The Full Professor: Stories from the Past, Guiding the Future

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy with a Major in Education in the College of Graduate Studies University of Idaho By Diane Ruth Swensen

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May 2023

Abstract

The gaps in the literature necessitated an examination of what is known and should be known about career advancement to full professor at the university level. The literature revealed that more research was needed to guide those who mentor faculty to meet the needs of those pursuing future careers in academia. This dissertation is a qualitative case study that investigates commonalities in the career journeys of 21 full professors at land-grant universities in the Northwest. Each participant was asked, "What is your story?" and based on individual interviews, common themes emerged from the career stories. Participants revealed common performances, dispositions, inspirations, and knowledge bases despite a scarcity of information about the promotional process to full professor. These commonalities, among others, were list-making, relationships with mentors and bosses, networking and collaboration, insatiable curiosity in pursuit of knowledge, and involvement with music. This study highlights the need for further research to illuminate the lack of clarity and transparency regarding gender and race inequities in advancement to full professor. Through analysis of the interviews, this dissertation provides insights regarding career paths to full professor so that emergent scholars seeking leadership careers in academia are better equipped to adapt, serve, and work toward advancement.

Acknowledgments

Many people kindly helped and supported me in completing this academic journey. I would like to extend a sincere thank you to the participants who gave their precious time and were willing to share their career stories with me. It was an honor and privilege to meet these esteemed scholars. My major professor, Dr. Allen Kitchel, and committee members, Dr. Paul Gathercoal, Dr. Sydney Freeman, Jr., and Dr. Richard Reardon, generously shared their wisdom, insights, and expertise. I was very fortunate to have a committee that supported, guided, and mentored me throughout this process. I would like to thank Callen Trapp and Rebecca Kanaskie for guiding me into the next century. I owe a debt of gratitude to different departments at the University of Idaho for their unwavering help and service: College of Education, Health and Human Sciences; ITS Help Desk; College of Graduate Study; Interlibrary Loan and Circulation Departments; and the Writing Center. All of these departments were University of Idaho gems for me.

Dedication

I had collegial and familial mentors who were willing to discuss and review my various thoughts and ideas. A special thank you to Dr. Jim Ekins, Dr. Joyce Jane Dolliver Hammer, Jill Ann Dolliver Christiansen, Dr. Tami Dirks, Erin Stutzman, Deasa Stein, Pam Noah, Marisol Zavala Maffei, and Ann Marie and Chuck Ricevuto. I am grateful to Denise

Joan Dolliver Glover and Dr. Steven Chen for their scholarly insights and positive encouragement. I am blessed to have friends that have spanned many decades. Their belief in my ability to undertake and complete this project was very meaningful to me. Thanks to Billy

Sidlow, Cammie Milot Link, Kate Kirk Alfadli, Jeff and Denise Gerken, Kelly, Shaun, Parker, and Preston Bright, and the Erny Family. I appreciate Dr. Harold Bailey, Jr. and Dr. Kerry Drain for their sound advice and continual support. For peer review, scholarly insight, encouragement, and understanding. A very special thank you to Polly Dolliver, my mother, eagle-eyed editor of grammatical and syntax errors. To my children, Drew, Jessica, Melissa, Alicia, and Leslie-Ann, and grandchildren, I appreciate your willingness to give me the time and space to complete this life-long dream. I was lucky, during most of this journey, to have a

brilliant father, Dr. James Stafford Dolliver, who throughout my life was a scholar who illuminated opportunities and encouraged me to be more than I ever thought I could be. Also,

I am blessed with a wonderful husband, Gail Thomas Swensen. There are no words to describe and adequately thank him for his loving devotion, sacrifice, and care during this academic journey.

To my dear friend, colleague, mentor, coach, Dr. Marcie Galbreath-Rawls, a special thank you for sticking by me through good times and challenges. To my husband and my father, I dedicate this dissertation.

Table of Contents

Abstract	ii
Acknowledgments	iii
Dedication	iv
Table of Contents	v
List of Tables	viii
List of Figures	ix
Chapter 1: Introduction	1
Context for This Study	2
Research Problem	6
Definitions of Terms	9
Significance	10
Assumptions	11
Limitations	12
Conclusion	12
Chapter 2: Literature Review	13
Who Are Full Professors	14
Absence of Clarity	18
Diversity Perspective in Academia	20
Absence of Information Regarding Promotion to Full Professor	24
Roles	27
Agentic Practices	42
Theoretical Framework	49
Constructionism and Career Theory	51
Conclusion	54
Chapter 3: Methods	55
Study Context	55
Research Design	55
Why Case Study?	56
Population	58

Data Collection	59
Data Analysis	63
Trustworthiness	64
Researcher Background	65
Limitations	65
Chapter 4: Findings	68
Sample Population	69
Data Collected Related to Triangulation	71
Themes	72
Agentic Practices	75
Experience	80
Knowledge Base	88
Leadership	91
Performance	
Relationship	
Resources	103
Technology	
Summary	105
Chapter 5: Discussion	
Overview	
Discussion of Findings	110
Challenges	115
Recommendations and Future Research	117
Recommendations	117
Future Research	119
Conclusion	
References	
Appendix A: Invitation to Participate	
Appendix B: Consent Letter	133
Appendix C: Interview Questions	136
Appendix D: Interview Checklist	

Appendix E: Follow-Up Inter	view Ouestionnaire	
rependix D. Fonow Op mor	View Questionnune	

List of Tables

Table 1: Full-time full faculty in degree-granting postsecondary institutions, title	13
Table 2: Full-time full faculty in degree-granting postsecondary institutions, race	22
Table 3: Full-time full faculty in degree-granting postsecondary institutions, gender	23
Table 4: Needs assessment	26
Table 5: Socialization strategies	53
Table 6: Interview questions	61
Table 7: Participants Professional Demographic Information by Gender	70
Table 8: Full Professors by Race and Ethnicity	71
Table 9: Citation Counts by Participant	72
Table 10: NVivo Data Report: Number of Participant Responses by Theme	73
Table 11: Theme Definitions	74
Table 12: Themes and Associated Sub-Themes	75
Table 13: Themes and Associated Sub-Themes	109

List of Figures

Figure 1: Defining scholarship for the twenty-first century	
Figure 2: Data Collection & Analysis	64

Chapter 1: Introduction

The road to full professor is not known for its transparency. Throughout the literature there is an absence of information regarding covert knowledge of career advancement to full professor (Gardner & Blackstone, 2013; MacFarlane, 2012; O'Meara, 2015). "This call for increased attention to the professoriate follows from the view that there is remarkably little known about this collective of individuals" (Castle & Schutz, 2002, p. 80). This study illuminates the commonalities of performances, dispositions, discovery, and knowledge base for those who have successfully attained the rank of full professor to provide this previously missing information. This dissertation can serve as groundwork for future mentorship so those in positions of academic policy can use this information to better design academic programs for those seeking advancement in higher education.

Boyer (1991) states, "Challenges on the campus and in society have grown, and there is a deepening conviction that the role of higher education, as well as the priorities of the professoriate, must be redefined to reflect new realities" (p. 3). Among these challenges are lack of resources, expanding technology, and the integration of diverse populations (Buller, 2010; Croom & Patton, 2012). "Moreover, academics are just one, perhaps increasingly marginalized, group of cultural producers in modern society" (Macfarlane, 2013, p. 4). Scarcity of information and clarity available to junior faculty regarding career advancement compounds challenges for professors (Fishe, 1998; Hekelman, Zyzanski, & Flocke,1995; Macfarlane, 2011).

The gap in the literature necessitates researchers to examine what is known and should be known about career advancement to full professor. Information concerning the progression to associate professor with tenure is abundant; however, research is lacking regarding

1

promotion to full professor (Buch, Huet, Rorrer, & Roberson, 2011; Gardner & Blackstone, 2013; MacFarlane, 2012; Walker, 2016). In view of this absence the full professor has myriad of challenges when performing various work roles such as mentoring the career paths of junior faculty. Furthermore, lack of clarity requires assimilating skills (consciously or unconsciously) that allow professors to maneuver their careers through the academic landscape (Macfarlane, 2012). To further understand this phenomenon, Gardner and Blackstone, (2013) point to the theory of socialization. "The theoretical framework of socialization allows for a deeper understanding of the process to attain promotion to full professors' roles and factors that may influence an unsuccessful attempt" (Gardner & Blackstone, 2013, p. 416). Inconsistency of promotion information and definitions of full professors' roles varies among universities (Walker, 2016). There is evidence in the literature that some institutions of higher learning are addressing this situation through professional development, use of social media (i.e., blogs), and work towards establishing new procedures and policies (Walker, 2016).

Context for This Study

The literature indicates more study needs to occur about full professors and their unique skill sets and academic paths (Boyer, 1991; Karpiak & Kops, 2013). Additionally, researchers (Boyer, 1991) posit, societal realities have fostered a premise that accessibility to higher education, as well as the duties of full professors, should mirror new challenges. Requisite skill changes (e.g., technology integration skills) may complicate career path roles. Training such as webinars, add more duties to the full professor's work time. "Today, capitalizing on the benefits of computers and communications technologies, scholars are accomplishing much more in less time, and are addressing problems heretofore unsolvable" (Zahorsky, 2002, p. 19).

Integrating technology into teaching and scholarship can present unique challenges in academia. "We need scholars who not only skillfully explore the frontiers of knowledge but also integrate ideas, connect thought to action, and inspire students" (Boyer, Moser, Ream, Braxton, 2015, p. 119). The very concept of using technology can change rapidly (Buller, 2010).

Technological changes may impact those in leadership positions as gaps in technology literacy may divide and impinge the flow of communication between senior and junior faculty. "Each new wave of faculty members and students largely take for granted technologies that their predecessors adopted only after extensive training" (Buller, 2010, p. 148).

Full professors assume myriad roles such as mentoring, leadership—including duties supporting teaching and research, and shaping the course of institutional direction and policies (Macfarlane, 2011). As leaders, the actions of full professors influence students and junior faculty in various ways. "...the values that full professors believe in and they implicitly objectify in their actions (hidden curriculum) are still a significant impact factor in shaping student behavior" (Cojocariua, 2013, p. 280).

Faced with limited resources plus internal and external pressures, full professors employ numerous strategies to maneuver their careers (Campbell & O'Meara, 2014; Neumann, Terosky, & Schell, 2006). Macfarlane (2011) indicates, "relatively little attention has focused on those performing informal and distributed forms of leadership, such as [full] university professors" (p. 57). McMillin (2004) posits, "A multidimensional sense of a professional self will be even more necessary...to develop the flexibility needed to adapt to the rapidly changing environment of higher education" (p. 43). As a group of new academic leaders take the helm, it is advantageous to know what characteristics provide strength and increased success in the role of full professor (Boyer, Moser, Ream, & Braxton, 2015; Hutchings, Huber, & Ciccone, 2011; Macfarlane, 2011).

Many full professors view mentoring junior faculty for socialization and community as a vital function of their role (Albu & Cojocariua, 2012; Ramani, Gruppen, & Krajic Kachur, 2006). When senior faculty members provide guidance (e.g., formal or informal mentoring) to

new and early pre-tenure faculty members during this adjustment period, they are fulfilling an important role in improving a pre-tenure faculty member's commitment to the institution and job satisfaction. (Ponjuan, Conley, & Trower, 2011, p. 338) Mentoring provided by full professors can enhance networking connections and likely affect greater understanding of the advancement process to full professor (Turner, González, & Wood, 2008; Zahorski, 2002). In academia, traditionally, mentoring occurs between full

professors and junior faculty and graduate students. Mentoring often occurs within same gender and cultural parameters (Bierema, 1998; Sands, Parson & Duane, 1991).

Full professors should be sensitive to a variety of ethnic and social perspectives as they reach out and collaborate with diverse populations. "The idea that a single narrative or *idea* can any longer capture the complex and often contradictory nature of higher education and its relationship with other parts of society has to be dispensed with" (Brennan & Naidoo, 2008, p.302). The literature illuminates a disparity in promotion rates based on ethnicity and gender (Thompson, Bonner, & Lewis, 2016; Toren & Moore, 1998). Those in positions of scholarly leadership should be cognizant of and embrace multicultural pluralities with adaptive responsive and effective strategies (Alexander, 2012).

There has been an increase in enrollment of diverse students, but numbers of diverse faculty have not grown at the same pace (Jayakumar, Howard, Allen & Han, 2009; Thompson, Bonner, & Lewis, 2016; Turner, Gonzalez & Wood, 2008). Faculty of color report dissimilar knowledge and experiences when compared to advancement understandings of their white colleagues (Jayakumar et al., 2009; Thompson et al.). These experiences unfold as perceived disadvantages (Jayakumar et al., 2009; Thompson et al., 2016; Turner et al., 2008). Turner et al. (2008) stated, "faculty of color remain underrepresented and their achievements in the academy almost invisible" (p. 139). Boyer (1990) stated, "The intolerably small pool of qualified minority applicants represents a shocking weakness, if not indictment, of American education at all levels" (p. 66). The racial/ethnic discrepancy among faculty in higher education has a far-reaching impact on career roles and advancement (Jayakumar et al., 2009; Thompson et al., 2016). Specifically, there are only 31,434 (17% of total number of full professors) minority full professors (U.S. Department of Education, 2017).

The literature indicates that gender imbalance exists in higher education, especially at research institutions. (O'Meara, 2015; Terosky, O'Meara, & Campbell, 2014; Toren & Moore, 1998). "Women at the rank of [full] professor in four-year institutions constituted only [31%] of the total in [2012-2013]" (U.S. Department of Education, 2017). Furthermore, when women achieve rank of full professor, usually time spent is approximately 25% more than men (Gardner & Blackstone, 2013). Women faculty usually receive lesser salaries, and "lower academic positions" (Toren & Moore, 1998, p. 267).

Individual viewpoints and experiences of women appear to lack information as research studies tend to focus on women as a group (Gardner & Blackstone, 2013). Terosky, et al. (2014) found that women perceived work responsibilities, relationships with colleagues, plus personal conflicts regarding promotion and values may hinder career goals. Within higher education, "mental and physical space" (Terosky et al., 2014, p. 70) needs to be created to study and discuss missing information for women seeking career advancement to full professor.

Also revealed in the literature is that there may be competing factors impacting advancement of all faculty. "And as we look at today's world, with its disturbingly complicated problems, higher learning, we conclude, must, once again, adapt" (Boyer, 1990, p. 81). How can a university widen its student base without its academic leadership in place to support diverse learners? How does a junior faculty member employ agentic practices to formulate career goals that will enable him/her to achieve promotion to full professor?

Research Problem

It is suggested in the literature that more research on full professors could provide a better understanding of how social patterns, values, and structures present different points of reference from which full professors establish successful careers (Bruning, 2002; Croom & Patton, 2012). "Driving this newer body of work is an increasing interest in the way in which university academics frame their existence, construct their roles, deal with their environments, and account for themselves" (Castle, & Schutz, 2002, p. 80). Junior faculty who hope to attain the position of full professor are working without a clearly marked career roadmap (O'Meara & Rice, 2005). The mysterious nature of the conventional appointment process requires these

scholars to have specialized knowledge towards the accomplishment of their professional goals (MacFarlane, 2011; MacFarlane & Chan, 2014; O'Meara, 2015).

This research study explores the absence of information for promotion to full professor. A review of the literature revealed that today's junior faculty are faced with lack of clarity and mentorship as barriers to meeting career goals and advancement. Knowing procedures for career advancement such as garnering research grants, gaining international recognition, providing professional leadership, attaining teaching excellence, and service (Macfarlane, 2012) does not necessarily translate into an action plan for reaching that objective. Macfarlane (2012) states:

Hence, there is a need to look at academic careers differently as horizontal not just vertical paths. What this means is that academics move between a variety of roles throughout the course of their careers, which may represent moves that are sideways as well as up. (p. 134)

The role and duties of the full professor are not clear. "They are key individuals who act as role models for the generation of scholars that will come after them. It is in everyone's interest that more thought is given to their role as intellectual leaders" (Macfarlane, 2012, p. 140). This study guides those who mentor faculty to meet the needs of future careers in academia. This study provides insights regarding career paths to full professor so that faculty seeking leadership careers in academia are better equipped to adapt, serve, and work toward advancement.

Career theory through a constructionist framework intersects the application of process and information. "...the opportunities and threats in the new millennium will continue

7

to challenge the traditional philosophies, theories, prescriptions, and practices of career. There seems little doubt, however, that career will continue into the future" (Collin & Young, 2000, p. 296). This study illuminates the strategies and skills needed for those scholars aspiring to earn the rank of full professor.

Primary Research Questions

- 1. Are there common experiences by those who attain the rank of full professor? If so, what are they?
- 2. What themes emerge from full professors' career stories? If so, what are they?
 - (a) Are there common performances?
 - (b) Are there common dispositions?
 - (c) Is there common inspiration for scientific discovery/scholarship development?
 - (d) Is there a common knowledge base for those who successfully attain the rank of full professor?

Secondary Questions

- 3. The research indicates that gender and ethnic diversity affect mentoring and networking relationships; do full professors report that is an accurate reflection today?
- 4. Are there common agentic practices that influence the decision-making processes employed by full professors?
- 5. Does technology play a role in the advancement to full professor?
- 6. Are there common leadership approaches among full professors?

Definitions of Terms

Agency – An organizational entity that provides service (i.e., university).

Agentic Practices – the acts, practices, reactions, efforts, or responses engaged by those maneuvering through an organizational network. Agentic practices are "taking strategic or intentional actions or perspectives towards goals that matter to one's self" (O'Meara, Campbell, & Terosky, 2011). Career roles, institutional dynamics, resource limits, and networking challenges are included in this definition. An individual's decisions, choices, and procedures enacted within the boundaries and space of social structures are types of agentic practices.

Capital - resources that procure and establish position in particular to the system's field. Capital is the asset that people employ to gain admittance to esteem within social fields. Bourdieu (2011) distinguishes four separate kinds of capital that are categorized as: economic, cultural, social, and institutional.

Career Theory - provides a perspective that derives from the constructionism framework, an approach from which to explore work settings. Career has multiple connotations such as occupation, paid employment, or vocation (Patton & McMahon, 1999).

Constructionism - constructionism acknowledges scientific contributions but reveals there is a deeper meaning to uncover that is unique to our thoughts in relationship to our actions.

Field - hierarchical structural relationship in which the members and the organizations both have continuums of control and dominance. Field also represents the social arena in which particular societal rules, regulations, and positions apply. Faculty- Individuals viewed as an academic group employed usually in a university or college setting. Their work is generally focused on scholarly practices such as the scholarship of teaching, research, integration, and service (Boyer et al., 2015).

Full professor - having moved through the ranks of academia, establishing senior faculty status as an intellectual leader.

Habitus - the viewpoint of the individual determined by experiences, beliefs, paradigms, and frame of reference in conjunction with one's historical perspective (Gonzales, 2014).

Land-grant university-established through the Morrill Act of 1862 providing federal land for every state to support agriculture, liberal arts and skills training needed for population groups served by the state. "The Hatch Act of 1887 added energy to the effort by providing federal funds to create university-sponsored agricultural experiment stations that brought learning to the farmer, and the idea of education as a democratic function to serve the common good was planted on the prairies" (Boyer, 1991, p. 5).

Scholarship – the creative work and research of scholars within the academy. Scholarship has expanded in the 21st century (Zahorski, 2002).

Senior Scholar – full-time, tenured faculty, usually with more than 15 years of experience in higher education, and at least 45 years of age (Bland & Berguist, 1997).

Service - providing intellectual expertise and mentorship to others through outreach within and outside the academic environment.

Significance

The literature revealed more study was needed regarding full professors (Buch, Huet, Rorrer, & Roberson, 2011; Gardner & Blackstone, 2013; MacFarlane, 2012; Walker, 2016). As additional research on this topic may provide better understanding of common social patterns, values, and agentic practices that lead to successful career promotion (O'Meara, 2015), my study helps to remedy the dearth of information present in the literature regarding the path to full professor. My study enhances the body of literature regarding career theory and agentic practices.

I designed this study with practical significance so that it addresses the call in the literature for more research that clarifies concerns of how roles, motivations, and skills provide points of reference from which full professors have established their careers. When major themes emerge, then the possibility exists that those individuals who have focused on academic pursuits in a variety of scholarly endeavors are individuals who share common motivations, skills, and qualities. A new generation of scholars need this type of study to guide their career goals and plans. My study assists those who design and implement higher education policies and the results of my research may guide future scholarly practices, professional development, leadership, and mentoring skills.

Assumptions

My assumption was that full professors participating in the study would benefit from the reflective information and metacognitive nature of the case study methodology without harm. It was also assumed that the participants may be influenced by participation in the study, giving untrue or scripted responses. My study assumed there were full professors willing to be studied and interviewed. There may be full professors who did not progress through the ranks, which was the case. Full professors who do not currently have administrative roles were interviewed as participants. This requirement may lower the numbers of full professors who may be available for interviewing. Some participants did have leadership roles. It was important that I, as the researcher of this study, be cognizant of the cultural and diverse frameworks of the participants and their settings. I was careful not to incorporate bias into the interview process and results.

