2022

The Power of Connections: An Online Doctoral Program's Use of Strategic Onboarding to Enhance the Doctoral Experience

Jeri Heileman
University of Kentucky, jeriheileman@gmail.com
Author ORCID Identifier:
https://orcid.org/0000-0002-8469-3603
Digital Object Identifier: https://doi.org/10.13023/etd.2022.78

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Jeri Heileman, Student

Dr. Beth Rous, Major Professor

Dr. John Nash, Director of Graduate Studies

THE POWER OF CONNECTIONS: AN ONLINE DOCTORAL PROGRAM'S USE OF STRATEGIC ONBOARDING TO ENHANCE THE DOCTORAL EXPERIENCE

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education in the
College of Education
at the University of Kentucky

By
Jeri M. Heileman
Lexington, Kentucky
Director: Dr. Beth Rous, Professor of Educational Leadership Studies
Lexington, Kentucky
2022

https://orcid.org/0000-0002-8469-3603

ABSTRACT OF DISSERTATION

THE POWER OF CONNECTIONS: AN ONLINE DOCTORAL PROGRAM'S USE OF STRATEGIC ONBOARDING TO ENHANCE THE DOCTORAL EXPERIENCE

A positive doctoral experience is rooted in an understanding of the expectations and reality of doctoral–level work. Students need specific knowledge, skills, and mindsets to complete coursework, critically analyze research, and write and defend a research dissertation. Despite a mutual commitment to academic achievement and graduation by both faculty and students, attrition in doctoral programs remains high. This rate is even higher for those in online programs. Additionally, there are many challenges doctoral students experience outside of the core curriculum. The challenges facing students vary depending on the phase of the doctoral journey and the individual development of each student.

This dissertation is a report of a mixed methods action research study that identified needs of doctoral students across the doctoral journey and explored how a strategically designed onboarding process impacted awareness of doctoral expectations and a sense of connectedness of doctoral students.

Findings indicate that established practices of the department and added features to the onboarding process positively impacted students' sense of connectedness and awareness of program expectations and information.

The findings of this study encourage leadership and faculty members of online doctoral programs to consider department–led efforts designed to strengthen a student's connectedness with peers and faculty members and increase their awareness of expectations and available resources. The power of these connections can support doctoral students toward an enhanced doctoral experience and persistence toward degree completion.

KEYWORDS: Doctoral Onboarding, Doctoral Student Connectedness, Action Research, Online Doctoral Programs

Jeri M. Heileman

04/20/2022

THE POWER OF CONNECTIONS: AN ONLINE DOCTORAL PROGRAM'S USE OF STRATEGIC ONBOARDING TO ENHANCE THE DOCTORAL EXPERIENCE

By
Jeri M. Heileman

Dr. Beth Rous
Director of Dissertation

Dr. John Nash
Director of Graduate Studies

04/20/2022
Date

DEDICATION

To my dad, who taught me to never quit

.

ACKNOWLEDGMENTS

There are many individuals to express appreciation and gratitude as the phase of this journey concludes and a new path unfolds. My advisor, Dr. Beth Rous has provided unwavering support and taken on roles beyond her job description. She has been an amazing advisor and mentor but has often added the roles of personal confidant, life coach, therapist, parent, and friend. I look forward to the last role developing more fully upon the completion of this dissertation. While completed individually, this work would not be in existence without the shared experiences of so many students living the transformative journey towards a doctoral degree.

Once framed and hanging, if anyone takes my diploma down and looks on the back, I will have penciled a number of names of those who placed both emotional and time investment into my completion of this task. To my husband who encouraged me to begin, stick with, and complete my doctoral program. You made this doctoral journey possible for me and our life's journey together of over 36 years adventurous and beautiful. I'm excited for our next phase as Dr. and Dr. Heileman. To my amazing adult children and their partners, your support and belief in me was often the fuel that kept me going. To my sister who always encouraged my perseverance and genuinely inquired about my progress each week. Your efforts to support me were heartwarming and beneficial. To my nephew Joel, you provided me with a tangible reminder at an important time that I could persevere and keep being your 'BA' Aunt Jeri. To my committee members for their time and guidance. To Dr. O'Hair for guiding me to the EDL department, it was my best fit. Dr. Nash who was my first introduction to the phenomenal EDL department and has provided incredible mentorship throughout the

journey. Dr. Bathon who reminded me to see this as ‘just another big project’. Dr. Richardson who will forever sit on my shoulder reminding me of effective writing techniques and how to ‘tell my story.’ To Dr. Mazur who joined and stayed on board until my completion. To each and every one of the other professors in EDL (Dr. Bjork, Dr. Tricia, Dr. Potterton, Dr. Young, Dr. Cahill) you have each had a small part in growing me as a doctoral student, I hope you are proud of the harvest.

Finally, I acknowledge the doctoral students in EDL. The dissertation was my journey but you were the data that made it possible. Your willingness to share and participate kept me persisting. I learned much from those who crossed the finish line before me. A million thanks to my cohort peers, especially Bailey who did not leave me behind when she finished. I hope to wave the flag now to show others the way to the end goal.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1

A positive and successful doctoral experience is rooted in a basic understanding of the expectations and reality of doctoral–level work. Students need specific knowledge, skills, and mindsets to complete coursework, critically analyze research, and write and defend a research dissertation. A deliberate induction process can clarify the expectations of a doctoral program, help students acquire skills outside of the core curriculum considered essential to degree completion, and support a more positive doctoral experience. In this mixed methods action research (MMAR) study, I explored how a university department can improve the experience of entering doctoral students. The desired outcome was to develop an onboarding process designed to increase the awareness of doctoral expectations and the sense of connectedness of entering doctoral students. A successfully designed and implemented onboarding process will improve the doctoral experience and effectiveness of the program. This chapter will provide information on the context in which this study took place, key stakeholders, the methodological framework, process, and results of the diagnosis phase of the study to identify the problem of practice to be addressed, and the overall study plan.

