite the article, but I'm wondering if you are looking to include the entire article within your dissertation?

Best wishes,

James LaPlant
Editor-in-Chief
CUR Quarterly

From: Susan Mendoza [mailto:mendozasu@gvus.edu]
Sent: Tuesday, October 13, 2015 2:01 PM
To: James T. LaPlant
Subject: Copyright Permission Request - CUR Quarterly

Dr. LaPlant,

I am hoping you can assist me. I send the following query to CURa couple weeks ago, and I am not sure if I directed it to the correct individual. I am trying to secure copyright permission from CUR for part of my dissertation.

Any assistance or redirection would be greatly appreciated.

My deepest thanks,
Susan
- Susan G. Mendoza
Director of Undergraduate Research and Scholarship
Office of Undergraduate Research and Scholarship
230 LIB
1 Campus Drive
Allendale, MI 49401

E-mail: mendozasu@gvus.edu
Phone: 616-331-8100
From: Susan Mendoza  
Date: Wednesday, September 30, 2015 at 12:55 PM  
To: admin@cur.org  
Subject: Copyright Permission request

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Attached is a copyright permission request for a portion of an article that was featured in the CUR Quarterly. I would like to use part of the article for my dissertation.

Please let me know if I should be contacting someone else. According to my records, CUR is the copyright holder.

Deepest thanks,
Susan

Susan G. Mendoza  
Director of Undergraduate Research and Scholarship  
Office of Undergraduate Research and Scholarship  
230 LIB  
1 Campus Drive  
Allendale, MI 49401

E-mail: mendoza@gvsu.edu  
Phone: 616-331-8100

“Establishing comprehensive services and programs which support students in their pursuit of inquiry, creativity, scholarship, and research.”
Subject: RE: Copyright permission request (2nd Request)
Date: Wednesday, October 21, 2015 at 8:19:04 AM Eastern Daylight Time
From: Communications
To: Susan Mendoza

Dear Susan,

Thank you for your email.

There is no problem with you using a figure from the publication you mention, as long as it is clearly and correctly referenced.

Kind regards
Nicola

---

From: Enquiries
Sent: 20 October 2015 08:55
To: Communications
Subject: FW: Copyright permission request (2nd Request)
Importance: High

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From: Susan Mendoza [mailto:mendoza@gyu.edu]
Sent: 19 October 2015 18:31
To: Enquiries; Research
Subject: FW: Copyright permission request (2nd Request)
Importance: High

To whom it may concern,

I sent the attached inquiry last month asking for permissions to use a figure in the following article:


A formal request is noted in the attached letter. Any assistance you can provide would be deeply appreciated.

Warmest regards,
Susan

---

Page 1 of 3
From: Susan Mendoza  
Date: Wednesday, September 30, 2015 at 1:04 PM  
To: "Director.Services@heacademy.ac.uk"  
Subject: Copyright permission request

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Please let me know if I should be contacting someone else. According to my records, HEA is the copyright holder.

Deepest thanks,  
Susan  

--Susan G. Mendoza  
Director of Undergraduate Research and Scholarship  
Office of Undergraduate Research and Scholarship  
230 LIB  
1 Campus Drive  
Allendale, MI 49401  

E-mail: mendoza@gyou.edu  
Phone: 616-331-8100
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Manager, Copyright & Permissions
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From: Susan Mendoza [mailto:mendoza@qum.edu]
Sent: Tuesday, October 13, 2015 1:00 PM
To: Wiley Global Permissions
Cc: Susan Mendoza
Subject: Permission request

To whom it may concern,

I am currently seeking permission to use Table 1 in the following publication:

I have attached a formal request. Please let me know if I need to do anything further.

Susan

Susan G. Mendoza  
Director of Undergraduate Research and Scholarship  
Office of Undergraduate Research and Scholarship  
230 LIB  
1 Campus Drive  
Allendale, MI 49401  
E-mail: mendoza@seises.edu  
Phone: 616-331-8100

“Establishing comprehensive services and programs which support students in their pursuit of inquiry, creativity, scholarship, and research.”
Subject: RE: Copyright Permission request
Date: Tuesday, October 13, 2015 at 2:37:55 PM Eastern Daylight Time
From: ASCB CBE (sent by Thea Clarke <TClarke@ascb.org>)
To: Susan Mendoza

Dear Susan,
You have permission to use the table. Please cite the article/journal as you have it below.
Best regards,
Thea

Thea Clarke
Director of Communications and Education
American Society for Cell Biology
8120 Woodmont Ave., Suite 750
Bethesda, MD 20814 USA
Phone: 301-347-9304; Fax: 301-347-9310

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From: Susan Mendoza [mailto:mendoza@gsu.edu]
Sent: Tuesday, October 13, 2015 1:38 PM
To: ASCB CBE
Subject: Copyright Permission request
Importance: High

To whom it may concern,

I am trying to secure copyright permission for David Lopatto's table in the following article:


I will be using the table in my dissertation through Western Michigan University. I have attached a request for your convenience.

Warmest regards,

Susan

--

Susan G. Mendoza
Director of Undergraduate Research and Scholarship
Office of Undergraduate Research and Scholarship
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