Limitations

Expected limitations of this study included proximity of the sites, diffusion, academic politics, study time, and the Hawthorne Effect. Universities were selected based on their location in the northwestern United States. Diffusion is defined as: subjects collaborating with each other based on a shared connection (i.e., discussion of this research). Academic politics may have limited responses that participants gave during the interview. Furthermore, this study was conducted over a bounded duration of a moment in time. The final anticipated limitation was the occurrence of the Hawthorne Effect: participants' responses and reactions can be influenced by participation in my research study. Limitations of my study and attempts to counter their effects are addressed in Chapter Three.

Conclusion

Chapter One includes a synthesis of the literature surrounding the need for this study. It introduces the research problems, its significance, and presents research questions that guided my study. This chapter also defines words and/or terms specific to the topic and theories of this qualitative research study. The next chapter reviews literature to provide the background and concepts that ground the research questions.

Chapter 2: Literature Review

Advancement of tenure track faculty to full professor status has stagnated or stalled

(see Table 1) on university campuses (Gardner & Blackstone, 2013; National Center for

Education Statistics, 2014) at a time when the nation needs academic leadership from our best

minds (Castle & Schutz, 2002; Croom & Patton, 2012; Gardner & Blackstone, 2017;

Macfarlane, 2013). Promotion to full professor requires mentoring and career guidance (Albu

& Cojocariua, 2012; Ramani, Gruppan, & Kachur, 2006; Sands, Parson, & Duane, 1991).

Table 1

Full-time Full Faculty in Degree-Granting Postsecondary Institutions, by Title, 2009, 2011, and 2013

	Title						
			Associate	Assistant			Other
	Total	Professors	Professors	Professors	Instructors	Lecturers	Faculty
2009	729,152	177,566	148,959	171,622	104,554	33,372	93,079
2011	762,114	181,509	155,201	174,052	109,042	34,473	107,837
2013	791,391	181,530	155,095	166,045	99,304	36,728	152,689

Adapted from: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, Adapted from Table 315.20. https://nces.ed.gov/programs/digest/d14/tables/dt14_315.20 (from The NEA Almanac, 2017, p. 66)

A review of the literature indicates that there is a lack of information regarding career progression and a definitive path to full professor (Castle & Schutz, 2002; Freeman, Douglas, & Goodenough, 2020; Gardner & Blackstone, 2013; Macfarlane, 2013, O'Meara, 2015). Macfarlane (2013) asserts, "It seems strange that there are so few references to professors and intellectual leadership in books about higher education" (p. 3). Adding to the absence of information is the scarcity of standardized job description guidelines for full professors (Bruning, 2002; Gardner & Blackstone, 2013; Macfarlane, 2013; O'Meara, 2015).

The qualifications to achieve the rank of full professor can vary from university to university (Crawford, Burns, & McNamara, 2012; Green, 2008; Walker, 2016). This may impact a professor's desire for advancement or lateral movement to university environments within his or her area of expertise. The literature shows that lack of clarity in career advancement to full professor is a recurring factor limiting the advancement of diverse scholars (Gardner & Blackstone, 2013; Macfarlane, 2013, O'Meara, 2015; Ponjuan, Conley, & Trower, 2011).

Who Are Full Professors?

Full Professors

The definition of the full professor encapsulates a myriad of descriptions and characteristics throughout the literature. There is not one standard definition. However, throughout the literature, various researchers use similar descriptors when defining full professors.

Full professors generally are considered experts in their fields of work (Clark, 1987). Full professorship leads to greater prestige and status in academia (Castle & Schutz, 2002; Croom & Patton, 2012; Gardner & Blackstone, 2017). Diverse criteria to achieve the rank of full professor is the norm, although it appears that those who are successful have mainly demonstrated a strong and continuous publishing record in prestigious scholarly venues or journals. The message from the university throughout the scholars' careers is an expectation of prolific scholarly publications.

While all faculty members have some level of status and influence, it is fair to assume that full professors have earned a fair amount of eminence allowing for influence in many aspects of higher education in ways that differ from their junior and mid-level faculty colleagues. (Croom & Patton, 2012, p. 20)

Specific benefits, such as influence, power and convening of status, are all linked with the role of full professor (Croom & Patton, 2012). Possible rewards for achieving the rank of full

professor include increased earning capacity, greater and wider scope of physical resources, obtaining of major grant funding awards, and expanded professional opportunities.

A comprehensive definition of the full professor reflects their responsibilities within the higher education context where they are employed. The literature suggests full professors may also adapt their roles to align with changing university directions or mission (O'Meara, 2015). Full professors may provide numerous services for stakeholders that are not distinctly recognized. "Policymakers, as well as our public, still do not have a clear understanding of the role, function, and responsibilities that comprise faculty work" (Rosser, 2004, p. 306). Absence of public understanding and limited fiscal support of the scholar's work plus rapid institutional change since the 1940's is mentioned throughout the literature as impacting the job description of the full professor (Gardner & Blackstone, 2013; Macfarlane & Chan, 2014; O'Meara, 2015). Researchers have sought to offer explanations for implications and changes in academia that have impacted role definitions of the full professor to provide better insight into the professional scholars' work and faculty career (Rosser, 2004).

Decades of public demands and expansion of higher education have impacted the work career path of the professional scholar. Consequently, the full professors' roles encompass different narratives and skill sets today. "Public demands for the accountability of faculty members' workload and productivity have become pronounced policy debates, adding to the existing pressures on faculty time and performance" (Rosser, 2004, p. 285). The roles of academic leadership, as this expansion gained traction, evolved at what seemed to be a slower or even a dissimilar trajectory. "This shift meant that members of the academic community were less and less likely to share a common understanding of the university and the way it traditionally related to the wider world" (Altbach, 1980, p. 2). Socioeconomic lines were blurred, changing the landscape of academia.

Higher education that was once seen as a community for the intellectual elite and prestigious social classes was now entrenched in an environment that demanded accountability and relevance. "When the academic system began to expand almost beyond recognition, the elite bemoaned the decline of the community of scholars" (Altbach, 1980, p. 3).

Evidence in the literature suggests professors have, in a variety of cases and for numerous reasons, struggled with university reforms. "Academics are, in a sense, the conscience of the university, and tend to defend traditions whether or not these traditions serve the best long-term interests of the university" (Altbach,1980, p. 9). In response to university reforms, institutional policies (e.g., teaching course requirements) may affect the level of agentic practices employed by full professors (Campbell & O'Meara, 2014).

Within the literature exists a reoccurring component calling for more examination of how the full professor usually attained some level of international prominence in his or her field of study. "Indeed, an Internet search for criteria for promotion to professor will demonstrate that scholarly reputation is a requisite trait of this rank at most four-year institutions of higher education in the U.S." (Gardner & Blackstone, 2017, p. 61). However, there is a gap in the literature emphasizing teaching and service in respect to the qualifications for full professor plus vagueness surrounding what represents substantiation of international eminence (Gardner & Blackstone, 2017). Frequently, full professors are acknowledged both nationally and internationally for their scholarship. This leadership contributes to the success of higher education in general (Gardener & Blackstone, 2017). For this proposed study, full professors are defined as those who have moved through the ranks of academia, establishing senior faculty status as an academic leader and achieving the title of full professor.

Senior Scholars

Senior scholars are often those who effectively maneuver through the landscape of academia reaching a position of leadership. A traditional definition springs from an organizational perspective and identifies the "senior scholar" as those faculty members who have attained a tenure ranking, preferably, full professor. The senior scholar is employed full time at their institution (Finkelstein & LaCelle-Peterson, 1993).

The majority of full professors are very secure in their jobs and have reached a pinnacle point of academic success and accomplishment. "They have earned the right to be heard and therefore are in a position to make things happen" (Zahorski, 2002, p. 64). Additionally, senior full professors are at a stage where they may not publish as much but would rather share their scholarship in the form of presentations, professional organizations, or guiding higher education policy.

Elder senior scholars have a wealth of experience and insight to offer an academic institution and stakeholders.

Full professors as senior scholars face unique challenges not experienced by other faculty. More generally, departments and institutions can work to re-engage senior faculty by designing time and space for intellectual exchange, recognizing and celebrating faculty achievements, and empowering dissatisfied faculty to respond to problems via voice rather than exit, silence, neglect, or destruction. (Huston, Norman, & Ambrose, 2007, p. 517)

The literature reveals there are numerous theories regarding faculty research that attempt to address differing needs of senior faculty in comparison to junior academicians (Huston et al., 2007). The need for junior faculty to have senior colleagues who are vibrant, dynamic role-models for the institution cannot be overstated (Huston, et al., 2007). Zahorski (2002) states, "Paired with energetic faculty members in their twenties and thirties, these seasoned professors can give their younger, less experienced colleagues perspective and can share wisdom from the trenches" (p. 65).

There is evidence in the literature directed at the importance of institutional support for senior scholars, including full professors. Disengaged or "stuck" full professors may negatively impact the university climate, contradicting institutions that are striving to foster participation and shared vision. "Long-time faculty perceive ambition, competitiveness, and career-professional orientation as the new norm" (Bieber, Lawrence, & Blackburn, 1992, p. 34). How does engagement of the full professor affect various levels of the institution? The senior faculty's role offers a safeguard for the institution from rash or unwise change. Conversely, this role may prevent new flexibility of ideas and transformations for changes that are suitable or needed. "Until an institution identifies why its senior members are disengaged and how the local university culture contributes to that dissatisfaction, institutions cannot take steps to remedy the situation" (Huston, et al., 2007, p. 517). An institution of higher education's circumstances, resources, and culture influences how it will address these specific complications (Huston, et al., 2007).

Absence of Clarity

Researchers Gardner and Blackstone (2013) posit that ambiguity concerning the role of full professor makes it easier for some groups of scholars to assimilate than others. Those

18

who have family members in academia can be more familiar with the university culture, or who are of the dominant group seem to have an advantage (Croom & Patton, 2012; Jayakumar, Howard, Allen & Han, 2009). Lack of awareness regarding career advancement may impact first generation scholars who seek to attain the position of full professor.

The covert nature of the appointment process requires conventional tenure-track faculty pursuing career advancement to have specialized knowledge toward the accomplishment of goals (MacFarlane, 2013; MacFarlane & Chan, 2014; O'Meara, 2015). "It is generally clear what it takes to be promoted to associate professor because the standards are typically clearly spelled out. For most institutions, the criteria for promotion to full professor are much less clear" (Walker, 2016, p. 263). In their research findings, Crawford et al. (2012) discovered 70% of the responding survey participants stated that while their workplaces had written guidelines on promotion to full professor, the essential elements and particulars were unclear. The literature reveals that even timeframes for career advancement to full professor are vague and ill-defined (Glassick et al., 1997; Gonzales, 2014; Knox, 1998). Walker (2016) states, in many governance documents, the criteria and process for promotion to associate professor take up several pages and are detailed and specific. If there is any mention of promotion to full professor, it is much more likely to be a single paragraph and make broad statements about "the impact and contribution" (Walker, 2016, p. 263).

A number of universities are increasing their response to this lack of clarity by offering expanded professional development forums and workshops and focusing on advice for junior faculty seeking successful promotion to full professor (O'Meara, 2015; Walker, 2016; Zahorski, 2002). Iowa State University is one such example. This institution, "…issued a new promotion and tenure document in 1999…" (Post, cited in Cambridge, 2004, p. 137).

Diversity Perspective in Academia

The literature reveals that social diversity research in higher education is fractional and lacks consistency (Gardner & Blackstone, 2013; O'Meara, 2015). Although the study of agency exists especially in regard to career advancement, there is limited research regarding women's agency toward achieving full professor (O'Meara, 2015). Diversity awareness and understanding appears to surface as overarching issues in the literature. Discrimination, racism, and ethnocentrism are perspectives that those in positions of scholarly leadership need to identify and address for collaboration within the academy and beyond (Lawrence, Celis & Ott, 2014; Turner, Gonzalez & Wood, 2008). While some focus has been put on equitable promotion, Lawrence et al. (2014) posit women and members of underrepresented groups still report that the promotion process is unfair. While there is a call in the literature for more studies on ageism and working past the traditional retirement age (Dorfman, 2000, 2002, 2009), there are researchers focusing on ageism (Bland & Bergquist, 1997; Stonebraker & Stone, 2015) and age/race-related issues (Chambers & Freeman, 2020; Freeman & Chambers, 2021).

The work of senior faculty members must promote social reforms and offer authentic cues that incorporate and understand the diversity issues faced by a new generational group (Gardner & Blackstone, 2013; Hutchings, Huber, & Ciccone, 2011). "Student activists from diverse social backgrounds refuse to allow colleges and their faculties to ignore the nation's racial inequalities" (Allen, 2017, p. 61). Through teaching and research collaboration, those in the position of full professor have the opportunity through shared work to gain understanding, tolerance, and open dialogue in the academy to identify those university policies that culturally thwart junior faculty members' advancement and progress. The literature reveals

that lack of advancement by minorities deserves further study. Insufficient information emerges regarding decision-making contexts and perspectives of faculty members who are of dissimilar demographic backgrounds, cultural, and diverse institutional groups (Gardner & Blackstone, 2017).

Race and Ethnicity

Increased cultural competencies and understanding have lagged as students have sought to establish faculty mentorship networks and support links (Allen, 2017). "Problems associated with diversity needed decisive actions and effective programs decades ago" (Allen, 2017, p. 63). Those in positions of faculty leadership, such as full professors, historically have been mostly white males (see Table 2) of social privilege; it is relatively uncommon to have come from a working-class upbringing (Castle & Schutz, 2002; Croom, 2017; Croom & Patton, 2012; Garrett & Croom, (2022); O'Meara, 2015). In their chapter, Garrett and Croom (2022) further strengthen this argument. Croom (2017) states women, especially women of color, are promoted at a lesser rate than white men. In recent times there has been some increase in extending the limited diversity base (Altbach, 1980). "White men over other groups, as evidenced by their predominant representation in the senior levels of the professoriate, and, as such, may feel most comfortable exercising agency within this context" (Gardner & Blackstone, 2013, p. 63).

Table 2

	Full Professors					
Race/Ethnicity	2009	2011	2013			
White	149,553	150,364	148,577			
Black	6,086	6,517	6,665			
Hispanic	4,683	5,180	5,604			
Asian		14,425	15,247			
Pacific Islander		192	170			
American Indian	580	589	573			
Two or more races		656	852			
Race/ethnicity unknown	1,923	2,202	2,323			
Non-resident alien	1,460	1,384	1,519			

Full-time Full Professors in Degree-Granting Postsecondary Institutions, by Race and Ethnicity, 2009, 2001, and 2013

Source: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, Adapted from Table 315.20. https://nces.ed.gov/programs/digest/d14/tables/dt14_315.20 (from The NEA Almanac, 2017, p. 66)

Gender

The often-cited disparity between males and females at all levels includes the full professor (see Table 3). Freeman, Douglas, and Goodenough (2020) state that women with similar qualifications as men are promoted at a slower rate. Explanations for gender differences are prevalent in the literature (Gardner & Blackstone, 2013; Niehaus & O'Meara, 2015; O'Meara, 2015; Williams, 2009). "The reasons for this disparity are not easily pinpointed" (Gardner & Blackstone, 2013, p. 414). Variations in productivity, familial status, and social capital have been examined by researchers in an attempt to seek and understand fundamental explanations for gender gaps. "While this gender disparity clearly exists, previous studies have typically only focused on national-level data and not the individuallevel experience or perspective" (Gardner & Blackstone, 2013, p. 414). However, these studies have highlighted the emergent idea that men and women approach how they spend their time in academia differently. Women who hold associate professor positions are apt to spend less time on research, gravitating instead to teaching and service. In contrast to their male counterparts, it appears that women have more family-related duties that absorb more of their time (Gardner & Blackstone, 2013).

Table 3

Full-time Full Professors in Degree-Granting Postsecondary Institutions, by Gender 2013

							American	Two		
							Indian/	or	Race/	Non-
						Pacific	Alaskan	More	Ethnicity	Resident
	Total	White	Black	Hispanic	Asian	Islander	Native	Races	Unknown	Alien
Total	436,456	316,912	18,905	17,198	42,928	591	1,736	2,547	10,813	24,826
Male	125,836	102,520	4,018	3,669	11,772	110	350	531	1,664	1,202
Total	354,935	258,579	24,283	16,019	28,110	617	1,802	2,744	9,200	13,581
Female	55,694	46,057	2,647	1,935	3,475	60	223	321	659	317

Adapted from: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, Adapted from Table 315.20. https://nces.ed.gov/programs/digest/d14/tables/dt14_315.20 (from The NEA Almanac, 2017, p. 66)

These disparities lead researchers to suggest better socialization and preparation for those seeking promotion to full professor (Gardner & Blackstone, 2013). "Future studies could continue to explore the process of application to full professor and the experiences of those who engage in it in different contexts and with different constituents" (Gardner & Blackstone, 2013, p. 423). Researchers (Gardner & Blackstone, 2013; Kulp, et al., 2022; Niehaus & O'Meara, 2015; O'Meara, 2015) posit that men and women face different obstacles in striving toward advancement to full professor.

Among the many contexts that contribute to the different experiences of women and men in research universities are segregated work roles, accumulated disadvantages in access to career resources, implicit bias and discrimination, fewer career sponsors, and ideal worker norms embedded in departments that devalue balance of work and family priorities. (Acker, 2006; National Science Foundation, 2006; Valian, 1998, as cited in O'Meara, 2015, p. 332) The aforementioned contexts may impinge and limit a woman's career development, especially for women of color (O'Meara, 2015). While white women have the benefit of closer networks with white men in senior faculty roles, white males in evaluative roles may not value or find relevant the female researchers' work and perspectives. "In higher education institutions the more social capital an individual has, the more status, recognition, and legitimacy he or she can acquire to advance in career" (Niehaus & O'Meara, 2015, p. 161). Although white women have a disadvantage when compared to their male counterparts, they have a career advantage over non-white women (see Table 2.3) working toward career progression to full professor (O'Meara, 2015). O'Meara's (2015) study highlighted equity related obstacles concerning social capital.

Absence of Information Regarding Promotion to Full Professor

The literature illuminates that information about promotion to full professor needs to be expanded and better understood (Freeman, Douglas, & Goodenough, 2020; Gardner & Blackstone, 2013; MacFarlane, 2012; Walker, 2016; Williams, 2016). Absence of information pertaining to the meaning and significance of the full professor rank is one explanation as to the rationale for minority populations' lack of advancement (Kulp, et al., 2022; Thompson, Bonner, & Lewis, 2016). Further study could provide a better understanding of how certain social patterns, values, and organizational structures present different points of reference from which full professors have established successful careers (Bruning, 2002; Croom & Patton, 2012).

Repeatedly, there is a call in the literature for clarity, information sharing, mentorship, and collaboration that assists scholars seeking to attain the position of full professor (Glassick, Huber, Maeroff, & Boyer, 1997; MacFarlane, 2013; O'Meara & Rice, 2005). Lack of clarity

manifests as a barrier for those seeking promotion to full professor. According to Buch, Huet, Rorrer, and Roberson (2011) those seeking promotion perceive lack of clarity, among other barriers, as problematic for mapping a career path toward advancement to full professor (see Table 4).

Table 4

<i>Needs Assessment: What do Associates Perc</i> Barriers to Promotion	Illustrative Quotes from Associate Professors
1. Lack of attention to career planning by	"After receiving tenure, I was working just as hard, and
associates	making good contributions, but I wasn't thinking
	strategically about my career." – female associate
	"My choice was to do the work that needs to be done to
	have the department run efficiently, but that will
	probably not lead to promotion." - male associate
2. Lack of institutional and departmental attention	"Lack of support/interest from the chair to target
to and support for the career-development needs	promotion as a career goal" - male associate
of associates	
	"Our department puts the bulk of our resources aside for
	junior faculty. They are protected from service, receive
	significantly lighter teaching loads, and get more travel
	money. This puts additional burdens on associates It
	seems impossible to meet the standards of full." –
	female associate
3. Lack of career-development opportunities for	"Although I have been asked (repeatedly) to serve as a
associates	mentor for junior faculty, I have never been asked if I
	could use a mentor myself." – female associate
	"The absence of effective mentoring opportunities "-
	female associate
4. Disproportionate service demands/	"We hate service as a means of advancement, yet load
administrative duties for associates that interfere	associate professors up with service obligations. If you
with progress toward full	are selfish and avoid these obligations, you get your
	research done and sail into the promised land of full
	professor."- male associate
	"My publication record is lower than I would like, but I
	feel I have A LOT of service that I am involved with
	(much more than the average tenure-track faculty
	member)" – female associate
5. Lack of clarity and clarity regarding promotion	"Unclear path to professor" – male associate
criteria	With a large suitable a Van and Calanter 1 days
	"Unclear criteria You only find out what you are
	missing when you are denied. More importantly, you find that even though you have been busy doing what
	find that even though you have been busy doing what they asked of you, and doing it well, it suddenly doesn't
	count." – female associate
6. Need for more flexible and inclusive "paths to	"Policies that would provide different tracks for
professor" that recognize a broader range of	promotion could help." – male associate
contributions	r active morp. India appointe
	"More varied models of 'success.' Scholarship is
	important, but contributions can take many forms." –
	important, out contributions can take many forms.
	male associate

Needs Assessment: What do Associates Perceive as the Barriers to Promotion?