Study Context

The setting of this study is the Department of Educational Leadership Studies in the College of Education at the University of Kentucky (UK). UK, founded in 1865 and first known as the Agriculture and Mechanical (A&M) College of Kentucky, is Kentucky's flagship university (UK College of Education, 2020). After receiving university status in 1908, the name was changed to the University of Kentucky in 1916.

As of 2022, UK, as a public land grant university, offers both undergraduate and graduate programs through 16 colleges. UK is one of eight higher education institutions in the country that provides a full range of programs on one campus, including liberal arts, professional, agriculture, medical, and engineering. The university's current strategic plan includes five objectives: undergraduate student success, diversity and inclusivity, community engagement and impact, graduate education, and research (UK State of the University, n.d.). The College of Education was established as a Normal School in 1880, which was replaced in 1908 through the establishment of a Department of Education. Eventually, it became a College of Education in 1923 by President Frank McVey (UK College of Education, 2020). As part of a research–intensive university, the College of Education is committed to advancing knowledge through research and preparing the next generation of teachers, leaders, and scholars to solve critical education and health challenges. Today the College of Education has seven departments and offers over 70 undergraduate and graduate programs serving nearly 3,000 students.

The Department of Educational Leadership (EDL) Studies, founded in 1923, is one of the oldest educational leadership programs in the country (About Educational Leadership, 2020). The department provides doctoral, education specialist, and master's degree programs. Currently, the department offers certification programs for superintendents, principals, and teacher leaders. In addition, four graduate certificates are available, including Executive Leadership, School Technology Leadership, Instructional Coaching, and Leadership for Deeper Learning. EDL also offers an undergraduate certificate in leadership studies. Outside of degree or certificate–granting programs, the department is the intellectual home for the College of Education's Center for UK Next

Generation Leadership, which organizes the UK Next Generation Leadership Academy. During the academy, leaders engage in deeper learning and share innovative models for creating learner–centered systems in schools and districts.

As one of four departments initially formed within the College of Education, EDL began offering an Ed.D. degree in 1938, and over 273 doctorates have been awarded since that time. Currently, EDL students pursuing a doctorate can choose either a Doctor of Philosophy (Ph.D.) in Education Sciences or a Doctor of Education (Ed.D.) degree. The Ph.D. program is part of the college's Interdisciplinary Ph.D. in Education Sciences. This degree is designed to prepare future academicians interested in faculty positions and the study of educational leaders. The Ed.D. program is an executive program designed to train practicing scholars interested in leading organizations and using research to inform their practice.

The department has long been a leader in distance learning and technology. It was one of the country's first educational leadership programs in a research university to offer distance learning courses, and the first academic program at the University of Kentucky to provide online courses for all their programs (About Educational Leadership, 2020). In Fall 2013, the department started offering both the Ph.D. and the Executive Ed.D. programs entirely online. Doctoral students enrolled in distance learning courses pay an in–state tuition rate regardless of their location. Professors of the Department of Educational Leadership Studies have consistently supported this tuition model which advocates for distance learners by avoiding increased tuition and fees often incurred by online students in other programs and institutions.

Stakeholders

A central element of action research is collaborating with those affected by the identified issue. Stakeholders assume an active role in creating a solution to benefit the community (Ivankova, 2015). The Department of Educational Leadership Studies faculty members serve as a primary stakeholder group in this action research study. Currently enrolled doctoral students also serve as stakeholders.

Faculty Members

The department faculty had ten full–time members as of Spring 2020, including four full professors, three associate professors, and one assistant professor. One associate professor holds a shared appointment, and two are clinical professors. Department leadership includes a chair, a director of graduate studies, and a director of doctoral programs. Three professors facilitate the four graduate certificates offered. Nine faculty members share doctoral students' instruction, advisement, and dissertation committee responsibilities. There is one administrative support associate.

Doctoral Students

Doctoral students are admitted annually in the fall as a cohort of 10–15 students. As of Spring 2020, the department has approximately 80 enrolled doctoral students: 38 pursuing a Ph.D. and 42 pursuing the Executive Ed.D. Whether seeking a Ph.D. or Ed.D., entering students take a set of five core leadership courses together. These include EDL 700 Knowledge Base for Leaders; EDL 701 Leadership in Educational Organizations, EDL 702 Leadership for Organizational Learning; EDL 703 Leading Organizational Change; and EDL 751 Foundations of Inquiry.

Researcher Role

Within the Department of Educational Leadership Studies, I am a student in the Ed.D. program and from 2017 to 2020 held a position as a graduate research assistant (GA). During my time as a GA, my responsibilities allowed me to support various projects within the department. My focus was on helping the department improve the doctoral experience of students in the Ph.D. and Executive Ed.D. programs. My responsibilities included exploring the department's current efforts to support students, insights of faculty members regarding challenges facing doctoral students, and student experiences during the program. Interactions with faculty members as a GA, my perspective as a doctoral student, and communication with fellow students combined to provide unique insights into department needs.

My role in this study is as a practitioner–researcher because I am an active member of the professional community setting. As a GA in the department, I was responsible for developing an overall strategic onboarding process. This research study addresses an issue within my area of control and involves an issue I am interested in and would like to improve. During this action research project, I collaborated with department leaders and faculty members to facilitate the design and implementation of the MMAR study and pursue a practical and effective solution to our identified challenge of enhancing supports for incoming doctoral students. The desired outcome of this action research project was the development of an onboarding process to increase the preparedness and sense of connectedness of entering doctoral students to improve the doctoral experience and the effectiveness of the program. As a currently enrolled doctoral

student involved in my own doctoral experience and a former GA for the department, I was well equipped and appropriately positioned to lead this action research project.