Adapted from Buch, Huet, Rorrer, and Roberson (2011)

Roles

Full professors must embrace a variety of roles and responsibilities including teaching, mentoring, and collaboration. The myriad of roles is found between the contractual duties set forth by the institution, research agendas, and community. Roles are informed by various public and private entities. "What we do with our time, then, will be reordered by a recognition that we are becoming a constituent-based service industry or profession" (Plater, 1995, p. 20). Also, role responsibilities can be subject to the stages of academicians' careers.

The literature review attempts to examine absence of information between the role of the full professor and the productivity of academics pre and post promotion to full professor (Montagno, 1996). Researchers agree there appears to be a myriad of roles for the full professor within and outside the university, however, they disagree on what the essential components are of these roles (Bartunek & Rynes, 2014; Blackburn, 1980; DeCew, 2003; McNaughton, Thacker, Eicke, & Freeman, 2021). c According to Blackburn (1980), "…employment will vary from discipline to discipline and by institutional type…" (pp. 31-32). Also, in the literature there is rhetoric about the existing explosion of ever-increasing knowledge simultaneously, "…there is little room for new scholars in academe, despite increased knowledge production" (Blackburn, 1980, p. 26).

How does less university space for junior faculty and knowledge expansion impact the full professors' productivity? How is productivity determined? Is productivity influenced by rank, gender, or discipline? Bonzi (1992) states:

...full professors increase productivity to a greater extent than do assistant and associate professors. Increase in productivity among females is greater than among males, but males are more productive overall. Humanities and science/mathematics

faculty increase productivity to a greater extent than do social sciences and professional school faculty. (p. 111)

Some researchers argue that full professors are more productive based on the quality of their early career research and scholarly training (Perrucci et al., 1983). Chen (2015) suggests roles and productivity (including time) are impacted by university type—public or private.

According to researchers (Boyer, 1991; Brennan & Teichler, 2008), modern societal realities have fostered a premise that accessibility to higher education, as well as the duties of full professors, should mirror new challenges in service, teaching, research, and collaboration. Increased access to a knowledge base that is wide in scope has demanded academic leaders in higher education to assimilate new tools and diverse social platforms directed toward reaching full professor. "The very complexity of modern life requires more, not less, information; more, not less, participation" (Boyer et al., 2015, p. 119).

Modern higher educational issues such as public policy, resources, expanding technology, and diverse student body have transformed the work and functions of career in academia (Altbach, 1980; Ponjuan et al., 2011). There is evidence of increased national interest in post-secondary education (Altbach, 1980; Zahorski, 2002). Researchers (Castle & Schutz, 2002) are focusing on the productivity of faculty in academia, specifically full professors.

Those in positions of senior academic leadership must nimbly transcend and maneuver through the shifting educational landscape regarding academic promotion (King & Cox, 2011; O'Meara, 2015). It is not enough to analyze what full professors do without looking at how they strategize, manage, orchestrate, and interact in modern culture. The acts, practices, reactions, efforts, or responses engaged by those maneuvering through an organizational network require strategic agentic practices that can shift as various circumstances and situations are presented within the work environment.

Chen (2015) theorizes that time spent on research influences teaching. Rynes (in Frost & Taylor, 1996) states, that after becoming a full professor the opportunity exists to choose varied research agendas. Rynes goes on to say that deciding to study various areas put new life into her research plan. In the literature there is polarity regarding weight and balance of the roles concerning research, teaching, and service for full professors (Chen, 2015; Macfarlane, 2012; Rynes, in Frost & Taylor, 1996).

Faculty who are academic leaders at the postsecondary level of education may need to foster qualities such as the role model, mentor, and key participant, influencing future directions and policies of the university (Boyer, 1990; Buller, 2010; Crawford et al., 2012; MacFarlane, 2012). There is more to intellectual leadership than faculty are educated to achieve or accomplish (Macfarlane, 2013). The important role of the full professor as senior intellectual and academic leader demands strength of understanding: "We need scholars who not only skillfully explore the frontiers of knowledge but also integrate ideas, connect thought to action, and inspire students" (Boyer, expanded by Moser, Ream, Braxton, 2016, p. 119).

Brennan & Teichler (2008) argue that society has a tremendous stake in research and those who are involved in the "knowledge economies" (p. 259). Researchers' expertise should lead toward new research directions and creative methodologies that will support the advancement of society and future policies. "The variety of institutional settings and the fluid lines between research and practice offer ample opportunities for broadening the scope of higher education research and its practical relevance" (Brennan, & Teichler, 2008, p. 262). Full professors work on investigative projects in a variety of institutional settings, thus, better

29

understanding the full professors' research agenda role enables a wider breadth and scope of knowledge from those who depend on their information (Brennan, & Teichler, 2008; Link, Swann, & Bozeman, 2008).

Scholars and Productivity

Intellectual productivity and capital efficiency are not easily measured (Boyer, Moser, Ream & Braxton, 2015). Researchers (Boyer, 2014; Boyer et al., 2015; Braxton, 2006; Bourdieu, 1977) have sought to provide an evaluative framework for understanding and assessing a scholar's efficiency, value, and productiveness. Spanning over 40 years and frequently cited, Bourdieu's research on cultural productivity has afforded a grounded theoretical framework from which time and work productivity may be measured. Drawing from Bourdieu, Boyer (1990) proposed time allotment measures by dividing the scholar's academic experience into four major areas of academic production to identify and gauge intellectual and academic work.

Bourdieu (1977) entitled his approach, *Reflexive Sociology*. "In that phrase, he captures the elements of a way to reflect not only on society but to account for the objective as well as subjective status of individuals within a social and discursive framework" (Palmer, Bresler, & Cooper, 2001, p. 230). Bourdieu's (1977) framework is probably best known by educators for his articulation of how the educated social groups (professional groups or classes) use cultural capital as a social strategy to hold or gain status and respect in society (Palmer et al., 2001). His theories posit individual action as practice upon his primary concepts of agency, social field, capital, and habitus through which he describes the intricacies of action and strategy that arise out of the interaction of those constructs. Agentic practices are the decisions, choices, and practices that social agents enact within the

boundaries and space of social structure including, "interacting with the next generation of scholars" (Gonzales, 2014, p. 198). The social field represents the arena in which particular societal rules, regulations, and positions apply. "The concept [social] field helps the researcher situate individuals in the milieu of social and objective relations" (Gonzales, 2014, p. 198). Capital is the asset that individuals employ to gain admittance to esteem within social fields. Bourdieu (1977) distinguishes four separate kinds of capital that are categorized as: economic, cultural, social, and institutional. Habitus is the viewpoint of the individual determined by experiences, beliefs, paradigms, and frame of reference in conjunction with one's historical perspective (Gonzales, 2014). Bourdieu's framework provides a guiding measure from which a professor's academic and cultural productivity may be studied.

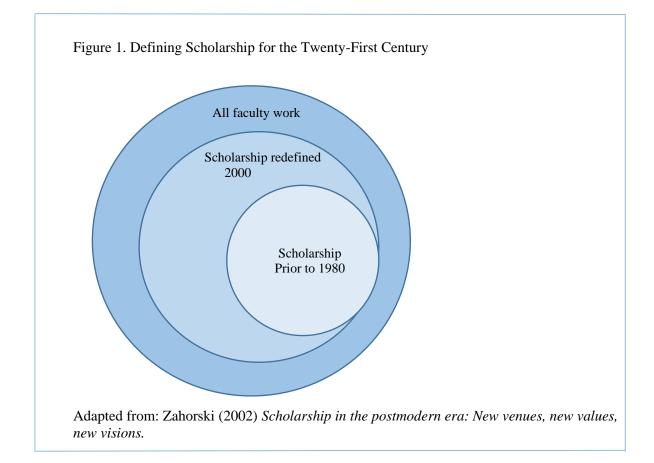
Academic productivity translates to capital values among research, comprehensive and teaching-focused institutions. "Previous research on the relationships between faculty pay, behavior, and productivity has been limited, typically relying on information about a single school and using a small set of explanatory variables because of their availability" (Finnegan, Webster, & Gamson, 1996, p. 362). The literature reveals promotion and compensation are impacted by faculty members' time allocation and productivity (Finnegan et al., 1996); however, evaluating tools may be vague and subjective (Finnegan et al., 1996; Gonzales, 2014).

Throughout the literature, the duties and roles of the full professor have been predominantly studied in relationship to the concept of agentic practices. Recently, some scholars have joined a research movement to revisit the significance of habitus and its relationship to actions of individuals seeking careers in academia (Swartz, 2002). This explanation of situated learning posits that knowledge is contextual within a perspective that attentively accounts for individual paradigms.

Boyer (1990) theorizes that academic work and time can be analyzed and compared within categorical domains in relationship to organizational structures and goals of varying higher education institutions. Boyer's domains have expanded Bourdieu's (1977) theoretical structure into a modern trajectory and guided the scholar's productivity measures through an evaluative framework divided into four distinct thematic quadrants:

- Teaching
- Discovery
- Application
- Integration

These domains, highlighting work of the academician within higher education institutions, have been the main categories for efficiency evaluation regarding university faculty time in recent decades, providing a framework for tenure track junior faculty seeking to accomplish tenure and promotion. Zahorski (2002) posits that Boyer's domain of *discovery* (scholarship) has expanded in the 21st century (see Figure 1).



The literature states that three of Boyer's domains, teaching, discovery, and application, appear to be dominated by teaching and discovery—a paramount focus for promotion review toward tenure. The application domain in the literature mainly centers on service within and outside the academic environment. Service appears to increase as a person achieves the position of full professor (Castle & Schutz, 2002). The progression to associate professor with tenure seems to concentrate on publications in a research institution. Teaching is emphasized as one criterion for promotion to full professor in higher education institutions where the focus is, to a greater extent, teaching-oriented:

For the research institution, the "impact" and "contribution" and obtaining a national or international reputation of peers for your scholarship. For teaching institutions, the "impact" and "contribution" may be more based on student engagement and teaching and your reputation for service within the institution or community. (Walker, 2016, p. 263)

Comprehensive universities fall somewhere in the middle, balancing Boyer's domains.

Mentoring

Guiding junior faculty is one role a full professor may embrace that can revitalize or enhance research productivity. This can be accomplished without competing within the university for academic time, financial backing sources, credibility, and other resources. "...those who achieve top ranking as professors also appear committed to mentoring others in the professoriate and carrying on the academic culture" (Castle & Schutz, 2002, p. 96). The literature reveals that sharing knowledge, guiding future scholars, and role modeling are commonly valued by many full professors especially those who have decades of experience within the university milieu (Castle & Schutz, 2002; Ramani, Gruppen, & Kachur, 2006; Sands, Parson, & Duane, 1991).

Responsibility to expand information beyond the gates of the university emerges as a common theme throughout the literature. Mentoring junior faculty for socialization and community is viewed by many full professors as a vital function of their role (Albu & Cojocariua, 2012).

When senior faculty members provide guidance (e.g., formal or informal mentoring) to new and early pre-tenure faculty members during this adjustment period, they are fulfilling an important role in improving a pre-tenure faculty member's commitment to the institution and job satisfaction. (Ponjuan et al., 2011, p. 338)

Throughout the body of literature there are references to those faculty members mentoring and guiding emergent scholars from diverse backgrounds. The expertise of senior faculty members provides diverse faculty information and clarity enhancing career development paths of the advancement process (Ponjuan et al., 2011). "Having mentors along their career path is a leading factor contributing to the growth and development of faculty of color" (Turner, González, & Wood, 2008, p. 151).

It is important for an emerging scholar that the senior faculty mentor recognizes and supports the kind of mentoring needed for the advancing scholar. "Mentoring programs designed to meet the needs of junior faculty should recognize the diverse character of the phenomenon and the need for sensitive and differential application of the concept" (Sands, Parson, & Duane, 1991, p. 191). It is clear in the literature that behaviors and skills professors acquired during their path to promotion are emphasized as they mentor junior faculty and students. Pardun, McKeever, Pressgrove, and McKeever (2015) state:

Similarly, although not surprising that the majority of full professors recognized the PhD as a "research degree," rather than one that should be focused on teaching and or administrative duties, one may wonder whether emphasizing research alone can hinder students' preparation for teaching and service, which are a large part of professors' careers once they are hired at an institution after earning their doctoral degree. (p. 363) This perspective may affect mentoring quality and success for those students and junior faculty of diverse backgrounds.

Community Engaged Scholar

Full professors as community engaged scholars are a link between the university and community. "The knowledge produced, examined, and transmitted by universities is important in one respect or another for all parts of society" (Schuetze et al., 2012, p. 17). Faculty members are responding by offering their expertise and experience to local

35

stakeholders, community policy makers, and beyond. Limited fiscal resources at all levels of society call for those in positions of resource management to seek out research-based informational insights from higher education faculty who focus on community scholarship. "Community-engaged scholarship is scholarly work undertaken in partnership with communities, draws on multiple sources of knowledge, crosses disciplinary lines, and is reciprocal and mutually beneficial" (Holland, 2005, as cited in Cutforth, 2013, p.14).

One of Boyer's (1990) four domains of academic productivity is service. Research and teaching domains have overshadowed the areas of service and integration. Rewards for promotion throughout the ranks to associate professor with tenure have been focused on scholarship production and teaching. "Faced with the current traditional typology of faculty work—teaching, research, and service—junior faculty in particular are often advised to postpone their community engagement work until after they secure their foundation in research and teaching" (Cutforth, 2013, p. 14). Academic leaders in higher education are addressing the value of time allotted toward community-engaged research and intellectual rigor, thus providing an opportunity for the promotion and tenure process to evolve.

When Cutforth (2013) chronicled his career progression to associate professor with tenure, he reported that he was able to successfully navigate the promotion process after graduate school until faced with applying for promotion to full professor. Bieber, Lawrence, and Blackburn (1992) noted after interviewing a set of "successful" academicians that, "Some full professors who jumped all the hurdles and are still on the track question the wisdom of a single standard for the final promotion" (p. 31). After reviewing his publication and scholarship records, upon reflection, Cutforth wrote, "Put simply, I found it impossible to bring my knowledge and expertise to issues in the community and simultaneously produce the

publications that would ensure my promotion to full professor and thus my progress in the academy" (p. 25). After taking a sabbatical he found that his work with the community had illuminated the possibility of a university-community partnership and further scholarship opportunities.

I applied for promotion to full professor...and after successfully negotiating this hurdle I returned to active involvement in the community, but with a more balanced approach to managing the dilemma of doing community work and writing about the doing. (Cutforth, 2013. p. 26)

The community engaged scholars who focused on Boyer's (1990) domain of service provide an important real-world connection between practice and theory. Cutforth asserts, "Community-engaged faculty members serve on the front line of their institutions' mission to be engaged partners with the needs of local communities and the larger society" (Cutforth, 2013, p. 27). More research is needed to understand the career path that community engaged junior and senior scholars follow. Community engaged scholars also seeking the rank of full professor seem to face barriers when scholarship and teaching appears to be more valued than service (Cutforth, 2013).

There is a symbiotic relationship between university scholars and the community stakeholders. There are indirect signs of community that help to gain personal insights through collaboration with others. "Our shared experiences allow us to clarify our thinking, open ourselves to criticism, test our ideas, increase our awareness of others, and uncover our values and beliefs" (Karpiak & Kops, 2013, p. 45). Community experiences help scholars to expand perspectives, foster diversity, and value differences in culture.

Community-engaged collaboration assists in formulating, within feasible and workable resources, a balanced research focus based on supporting the mission of diverse viewpoints (Karpiak & Kops, 2013).

By paying attention to these more subtle signals of change in our society and by considering their relationship to continuing education, we may reshape our thinking, recreate our organizations, and redefine the way we work, both inside and outside the university. (Karpiak & Kops, 2013, p. 39)

The idea is that scholarship produced by faculty, in the academy, should embrace activities wider than only research (Park & Braxton, 2013; Plater, 1995). The literature reveals (Altbach, 1980; Braxton, 2006; Hutchings, Huber, & Ciccone, 2011; Zahorski, 2002) that service regarding faculty assessments for promotion and tenure have failed to change even when institutions have introduced plans for increased service (Porter, 2007; Zahorski, 2002). "...the issue of excess committee service is still important, as faculty spending more time on areas not valued in the tenure and promotion process will undoubtedly fare poorly when they go up for promotion" (Porter, 2007, p. 539). The literature presents that important community links both inside and outside the academic institution appears to be neglected or minimized (Altbach, 1980; Braxton, 2006; O'Meara, 2015; Ponjuan et al., 2011) until scholars reach their research productivity quota for promotion.

Universality

Globalization (universality) requisites new collaborative norms and approaches that impact full professors and faculty at all levels. A lack of global perspective can impact professional considerations regarding scholarly efficiency and promotion decisions. In modern times, third world countries started posturing and striving to change their status

38

pertaining to configuration of knowledge. They seek to become a producer of knowledge rather than a consumer of knowledge generated by others (Altbach, 1980).

Central university systems presently constitute an international cartel of technical knowledge, and world redistribution would significantly alter their material circumstances. While academics at the center deny knowledge is a commodity and speak of it as unfettered by national boundaries, in reality the international academic system links the academic profession in a web of inequality. (Altbach, 1980, p. 5)

Welch (1997), in his research study on the peripatetic professor, stated, "it was found that 'peripatetic' staff were more likely to be among the senior ranks than their indigenous peers" (p. 332). This finding suggests those in higher education leadership have a key opportunity to reach out and bridge barriers of diversity and cultures throughout the international global knowledge society. "...given the prominent role given to intellectuals in terms of opinion formation, and the cultivation of future leaders in society, its role is too important to ignore" (Welch, 1997, p. 341). As increased globalization knowledge sharing occurs, higher education as a major conduit facilitates global understandings from which ideas of diverse people, cultures, production, technology, awareness, information, and economic theory exchanges will flow. Scholars such as full professors today have options to cooperate, share ideas, and participate fluidly across boundaries that in the past were thought impermeable. The literature reveals that the meaning of collaborative networks for advancement to full professor is fractional and lacks consistency, possibly limiting the potential of valuable resources. Integration appears to align with global outreach and collaboration.

Teaching

The scholarship of teaching is another one of Boyer's (1991) four domains highlighted in the literature (Braxton, 2006; Wisniewski, Durcharme, & Agne 1989). Researchers Park and Braxton (2013) assert, "Recent literature has begun to explore the interplay of faculty activity across Boyer's four domains of scholarship" (p. 305). "...Braxton, Luckey, and Helland (2002) asserted that 'the purpose of the scholarship of teaching is the development and improvement of pedagogical practices' (p. 106)" (as cited in Braxton, 2006, p. 53). Researchers (Gardner & Blackstone, 2013; Zahorski, 2002) argue what constitutes successful scholarship performance is important to understand by those whose goal is the realization of obtaining full professor status.

The scholarship of teaching within the conceptual model of Boyer's (1991) domains and their relationship to each other is a topic about which today's scholars attempt to gain understanding. "Interdependency implies that a scholar's work in one domain depends on their work or the work of others in another domain" (Park & Braxton, 2013, p. 303). Questions emerge as to whether the scholarship of teaching is equal in value to the other domains. Some researchers suggest the scholarship of teaching may prove autonomous in relationship to the other three domains (Park & Braxton, 2013).

Park and Braxton (2013) assert:

Scholars of Pedagogical Practice are involved in such activities as creating an approach to help students think, experimenting with new teaching methods, creating an approach for class management, and constructing a novel examination practice. The work of these scholars concentrates entirely on the scholarship of teaching and does not cut across any of Boyer's domains. (p. 320)

Interdependence and reward structures ascribed to the domains are topics that need more study as the literature reveals that the underlying values within the domains may impact scholars' successful promotion (Braxton, 2006; Green, 2008; Park & Braxton, 2013).

Faculty who concentrate their time on the scholarship of teaching instead of scholarship of research appear to build a different skill set of academic approaches. This division may impinge on promotion to full professor (Park & Braxton, 2013; Taggart, 2015). The literature (Braxton, Luckey, & Helland 2006; Gardner & Blackstone, 2013; Macfarlane & Chan, 2012) focuses on "the growing importance of knowledge..." (Valimaa & Hoffman, 2008, p. 265) as related to learning and content. "Tenure-track professors are pulled back and forth in a constant tug between teaching and research" (Taggart, 2015, p. 443). There are numerous calls in the literature, from historical to modern times, emphasizing the mission and perspectives of teaching in higher education (Cambridge, 2004; Gardner & Laskin, 2011). Robert Maynard Hutchins, former president of the University of Chicago for two decades until 1951 stated:

Education implies teaching. Teaching implies knowledge. Knowledge is truth. The truth is everywhere the same. Hence education should be everywhere the same. I do not overlook the possibilities of differences in organization, in administration, in local habit and customs. These are details. (as cited in Gardner & Laskin, 2011, pp. 111-

112)

These words are mirrored in modern research. The literature further reveals this issue still generates scholarly career frustration as those seeking promotion through the ranks of academia are heavily evaluated on the scholarship of research production and the monies gleaned for research studies rather than teaching (Cambridge, 2004).