Overall Study Framework

This study used a mixed methods action research (MMAR) framework (Ivankova, 2015) that includes six phases: Diagnosis, Reconnaissance, Planning, Acting, Evaluating, and Monitoring (see Figure 1). Action research seeks to affect change in behavior or improve a human condition. In this study, the goal was to improve the doctoral experience. Thus, this study aimed to enhance the department's doctoral program by examining how an onboarding process can increase an entering doctoral student's awareness of doctoral expectations and strengthen a sense of connectedness to their doctoral peers and faculty members. Characteristics of action research include community orientation, practical focus, participation and collaboration, and reflection and empowerment (Ivankova, 2015). Each characteristic was considered throughout the study's design.

Mixed methods research includes quantitative and qualitative measures but is more than just a combination of these methods. Key characteristics of mixed methods research include strands, sequence, weighting, and integration. A strand consists of a research question, collecting and analyzing data, and interpreting the results. A mixed methods study has at least one qualitative and quantitative strand. The sequence expresses the relationship between the strands and can include concurrent, sequential, or multistrand combinations. Concurrent means the data from both strands are collected independently. Sequential occurs when data from one strand is collected, analyzed, and used to inform the next strand. A multistrand combination consists of two or more strands

and combines concurrent and sequential data collection and analysis. The weighting indicates the researcher's emphasis on the qualitative or quantitative data during collection and analysis. Finally, integration, a vital element of a mixed methods study, is described as either combining, connecting, or merging across the strands (Ivankova, 2015).

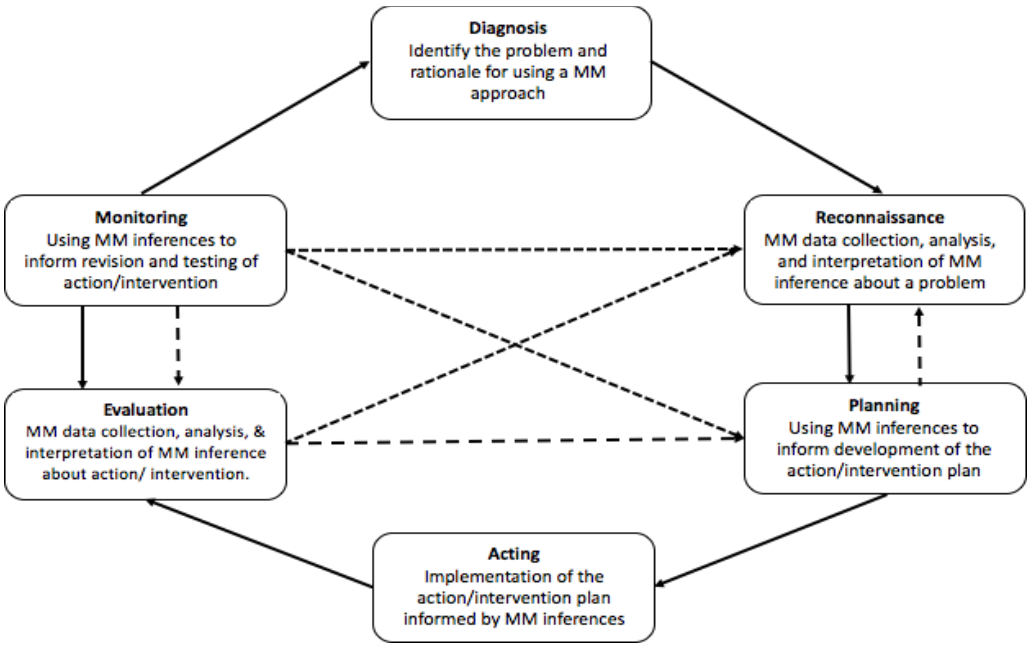
Action research is an appropriate methodology in this study because the essence of action research is to develop a deeper and more thorough understanding of an issue, which achieves a comprehensive solution (Ivankova, 2015). The setting and context of this study meet several assumptions of action research. First, as a community, faculty members in EDL embrace systematic inquiry and make decisions. Second, the department's culture demonstrates a commitment to professional development and reflection. Lastly, and most importantly, members demonstrate a desire to improve their practice (Ivankova, 2015).

Within the six phases of the MMAR Framework, during the initial phase, diagnosis, a problem or dilemma within a community, workplace, or organization is identified. Working through the diagnosis phase helps conceptualize the problem and justifies a more in–depth investigation. A systematic collection and integrative analysis of data occurs in the reconnaissance phase. The interpretation of this analysis prepares the practitioner–researcher to develop meta inferences, which inform the creation of an effective and practical intervention. In the planning phase, the researcher generates action objectives and expected outcomes of the intervention. The implementation of the intervention occurs in the acting phase. Using mixed methods as part of the evaluation

phase allows for quantitative and qualitative data to draw inferences from and determine the effectiveness of the intervention or a need to return to a previous stage of the cycle.

Figure 1

Six Phases of MMAR



Note. Reprinted from Mixed Methods Applications in Action Research: From Methods to Community Action (p. 61), by N.V. Ivankova, 2015, Sage. Copyright 2015 by Sage.

The MMAR process involves collaboration with members of the community. It builds capacity and a sense of empowerment as stakeholders exercise problem–solving skills and create solutions to meet an identified community need. This methodology supported the goal of gathering the perceptions and experiences of doctoral students regarding the essential needs of incoming postgraduate students and exploring the use of an onboarding process to increase their awareness of doctoral expectations and sense of connectedness. Data collected through mixed methods generated an accurate picture of the perceived student needs. This deeper understanding and collaborative efforts with

faculty members facilitated the creation of an intervention intended to enhance the doctoral journey and improve the effectiveness of the online doctoral programs in EDL at UK.

Diagnostic Phase: Problem of Practice

New doctoral students are often unprepared for the expectations and demands of a doctoral program (Terrell et al., 2009). This lack of awareness can lead to confusion for students and challenging experiences. In EDL, conversations between faculty during meetings revealed concerns about the doctoral experience for their students. Specifically, doctoral students encounter challenges towards their degree completion and may not be aware of how a doctoral program is different from previous degree pursuits. Doctoral students enter the program without a sense of "how to doc." (J. Nash, personal communication, Aug. 2018). Additionally, EDL had no formal process for strategically onboarding first–year doctoral students. Lovitts (2001) found that a change in the program structure of a doctoral program could prevent a significant percentage of the attrition that occurs during the initial stages of a program. Higher completion rates have been found in environments with clear expectations, social and academic integration, and supportive faculty–student mentoring relationships (Golde, 2005; Lovitts, 2001). The following section presents the mixed method action research framework, a description of the diagnosis phase, and the research problem statement guiding the study.

The Diagnosis Process

The first step in an MMAR study is the diagnosis of the problem. During this phase, the practitioner/researcher identifies a problem or issue within a group that requires a solution. The diagnosis of a problem of practice includes using multiple

sources of information. For this study, the diagnosis of the issue resulted from considering feedback from faculty members and current doctoral students within the department, a review of EDL doctoral program policies and guidelines, and a review of the literature on doctoral student success. A summary of key learnings from each of these sources of information is presented. Many of the opportunities to gather feedback developed directly from assigned tasks within my GA role in the EDL department.

Feedback from Faculty

Department leaders shared discussions with faculty members during the 2018 academic year that centered on potential gaps in the Educational Leadership Studies doctoral program relating to students' understanding of 'how to doc.' As a task within my role as GA, the department chair asked that I continue to explore this issue of concern. I arranged a conversation via Zoom with each faculty member to examine this dilemma further. The goal was to gather information regarding specific areas the faculty identified as challenging for students and problematic to program completion. During these individual discussions, faculty members shared perceptions regarding challenges doctoral students face, the point in the doctoral journey these challenges occur, essential knowledge, skills, and mindsets deemed necessary for doctoral student success, and how support for students could be improved. Overall, faculty members felt that students need a deeper understanding of the expectations of a doctoral program and how it differs from other graduate–level work. When students move from the structured to the unstructured phase of the doctoral program, faculty find students experience challenges. The unstructured nature of research and writing a dissertation presents an unfamiliar experience for students. Through these conversations with faculty members, I generated a

list of skills and mindsets considered essential to completing a doctoral program. These included self–direction, asking questions, taking risks to state and defend opinions, openness to feedback, ability to organize, prioritize, and set a timeline, and a mindset of completion and delivery.

Through follow–up communications, I solicited ideas from faculty members about the essential knowledge and skills students should acquire in the first year of their doctoral program. Faculty members felt that doctoral students should understand how a doctoral program differs from other graduate degrees during their entering phase. Several members reasoned that knowledge of the program pathway, important milestones, and specific policies and requirements for degree completion could increase a student's preparedness for the unique doctoral journey. It was suggested by a few that if entering doctoral students understood how the expectations and experiences of a doctoral program differ from their previous degree pursuits, they might be better prepared to complete their program. Faculty members also felt that students need to understand how to balance school, work, and life challenges as part of the first year of their doctoral program. Other elements identified by faculty as necessary in a first–year experience included a student's acquisition of a mindset of *openness to feedback* and the skill of *critical thinking*. Additionally, an ability to prioritize and the qualities of curiosity, determination, and perseverance were mentioned as essential in a first–year experience. These conversations provided insight into faculty members' perceptions about challenges facing doctoral students and the needs of entering students.

Feedback from Students

Student feedback helped provide a deeper understanding of the student experience in EDL. Student feedback that focused on existing needs and effective ways to support students helped determine if current support met the needs of students. Three opportunities provided this critical student perspective. The first opportunity was during the 2018 Summer Doc Week, which occurs annually and is an intensive week–long, on–site, academic, and social colloquium hosted by the department. Doc Week is designed to support the growth of students in doctoral study in EDL by providing an important opportunity for students to spend concentrated time with their professors and classmates in a fun, engaging, and thought–provoking environment. In my role as a GA, I was asked to gather feedback from students in attendance on their first–year doctoral experiences. On an exit slip, students were asked to answer the question, "*Looking back to your first year as a doctoral student, what do you wish you had known or known how to do as you began your doctoral journey*?" Through this process, we learned that students feel they need to understand the program plans, course sequences, and program planning more deeply. Students described a need to know the meaning of vocabulary associated with the doctoral journey along with knowledge of important dates and milestones.

The second opportunity for providing insight into the student experience in our doctoral program occurred through a discussion with students in a first–semester core course, EDL 751 Foundations of Inquiry, at the end of their first semester (Fall 2018). The professor provided time at the end of the class session for me to meet with the class alone to discuss their first–semester experience. Students shared challenges, concerns, or unmet needs they experienced at some point in the beginning phase of their program.

Feedback highlighted the benefits of using a backchannel to strengthen peer support from cohort members. Students also stated a need for more interaction with faculty to improve their comfort in communicating with professors. The concerns voiced by students centered on not knowing how to manage the next steps in the program, such as the choosing of an advisor, course selection, or elective strand. Students also requested resources and information on how to achieve work/life/school balance.