Life-long service learning is imbued throughout the scholarship of teaching. An outgrowth of increased globalization, service learning plus changing perspectives supports expanded knowledge and the development of new teaching opportunities for the university. As modern society embraces a new age of global information sharing the concept of a "Knowledge Society" develops (Välimaa & Hoffman, 2008). As the scope of the students in higher education changes, the service role of academia reflects an expanding social purpose and knowledge (Clark, 1986; Trow, 2010). "... the expansion of knowledge leads to new research fields creating a demand for new chair and professorships to be established for emerging field of research and disciplines" (Välimaa & Hoffman, 2008, p. 266). The recognition and cultural shift that derives through a service teaching perspective may leverage advancement and promotion assistance in addition to increasing the substantiation of effective teaching service as well as public recognition of scholarship (Cambridge, 2004). "Without the teaching function the continuity of knowledge will be broken and the store of human knowledge dangerously diminished" (Boyer, 1990, p. 24). The literature illuminates numerous instances where the scholarship of research productivity is weighted heavier than the scholarship of teaching when seeking advancement to full professor (Gardner & Blackstone, 2013).

Agentic Practices

Agentic practices, defined for this study as the acts, practices, reactions, efforts, or responses engaged by those maneuvering through an organizational network, is similar to a matrix with interconnected pushes and pulls changing over time. Within the boundary of time, shifts occur as situational constructs are presented within the full professor's environment. Institutional changes, career roles, resource limits, and networking challenges require nimbleness and flexibility of focus. Full professors may need to employ a multi-toggle type approach when engaged in work.

Institutional Change

Throughout the literature, (Altbach, 1980; Finnegan, Webster, & Gamson, 1996; Hutcheson, 1998; Zahorski, 2002) references are made concerning the increased external pressures after World War II that impacted higher education. These demands are cited as important reasons for rapid institutional change and growth since the 1940's:

Major changes resulted from the dramatic expansion of post-secondary education, from the student turmoil of the 1960's, from massive societal demands for curricular and other reforms in the universities, and most recently, from the decline in financial support and enrollments in many countries. (Altbach, 1980, p. 2)

As the nation continued its progression into an industrial society, higher education linked with social and industrial forces to provide people with skills to meet anticipated needs of future workers. Financial gains bolstered the university to seek and admit a larger span of diverse students (Thelin, 2013). "Many university systems doubled their student enrollments in little more than a decade in the period between 1950 and 1970" (Altbach, 1980, p. 2). Researchers (Deane Sorcinelli, 2002; Zahorski, 2002) sought to offer explanations of organizational transformations where rapid growth has impacted higher education.

As the institution changed, the work of the academic professional was transformed, adapted, or delayed. Additionally, researchers (Brennan & Teichler, 2008) argue new roles developed questioning institutional systems and autonomy of academic professionals. Brennan and Teichler (2008) asked, "Were academics too self-interested to apply their various crafts to their own professional world?" (p. 263). Policy and research and collaboration and change within the academy fostered the escalation regarding educational capitalism, intellectual property, and more (Brennan & Teichler, 2008).

Students came to the university with backgrounds, characteristics, skills, and social circumstances that expanded the common class base and forged a gap in what had been shared academic understandings of the university milieu. The roles of academic leadership as this expansion gained traction evolved at what seemed to be a slower or even a dissimilar trajectory. "This shift meant that members of the academic community were less and less likely to share a common understanding of the university and the way it traditionally related to the wider world" (Altbach, 1980, p. 2). Higher education, once seen as a community for the intellectual elite and prestigious social classes, was now entrenched in an environment that demanded accountability and relevance. "When the academic system began to expand almost beyond recognition, the elite bemoaned the decline of the community of scholars" (Altbach, 1980, p. 3). The literature (Castle & Schutz, 2002; Croom & Patton, 2012; Ponjuan et al., 2011) brings forward that full professors have, in a variety of cases and for numerous reasons, struggled with university reforms. "Academics are, in a sense, the conscience of the university, and tend to defend traditions whether or not these traditions serve the best longterm interests of the university" (Altbach, 1980, p. 9).

Faced with limited resources, the public and government entities that fund institutions of higher education are now demanding that universities respond to societal needs, provide transparent accountability, and focus on research agendas that are socially beneficial and relevant (Altbach, 1980). Conversely, universities' roles may have thwarted new flexibility of ideas and transformations for changes that are suitable and needed. "Academics have also

44

tried simply to ignore governmental and university authorities placed over them and have had surprisingly good luck with this tactic" (Altbach, 1980, p. 11).

Resource Limits

Diminishing financial support and lack of abundant supplies may create barriers for those working toward achievement of university goals. Numerous higher education institutions in the United States receive public funding in some form that generates a call for greater accountability in education practices (Brennan & Teichler, 2008; Davis & Chandler, 1998; Välimaa & Hoffman, 2008). Assorted funding sources coupled with diverse stakeholders exert demands on university faculty. "We now recognize that our university structure is vertically organized but that our constituents—both students and the several publics that depend on us for services and research—are using our products horizontally" (Plater, 1995, p. 25). As scholarship support provides generous funding for both private and public institutions of higher learning, competition for student tuition dollars emerges as the costs between public and private universities narrow. Furthermore, community colleges have successfully competed for student tuition dollars, especially among freshman enrollees (Thelin, 2013).

Lack of resources is one explanation for the limitation of productivity for scholars seeking advancement. Perrucci, O'Flaherty, and Marshall (1983) believed there is value in exploring the economic and sociological aspects of career advancement in academia:

The incomes that faculty receive or their chances for promotion cannot be understood simply in terms of the personal resources they command and the performance records they develop. Income structure and promotion probabilities are also shaped by labor market conditions that are independent of personal resources and exert their own special influence on the career of academics. (Perrucci et al., 1983, p. 447)

Conventional funding sources, e.g. state provisions, federal subsidies, and tuition, may not increase at a level necessary to meet higher education fiscal needs (Thelin, 2013). The aforementioned limited economic conditions possibly influence those who are seeking promotion to full professor. These circumstances may pressure professors to take a more pragmatic approach to their careers (Perrucci et al., 1983).

Networking Challenges

There is a call in the literature for universities to reassess agentic practices within society, specifically relationships with outside communities and stakeholders (Jongbloed, Enders, & Salerno, 2008). Such partnerships have far-reaching consequences when cogitating university governance. Jongbloed et al. (2008) postulate, "For the future of the universities we foresee a change towards *networked governance*" (p. 303). MacFarlane (2012) discovered that the general public believes that an important role of professors is to act "as an *ambassador* on behalf of the university, representing its interests on the national and international stage" (p. 98). Conversely, full professors do not put the same importance on that particular aspect of networking (MacFarlane, 2012).

Researchers (O'Meara & Rice, 2005) value networking within the institution of higher education. O'Meara and Rice (2005) theorized that socialization networking for scholars should be a continuous process beginning in graduate school. Clark (1987) states, "we cannot imagine academic life without this type of professional linkage" (p. 234). The literature reveals that institutional networking should occur in an interdisciplinary manner, thus strengthening a scholar's own research (Albu & Cojocariua, 2012; Clark, 1987; O'Meara & Rice, 2005). Full professors are generally associated with multiple associations or networks; "some are almost completely restricted academics, others center on the outside members, and still others blend the two" (Clark, 1987, p. 237). These networks may be complex and multifaceted (Clark, 1987).

Albu and Cojocariua (2012) found in their study that professors ascribe values to different networking types. "University professors (with at least 20 years experience) are aware of the importance of personal role model for the evolution of students" (Albu & Cojocariua, 2012, p. 2192). In addition to mentoring, these senior scholars also valued networks that were focused on career and respect. However, little value was placed on esprit de corps, collaboration, self-evaluation, and professionalism (Albu & Cojocariua, 2012). Full professors not only navigate through different networks, but they negotiate assorted processes. Buch, Huet, Rorrer, and Roberson (2011) described the vertical and horizontal processes of networking including formal and informal aspects. Vertical interaction usually occurs within the same department and/or discipline in a hierarchical manner. Horizontal networks tend to be dyadic; however, they often encompass groups. Peer networks may also be informal or formal in relation to perceptions of social capital (Buch et al., 2011).

Technology has presented another level of networking challenges. Through increased globalization social networks have undergone transformations (Lin, 1999). "Networking transcends time (connecting whenever one can and wants to) and space (accessing to sites around the globe directly or indirectly if direct access is denied)" (Lin, 1999, p. 46). Lin (1999) argued against "the hypotheses that social capital is declining" (p. 46) recommending researchers study outside traditional social networks, examining cyber-networks. In response to these changing networks, institutions are changing the way they do business, creating new

rules and best practices (Lin, 1999). Full professors may need to assimilate into this new environment, acquiring different skills and learning changing social norms. King & Cox (2011) postulated that overwhelming faculty responsibilities act as barriers for some full professors regarding interactions with new social networking milieus. "Higher education organizations and classrooms cannot ignore this tsunami of constant technology change" (King & Cox, 2011, p. xv).

Full professors may require additional support (e.g., mentoring, professional development) to overcome cyber-networking challenges (King & Cox, 2011). If full professors have not successfully assimilated to new means of social networking, how do they successfully mentor emerging scholars? Professors should be attentive to how their *professionalism* is impacting their colleagues, stakeholders, and institutions (Allen, 2017; Macfarlane, 2011; Zahorski, 2002).

Integrating technology into teaching and scholarship can present unique challenges in academia. The very concept of using technology can change rapidly (Buller, 2010). Technological changes can impact those in leadership positions as gaps in technology literacy may divide and impinge the flow of communication between senior and junior faculties. Training, such as webinars, add more duties to the full professor's work time. Technology has transformed information processing and advanced scholarship. "Today, capitalizing on the benefits of computers and communications technologies, scholars are accomplishing much more in less time, and are addressing problems heretofore unsolvable" (Zahorsky, 2002, p. 19). From locating research funding sources to networking with scholars throughout global networks, collaboration opportunities have expanded. "Technology has already altered how scholars work and the problems on which they work" (Zahorsky, 2002, p. 26).

Theoretical Framework

Various perspectives influence human cognitive development and learning. However, a common thread emerges as developmental theorists question whether formal or abstract ideas reflect intellectual development at the uppermost levels of cognition (Ackermann, 2001). "All claim that formal thinking is by no means the most powerful tool for everyone, and not necessarily the most appropriate in all situations" (Ackermann, 2001, p. 6).

Influenced by Piaget's constructivism, Papert advanced his theory (constructionism) of how individuals construct ideas through familiar schemas (Ackermann, 2001). While Piaget's functional theory of intelligence offers a sharper look into understanding the processes by which a person controls their "world" boundaries, it does not adequately address the accommodations an individual uses as self-regulation functions to loosen or adjust boundaries (Kafai & Resnick, 1996). Papert states, "projecting out our inner feelings and ideas is a key to learning. Expressing ideas makes them tangible and shareable which, in turn, informs, i.e., shapes and sharpens these ideas, and helps us communicate with others through our expressions" (Ackermann, 2001, p. 4). Constructionism acknowledges scientific contributions but reveals there is a deeper meaning to uncover that is unique to our thoughts in relation to our actions.

Both a strategy for education and a model of learning, constructionism is founded on the notion that ideas shared with others help enhance learning (Kafai, & Resnick, (Eds.), 1996). Creating ideas, models and things that are external and discussed, probed, revealed, observed, and examined enlightens understanding of real-world phenomena. "Sharing a creation can result not only in its refinement, but also in the learner obtaining a deeper understanding of other people's perspectives on the object and on the ideas to which it is

49

related" (Kafai, & Resnick, (Eds.), 1996, p. 224). People do not catch thoughts and actions, they construct thoughts and actions (Kafai, & Resnick, (Eds.), 1996). "Whereas most theories describe knowledge acquisition in purely cognitive terms, constructionism sees an important role for affect" (Kafai, & Resnick, (Eds.), 1996, p. 2). Constructionism supports diversity, various learning styles and embraces multiple representations of knowledge (Kafai, & Resnick, (Eds.), 1996).

According to the constructionism theory, information should not be disconnected from the circumstances where it is actualized and constructed (Ackerman, 2001). Grounded in situated and pragmatic contexts, knowledge through a constructionism perspective is ever mindful of explaining and clarifying meaning to enhance cognitive engagement (Ackerman, 2001; Creswell, 2013). "This growing interest in the idea of situated knowledge, or knowledge as it lives and grows in context, has led many researchers to look closely at individual people's ways of knowing, or relating" (Ackermann, 2001, p. 6).

Different people may adapt particular methods of thinking in certain settings but still remain exceptional at whatever they ultimately set out to achieve (Papert & Harel, 1991). The dynamics of transformation and fragility of thinking processes during periods of change are of key importance for illuminating how meaning is derived and processed from the information. "Papert always points toward this fragility, contextuality, and flexibility of knowledge under construction" (Ackerman, 2001, p. 8). The learner immerses in the new situation, assuming that diverse viewpoints spring forward into a mental discourse between familiar and novelty experiences (Ackerman, 2001). Throughout the literature situational social explanations as to how human learning, growth, and skill attainment occur are examined with varied interpretations.

Subset categories such as social constructionism derive refined definitions from the over-arching constructionism framework. Social constructionism, or the social construction of reality (also social concept), is a theory of knowledge in sociology and communication theory. It is a framework that examines the development of jointly constructed understandings of the world that form the basis for shared assumptions about reality (Young & Valach, 2000). "Only when a learner has actually traveled through a world, by adopting different perspectives, or putting on different 'glasses,' can a dialogue begin between local and initially incompatible experiences" (Ackerman, 2001, p. 10). This knowledge discourse forms the basis for a model or explanation of various events and actions regarding an individual's perceptions and choices, especially in relation to work and career.

Constructionism and Career Theory

Career theory provides a perspective that draws from the constructionism framework, an approach from which to explore the work setting of full professors in academia. There is a call in the literature to examine the opportunities a career can offer for advancing an individual's growth and how that development can benefit organizations and society (Sheppard, 1984). The literature advances that there is no singular sufficient definition, as it depends on context (Patton & McMahon, 1999). For the purpose of this dissertation, the definition of career theory is an "emphasis on the person and context as coexisting and jointly defining each other" (Patton & McMahon, 1999, p. 80).

The term *career* also has multiple connotations such as occupation, vocation, or paid employment (Patton & McMahon, 1999). The literature reveals that researchers incorporate the relationship between work and time as a common element of career definitions. This broadens the scope of career to include non-paying social or community undertakings. "For example, work that involves community welfare and social activity—'caring work'—is often included in people's definitions of their career-related or work activity" (Patton & McMahon, 1999, p. 3).

In recent times, a broader definition of *career* includes the development of career that occurs over the duration of the individual's work life and acknowledges the concept of choices and decisions as a continuous process throughout a person's career span (Patton & McMahon, 1999). The concept of career development has been identified as an integral element in career theory and includes key components such as change, the individual, relations, strategies (see Table 2.5), and settings (Patton & McMahon, 1999). The values of the individual are holistically addressed throughout the decision-making process inherent in career development. Patton & McMahon (1999) state, "We concur with these more recent constructions of career, perceiving that people develop a career on the basis of their perceptions of, and attitudes toward, career" (p. 4). Different viewpoints and the varied approaches of diverse populations toward career development may be studied through illuminating an individual's value system. "Cultural background, gender, and socioeconomic status influence opportunities and social interaction; thus, there is variation in values both within and between subgroups of society" (Patton & McMahon, 1999, p. 29).

Buch, Huet, Rorrer, and Roberson (2011) described the vertical and horizontal processes of building an academic career through socialization strategies that include formal and informal aspects between groups and individuals. O'Meara and Rice (2005) theorized that socialization networking for scholars should be a continuous process beginning in graduate school. Clark (1987) states, "...we cannot imagine academic life without this type of professional linkage" (p. 234). Examples of socialization strategies in academic careers for individuals and groups are listed below (see Table 5).

Table 5

Socialization Strategy	Description of Strategy	Examples in Faculty Role
Collective	Group faces a common set of experiences together	New faculty orientation
Formal	New recruit separated from existing members of organization to participate in designed activities	New faculty workshop series
Sequential	Occurs through identifiable, clear steps to achieve the goal	Mentoring relationships
Fixed	Precise timetable for moving through organizational roles	Six years in assistant professor role
Serial	Planned training of individuals by senior members of the organization	Six years in assistant professor role
Investiture	Affirming and welcoming practices to highlight diverse experiences of individual	Social events
Divestiture	Attempts to strip away the characteristics of the individual that do not mesh with the organization's culture	Harassment of newcomers; paying of dues

Socialization Strategies Constructed Through Groups

Socialization Strategies Constructed by Individuals

Socialization Strategy	Description of Strategy	Examples in Faculty Role
Individual	Individual is socialized alone	Faculty mentoring program
Informal	Individual learns through trial and error	Evaluation
Random	Progression of unclear or ambiguous steps leading to a target goal or role	Tenure-promotion process
Variable	Vague and unclear timetables	Unavailable
Disjunctive	A lack of role models available to guide individual	Shortage of time and resources

(Adapted from Gardner & Blackstone, 2013)

Patton and McMahon (1999) posit that the context of work or career paths should not be examined in isolation but in relationship to social settings and life tasks that align with the constructionist paradigm. The field of career theory provides an important setting for the transdisciplinary study of individuals at work because of two features. First, the career model encourages theories to examine both institutions and individuals. Additionally, it supports theories to consider relativity and personal development. Academics who are earnest about understanding work trajectory can point to career theory to offer an analytic theory for developing both real-world and applied viewpoints. Career theory can be better explored through examining the circumstances and growth of individuals in relationship to their work (Arthur, Hall, & Lawrence, 1989). Career theory springs forward as a research perspective, guiding aspects of human interaction and agentic practices. It furthers understanding of the advancement process and choices of work.

Conclusion

A review of the literature has revealed the lack of information regarding advancement to the rank of full professor in higher education. Additional gaps are the ambiguity surrounding the roles of full professor, lack of clarity, and non-standardized criteria for promotion. Furthermore, there are gaps that exist relating to equitable promotion for diverse groups. This literature review also details research describing some roles of the full professor: service, mentoring and teaching, productivity, and agentic practices. This chapter included an overview of the constructionist framework and career theory that grounded this study. There is evidence in the literature that questions remain concerning how a person becomes a full professor as well as perceptions of knowledge, performance, and dispositions required. This study examined these questions.

Chapter 3: Methods

Study Context

Throughout the literature, a need to study the many unique career pathways among full professors emerges as imperative (Boyer, 1991; Karpiak & Kops, 2013). Full professors face myriad of challenges: limited resources, technology interruption, understanding diverse norms, time constraints, and role definition (Campbell & O'Meara, 2014; Macfarlane, 2011; Turner, González, & Wood, 2008). While not clearly defined, the literature reveals that some full professors share common duties. The most common of these are teaching, mentoring, research, and service (Boyer, 1997; Macfarlane, 2011). There are indications from the literature that many full professors value mentoring graduate students and junior faculty (Albu & Cojocariua, 2012; Ramani, Gruppen, & Krajic Kachur, 2006).

The literature review presented in Chapter Two indicated scarcity of information pertaining to a lack of advancement of junior faculty to full professor. Furthermore, there is evidence of the need to examine gaps regarding clarity, role definitions, and career guidance (Brennan & Naidoo, 2008; Gardner & Blackstone, 2017; Macfarlane, 2011; O'Meara & Rice, 2005). Chapter Two also focused on networking, diversity among faculty and students, limited resources, as well as internal and external accountability. The chapter ended with a discussion of the constructionist framework and career theory.

Research Design

Primary Research Questions

This is a qualitative research case study that examined the main research questions:

 Are there common experiences by those who attain the rank of full professor? If so, what are they?

- 2. What themes emerge from full professors' career stories? If so, what are they?
 - (a) Are there common performances?
 - (b) Are there common dispositions?
 - (c) Is there common inspiration for scientific discovery/scholarship development?
 - (d) Is there a common knowledge base for those who successfully attain the rank of full professor?

Secondary Questions

- 3. The research indicates that gender and ethnic diversity affect mentoring and networking relationships; do full professors perceive that is an accurate reflection today?
- 4. Are there common agentic practices that influence the decision-making processes employed by full professors?
- 5. Does technology play a role in the advancement to full professor?
- 6. Are there common leadership approaches among full professors?

All elements of this study focus on these questions.

Why Case Study?

Merriam and Tisdell (2015) define qualitative research as, an investigative method used to analyze gathered information through interpretative procedures such as translating, decoding, explaining and describing. In other words, "...how people make sense of their world and the experiences they have in the world" (Merriam & Tisdell, 2015, p.15). The constructionist framework, "...focuses on how knowledge is formed and transformed within specific contexts, shaped and expressed through different media, and processed in different people's mind" (Ackermann, 2001, p.8). Qualitative research also focuses on the meaning, not frequency, of phenomena (Merriam & Tisdell, 2015). There are various types of qualitative research (e.g. biography, grounded theory, case study, ethnography, and phenomenology). Of the abovementioned five types, case study was the most appropriate for this proposed study. McCaslin and Scott (2003) defined case study as discovering, "...what actually occurred and was experienced in a single lived event..." (p. 450). For this qualitative case study, I examined the experiences of becoming of full professor.

Case study is defined as empirical research investigating modern phenomenon in reallife settings where various sources of evidence are utilized (Creswell, 2013; Yin, 1989). Creswell (2013) goes on to further define case study as exploring:

A real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observation, interviews, audiovisual material, and documents and reports), and reports a case description and case themes. (p. 97)

Three elements bound this qualitative case study. The first element was the duration reflecting this particular moment in time. The second element was the setting (land-grant university). Land-grant universities employ full professors—this study population. Finally, the third element binding this study was the rank of full professor. Case studies are a formal research design (Yin, 1989) that, like other research approaches, "search for patterns [and] consistencies" (Stake, 1995, p. 44). Case study design best aligns with this research study as each participant's story is unique, however, they were collectively bound by setting, rank, and time.

Population

The population in this study are full professors purposely selected from one geographic location—the northwestern United States—who were employed at a land-grant university. These individuals met the definition of full professor as stated in Chapter One. The population sample was derived from multiple disciplines. Population recruitment involved the following processes: (a) calling the office of Human Resources to obtain the names of full professors employed by the university and/or from a list generated from the Office of the Provost or Vice President of Academic Affairs—two of the land-grant universities required the completion of a Public Records Request, (b) contacting persons on the list by either e-mail or phone and (c) arranging meetings (face-to-face or via Skype/Zoom/phone) with each participant in this research study.

The participants consisted of 21 full professors employed full-time at a land-grant university within the specified geographic location. I contacted the Human Resources Department of six universities meeting the above definition. All the participants were from three of the six universities. I then sent an invitation letter (via e-mail) (see Appendix A) to full professor on the lists. The full professors who indicated a willingness to participate were put in a pool from which 21 names were purposely selected. To broaden the participant pool, I employed the "snowballing technique" (Bogdan & Biklen, 2007, p. 231). This technique encompasses acquiring referrals of possible participants from existing study participants.

The full professors who consented to be participants were asked to sign an informed consent form (see Appendix B). Additionally, the participants were asked for their current Curriculum Vitae (CV) and to complete a post-study questionnaire. All participants were volunteers. The purpose of this research study was contained within the signed consent form

58

and that purpose was explained and restated before each interview began. All participants were reminded that they could withdraw from the study at their discretion at any point during the study. Participants were asked to give their permission to be audio-recorded verbally and on the signed consent form before the interview began. Confidentiality was not ensured although the assignment of pseudonyms and storage of information on a designated password protected computer was an attempt to mitigate identification. Data in hard copy format is locked in a cabinet where only I had access.

Data Collection

Data was collected by a variety of means for this qualitative case study. These methods included the following artifacts: participant interviews, follow-up participant questionnaire, researcher's reflection journal, CVs, and citation counts. For organizational and analysis purposes, artifacts were divided into three categories: primary, secondary, and tertiary. Primary artifacts include participant interviews. The secondary category consists of CVs, researcher's reflection journal, and follow-up participant questionnaire. Lastly, the tertiary category includes citation counts.

Before my research study began, each participant was provided with a copy of the signed consent form and reminded they could ask questions, take breaks, and withdraw from the study at any point. The participants were asked to give verbal and written permission (included in the consent form) to be audio-recorded (digitally) before the interview started. The participants were reminded of the study's purpose.

The participants interviewed were given the Institutional Review Board phone number and e-mail in case they had questions or concerns about my research project. I composed an interview protocol (see Appendix C). This protocol included probing questions as a strategy to elicit richer responses. There was one interview session per participant. Interviews consisted of semi-structured, open-ended questions and ranged from 50 to 120 minutes. Subsequent questions developed as particular topics were addressed. I proposed to complete member checking; however due to extenuating circumstances that was not possible. The example interview protocol is below (see Table 6).

The interview questions were intended to elicit comprehensive responses from participants and were linked to my research focus. "Questions developed to guide a qualitative study need to be more open-ended and concerned with process and meaning rather than cause and effect" (Bogdan & Biklan, 2007, p. 162). Open-ended interview questions enhanced the likelihood that responses from participants would be substantive rather than theoretical. Aligned with primary and secondary research questions, the interview questions were crafted to support rich data collection from participants. The secondary questions provided another layer of inquiry that supported the interview narrative toward the primary research focus. Questions that personally engaged the participant in this research study were designed to encourage quality responses (see Appendix D).

Table 6

Interview Questions

Primary Interview Question				
	What is your story?			
Research Questions	Probing Interview Questions			
Primary Are there experiences that are common to those who attain the rank of full professor? If so, what are they?	Please describe your experiences toward accomplishing your current level of achievement as a full professor.			
 What themes emerge from full professors' career stories? If so, what are they? (a) Are there common performances? (b) Are there common dispositions? (c) Is there common inspiration for scientific discovery/scholarship development? (d) Is there a common knowledge base for those who successfully attain the rank of full professor? 	 When selecting the academic institutions that you attended as a student what was your rationale? What went into your thinking when selecting academic institutions in which to work? What types of knowledge are useful to you? What ideas or thoughts supported your decision to pursue a career in academia? And what inspired you in your field of research and discovery? Did you go directly into academia or did you spend time working outside academia in your chosen field? If so, what was this experience? What were the experiences that helped you make the decision to concentrate on your field of focus? 			
Secondary Questions				
The research indicates that gender and ethnic diversity affect mentoring and networking relationships; do full professors report that is an accurate reflection today?	In your experience were there mentors or networking relationships that were instrumental in helping you chose a career path? A subject matter area? How do gender and ethnic diversity affect those who teach in academia? Advancement to full professor?			
Are there common agentic practices that influence the decision-making processes employed by full professors?	How have campus politics and policies been contributing factors in your professional journey? How do you plan and organize your time? In retrospect, are there any career choices or decisions that you would have changed or done differently? What has been impact of technology expansion for you?			
Does technology play a role in the advancement to full professor? Are there common leadership approaches among full professors?	Has technology presented any effects on your path to full professor? How has acquiring the level of full professor influenced you as a leader? What part did your family, or support group, play in your success?			
Others	In what ways have you been able to balance your professional and personal lives? How is your stress level? What are your avocations? What kinds of books outside of your field do you read, if any? What advice would you give to aspiring scholars? If and when you plan to retire, how do you hope to spend retirement time?			

Participants were requested to e-mail a copy of or provide a link to their current CV for me to use as an artifact for triangulation. As a secondary artifact, the CVs were used to support the interview responses and contribute to the trustworthiness of this study through triangulation. Additionally, I kept a journal during the entire study. As standard practice in qualitative research, my reflection journal contained observation notes, thoughts, and reflections (Creswell, 2013; Yin, 2014).

Numerous data bases record citation counts of various publications such as: Web of Science, Scopus, and Google Scholar. Each of these databases have published analyses, however, there is evidence that Web of Science and Scopus have disparaging inaccuracies (Altbach, 2005; Klien & Chiang, 2004). Researchers (Altbach, 2005; Klien & Chiang, 2004) found Web of Science and Scopus to have biases in terms of inaccurate counting, types of publications, and accurate reflection of article relevancy. Based on this research, for this study, Google Scholar was used for citation counts.

A post-study questionnaire was given to participants at the conclusion of the interviewer. Hard copies were given to participants interviewed in person and digital copies were e-mailed to participants interviewed via Zoom. This questionnaire was designed to elicit feedback from the participants about the interview experience. The post-study questionnaire and triangulation enhanced the trustworthiness of the study. The questionnaire was collected from participants prior to the end of the study.

In compliance with IRB protocol all data (interviews, researcher's reflection journal, recordings, CVs, and post-study questionnaire) are secured. All hard copies of data are locked in a secure file cabinet. Each piece of digital data has been saved on a designated password

protected computer and interview transcripts stored on digital encrypted thumb drives; locked in a fireproof safe. I am the only person who has access to all data storage units.

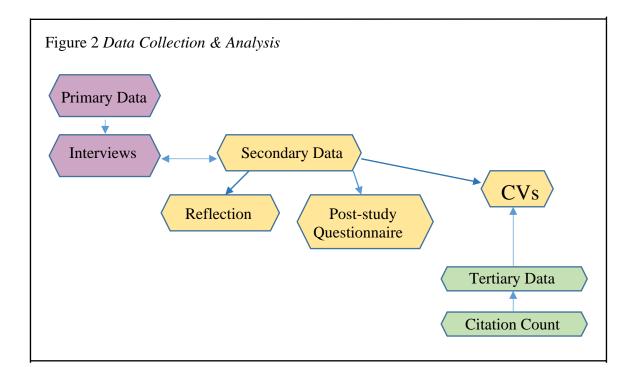
Data Analysis

This qualitative case study design provided rich, in-depth descriptions illuminating the lived event (becoming full professor). Data analysis in the case study framework involves five steps: organization, categorization, interpretation, identification of patterns, and synthesis. Organization of details about multiple bounded systems (cases) where specific facts are arranged in a logical order. Categorization of data is used to cluster the data into meaningful groups. Interpretation of single instances takes specific documents, occurrences, and other bits of data and examines them for the specific meaning. Identification of patterns takes the data along with its interpretations and scrutinizes it for underlying themes and other patterns that characterize the cases more broadly than a single piece of information can show. Synthesis shows an overall portrait of the case. Conclusions are drawn and may have implications beyond the specific cases studied (Bogdan & Biklen, 2007; Creswell, 2013; Savin-Baden & Howell Major, 2013; Yin, 2014).

Qualitative case study methodology requires me to identify and apply codes (Creswell, 2013; Savin-Baden & Howell Major, 2013; Yin, 2014). All interview data was transcribed into Word, hand-coded, and further analyzed using NVivo software. Findings for this study were organized by the codes and subsequent themes emerged from the data. These themes guided the analysis and discussion sections of this dissertation.

The remaining artifacts—e.g., CVs, citation counts, post-study questionnaire, and researcher's reflection journal—were analyzed to support the participants' interviews and subsequent themes (see Figure 2). This procedure added to the study's trustworthiness.

Further attempt to strengthen trustworthiness, accuracy of the findings was corroborated using triangulation (Merriam & Tisdell, 2016).



Trustworthiness

Qualitative research examines phenomenon from the perspective of the participant. (Merriam & Tisdell, 2016). Therefore, only this research study's participants determine trustworthiness (Creswell, 2013). Clearly defining the participants in this study enhanced the trustworthiness of this research as then this study could be replicated using the same definitions at other land-grant universities in other geographical areas in the country. Merriam & Tisdell (2016) indicated that researchers argue that large qualitative data does not correlate to individuals. Providing an objective stance enhances credibility of the study because it guides others as they observe and interpret (Creswell, 2013; Savin-Baden & Howell Major, 2013). For example, accurately describing, in depth, the setting of the interviews and how the participants were encouraged to tell their story accurately supports trustworthiness. Revealing whether the analysis is etic or emic promotes this research study's authenticity in addition to well-supported and grounded methodology through accurate field notes, interviews, coding, literature review, and other methods of gathering qualitative information (Savin-Baden & Howell Major, 2013).

Researcher Background

A long and varied career as a public and private educator has given me insights and experiences that provided added benefit to theoretical analysis. Prior to entering the doctoral program, I had embraced a variety of career opportunities which fostered an interest in exploring the process of becoming a full professor.

In the past six decades I cannot think of a time when the college setting was not a part of my life either as a child, student or parent of a student, or instructor/faculty. This interest coincides with national attention on higher education. My background and interest in careers in higher education, particularly the full professor, was the inspiration for pursuing this terminal degree.

Numerous members of my family are or have been professors. Being a member of the educational milieu, both professionally and personally, contributes to my bias about educational practices. As I have informally observed, it does appear that those with a career in higher education are afforded unique freedom and intellectual challenge opportunities versus other careers.

Limitations

There were five limitations predicted in this study. Each was important to address due their impact on the research process and the necessity to account for them in succeeding chapters.

Proximity of Sites

The first anticipated limitation was study proximity. I selected universities within one geographic region—the northwestern United States. This region was selected because there are multiple universities within driving distance. This limitation was countered through use of technology (i.e., Zoom, telephone).

Diffusion

Diffusion was the second foreseen limitation possibly impacting this study. None of participants collaborated during the time this study was conducted; therefore, diffusion was not a limitation.

Academic Politics

I predicted political agendas and influences to limit participant responses and impact this study. This predicted limitation may be covert and even the participant may not be aware of the bias. There was no evidence this limitation existed, therefore, it did not need to be countered.

Study Time

The fourth anticipated limitation was the constraints of the timeline to complete this study. A longitudinal study originally was considered and rejected due to the nature of this type of dissertation research. The current study was designed to be completed in approximately eight weeks. Due to extenuating circumstances, it took nine months to complete this study. This limitation was not countered.

Hawthorne Effect

The Hawthorne Effect was the final consideration as a predicted limitation. This occurs when participants' responses and reactions are influenced by their perceptions within the experimental atmosphere as to what is expected. This limitation was not countered.

Chapter 4: Findings

Emergent scholars seeking the rank of full professor face challenges. Review of the literature reveals there is no clear definition for career pathway advancement (O'Meara & Rice, 2005). This lack of information drives a call in the literature for further study (Castle & Schutz, 2002; Macfarlane, 2012) that include an interest in how academics view their scholarly work, manage their time, interact with their environment, and self-regulate their experiences. Researchers (Boyer, 1991; Karpiak & Kops, 2013; Macfarlane, 2012; Walker, 2016) assert addressing informational gaps assists emergent scholars seeking leadership careers in academia to better understand what is required when working toward the rank of full professor. The existence of this gap in the literature illuminates the need to study the professional and personal journeys of those who have already attained the rank of full professor (Macfarlane, 2011; Macfarlane & Chan, 2015; O'Meara, 2015).

As a result, I conducted a qualitative case study of full professors from three landgrant universities that was guided by two primary research questions:

- 1. Are there common experiences by those who attain the rank of full professor? If so, what are they?
- 2. What themes emerge from full professors' career stories? If so, what are they?
 - (a) Are there common performances?
 - (b) Are there common dispositions?
 - (c) Is there common inspiration for scientific discovery/scholarship development?
 - (d) Is there a common knowledge base for those who successfully attain the rank of full professor?

The above primary research questions were supported by the following secondary questions:

- 3. The research indicates that gender and ethnic diversity affect mentoring and networking relationships; do full professors report that is an accurate reflection today?
- 4. Are there common agentic practices that influence the decision-making processes employed by full professors?
- 5. Does technology play a role in the advancement to full professor?
- 6. Are there common leadership approaches among full professors?

This chapter includes findings derived from themes synthesized from data analysis conducted by this researcher.

Sample Population

All participants in this research study were full professors employed at land-grant universities in the northwestern United States. As stated in Chapter One, these participants met the definition of full professor. A range of academic disciplines was represented within the study population (see Table 7). I selected participants using a purposeful selection process. To promote confidentiality of the participants, the words "university" and "location" in brackets or parentheses are used instead of the actual names of states, cities, or universities discussed in participant interviews. To further promote confidentiality, I used pseudonyms in place of actual participant names. Participant quotes were used verbatim. I also included [sic] in any quotes containing grammatical errors to indicate they are presented as stated by the participant. Twenty-one full professors participated in this research study. Gender distribution was as follows: seven females and 14 males (see Table 7). The ratio of females to males was 1:2.

Participant Gender	N = 21		
Female	7		
Male	14		
Participant Department/Association	Gender Breakdown		
Architecture	Female	0	
	Male	1	
Agriculture & Life Sciences	Female	1	
	Male	1	
Biochemistry	Female	C	
	Male	1	
Biology	Female	-	
	Male	1	
Business	Female	(
	Male		
Chemical Engineering	Female	(
	Male	-	
Chemistry	Female	-	
	Male	2	
Education	Female	-	
	Male	-	
History	Female	(
	Male	-	
Microbiology	Female	1	
Philosophy	Male	1	
Physics	Female	(
	Male	-	
Sociology	Female	C	
	Male	:	
Soil & Water Science	Female	:	
	Male	(
Wildlife Resources	Female	-	
	Male	(

Participants Professional Demographic Information by Gender

Of the 21 participants, 17 were White, two were Black, one was Hispanic, and one was Asian (see Table 8). As part of the purposeful selection this researcher made a concerted effort to recruit participants from diverse racial/ethnic groups. Table 8 reflects the total number of full professors by racial/ethnic group who were willing to participate in this research study.

Table 8

	Female	Male
Race/Ethnicity		
White	6	11
Black	0	2
Hispanic	1	0
Asian	0	1
Pacific Islander	0	0
American Indian	0	0
Two or More Races	0	0
Race/Ethnicity Unknown	0	0

Full Professors by Race and Ethnicity

Data Collected Related to Triangulation

Citation counts found in Table 9 along with the participants' interviews and CVs provided the basis for triangulation to strengthen trustworthiness. Each participant's citation count in Table 9 was tabulated using Google Scholar. The participants' interview was compared to the participants' CV and citation counts. Citation counts are an artifact of scholarly production and contribution in academic fields (Crawford, Burns & McNamara, 2012).

Participant Pseudonym	Citation Count	
Tiffany	1307	
Liam	4226	
Xander	1196	
Quinn	12627	
Ian	3451	
Martha	1307	
Walter	181	
Grace	3248	
Grant	3598	
Ben	5688	
Denise	25205	
Ella	1432	
Veronica	20190	
Preston	447	
Isabel	3834	
Amos	287	
Max	20012	
Fred	8610	
Steven	799	
Carl	660	
Henry	4294	

Citation Counts by Participant

Themes

Eight major guiding themes emerged in the first level hand-coding. Second-level coding was completed using NVivo software and data related to participant response by code is reported (see Table 10). The following discussion of results was guided by these eight themes and subsequent sub-themes from hand-coding and NVivo software.

NVivo Data		
# of	Theme	
Participants		
21	Agentic Practices	
21	Experiences	
18	Knowledge Base	
9	Leadership	
21	Performance	
21	Relationships	
17	Resources	
18	Technology	

NVivo Data Report: Number of Participant Responses by Theme

As outlined in Chapter Three, the participants' interviews were transcribed into Microsoft Word. First level hand-coding was completed on each participant interview transcript and main themes were identified and defined (see Table 11). Sub-themes were also revealed in first-level hand coding and supported by a definition of each of the main themes.

Theme Definitions

Theme	Definition
Agentic Practices	The acts, practices, reactions, efforts, or responses engaged by those maneuvering through an organizational network.
Experience	An individual's participation, observations, or interactions with phenomena in work, social interactions, or other life occurrences that prompts formal or informal knowledge or skills. Experience can be gleaned through direct or indirect participation of an event.
Knowledge Base	The protocols, practices, and routines that shape the framework for the customs, traditions, and norms employed by an university.
Leadership	The action of guiding, directing, supervising, and/or governing an institution, group, society, business, community, or country.
Performance	Direct participation in work or activities that produce or factor into resource attainment (personal or professional).
Relationships	The association and/or interconnection between individuals in the workplace and academic community.
Resources	Benefits or assets such as a source or quantity of money, talent, staff, time, and supplies that better enable or provide individuals, groups, occupational entities, leadership, and communities the ability to manag and work.
Technology	Tools in the application of work, knowledge, and reaction.

The organization of main themes and associated sub-themes derived during first level hand-coding is displayed in Table 12. These themes and their associated sub-themes were entered into qualitative analysis using NVivo software. Second-level coding was performed with NVivo software in accordance with the groupings displayed.

Themes	Sub-Themes	
Agentic Practices	Collaboration	
	Fire in the Belly	
	Teaching	
Experience	How I Spend My Time	
	Lifestyle	
	My Work is Fun	
	Curiosity	
	Serendipity	
	Freedom	
	Gender	
	Privileges	
Knowledge Base	How the University Works	
Leadership	Drive	
Performance	Choices	
	Pre-Academic Jobs	
	Qualifications	
	Professionalism	
Relationship	Mentoring	
	Boss	
	Social Interactions	
Resources	N/A	
Technology	N/A	

Themes and Associated Sub-Themes

Agentic Practices

All 21 participants described some of the agentic practices employed as they maneuvered through their career lives within the organizational structure of academia. Grace stated, "I just decided, you know, to plow ahead. ...so don't quit." Other study participants also talked about not quitting. Tiffany said, "Don't let anybody tell you can't." Grant talked about agentic practice being "internal." Quinn talked about agentics in terms of competition stating, "I am really competitive though." Also, in regard to agentic practice, most of the participants talked about choosing to focus on their research work and not getting involved much in general campus politics and activities especially while on the path to achieving full professor. Grant stated, "I tried to stay out of the politics..." Several participants brought up the importance of various types of networking and purposely worked to form these connections. For example, Grant said he will ".... email someone out of blue. But lots of times it's because I've been, I know this person for a while and introduced to them somehow at a meeting." The networks were fostered and utilized for different purposes by the participants. Examples of these networks were expertise support, interdisciplinary perspectives, informational guidance, resource based, recreational or professional socialization.

All participants spoke about actively reflecting on their efforts and practices in their work and goals. Many of the participants had won awards for their teaching but still critiqued their lessons, asked for feedback from others, and strived to be even better. They deliberately sought out a variety of resources and networks to keep improving their work and formulating goals.

The participants reported they liked communicating with and sharing ideas with others throughout the university and beyond. Interdisciplinary networks sometimes led to collaboration relationships. Grant said, "I can reach out to other people to do practical research... you're a piece of something." Not only did the participants seek out other full professors but students, staff, and emergent scholars at various stages of their careers. All expressed the desire to analyze, then hone and refine their skills while continuing to expand

their thoughts and ideas. Participation in teams was also expressed by most as a preference for successful accomplishment of work.