A third opportunity to gain additional understanding of doctoral student needs took place during the planning of the annual summer Doc Week for 2019. The department chair had requested a few current doctoral students to help plan the annual event. As part of the volunteer student planning team, we constructed a brief survey and sent an email request to all current doctoral students to provide feedback, including student perspectives on priorities for content and types of activities to include in the Doc Week schedule. Top priorities for students were spending time getting to know faculty members and clarification of program pathways and expectations.

Review of Department Policies and Guidelines

A review of department policies and guidelines revealed current and past efforts by department members to address the needs of doctoral students and embrace best practices in doctoral programming. Efforts have included using a cohort model, implementing a one–week intensive doctoral seminar each summer (Doc Week), offering an online orientation session for entering students, and adding academic courses addressing identified needs. The *Doctoral Student Handbook* described policies and guidelines regarding course enrollment requirements, advising, financial aid, and student work. The department website offered information about program specifics, course

selections, faculty members' backgrounds, and links to web pages such as the Graduate School. Additionally, the webpage provided a description of the program pathway and a suggested timeline. Despite this effort to inform and provide answers to frequent questions, leaders reported an abundance of consistent and similar inquiries by potential and newly accepted doctoral students. Department information regarding degree completion and program attrition also showed that students did not always meet the suggested program timeline, and some members of cohorts drop from the program without graduating.

Literature Around the Problem

There are two critical ways the literature helped to diagnose the problem of practice for this study. First, literature related to factors that impact doctoral student success will be presented. Searching the literature for what is known about attrition and doctoral persistence provided an understanding of doctoral students' challenges. Second, a focus on how other organizations have addressed these factors is presented. Lastly, potential strategies to consider as support for entering doctoral students are provided.

Databases utilized for this literature review are those included in the University of Kentucky's online library, including electronic resources, such as journal articles, book chapters, books, and reviews. A search through InfoKat Discovery, using individual databases provided by the UK Libraries such as Education Resource Information Center (ERIC), Academic Search Complete, ProQuest Dissertations, and others provided relevant literature. Additionally, the use of Google Scholar extended the search for articles and reports. The websites for the National Center for Education Statistics at

https://nces.ed.gov/ and the Council of Graduate Schools at https://cgsnet.org/ provided further information and statistics.

Doctoral Attrition

As the graduate population increases, a need exists to consider the graduate–level experience. Between 1998 and 2010, doctoral enrollment in the United States increased by 64% (Education at a glance, 2013). More than half of all graduate students drop out before completing their program (West et al., 2011). This high dropout is gaining the attention of leaders in the higher education community.

Doctoral attrition creates economic, social, and personal impacts (Lovitts, 2001). Economic consequences include increased costs for the institution. The attrition of students results in the loss of faculty members' time due to a need to contact and connect with potential students to replace those who have dropped out. Purchasing, printing, and distributing additional recruiting material is another unintended cost of students failing to complete their degrees. It is far cheaper to keep students than to acquire new ones.

High attrition tarnishes the reputation of the institution, which harms potential recruiting efforts. Equally as important are the social consequences resulting from the loss of potential leaders, talented scholars, innovative researchers, and influential educators (Lovitts, 2001). Students admitted to doctoral programs are assessed as goal–oriented, intelligent, and hard–working individuals who have demonstrated potential for continued contributions in new arenas. Without the completion of their degree, their social contributions might be lost. Lovitts (2001) asserted that the personal impact of attrition holds ethical importance for education leaders to consider. The failure to complete this self–selected goal can be devastating to individuals who have experienced

previous levels of success and accomplishment. Many students who decide to leave before attaining a degree do so with great angst and feelings of failure. This personal loss can impact their future success, both personally and professionally.

Focusing on educational leadership programs, Stallone (2004) asserted leadership programs are particularly susceptible to high attrition rates. Teachers and leaders in P–12 settings are often recruited as doctoral students and offered a program of coursework designed to complement a work schedule. Weekend, evening, and online classes allow flexibility. However, the downside is students can lack opportunities to develop scholarly skills or satisfactorily integrate into the academic department (Ampaw & Jaeger, 2012). Additionally, the distinct cultures of P–12 and higher education may create challenges because of the pivot from a practical to a more theoretical outlook, which demands skills of critical thinking, synthesis, and analysis.

Doctoral Persistence

To develop strategies to effectively address attrition, understanding factors that attribute to doctoral persistence can be beneficial. Bair (1999) defined doctoral persistence as a student demonstrating continued progress and the completion of a doctoral degree. Persistence is the result of an interaction of institutional, social, and personal factors such as personal motivation and strategies, formal and informal support systems, and program factors such as cohort model and knowledgeable faculty (Ivankova & Stick, 2007; Spaulding & Rockinson–Szapkiw, 2012; Tinto, 2012). By understanding the experiences, challenges, and strategies of individuals who have achieved degree completion, prospective or current doctoral students can better identify, and address challenges and setbacks encountered along their journey.

Terrell et al., (2009) argued that newly admitted doctoral students begin the journey unprepared and unaware of the challenges and expectations of undertaking a doctoral program. This lack of understanding of the doctoral pathway or process can confuse a student (Terrell et al., 2009). In a study by Gardner (2009), the dissonance for students created due to unclear expectations led to reduced performance and increased stress and frustration. The beginning phase of a student's doctoral program is a critical time for establishing awareness of program expectations, creating important social connections, and learning how to access available resources to support their success in the program (Gardner, 2009). Shambaugh (1999) presented a "program of human inquiry," which encouraged an equal emphasis on "tools of doing" (skills for research) and "tools of being" (human sensibilities and identity formation) as an effective approach to support doctoral student development (pp. 296–297). Doctoral students who acquired identity capital through intentional and systematic supports were found more likely to benefit from their doctoral training (Hall & Burns, 2009).