Collaboration

Eighteen of the participants discussed that professional collaboration and networking were key components to accomplishing career success. The ability to seek out people within academia who had skills to help them maximize their job efficiency was regarded as essential for successful attainment of goals. Grant said, "I'm always looking to collaborate. Sometimes it's out of necessity because I don't have say equipment here." Additionally, Ella stated, "If I need to reach out to people, I'll do that. I don't have a problem doing that." These participants reported that working on and assembling excellent teams helped boost their work productivity and subsequent professional success. Professional collaboration also afforded feedback and norms for the type of quality and work criteria expected from other scholars at participants' universities and other universities. Walter said, "I've got some people I do research with. So, we've kind of figured out who does what well. You're a piece of something." Working with others was considered important enough to mention.

Fire in the Belly

The desire from within or the impetus to keep pushing on emerged as a sub-theme code from over half of the participant interviews. This innate need to keep pushing existed regardless of outside distractions. This burning desire to keep going was intrinsically part of their disposition. Walter said, "But now it has to be internal." Denise stated, "High work ethic. I work but fire in the belly says it best." Participants also reported a deep sense of ambition. For example, Grant said, "Just keep at it. You can't give up." Amos also commented, stating, "I wouldn't quit." Perseverance and the resolve to continue on was often stated by these participants throughout the interviews.

Teaching

Nineteen of the 21 participants stressed the importance of quality teaching. Preston said, "how can I bring that better to the classroom? I'm always thinking about these things that, you know, can I, do I have a better story to tell my students to make the point? Can I tell them that I've been through this too? You know, actually in teaching, I think probably one of the best things that has helped me be the best teachers."

Steven stated, "I am teaching them what I do, but I'm teaching it to them in a way that they can pursue a different career path than I did." Along these lines, Liam commented, "I'm going to try and teach you the most, you know, the most efficient..." Two were focused on grant writing teams and special research lab projects working only with graduate students. Although both had taught during their career advancement in academia most of their careers involved little teaching as compared with other participants.

Participants stated that teaching could consume time away from research. Grace said, "Because you know, if you're teaching, teaching can take up all your time if you let it." Published research was needed to advance their careers but most participants reported that they felt teaching did support and enhance research. Walter stated, "Research should inform your teaching." Steven said, "...it's the trick of what makes a good researcher a good teacher." All the participants felt that balancing time teaching with research goals was an important management skill toward career advancement in academia. As published research is needed for advancement and grant generation, time spent on teaching may become secondary to research. However, most of the participants worked hard to offer well taught courses. Veronica said,

I know like we're gonna [sic] talk about this and I'm going to say that; these are the dates you need to know. And then I talked with some people who are all about getting students to talk and free form kind of learning process. I'd start working on trying to incorporate some of those things.

Additionally, Liam stated, "I learned about teaching. I'm going to try and teach you the most, you know, the most efficient way of getting there." The participants sought out student feedback; one participant made a separate evaluation sheet in addition to the university generated course evaluation for students to provide more feedback to improve teaching skills. Participants also sought out professional development resources for self-improvement. For example, Veronica said,

I'm gonna [sic] learn how to teach. ... trying to figure out how to teach and I didn't know how to teach. So, I took a class on how to teach. Now I went to all the workshops that you could go to...

Participants reported that they enjoyed teaching and working with students. Preston said, "I care most about my students." Tiffany also stated, "In teaching for me, it's about students in developing students." Max said, "I get excited by the way I teach..." The desire to teach well was apparent among participants.

Experience

Each participant interview started with the question, "What is your story?" During the interview, some participants were immediately able to start telling their story, while others

79

needed some prompting. For those who needed prompting I asked, "Please describe your experiences toward accomplishing your current level of achievement as a full professor." Most of the participants started their story with experiences from their early childhood.

Several participants reported their upbringing was non-traditional from their point of view. They described 'non-traditional' as being allowed to freely explore their surroundings and nature. Participants felt they had more independence or autonomy than their peers. They reported significant experiences with rural settings either through their own family's lifestyle or time spent with relatives. Growing up observing and interacting with their environment was a common experience described. Isabel said,

I lived in the countryside, and I really lived in a rural environment. So we were allowed to go check out the creek and look at the insects and collect rocks and collect glass and organize things and make mud pies and decorate them with flowers and wander around the forest for four or five hours from the time we were five, six years old. Discover nature and look at things and wonder why it is happening that way.

Denise stated,

Where I grew up, yeah. Yeah. [sic] But even then, my brother and I would go fishing and I would fish a hole and it wouldn't catch a thing and he'd come along behind me and he pulled two or three fish out of that hole.

Veronica said,

So, I was a unique child in that I was just from the beginning, super interested in the outdoors and in just kind of watching the world around me ... So I was just always really, really interested in nature and being outdoors is as much as possible. So, I

definitely was inquisitive. I just wanted to know how things worked, you know, turning over rocks to see what's under them and, and things like that.

Many reported they enjoyed seeking out and examining topics from unusual perspectives. Veronica stated,

I don't remember what my research project was, but I remember, you know, they got the chance to do research and it was the first project that I did that was kind of outside, like I was collecting data outdoors instead of my science fair projects, which had been more indoor kind of...

Max said,

And as a boy I was collecting animals and plants and all this. But then in the long run I said, I want I want to get to the next layer. That means to a more fundamental level to explain all science.

They would spend time learning about assorted topics in depth. These subject areas might not have anything to do with school lessons or job skills but rather topics of personal interest. Independence to study, learn, and investigate at an early age in their development was reported by the participants. Many learned through nature, and still do. Autonomy and choices were often stated as an important value and desire for the participants' learning experiences and career satisfaction. Nearly all were early readers and enjoyed spending time reading as children. Informational, historical reading, and comic books were commonly brought up as preferred reading rather than fictional novels. Veronica said, "And when I was in the second grade, I read this book about [sic] that was written for children called the Shark Lady was the name of the book." Grace said, "So one of the things my dad had this, you know, series of books that he kept on our, that were things he considered sort of fundamental knowledge, you

know, organic gardening." Ben said, "We had two sets of books in the house... One was the American Encyclopedia and the other was the Harvard Classics. ... and that's what I read mostly as a kid was those two sets of books."

Some participants reported taking classes at a community college. They stated several reasons: Amos explained that his books were paid for at the community college. Ella discussed how her parents did not have much money and so she started in community colleges because, "…the community college was super good deal, excellent deal." Similarly, Tiffany stated, "I was a dancer and so I got a dance scholarship at a community college." Educational cost savings was a compelling reason for many of the participants who chose to attend community college.

How I Spend My Time

Nineteen participants played a musical instrument during their formative years. Of these participants, more than half continued to be involved with music at some level. Several played at least one musical instrument well or sang in organized choirs. Grant said, "Yeah, I did play the violin." Walter said he played the trombone. Tiffany and Isabel mentioned singing in choir. For many of the participants when growing up, board games and cards were played with family and friends. All the participants revealed their lifestyle integrated some form of hobby or exercise activity. Additionally, several participants had a form of activity that had carried into their career routine such as running, swimming, art, or gardening. In addition to playing trombone, Walter also mentioned running as a hobby. Veronica stated,

I did a lot of different sports, but I did gymnastics, and I did softball, and I did basketball, and I did track and cross country and I stuck with track and cross country all the way through college. So, I continued doing athletics as well. Frequently participants stated that they required just a few hours of sleep. Most participants described themselves as 'night owls.'

Lifestyle

Almost all the participants indicated a lack of delineation between professional and personal lives. They described work in academia as a lifestyle. Steven said, "...it's just what this community is. ... and so, it's, [sic] it's the type of people I like to be around and, ... and it's the type of job I like to do..." Tiffany stated, "It's a lifestyle. I mean it's part of my identity." Max said, "...no textbook career, and there's no standard career. Everybody has to find his own way." Grace commented, "You're creating a lifestyle or lifestyle that you want to live." Merging of professional and personal lives was common to most.

My Work is Fun

My Work is Fun emerged as a common theme. It was not unusual for participants to report spending considerable energy focused on subjects of interest. The majority of participants stated difficulty separating work from fun as most of them perceived their chosen vocation as their avocation as well.

Nearly half of the participants reported experiencing some privileges after attaining the rank of full professor. Expanded community involvement was now an activity that participants stated they could spend more time developing. Walter said, "I like my college, but I really like the rest of the university." Veronica said, "I'm always like learning new projects, new species, new countries." Most participants stated that they enjoyed most aspects of their work.

Curiosity

The participants described themselves as very curious. Many participants recalled asking numerous questions and exasperating others in school, family, or social settings. All described themselves as having an inner urge to learn more. Participants described embracing situations that offered increased learning independence. Isabel said, "I remember when I was in elementary school, when I was 10 years old, I told myself, I love learning, I haven't lost that." Veronica stated, "I had an interest in learning calculus in high school or trying to just learn new things that they were never going to teach you and school." Xander said, "Certainly I think that being interested in a wide variety of things in the world is important. But it doesn't mean that you're going to make much progress on anything without getting down into the weeds." Quinn stated, "I like to go where no one's gone before. I like to be cutting edge. I like to seek that out." Enjoyment of work was stated frequently by participants.

Serendipity

All participants stated it was good fortune to have a career that paid them to think about ideas and learn. Fourteen of the 21 participants interviewed stated that good luck was an integral component of their career success. Henry stated, "…once in a blue moon happens. It was just a very serendipitous kind of thing." Amos commented, "A lot of it just has to do with who you would meet, you know, it's being in the right place at the right time." Fred said, "So I was very lucky to be part of such a fantastic group." Several participants conceded that they were the recipients of what they identified as luck.

Freedom

Freedom in the workplace and other areas of their lives was an important consideration for more than half the participants. Walter said, "But, I would say what I saw was there was almost no constraints." Xander commented,

I guess I feel a little bit freer now to worry less about where things will be placed and worry a little bit less about how things will be received. I mean it's a particular kind of job, and it has some real advantages as you said in terms of, you know, I have freedom that I ... the variety of the kinds of work you get to do.

And Liam stated, "I could go wherever I wanted to go." The freedom to explore topics of their choosing, manage their personal time, and opportunities to collaborate with scholars was discussed a benefit of being a full professor.

Gender

Most of the women reported that they had encountered gender inequality. Some of these inequities were lack of women colleagues, income, or promotion disparities, disproportionality in workload, service, and committee work roles. Ella stated, "And you just assume that OK because you're a woman you're going to be the diversity coordinator." Tiffany said, "I think it was because I was a woman who was a dancer, looked a certain way and yeah, I didn't look like a smart person, like a little bobblehead." Veronica also said, "I just, I felt challenged to do things better because I was always having to prove myself."

A few male participants also recognized and reported they had observed gender unfairness experienced by their female colleagues. Amos posited, "But I would think that women might not perceive -- that they're kind of accepted but they're accepted as being one of the guys." Liam stated, So, the imposter complex goes like this where people of color and women often think that it's only because of some kind of luck that we got to where we are and so, therefore, we're always thinking of ourselves as imposters of being in places of leadership or we'll always doubting yourselves [sic]. And so that's a condition under which we always try to psychologically, you know, move ourselves away from because if you think about white, you're an American man, many of them just assume they're going to be in positions of leadership and they just assume people like them are there and that's what they're supposed to be doing. Whereas for, again, women and people of color, you know, we're only recent arrivals to the academic worlds.

Both gender and race inequities were reported by several participants.

Privileges

Participants spoke of promotion to full professor as gaining them little advantage other than the ability to manage more of their time. Tiffany stated, "So that's one thing you, so you have more control negotiation." Steven said, "I have leisure goals. There's, ...still places I want to go and hike and ski and do those sorts of things." Several older participants talked about the realization that attaining full professor was a satisfying culmination of their career goals. Amos said, "...because it was an educational necessity." Max stated, "...but I don't come and say, Hey, I'm actually older why don't I get paid as much?" Tiffany commented, "I think definitely helped develop my confidence and you know, that I could do." Veronica also discussed this commenting, "I think it just benefits you, you know as an individual." Those who had worked in the private sector before deciding on a career in academia stated that they felt fortunate to have chosen a career that afforded them the opportunity to learn, study, and grow as a scholar within a community of scholars. Grant stated, "...we have to realize that people in the industry don't have a chance to publish."

Ian said,

Now that's looking outside the university, inside the university, amongst our peers. I do think that being a professor at full rank does put you in a position of some esteem amongst your junior colleagues... To be a supporter of them, to be an encourager as they pursue their careers. So, it's this odd dichotomy depends on whether you are looking from inside the institution or outside.

Steven said, "I'm at this university...because I get what I need on campus." Several participants reported that achieving tenure felt more prestigious than their promotion to full professor within the university community. Xander said, "You don't get a new title, and you don't get a raise. Nothing happens." Veronica also commented on this, saying, "I didn't find it difficult to like get tenure to become a full professor." Earning tenure seemed to offer many participants more freedom, time, and fewer constraints in their daily work. Grant said, "having tenure here has been a big plus." Promotion to full professor did not seem to change their workload or job description as noticeably as the tenure promotion. Liam stated, "So, nothing really changes. …even though you've made it to a certain level, you've still got to be relevant to publish." Denise commented, "I think being full professors here doesn't matter one bit. You could be a janitor and have as much esteem as a full professor." Most of the participants agreed that being able to be paid for learning at any level was an advantageous opportunity. Walter stated,

So, I have talked to some people who have thought about being professors, and I've said, Okay!, just think about, it's about learning. You're going to get paid to learn

stuff. So, if you like learning that's a start. And go into an area that you're passionate about!... 'cuz it [sic] it's something you want to learn more about, you're gonna enjoy it [sic].

Grace said, "I do love to learn." The enjoyment of learning for almost all participants outweighed privilege gained through achieving the rank of full professor.

Knowledge Base

Eighteen of the participants described their career journeys to associate professor with tenure. These participants reported similar guidelines and requirements for promotion. They reported that they perceived clear access to information regarding promotion, trajectory, and requirements needed to attain associate professor with tenure rank.

Advancement to associate professor with tenure required experience in research, teaching and service deliverables. In some university settings, outreach was expected to be performed at a level in keeping with policies and norms as set forth by the university's academic leaders. Several participants had remembered university leaders publishing information, disseminating handbooks, or leading workshops to provide information for promotion to associate professor with tenure. These participants stated the criteria for advancement to associate professor with tenure was also on a time clock set within a particular time frame for each participant. The participants reported that they understood this stage in their career required work and established commitments. Preston said, "I read the faculty staff handbook and it said I could do that. But the tenure track is a clock." Grant stated,

At a university like this, it would be say, maintaining, ... the ability to teach, ... but ... That would get you to ... you would say at associate professor there, but there would be research with a little bit of service thrown in, but mostly research. Walter said, "The standards that they set are pretty achievable."

Three of the 21 participants experienced a different set of circumstances regarding advancement to associate professor with tenure unique to their career journeys in academia, previous careers, or published work, and also the participant's particular field of study. These variations of the time frame and requirements were negotiated with university leaders. Even though these three participants succeeded on a different career path to achieve the associate professor with tenure position they also stated that the requirements were transparent.

Most of the participants described their understandings of promotion from associate professor with tenure to full professor as not clearly understood or defined. Walter said,

If you look in the policy manual, it says, what's an Assistant Professor? What's an Associate Professor? What's a Full Professor? The policy says an Assistant Professor is a person who has the potential to do stuff. So, the word potential. And, the stuff was service, teaching, research, and outreach. Then it says an Associate Professor is proven it can do those four things, right? And, for a Full Professor they use the word 'maturity'. Ian said,

You come in as an assistant professor, you work for nominally six years, you become an associate professor. If you've done the things that you need to do and these things go your way and then you work for four to six more years, call it another and then your 12 years into your career. And if you've played your cards right and done your job, you get promoted to full professor.

Participants recounted their career journeys from associate professor to full professor and although they had common performances and experiences their knowledge of this process was not clear. Nor did the participants have well-defined criteria of what the university expected them to deliver or achieve to attain promotion to full professor. Participants talked about gathering information about promotion to full professor from a myriad of sources. Although they didn't have the same information about the promotion to full professor process, the participants employed similar background knowledge of the university and common adaptive skills to achieve successful promotion to full professor.

How The University Works

Over half the participants talked about university structure, administrative leadership, and support and its impact on their career journeys. These participants reported that their universities were structured with policies, traditions, norms, and protocols that provided a framework to manage their work and teaching responsibilities. Grace said, "I was told I needed to either get my NIH grant renewed or I had to get another grant. I was told I had to get another grant before I came up for tenure." She went on to say,

Somebody has to be on search committees. Somebody has to be on the curriculum committee. Somebody has to be on all these committees that monitor human research. There are committees for every aspect, life in a department, curriculum evaluating faculty. people have to do all this. the university has to do all this work, the business of the university as the university.

Amos added, "They're going to tell you that everything depends upon the research and that's absolutely true." The university administration and staff were understood by most participants to provide support and leadership to faculty, students, and the upholding of the mission of the university.

Leadership

Secondary research question asked, "Are there common leadership approaches among full professors?" There was no prompting question directly aligned with leadership style, although, during the interviews I asked, "How has acquiring the level of full professor influenced you as a leader?"

Nine of the 21 participants noted some changes in their leadership styles once achieving the rank of full professor. Earlier in their career journeys, the participants spoke about leadership in terms of teaching, research, and obtaining resources. As full professors, the participants revealed their leadership styles changed as they expanded their work outside research and teaching roles.

Some spoke about a more collaborative approach in leadership style when involved in university committee work, networking, managing resources, and mentoring emergent scholars. They talked about developing their leadership roles to incorporate faculty matters and community involvement. Walter said, "Maybe you're leading research teams, or you're mentoring junior faculty, or you're doing something that's above and beyond than what you'd expect, right." Fred said,

I think I was a good servant to the faculty. Just keeping us on track and working with everyone to help them improve themselves and improve our unit. I was the leader of the project director project [sic]. ... not because I was ambitious to be anybody's leader, rather than being compelled because you want to be a leader. You want to be a servant.

Participants talked about realizing they could deliver a good outcome through their leadership styles. Veronica said, "I got people interested. So, I've had to face all those leadership challenges, taking on those leadership roles, was challenging for me." Liam said, "I was able to have a lot of leadership roles. I really learned about leadership." They also mentioned that knowledge gained from outcomes compelled them to step up and lead others. **Drive**

Four of the 9 participants who discussed leadership reported that they had an inner drive to push, and the skills needed to efficiently complete tasks. Because this was such a small percentage of participants, I decided not to include narrative in the results section, although, she did code it as a sub-theme.

Performance

All participants stated that research and publications were foundational performances essential to their successful advancement to full professor. When on the universities' tenure tracks, participants remembered moving through the process cognizant of timelines and requirements to achieve their career goals. When interviewed, participants reported that they perceived a well-marked path to associate professor and tenure involving much work and pressure to publish; working 60-80 hours a week and six or seven days a week was common among the participants. Fred said, "I pretty much worked six days a week and probably 10 - 12 hours a day. That's pretty much what I've been doing. It's a work habit. So, it's a lot of hours if you do the math." Grant said, "So, I'd have to work from typically 8:00 am until 9:00 pm every night. And given the payoff, you know, for being able to do research adequately that that wasn't, ... and the amount of time commitment involved...." Denise stated,

No, I go home from the lab about 11:00 [o'clock] and um, hopefully get out of here by 11 at night [sic]. Well, I'd much rather work graveyard than normal time, but I don't get out by 7:00 or 7:30 in the morning, ...

92

Max said, "Sixty is a rule of thumb. I worked evenings, the weekends. I don't know this thing weekdays/weekends; I don't [sic], is there no difference?"

The participants discussed a workload that required long hours, demanded highvolume productivity, teaching ability, and shared expertise with stakeholders. Several of the participants noted that the quest for more knowledge and peak performance was important not just to them personally but also for the community of scholars. Grace said,

...as soon as I got funded by NIH, I got put on a grant review panel. They asked me to be in a grant review. And so, I've actually reviewed probably in my career 40 or 45 times on grant review panels.

Xander added,

My research, you know, and I don't remember how many articles there were, but it was a good chunk of articles for that seven-year period. I think on the order of 20.

Something like that, 15, 20, you know, in pretty decent places.

All participants reported spending long hours on their work.

Choices

Most of the participants kept daily lists of goals or tasks to complete during the day. Time organization was considered an important performance skill. The participants stressed the need for writing daily and most had blocks of time carved out for writing production and reading. Several participants needed abundant quiet and chose to write in the early morning or late at night. Amos said, "I work at home. I never write here because there's too much in the way of sort of distractions here." Grace stated, "I try to set out blocks of time when I can write at home. So, I try to have at least a couple days a week when I don't come into the office until noon…" As part of this study's data collection methods, I also documented participants' experiences in a narrative format called the "researcher's journal." As it is reflected in the journal, it was not uncommon for the participants (either male or female) to have a partner or relative at their home who handled family matters freeing up the participant to have more time for their work. Female participants talked about choices made regarding family dynamics. Some knew of female colleagues who had chosen to immerse themselves in their research and scholarly pursuits with no time left to have or raise children.

Some of the participants had explored other careers before deciding to pursue a career in academia. Acceptance to medical school, private research labs and industry, teaching, design firms, consulting, and business were some of the options explored by the participants before committing to a career in academia. Henry said, "In any career, as in life, you know, you make choices. Digging ditches at a construction site really taught me that I sure as hell don't want to do this for the rest of my life." Quinn stated, "But, then for a number of reasons I decided, and people convinced me, to go to graduate school instead of medical school. And so that was a tough decision, but I did it." Carl said, "My intent was Pre-Med. but and then I said 'okay', I just did it my way." Even though the financial compensation of some of these other career paths far outweighed academic salaries, the freedom to learn, explore, research ideas, and academic autonomy were reported as compelling factors for the participants' ultimate career path choice.

Pre-Academic Jobs

Several of the participants had worked in other jobs or careers before deciding on advancing their education or proceeding to graduate school. Some had jobs in custodial work or warehouses. Carl said, "I worked as a janitor." Henry added, "I did a lot of odd jobs. I worked construction. I worked, I painted houses. I picked apples very briefly." As reflected in my journal, one participant reported that learning to systematize and clean well transferred to his work environment in academia. One participant, who managed a fast-food restaurant before entering a career in academia, modeled the organization of a research lab after the restaurant's efficiency pattern. A few participants had teaching certificates and had taught in the private or public K-12 system. Several had worked in business or sales.

Qualifications

Over half of the participants discussed that they had worked to become good academic writers. In my journal, I noted many participants mentioning the ability to procure grants was important. Additionally, if a piece of equipment was needed for research and lacked a trained technician to operate the equipment, the full professor must be willing and able to learn, understand, or obtain what is needed to keep their research going.

Grant said,

...you know, at this point in my career, I kind of recognize what my strengths are." Sometimes I'll concentrate on that, but if there's a weakness involved in, for instance, when I was working with this material, I knew nothing about Raman's spectroscopy and which I needed to, to do, to interpret what was going on. I had to seek help while I found out that actually very few people in this world know much about it.

Veronica also said,

It's like I'm looking for examples of successful, you know, proposals and reading them and thinking about the same thing or like published papers. Like when I wanted to learn how to get my own papers published, I would study the papers that were published and what was the flow and what was the structure and what was the style. So, it was like using my scientific skills to figure out how to be a writer.

The participants discussed the need to keep adding to their skills as their careers progressed.

The ability to read research reports in languages other than English was cited as an advantageous skill. Several of the participants were fluent in more than one language. Some had learned Latin and those who were older and in science areas had also learned German.

Strong collaboration skills were mentioned by most participants. Xander stated, "I worked on a couple of different committees that were trying to improve working conditions for various people on campus, sometimes successfully..."

Leadership skills were reported to be different than collaborative skills. Veronica said, "I'd led a research group and I'd led research centers, but it's a different set of responsibilities." Important qualifications also mentioned were the ability to self-reflect and continue learning. **Professionalism**

Associated with successful achievement to full professor rank, all but one participant reported as part of their careers a heightened sense of professional awareness. Quinn said, "Because I have enough confidence that I am going to be able to stay ahead" and Walter stated, "...it felt like a job with a lots of autonomy[sic]." Participants felt it was not enough to reach this goal without delving into some reflection as to how this next step could professionally benefit their future work and career. Ella said, "It is important to manage time." Fred stated, "Seeing connections and ideas and hypotheses that are testable." And, Steven really hit this point when discussing his reflection, stating, "How do I identify a worthwhile question to ask to make sure that you are asking the data questions?" In discussing professionalism and in regard to reflection, Ian stated,

I am definitely a person who likes to complete things. Right. I like to have a list and I like to do the things on the list and put the checks in the boxes next to them and get things done.

Some found that once attaining the full professor position, those in academia and community would seek them out to serve in consultative roles, or as speakers at conferences throughout the United States and other parts of the world. Preston stated, "I am a well-known persona around my work and my teaching." The skills needed to write, collaborate, teach, and publish now translated into reviewing books, research, teaching, and networking. Fred stated, "Review papers have been part of my output because it's a lot of work." Steven said, "And so, you know, there's this trick of being able to do your research and do it in a way that it feeds everything else and make space in your day for everything else." Quinn said, "Yeah, I'm on a lot of advisory committees for universities, for companies, for government agencies, but I do community work as well." Service such as participation on tenure committees also broadened the participants' focus of work.

Early in their career, after earning their doctoral degrees, many of the participants were awarded at least one post-doctoral fellowship. Now as full professors, the participants believed this was an optimum time to reconnect and network with other scholars nationally and internationally. Grant said, "We got, it got so much attention nationally." Ben said, "I'd always wanted to go into academia because I want to be in a place where I'm surrounded by lots of smart people in lots of different area, so I can talk about all sorts of things." Liam commented, "I've been asked two days ago to go to [location] to do a keynote talk at a conference." They reported that it was good professionally to be making these connections and networks with other scholars for the benefit of the university and other stakeholders, something they could not fully embrace in other university roles. Grace said, "You go to people because not everything is published and even defined where something is published. Sometimes I'll go ask them." Working with students and peers on committees and projects was seen as contributing to their own professional growth.

Relationship

The theme, *Relationship*, emerged for all 21 participants. They described relationships in the academic community and workplace as different than collaborative teams brought together to produce or assist with work. These types of relationships were described by some as social in nature and for others long-lasting friendships. Ella said, "I felt like I did have plenty of female friends." Preston stated, "I had two close friends there that were in ... school with me." Formed within and outside their places of employment, relationships provided the participants with a community of scholars. Several of the participants were nurtured and encouraged throughout their career journeys to full professor through the rapport of a special association. Ella stated,

The person I worked for was amazing. It was a great faculty member; this was a man that was a mentor [who] was also a boss. [We] still talk as well. He ended up being my academic advisor as well as being my, my research mentor and my model academic too [sic]. He was he had a huge impact on my career.

Martha said,

...everybody, I met there, everybody I met there ended up, you know, really shaping the rest of my career at work because you know, it's not just what, you know, it's who, you know, you hear that all the time.

The bonds formed were not always in their discipline or field of study and could be found within other academic areas within the university. Several of the participants formed special relationships through gatherings or conventions throughout the country and the world. These relationships were initially formed through interactions at events where there were common interests and for some the initial encounters were networking interactions. Walter said,

I mean there's just amazing human beings all over this campus. They're all doing, they're doing amazing things. I mean, there's people in biology, chemistry, art, music, and stuff like that. The only way to meet them is to go do something outside your college.

Other participants during their interviews likewise mentioned encounters that fostered relationships. Liam stated, "Well, I have not missed a year in that [professional] association for the last 26 years. I've been going every single year."

University sponsored social events were reported by Denise,

So, you got to know people outside of this department, the musicians, the artists, the historians and so on and so on. ...well, I mean this would be a different party on Saturday nights.

Many participants talked about learning and exchanging ideas as an important aspect of their career success. Liam said, "I could pick up the phone or email people right now and say 'I'm coming', and people would actually pick me up at the airport." Liam added, "…was one of those people who opened up a whole bunch of doors for me in terms of creating opportunities." Many participants through these relationships found people who could be sought out for advice, guidance, information or catalysts for new ideas and directions.

Mentoring

Nineteen of the participants stressed the importance of being mentored in their career journeys. Many reported that the mentoring also included role modeling and socialization in academic arenas. Mentors would highlight opportunities. They also provided a sounding board for the participants to discuss ideas. Amos said, "I became pretty, you know, good friends. I became fairly close to him. I would go in and talk to him. So, he was a big influence." Henry said, "He was a great mentor because he was just a very thoughtful guy. He listened to us." Mentors also served as catalysts to help the participants succeed with their career goals.

Some mentors sought to help with procuring needed resources, networking prospects, and information. Carl said, "He and I hit it off. He took a liking to me. He constantly found work for me. [He] kept creating these opportunities for me to always have funding". Ian said,

So the social piece is a little tougher and I think each of those mentors helped me with that too. Both of them, both because they too were scientists, technical people, and they had had to kind of develop some social skills more so for some of them meant than for others. So, they definitely helped with that kind of skill development.

So strong was this relationship that many of the participants reported that mentoring emergent scholars on their career path has been an important part of their jobs.

Boss

The importance of a good boss in successful attainment of the participants' career goals was stressed and discussed throughout the interviews. Participants attributed the boss being the right fit to enabling them to complete work successfully and provide opportunities for learning and professional growth. Isabel said,

100

I had good bosses. I had a couple that were not, fortunately, they didn't last long. I had some of my bosses here at [university] that were very, very, good too, and very supportive and friendly and I still consider them my friends.

Denise said, "...my story is based on one thing: of taking a job where I found the world's best boss. I recommended highly, be sure to pick your first boss, a great boss..." Denise went on to say, "What he did was open up doors to professional societies, professional committees, and being on boards of directors and getting acquainted with people who were program managers at agencies and always, always speaking highly of his coworkers." Ian said, "He was serving as a boss affording opportunity for growth well beyond the norm." Some bosses pushed, guided, and provided role modeling of the scholarly and social requirements needed to succeed in the university setting.

Several participants had many bosses, a few did not interact with their bosses, and others reported their bosses were also mentors or career resources. A couple of participants had bosses who taught them how to adapt to dissimilar styles and personalities. Veronica said, "And I have had some really difficult bosses and I probably learned most about myself by working with a difficult boss." Although this type of boss was difficult, they still learned valuable skills that helped them succeed with their subsequent job interactions. Denise said, "What he did was open up doors to professional societies, professional committees, and being on boards of directors and getting acquainted with people who were program managers at agencies and always, always speaking highly of his coworkers." A commonality among most of the participants was that bosses played a role on their career path.

Social Interactions

The sub-theme, *Social Interactions*, emerged as participants discussed their interactions with peers, colleagues, the university community, scholars, and social interestbased networks within and outside their particular university. Within the university, participants mentioned social interactions that afforded connections based on interests such as a lunchtime running or walking group. A daycare/preschool for university employees' children was an example of a social interaction group with common interest goals. University events such as concerts, lecture topics, dinner parties, sports, theater, and other gatherings also provided opportunities for academicians at all stages in their career journeys to form networks and friendships. Participants shared that these types of networking and interactions helped them socialize with the university community. Max said, "So you meet the people and then you stay in contact, they contact you…" Grace added,

We started a group of sort of assistant professors in my department who got together every Friday. your tribe is who you eat with. And so, both of these groups have had lunch. Meaning things that kind of got them going. So, the social, so you, so you integrate the social piece with the learning and it's a whole, it's a whole package.

Ben said, "We would occasionally do things together. I just enjoy being around these people. And those are the people that you run into that build these relationships." Throughout the interviews, all the participants, at some point, brought up the importance of socializing without competition and free exchange of ideas with other scholars as important components to their ultimate success.

Resources

During the interviews, 17 participants stated that to move forward in their careers, they needed resources to generate and sustain their work. More resources garnered translated to additional work and subsequently new research, which in turn provided for other research. The participants spoke about the need for money, time, talent, equipment, and supplies for their work. Martha said, "I got the money." Ben stated simply, "getting grants." In addition to procuring grants, the securing of outside resources included filing patents, obtaining equipment, recruiting staff, and learning new skills.

According to participant responses, obtaining resources may include reaching out through university and collaborative networks to the community and other stakeholders. Grant said, "...we'll be forced to see what's going on in industry to see if we can make an impact there and look for industrial base funding. you have to learn how to be resourceful." Many participants said that successful acquisition of resources meant understanding what was needed to conduct research at a particular place and time.

Technology

Technology and the impact on reaching the path to full professor emerged as a coded theme for 18 of the participants. Several made positive comments about having personal access to a vast data bank of information and the potential efficiency and increased productivity this access produced. Fred said, "I expect it to be instant now. So, if I can't find a paper [in] a split second, I'm annoyed that I can't get the citation and it's all ready to go; I have to do some modifications." Steven said, So clearly the types of mathematics that we can apply to our studies ...to test our theories as so forth, and just because of the crunching power that we can do with computers. You know, it's just a whole different game.

Tiffany stated, "It makes the work easier and faster and better. I have more access to information and, colleagues and resources." Ian stated, "And it was a big...[sic] deal, and you had to really ponder your path, your keywords and everything beforehand and now I can Google it and get 10 times the information I ever got." Some of the participants preferred to visit the library for original books and sources. A few still wrote their research publications outline and some drafts by hand. Preston said,

I'm still drawing like by hand... But posting it online, being out there online and paying attention to what was going on and seeing something start and immediately being part of that. Again, the Internet's a good place to carry out.

However, many spoke about expectations and pressures to produce more research, which at times required wading through overzealous amounts of online information.

Those participants who had achieved advancement to full professor quickly and at a younger age than some of their colleagues, credited technology, and their own technological skills as a major catalyst to advance quicker than anticipated. Ian said, "I wonder, I don't know people who are more adept and more clever than me who maybe didn't get promoted just because they were a generation ahead of me and didn't have access to the technology..." Several of the participants started their careers when technology was just in its infancy. Participants reported that as technology advanced, they made sure to increase their technological competencies to keep pace as the technology evolved. Amos said, "Yeah, I mean today it's much simpler because you just Google it." Participants accomplished this goal

either through networking or collaboration with others, especially those colleagues in the computer science departments. Often, they would identify and search out instruction such as classes, workshops, online resources, and manuals for needed skills for their work.

The security of technology, specifically e-mails, and dangers of social media were discussed by most participants. Although efficient, technology as a way to discuss, brainstorm ideas, and conduct research can be problematic in regard to data and intellectual capital security. Ben said, "That stuff just goes everywhere. And really email, I've said a lot of stuff in emails that I probably would go back and not do again".

Another impact of technological expansion is that now students can e-mail or text a professor without time boundaries. Some participants reported this practice as intrusive. Many of the participants still preferred face-to-face teaching. The ability to collaborate with other scholars throughout the world without spending time and money traveling was reported as a positive effect of the technological expansion for most of the participants.

Summary

Chapter Four began with a review of the literature that illuminated a gap in the literature calling for further study on the personal and professional journeys of those who have attained the rank of full professor. The sample population was discussed and defined within this chapter. Tables and theme definitions that support the findings and analysis of the major themes and sub-themes reports are included.

Chapter Four highlights the analysis of data gathered through this qualitative study. First level hand coding of all 21 transcribed participant interviews revealed eight major themes that were identified and defined. Further analysis of participant interview transcripts after initial hand-coding was implemented through NVivo qualitative software. Triangulation of the interviews, CV's and Citation Counts for each interview were performed in accordance with qualitative criteria for trustworthiness. A report of findings for each major theme and sub-theme from the thematic analysis of the hand-coding and NVivo software is also included in Chapter Four.

Chapter Five discusses the findings of this study, revisiting the literature to compare theories that are supported by this study and identify those findings that are refuted. Chapter Five concludes with recommendations for expanded study to guide education leaders, policy makers, human resource offices, career services, and those seeking careers in higher education is discussed. Practical applications and suggested practices based on the findings from this study are explored and examined.

Chapter 5: Discussion

Overview

In the literature, a gap was revealed regarding a lack of clarity for career advancement and promotion to the rank of full professor, which led to a call for more study on full professors who have successfully guided their careers through the academic landscape (Buch, Huet, Rorrer, & Roberson, 2011; Freeman, Douglas, & Goodenough, 2020; Gardner & Blackstone, 2013; MacFarlane, 2012; Walker, 2016). Using faculty handbooks, Freeman et al. (2020) found that language is unclear as to what is needed to advance resulting in a barrier for women and people of color seeking advancement. Even though awareness and understanding of diversity issues surfaced as a compelling focus in higher education, review of the literature demonstrates that research in equitable promotion in higher education among the intersectional identities of emergent scholars is bereft of consistency and at most fractional (Gardner & Blackstone, 2013; Lawrence et al., 2014; McNaughton et al., 2021). Researchers suggest that a better understanding of common social patterns, knowledge, perspectives, and agentic practices for successful career promotion is needed to guide career plans and goals for a new generation of scholars (Gardner & Blackstone, 2013; O'Meara, 2015). To address this knowledge gap, the commonalities of how a person attains full professor rank in higher education was examined, in this study, through personal interviews and other artifacts of full professors pertaining to their career journeys, experiences, and perspectives.

I predicted that this study would address the gap in the literature and add to the body of knowledge specifically involving future professional development, agentic practices, and senior leadership skills for those seeking careers and advancement in higher education. After completion of the study, the findings support these predictions. Therefore, this study is of theoretical and practical importance. I further discuss the practical and theoretical implications below in the Recommendation and Future Research section of this chapter. Through directly accessing the study participants, all of whom had successfully maneuvered through the academic landscape, I compared the career journeys, experiences, performances, dispositions, inspirations, and knowledge commonalities of 21 full professors.

This qualitative case study begins by asking each full professor the primary interview question, "What is your story?" The interviews were recorded, transcribed, and compared through qualitative first-round hand coding. After the first-round hand coding process, eight major themes (Experience, Technology, Agentic Practices, Knowledge Base, Resources, Leadership, Performance, and Relationships) with associated sub-themes (see Table 13) emerged from the career stories. The primary research questions which formed the framework for this study were:

- 1. Are there common experiences by those who attain the rank of full professor? If so, what are they?
- 2. What themes emerge from full professors' career stories? If so, what are they?
 - (a) Are there common performances?
 - (b) Are there common dispositions?
 - (c) Is there common inspiration for scientific discovery/scholarship development?
 - (d) Is there a common knowledge base for those who successfully attain the rank of full professor?

The findings that emerged from these questions provide emergent scholars a framework to illuminate the skills needed for advancement in higher education. The findings also provide

guidance to higher education leaders and policymakers that can inform hiring decisions when seeking to identify new hires with long term potential into the professorate. Finally, the results from the study provide directions for those designing and implementing professional development programs for higher education faculty.

Table 13

Themes	Sub-Themes	
Agentic Practices	Collaboration	
	Fire in the Belly	
	Teaching	
Experience	How I Spend My Time	
	Lifestyle	
	My Work is Fun	
	Curiosity	
	Serendipity	
	Freedom	
	Gender	
	Privileges	
Knowledge Base	How the University Works	
Leadership	Drive	
Performance	Choices	
	Pre-Academic Jobs	
	Qualifications	
	Professionalism	
Relationship	Mentoring	
	Boss	
	Social Interactions	
Resources	N/A	
Technology	N/A	

Themes and Associated Sub-Themes

Discussion of Findings

Commonalities emerged from the full professors' career stories. During interviews, study participants revealed common performances, dispositions, inspirations, and knowledge bases despite a scarcity of information about the promotional process to full professor. These commonalities, among others, were list making, relationships with mentors and bosses, networking and collaboration, insatiable curiosity in pursuit of knowledge, and involvement with music. However, while not addressed by all participants, some revealed feelings of gender disparity and a focus on being humble to the point of minimizing their numerous accomplishments. The following discussion includes these commonalities and how they may or may not relate to existing literature.

One of the most prevalent commonality participants mentioned was list making. Valuing freedom from time constraints, the participants would arrange their days through list making. Lists provided a way that they could self-manage time resourcefully. I noted that the participants planned their day's work and events as efficiently as possible with short-term and long-term goals. List making was a common strategy employed by most of the participants. Some of the participants had lists with categories, a few used small pieces of paper that fit into a pocket or purse, some utilized their phone or computer, however, participants had some sort of a list making system. One participant described that her list-making was so important each day that even if she did not have compelling or new work, she would add to the list something just to check off a completed task. Another participant talked about ranking tasks by level of importance to complete that day versus moving to another time. Many acknowledged that they enjoyed crossing completed items off the list or lists. This was a common performance employed by participants throughout their academic journey as they

110

advanced to full professor, demonstrating the participant's ability to maneuver strategic agentic practices as discussed by King and Cox (2011) and O'Meara (2015). This further solidifies the importance of looking at how full professors organize their time.

The participants viewed a boss and mentor as separate roles. Their bosses supported their work whereas, in most cases, mentors helped with career guidance and socialization within the university. Some mentors were not associated with their university department or the university but were someone with whom they had a personal connection, could converse freely with, and explore ideas. Mentors were also those whom the participants could trust. Bosses were sought for advice on work and in some cases provided informational leadership. Bosses were more about skill sets and university protocols whereas mentors were seen as more holistic and providing community, scholarly resources, and connections. Participants described a type of continuum where in some cases bosses might do some social mentoring and conversely mentors could at times be a boss for a work project. Mentors provided guidance and trusted feedback to help with problems, anxieties, and successes. One mentor and family provided housing for the participant and their family during graduate school. Both bosses and mentors would point out strengths and encourage professors to keep going; bosses supported through resources, feedback, and development of ideas. Mentors supported participants through illuminating needed navigational career knowledge. Aligning with the literature that mentoring junior faculty for socialization and community is viewed as a vital function of full professors in their role (Albu & Cojocariua, 2012). Although talked about distinctly differently by participants, both bosses and mentors assisted those interviewed for this study along their journey to full professor through aiding in the development of knowledge and skills so they could advance to the pinnacle of their careers.

Networking and collaboration were two concepts that were defined separately by participants in this study. Networks were described as relationships built through interactions, reputations, and expertise of others in and out of the university. The participants' network relationships were also valued as human resources for them. Access to those who could help the participants actualize projects facilitated more ideas and resources to meet their goals. Collaboration incorporated understanding of what another could deliver in a team structure for a task or work. The participants could agentically and adeptly evaluate and proficiently assess strengths, skill sets, and weaknesses in themselves and others. This ability supported the participants' goal to achieve successful collaborative outcomes and efficient work. Participants actively participated and learned from networking and collaboration with others to help them become a full professor. However, the literature does not describe how full professors specifically process their multi-toggle network and collaboration support web. The literature show that important community links both inside and outside the academic institution appear to be neglected or minimized (Altbach, 1980; Braxton, 2006; O'Meara, 2015; Ponjuan et al., 2011). However, the participants who successfully attained the rank of full professor had mastered this disposition and knowledge base of effective networking and collaboration.