Strategies of Support

Identifying and addressing the needs of doctoral students during the entering phase of a doctoral program can lay a solid foundation on which a student can build the remainder of their program. Terrell et al. (2009) asserted that supporting academic and social integration (Tinto, 1975) should be embraced by institutions and departments to support and facilitate doctoral student success. Lovitts (2001) found that a change in the program structure of a doctoral program could prevent a large part of the attrition that occurs during the initial stages. Higher completion rates have been found in environments

that have clear expectations, provide social and academic integration, and develop supportive faculty–student mentoring relationships (Golde, 2005; Lovitts, 2001).

A variety of strategies to support doctoral students and increase persistence are present in the research literature. Building an online community, developing cohort relationships, and strengthening student–advisor relationships, are considered effective supports for students (Exter et al., 2009; Jorissen et al., 2015; Palloff & Pratt, 2005). Strategies such as proseminars, orientation seminars, and graduate student support centers assist students in acquiring essential information and skills (Davis et al., 2001). For example, Langer (2008) used a professional seminar to strengthen the academic foundations of incoming doctoral students. Shackelford and Maxwell (2012) found that student introductions, collaborative projects, and sharing individual experiences contributed the most to developing a sense of community. Online orientation sessions are becoming popular methods of delivering critical information to new students. Institutions are embracing an online format as an efficient, continuously accessible, and comfortable way for today's entering doctoral students to connect with essential information and resources.

Doctoral Student Onboarding and Orientation. Schaffhouser (2016) described a 'flipped orientation' approach used to encourage students' familiarity with necessary information before the orientation session, which allowed the face–to–face activities to be more interactive. An added benefit of this approach was that students could return to the site of the information as needed. Used as a one–stop shop for orientation and first–year information, this approach can also incorporate scaffolding of information or customization based on student needs and experiences. For example, if a student has

never worked with Canvas, then resources/videos about how to navigate Canvas can be available for them. If, however, a student indicates they have previous online course experience and are comfortable with the format, then there is no need to access that support resource.

The literature includes phrases such as ‘strategic onboarding’ or ‘intentional retention’ and illuminates the current interest in exploring and implementing effective strategies to support doctoral student success. Onboarding is a mechanism through which new members acquire the necessary knowledge, skills, and behaviors to become effective members of the organization. In business, it is the process of integrating a new employee with the organization and its culture. With graduate students, onboarding is a process to create a smooth adjustment for students into the organization.

A deliberate onboarding program for entering doctoral students can be a critical part of a department’s efforts to position admitted students for successful entry and timely completion of their degree. New doctoral students need a planned introduction to the doctoral expectations, potential challenges, and the organizational culture of the department that will support them. How students are onboarded and welcomed into their doctoral programs sets the tone for the culture of the department and connects students to the people and values of their new organization. Onboarding equips new members of an organization with knowledge regarding their roles and responsibilities and helps them understand how they fit within an organization (Bauer & Erdogan, 2011). Therefore, a strategically planned onboarding experience can have a significant impact on their sense of belonging.

Areas to include for consideration in an onboarding process are academic socialization and virtual collaboration skills. Entering doctoral students, like new employees in the business sector (Bauer & Erdogan, 2011), possess the same need to "acquire the necessary knowledge, skills, and behaviors to become successful members of the organization" (Holmes et al., 2016, p. 136). A recent Education Advisory Board (EAB) report stated that today's distance learners are interested in "just in time" information that fulfills their immediate needs. When coupled with an expectation of speed and convenience, content accessibility becomes critical. Additionally, in a rapidly changing world, there has become a necessity for design considerations to place greater emphasis on user experience. The designed learning should work on small screens, be 'device agnostic', and key concepts or information should be presented in easily digestible chunks. The report further asserted the importance of educational leaders responding to students promptly and anticipating their needs on the school's website or in marketing messages. Minimizing barriers for students to access information is vital during the admissions process because 43% of adult learners only apply to one school, and most spend less than 2 hours on the application (Understanding the Shifting Adult Learner Mindset: Insights for Growth from EAB's Adult Learner Survey, 2019). Remaining in contact with new students between the time of acceptance and the beginning of the semester and providing information and resources of support can help build a sense of connectedness to the program and combat the risk of early attrition.

Bauer (2010) describes 4 Cs of onboarding which can be applied to an intentional process designed for doctoral students. The 4 Cs can be defined as follows:

- Compliance – admission acceptance, academic deadlines, course registration, pathway requirements

- Clarification – program and department expectations – academic progress, class participation, research requirements.
- Culture – departmental procedures and practices, faculty research interests, academic socialization opportunities
- Connections – building relationships with peers and faculty, academic mentoring, doctoral student networking, social media uses, a community of learners (Holmes et al., 2016)

When the 4 Cs are embraced during the onboarding of doctoral students, the result is both program integration and doctoral student identity development. Strategic efforts in each area build a sense of community for the organization in which a member can thrive – not just survive.

Research Problem Statement

Across higher education institutions, student success through degree completion is a goal held by institutional leaders, department faculty, and individual students. Students apply and enroll in a doctoral program intending to complete their degree and do so in a timely manner. Faculty members and department leaders craft and publicize mission statements pledging to support students towards their academic advancement. Despite the mutual commitment to academic achievement and graduation by both faculty and students, the rate of attrition in doctoral programs remains high, and there are many challenges doctoral students experience outside of the core curriculum. The challenges facing students and the support needed varies depending on the phase of the doctoral journey, as well as the individual development of each student (Gardner, 2007).