Insatiable curiosity and an active desire to gain knowledge was common for participants. Formulating theories many times requires well-developed questions. Questioning skills helped the participants gather information for creative ideas, work, and career advancement. I noted that learning through research and teaching were not only a work requirement but also an exercise in more skill development for critical thinking and problem solving. I also noted in my journal that the participants spoke with enthusiasm about embracing a vocation that was their avocation. I noted that an important aspect of engaging the participants in lifelong learning was experiencing learning as fun. It does appear that the internal motivation to have fun was an integral part of scholarly drive and pursuits. To question and study was not a chore but an opportunity for more intellectual growth. As mentioned in Chapter Four, participants experienced great enjoyment from working in a job that allowed them the freedom to think and explore as lifelong learners.

When discussing enjoyment and experiences, participants mentioned musical arts frequently. This stood out as unique in that no mention of connection between full professors and music was evident in the review of literature. Participants were involved in music during their developmental years, and in some cases, still involved today. Participants' discussion of music, in relation to lifestyle, correlates with this study's research question regarding common inspirations for scientific discoveries/scholarship development. The curiosity and internal motivations related to fun are examples of these common inspirations among the participants.

I observed that it is inherent in academic leadership that full professors are generally pursuing new research and ideas that leads them to wonder if the goals are attainable and realistic in real time. It seemed as if most participants spoke of their accomplishments as being overrated. I discovered many participants presented a humble narrative and were uneasy about attributing their accomplishments to their scholarly mind but rather to hard work and interest in the ideas and subject matter. Some participants discussed their struggles with internalizing their successes, disregarding their accomplishments as the result of hard work and good luck. I observed that most participants did not see themselves as gifted scholars. Several participants revealed that serendipitous occurrences in their career journeys brought their ideas, goals, and dreams closer to situational reality—meaning their abilities were less of a factor, surprisingly aligning with studies on imposter syndrome. "Imposters also dismiss praise, derogate the accuracy of positive evaluations, and engage in other behaviors that insulate them against information that would validate their confidence and work" (Leary, M. R., Patton, K. M., Orlando, A. E., & Funk, W. W., 2000). I noted that being recognized for excellence keeps participants motivated as if to prove to themselves they are really at the top of the academic rung. Of course, hard work by a skilled scholar usually translates into more productivity and recognition. This study's findings regarding hard work and serendipitous opportunities were seen as compelling reasons for participants' career success as scholars who had attained the rank of full professor.

Inequities about gender were described by most of the women and observed by some of the men in the study. According to the participants discussing gender, roles were more often defined for the women than the men when engaged in university business. For example, when on a university committee, the women full professors stated being assigned to the role of secretary of the group even though all were of equal professional standing. Women also explained that to achieve the rank of full professor they believed they had to give up more personally and work harder than the men. A few men felt the women were treated inequitably compared to males, regardless of race. This study's findings coincide with discussions in the literature regarding the need for some women to choose between work and family because of university demands and their biological clock (Gardner & Blackstone, 2013; O'Meara, 2015). This is supported in the literature by researchers such as Baker (2020), Gardner and Blackstone (2013), Niehaus and O'Meara (2015), and O'Meara (2015) who argue that men and women face different obstacles in striving toward their advancement to full professor. In her book, Baker (2020) reports a similar experience as female participants in my study, especially in regard to balancing family and career. For those who had children, caring for the children was an issue that men did not discuss or mention as a challenge for work performance. The women agentically sought out other women at the university and collaborated to support one another. One example of collaboration was a university daycare that was formed at the education department and ran successfully for many years. This daycare provided real life care and early childhood teaching experiences for the education students and daycare for the professors' children. The female participants and some male participants described feeling an undercurrent of gender bias within their universities that presented challenges to the women scholars in their career journey to full professor.

Challenges

Challenges and adjustments surfaced during this research that were not anticipated. The first challenge was delayed access to participants. Human Resources departments at each of the designated land-grant universities had policies in place that would not grant me access to a list of full professors due to their confidentiality protocols. The Human Resources departments at each land-grant institution then directed me to the Office of the Vice Provost. Each Office of the Vice Provost had its own set of procedures in place for obtaining the list of full professors employed at the university. Most required the completion of a Public Records Request where a decision to allow release of a list varied from four to twelve weeks. A couple of the institutions did not require a Public Records Request but rather numerous phone conversations with questions and information about my research. In the absence of a Public Records Request, discussions ensued so the staff could contact the correct department and obtain permissions for release of the list of full professors employed full time from within the Office of the Vice Provost. Each land-grant university had its own set of rules or types of contacts for the ultimate permissions and release of the list. This delay was not expected or predicted.

Once the lists were released, potential participants were e-mailed and initially there was no response. After several weeks and a second round of e-mails at one land-grant university a participant did respond and was interested in participating in the study. However, they advised me that the full professors at that particular land-grant university had been advised to not answer e-mails with attachments or requesting information from student accounts that they did not recognize.

After seeking permission from the chair of my department and subsequently notifying the university informational technology security department, I used my university staff e-mail account, rather than my student account, to successfully contact participants. This security issue regarding student e-mails had recently been put into place and therefore this technological challenge could not have been predicted.

Academic politics between land-grant universities did emerge as a challenge. One land-grant university's administrators in the Public Records Disclosure wanted assurances that the information focused on comparing and contrasting the participants and their career journeys. I had to assure the administration leaders at one land-grant university that I was not a spy for my university looking for weaknesses in their programs to recruit students. This situation was not a predicted challenge and resulted in a substantial time delay when accessing that land-grant university. Once permission was granted, more time delay occurred when subsequently reaching out and receiving responses from interview participants.

Another time delay in the study was the full professors' busy schedules. Many of the participants had calendars that were booked out three or four months from the time when they

agreed to participate and had an open time slot for the interview. One participant had only a single time slot in a six-month period of time for an interview. A couple of the participants had to reschedule due to their busy schedules for reasons that included unexpected travel or university meetings. The rescheduling issue also pushed the time frame of the study out longer and could not be expected by me or the participants when they agreed to be interviewed for the study.

COVID-19, a global pandemic, was not foreseen or imagined as a limitation or concern when designing this research study. Access to mail was not secure and participants had limited access to the campus during the closing of the campuses. Subsequently, many of the universities' moves to online learning and cloud-based storage was limited in size and the e-mail not secure. The IRB did not allow use or request of home addresses for the participants. To mitigate this unexpected limitation, I used triangulation instead of member checking to strengthen trustworthiness of my research study. Access to the land-grant universities was also limited, which prohibited me from physically being on campus.

Recommendations and Future Research

Recommendations

The findings of this study reveal that more research is needed to understand how agentic practices develop and how individuals hone that skill. This study found some common performances, dispositions, inspirations, and knowledge, but what is the hierarchy of these constructs, how do they interact with each other, and how would these commonalties be quantified? If the commonalities are skills, researchers should determine what teaching methods would best be employed to encourage future scholars along the K-12 and higher education continuum. For example, list making to set and track the completion of goals could be integrated into an elementary school study skills curriculum.

Researchers should look to see what policies and coursework would best help emergent scholars seeking careers in academia achieve their goals. Additionally, more research needs to be done on foundational knowledge and how to disseminate information about university resources, networking, and collaboration. Another recommendation would be to study how those designing curriculums for emergent scholars could enhance research skills along with content knowledge to foster the attributes common to full professors. This could also include studying curiosity and questioning skills in more depth.

Findings indicated that music was a common experience that most participants shared. Future studies need to examine the relationship between music training and success in climbing the academic ladder. Researchers should consider applying career theory that supports the analysis of both real-world and applied viewpoints to further examine the relationship between the arts and career advancement. Career theory provides a theory to understand the advancement process and choice of work through relativity and personal development and the interaction of institutions. If music and the arts are common experiences that support emergent scholars in their pursuits in academia, how does career theory better support and guide that relationship? Could there be other experiences in early childhood that would encourage lifelong academic career success or determine the optimum time when these various experiences enable students to become lifelong learners?

This study found that the impact of mentors was common to the success of most participants. Mentors help uncover and develop constructivist practices which may assist in developing agentic skills (Kafai & Resnick, 1996). Another recommendation would be to

118

study the infusion of mentoring programs into K-12 and higher education academic curriculums to see if the agentic practices employed by full professors could be fostered in younger students. Future studies should research the best practices for educational programs to guide effective mentoring for all learners and emergent scholars. Lastly, because race was not a primary focus of this study and gender issues surfaced during the interviews, race and gender inequities need to be examined in depth through future research.

Future Research

Based on the findings of this study, five topics of future research are highlighted. These five are the development of an instrument survey scale measuring commonalities of full professors; a study to determine gender impact on performance, experience, and relationship roles in academia; more professional development of mentors and bosses; exploring the arts, particularly music, and its relationship to scholarly success; and a pedagogical study of questioning skills and curiosity attributes and their relationship to lifelong learning.

- The development of an instrument survey scale through quantitative analysis measuring common performances, dispositions, inspirations, and knowledge across a wider population of full professors based on the constructed theme and sub-theme findings of this study. This study should be replicated with a larger diverse population and hear more voices of minority groups. The population should focus on a variety of universities and colleges throughout the United States regarding their career journey to full professor instead of only focusing on land-grant universities.
- Conduct a comparative mixed method case study on the impact of race and gender pertaining to performance, experience, and relationship roles within the academic

setting. This future study should aim to illuminate what skills, values, and characteristics encompass agentic practices in full professors.

- Study about academic relationships: further research needs to be conducted regarding professional development and stronger mentor relationships. Bosses and mentors should be actively advising associate professors with tenure about the process of advancement to full professor. Workshops should be developed which provide transparency and outline the requirements of the process for promotion to full professor. In addition to the above suggestions, a critique board is needed that could provide feedback to emergent scholars to better enable them to strengthen their skills and materials for advancement.
- Exploring how creative commonalities, specifically music and other arts, have a positive impact on scholars' development in academia. This would encompass completing a case study of full professors and other academic leaders in relation to their experiences with music and the arts.
- Strategies to foster curiosity and formulate questioning studied in an outdoor educational environment to determine and observe the links between curiosity and questioning. Researchers should complete a longitudinal study in a natural setting to further understand how curiosity and questioning relate to learning.

Conclusion

The findings of this qualitative case study support other researchers' claim in the literature that the process for advancement from associate professor with tenure to full professor lacks clarity. Researchers further assert that this absence of information creates a gap of knowledge regarding promotion to full professor. The participants in this research

study all needed information about the promotional process, yet each participant agentically maneuvered through the academic organizational network, drawing on experiences and cultivating performance skills to work efficiently. Although a scarcity of information exists, this study found that participants did have common experiences, dispositions, inspirations, and knowledge bases to successfully achieve promotion to full professor.

The role and process to become a full professor is continuously evolving and must be studied in more depth and breadth, especially with the rapid growth of technology. This expansive information landscape changes how we live, work, teach, research, and communicate today and tomorrow. Researchers and policy makers must keep reviewing current evaluation guidelines related to full professor promotion along with updating guidelines, processes, standards, and policies in a timely and systematic manner. The findings from this dissertation study provide a framework for this ongoing development and may help emergent scholars better maneuver through their career journeys.

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Appendix A: Invitation to Participate

October 27, 2018

1031 North Academic Way Coeur d'Alene, Idaho 83814

Dr. Full Professor, Ph.D. Professor of_____ Department of_____ University of Idaho Moscow, Idaho 83844

Dear_____,

My name is Diane Swensen and I am a Doctoral Student in the College of Education, Health and Human Sciences at the University of Idaho. I would like to invite you to participate in my dissertation research study by sharing your journey toward becoming a full professor.

The purpose of this study is to provide insights regarding career paths to full professor so that junior faculty seeking leadership careers in academia may be better equipped and motivated to adapt, serve, and work toward advancement. This research is needed to guide those who mentor developing scholars and adapt higher education to meet the needs of those aspiring to careers in academia.

There will be one interview session. Each interview will consist of semi-structured, openended questions and last approximately 50 minutes. Once the interview is transcribed, the full transcription will be sent for you to check for accuracy. Although you will be assigned a pseudonym there is no guarantee someone will not be able to discern identifiers that would reveal your identity.

It is hoped that your story and those of others may inspire and influence future junior faculty.

If you have questions at any time about this study please contact the Doctoral Student Researcher, Diane Swensen: 208-981-0095 or <u>swen4456@vandals.uidaho.edu</u> or Principal Investigator, Dr. Paul Gathercoal: 208-292-2527 or <u>gatherco@uidaho.edu</u>. This study has been approved by the University of Idaho Office of Research Assurances: IRB number:_____.

Thank you for considering this request to tell your story.

Best regards,

Diane Swensen 208-981-0095 swen4456@vandals.uidaho.edu

Appendix B: Consent Letter

TITLE OF STUDY

The Full Professor: Stories from the Past, Guiding the Future

PURPOSE OF STUDY

You are respectfully being asked to take part in a research study. Participating in this study is completely voluntary. You may change your mind and stop at any time even if you decide now to participate. Before you decide to participate in this study it is important that you understand why this research is being conducted and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information for clarification.

The purpose of this study is to provide insights regarding career paths to full professor so that emergent scholars seeking leadership careers in academia may be better equipped to adapt, serve, and work toward advancement. This research is needed to guide those who mentor developing scholars and adapt higher education to meet the needs of future careers in academia.

STUDY PROCEDURES

A copy of this form will be given to you. Each participant can withdraw from the study at any point. Before the interview begins, you will be asked to give permission to be audio-recorded (digitally), and indicate permission for audio-recording (digitally) on the signed consent forms. The study's purpose will be restated and you can ask questions before the start of the interview. If needed, you may ask questions during and after the interview.

Data will be collected by a variety of means for this qualitative case study. These methods include the following artifacts: interview, follow-up reflection, CV, citation counts, and researcher's reflection journal. The researcher's reflection journal will contain the researcher's observations and thoughts.

The interview is focused on your journey to full professor. There will be one interview session. It will consist of semi-structured, open-ended questions and last approximately 50 minutes. Subsequent questions may develop as particular topics are addressed. Once the interview is transcribed, the full transcript will be sent to you to check for accuracy.

After the interview, a reflection follow-up questionnaire will be sent to you. This questionnaire is designed to elicit feedback about the interview experience.

RISKS

Participating in this study is completely voluntary. The interview is scheduled for a 50minute duration. If needed, breaks may be taken at any point during the interview. You may decline to answer any or all questions and you may terminate your involvement with this research study at any time. Although you will be assigned a pseudonym there is no guarantee that someone will not be able to discern identifiers that would reveal your identity even with the upmost care employed.

There are no other risks or discomforts discerned or anticipated to occur in this research study.

BENEFITS

This research study seeks to examine the stories of full professors and discover patterns or identify knowledge that could guide, influence and inspire future scholars who seek advancement. Additionally, this research study may enhance the body of literature regarding career theory and agentic practices.

CONFIDENTIALITY

Every effort will be made by the researcher to preserve your confidentiality including the following:

- Assigning code names/numbers for participants that will be used on all research notes and documents.
- Keeping notes, interview transcriptions, and any other identifying participant information in a locked file cabinet in the personal possession of the researcher.
- Storage of digital information on a designated password protected computer.
- Review by the participant of the transcribed interview transcript for accuracy through member checking.

There is no guarantee that someone will not be able to discern identifiers that would reveal your identity even with the upmost care employed. If you have questions about the interview or study, you can ask the researcher during, after or at another time you feel is appropriate.

CONTACT INFORMATION

swen4456@vandals.uidaho.edu

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the Doctoral Student Researcher or Principal Investigator whose contact information is provided below:

DOCTORAL STUDENT RESEARCHER
Diane R. SwensenPRINCIPAL INVESTIGATOR
Paul Gathercoal, Ph.D.
University of IdahoUniversity of IdahoUniversity of IdahoCollege of Education, Health, and Human ServicesCollege of Education, Health, and Human Services1031 N. Academic Way, Suite 2421031 N. Academic Way, Suite 242Coeur d'Alene, ID 83814Coeur d'Alene, ID 83814208-981-0095208-292-2527

gatherco@uidaho.edu

If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Doctoral Student Researcher, Diane Swensen at (208) 981-0095 or Primary Investigator, Dr. Paul Gathercoal, Ph.D., then please contact the Institutional Review Board Coordinator with any questions- <u>irb@uidaho.edu</u>. or (208) 885-6340.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study, before data collection is completed, your data will be destroyed.

CONSENT

I have read and I understand the information provided above and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this research study.

Participant's signature	Date
1 0	

Investigator's signature _____ Date _____

_ I am willing to be interviewed and audio recorded.

Appendix C: Interview Questions

Table 3.1 Interview Questions

merview Questions	Primary Interview Question
	What is your story?
Research Questions	Probing Interview Questions
Primary Are there experiences that are common to those who attain the rank of full professor? If so, what are they?	Please describe your experiences toward accomplishing your current level of achievement as a full professor.
What themes emerge from full professors' career stories? If so, what are they?	When selecting the academic institutions that you attended as a student what was your rationale?
 (a) Are there common performances? (b) Are there common dispositions? (c) Is there common inspiration for scientific discovery/scholarship development? (d) Is there a common knowledge base for those who successfully attain the rank of full professor? 	What went into your thinking when selecting academic institutions in which to work?
	What types of knowledge are useful to you?
	What ideas or thoughts supported your decision to pursue a career in academia? And what inspired you in your field of research and discovery?
	Did you go directly into academia or did you spend time working outside academia in your chosen field? If so, what was this experience?
	What were the experiences that helped you make the decision to concentrate on your field of focus?
Secondary The research indicates that gender and ethnic diversity affect mentoring and networking relationships; do full professors report that is an accurate reflection today?	In your experience were there mentors or networking relationships that were instrumental in helping you chose a career path? A subject matter area?
	How do gender and ethnic diversity affect those who teach in academia? Advancement to full professor?
Are there common agentic practices that influence the decision- making processes employed by full professors?	How have campus politics and policies been contributing factors in your professional journey?
	How do you plan and organize your time?
	In retrospect, are there any career choices or decisions that you would have changed or done differently?
Does technology play a role in the advancement to full professor?	What has been impact of technology expansion for you?
Are there common leadership approaches among full professors?	Has technology presented any effects on your path to full professor? How has acquiring the level of full professor influenced you as a
	leader? What part did your family, or support group, play in your success?
	In what ways have you been able to balance your professional and
Other	personal lives?
Other	How is your stress level?
	What are your avocations?
	What kinds of books outside of your field do you read, if any?
	What advice would you give to aspiring scholars?
	If and when you plan to retire, how do you hope to spend retirement time?

Appendix D: Interview Checklist

Interview Questions

		Primary Interview Question		
Descende Questions		at is your story?		
Research Questions Primary Ouestions:	Pro	bing Interview Questions		
Are there experiences that are common to those who attain the rank of full professor? If so, what are they?		Please describe your experiences toward accomplishing your current level of achievement as a full professor.		
What themes emerge from full professors' career stories? If so, what are they?		When selecting the academic institutions that you attended as a student what was your rationale?		
(a) Are there common performances?(b) Are there common dispositions?(c) Is there common inspiration for scientific		What went into your thinking when selecting academic institutions in which to work?		
discovery/scholarship development?(d) Is there a common knowledge base for those who successfully attain the rank of full professor?		What types of knowledge are useful to you?		
		What ideas or thoughts supported your decision to pursue a career in academia? And what inspired you in your field of research and discovery?		
		Did you go directly into academia or did you spend time working outside academia in your chosen field? If so, what was this experience?		
		What were the experiences that helped you make the decision to concentrate on your field of focus?		
econdary Questions:				
The research indicates that gender and ethnic diversity affect mentoring and networking relationships; do full professors report that is an accurate reflection today?		In your experience were there mentors or networking relationships that were instrumental in helping you chose a		
		career path? A subject matter area? How do gender and ethnic diversity affect those who teach in academia?		
		Advancement to full professor?		
Are there common agentic practices that influence the decision-		How have campus politics and policies been contributing		
making processes employed by full professors?		factors in your professional journey?		
		How do you plan and organize your time? In retrospect, are there any career choices or decisions that you would have changed or done differently?		
Does technology play a role in the advancement to full professor?		What has been impact of technology expansion for you?		
		Has technology presented any effects on your path to full		
		professor?		
Are there common leadership approaches among full professors?		How has acquiring the level of full professor influenced you as a leader?		
Other		What part did your family, or support group, play in your success?		
		In what ways have you been able to balance your professional and personal lives?		
		How is your stress level?		
		What are your avocations? What kinds of books outside of your field do you read, if any?		
		What advice would you give to aspiring scholars? If and when you plan to retire, how do you hope to spend retirement time?		

Appendix E: Follow-Up Interview Questionnaire

1. Do you have any feedback for the researcher about your participation in and logistics of the research study interview?

2. Are there any additional questions you would have liked included in the interview?

3. Would you be willing to participate in another study pertaining to this topic?