In this study, faculty members, and students in EDL as critical stakeholders identified a need for enhanced efforts to support entering doctoral students. Engaging in an MMAR study will create an authentic understanding of the unmet needs of entering

online doctoral students. Collaborative and systematic inquiry of this issue will produce a relevant and meaningful solution. Addressing the needs of entering doctoral students through a strategic onboarding process can lay a solid foundation on which a student can build the remainder of their program. Creating and implementing an onboarding experience that addresses identified student needs may provide benefits to current and future EDL doctoral students. The benefits could lead to an enhanced doctoral experience and an increased likelihood of program completion by providing:

1) increased program awareness and understanding of doctoral expectations:
2) access to relevant resources within the department and institution; and
3) strengthened connections among cohort members and faculty.

General Study Plan

To provide an effective doctoral program, faculty and program leaders engaged with doctoral students must consider ways to support students in understanding what the doctoral journey entails and help them acquire essential skills, knowledge, and mindsets. Helping students gain an awareness of critical elements of the doctoral journey and encouraging entering students to access available resources and support can result in a more positive doctoral experience and an increased likelihood of program completion. The purpose of this MMAR study was to explore the creation of a strategic onboarding process for new doctoral students to increase their awareness of program expectations, resources helpful to their degree completion, and sense of connectedness with peers and faculty in the Educational Leadership Studies doctoral program.

The goal of the reconnaissance phase was to identify critical needs and concerns of doctoral students by using a sequential mixed method design to analyze departmental

data on student experiences and collect and analyze survey data from current doctoral students to inform the development of a first–year onboarding experience. The goal of the evaluation phase was to determine the effectiveness of additional onboarding elements strategically planned to strengthen students' awareness of program expectations and available resources and connections to cohort peers and faculty. A concurrent mixed method design was used to collect and analyze student survey responses and semi–structured interviews to assess the new onboarding process and highlight areas for improvement or sustainability. The rationale for applying mixed methods in this study was to gain insight into how doctoral students' sense of connectedness and awareness of doctoral expectations is affected by a strategic onboarding process leading to an enhanced doctoral experience and a more effective doctoral program.

Ethical Considerations

Although creating a practical and relevant solution to the diagnosed problem was the primary focus of this study, conducting this research ethically at each stage was a priority. During all phases of this MMAR study, ethical considerations regarding general research and those specific to action research were considered (Ivankova, 2015). Ethical principles, including veracity, justice, beneficence, fidelity, and respect, held priority for consideration. Additionally, issues exposed through the action research approach, such as power, coercion, and researcher bias, were addressed.

A commitment to veracity means telling the truth and providing full disclosure to all participants regarding study purpose and details. Because action research is participatory, transparent communication with all participants and informed consent with those directly involved in the study were critical considerations. Each participant in this

study provided informed consent to serve as documentation of their understanding of the goal and details of the study. In each phase, reminders that participation was voluntary and that individuals could cease participation at any time without reason or retribution occurred as part of an email and verbal communication from the researcher. Additionally, participants were encouraged to contact either the researcher or faculty advisor to request additional information about the research or procedures and provided with ways to address concerns or questions. Committing to a principle of justice in this study required consideration of fairness and recognition of participants' needs. This included efforts to avoid any form of discrimination. To address justice, the researcher applied consistent procedures to interactions with every participant and established collaborative discussions and channels of communication between the researcher and participants. The ethical principle of beneficence commits to preventing harm, protecting the weak, and benefiting both participants and society (Ivankova, 2015). Using an action research approach supported a commitment to improving a process or human condition which holds benefits to both individuals and society. Across all phases of the study, efforts were targeted at preventing harm and ensuring vulnerable participants were protected, including consideration of participants' mental, physical, and emotional well–being at each phase.

The ethical principles of fidelity and respect were addressed through efforts to build trust and respect participants' rights. Due to the small scale and intimate nature of the context of this study, protecting identity and preserving anonymity was extremely important. The analysis of quantitative data provided levels of perceived connectedness. This information was connected to qualitative data collected from interview participants.

Survey participants willing to participate in a follow–up interview offered an email contact. All names and identifiers were secured in separate records, and only the professor directly involved in the supervision of the dissertation work, and I had access. Seeking and receiving Institutional Review Board (IRB) approval ensured a rigorous assessment of efforts to maintain the well–being of all participants, which served to build trust with participants that ethical considerations of fidelity and respect were addressed.

Specific efforts were made to minimize the possibility of coercion or undue influence. Each data collection effort offered a cover letter explaining that participation was voluntary and choosing not to participate would not negatively impact their academic evaluation or standing in the department. My role as a participant–researcher within an action research study and my position as a GA in the department elevated concerns regarding issues of power or authority and feelings of coercion. It was necessary to address the influence of these issues on both myself and the participants. Being a student and employee in the department created a concern that data may appear critical of current efforts by faculty members or department leaders. This tendency required an emphasis on the research goal of seeking a solution and embracing the collaborative nature of action research. Highlighting the opportunity for improvement helped maintain a positive focus. Another consideration was that doctoral students in the department might feel pressured to participate in the study because of their desire to seek favor and approval of faculty or me as a peer in the program. Students may feel their sense of choice in participating is limited. Reminders throughout the study that participation was voluntary and communicating clear procedures for asking questions or dropping from the study at any time without reason or retribution helped participants feel empowered. Establishing trust

and confidentiality also helped reduce the potential for the Hawthorne Effect, where participants' awareness of the research influences their responses or behaviors. Students were encouraged to provide truthful perspectives yielding accurate data to drive effective change.

Researcher Bias

Researcher bias was an essential ethical consideration because I am an enrolled doctoral student. Objectivity occurs through an awareness of one's value biases. Practicing reflexivity can reveal a researcher's underlying assumptions and biases (Ivankova, 2015). As the researcher, I acknowledged the personal values I hold and their influence on all aspects of the study, from conceptualization and design to data collection and analysis. I was willing to accept evidence that contradicted my assumptions or values to support a more objective approach. I committed to recognizing inconsistencies and embraced opportunities to modify my understanding. Bias may exist because when the study started, I was three years away from the mindset of a beginning doctoral student and may have forgotten the essential needs during the first year. Also, my experience of progress through the program as a doctoral student may have limited my understanding of the needs of struggling students and created bias regarding the study design and data collection and analysis. Remaining mindful of these issues throughout the study and including them as part of collaborative conversations with study participants helped reduce researcher bias.

Summary

This chapter presented the MMAR study design chosen to explore and address an identified need for a Department of Educational Leadership Studies doctoral program at a

research–oriented institution. The beginning of the chapter described the initial action research step, the diagnosis phase. This was followed by the problem of practice and the mixed method action research framework. The chapter concluded with important ethical considerations addressed in the study. By using a mixed methods action research design, the practitioner–researcher sought to collaborate with faculty and doctoral students as key stakeholders to create and implement an effective and practical solution to enhancing support for incoming doctoral students through a strategic onboarding process. In Chapter 2, the reconnaissance phase of the study will be presented, including the overall design, data collection, and analysis of data. Additionally, the chapter will include a description of how the findings from the reconnaissance phase were used in the planning phase to develop the proposed intervention, a strategic onboarding approach for doctoral students across all phases of the doctoral journey.

Chapter 2

The first–year experiences of doctoral students are critical in their overall success (Gardner, 2009). In EDL, a deliberate orientation and onboarding process for entering doctoral students to prepare them to complete their doctoral journey successfully was needed. The purpose of this MMAR study was to explore the creation of a strategic onboarding process for new EDL doctoral students to increase awareness of program expectations and resources and strengthen their sense of connectedness with peers and EDL faculty members. This chapter presents the study's overall design. It includes specific information about the reconnaissance phase, followed by an explanation of the iterative and blended nature of this study's planning and acting phases. Additionally, a summary of the planning process is presented.

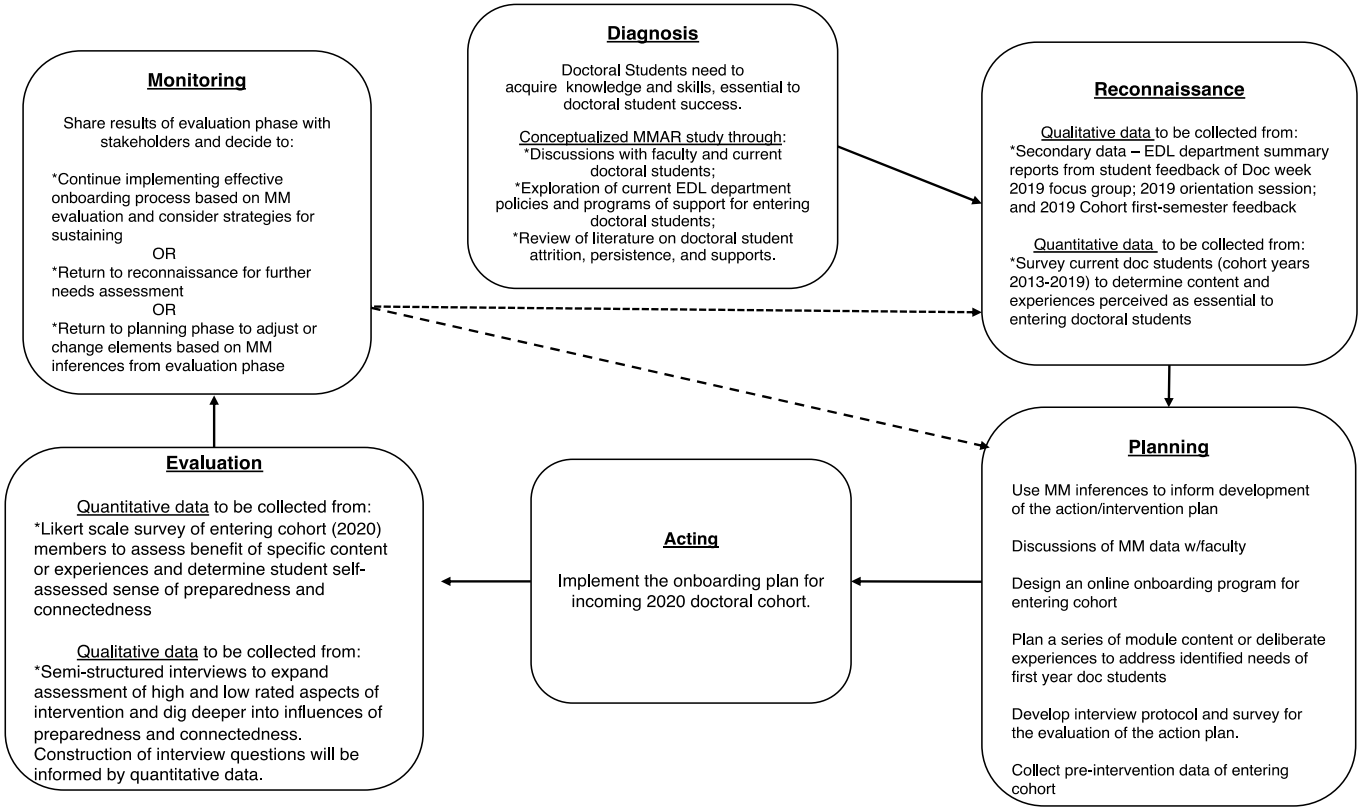
Overall Study Design

Traditional research seeks to add to existing knowledge. Action research addresses a specific need within a community or professional setting and provides a practical improvement of practice appropriate for that setting (Ivankova, 2015). This study used an MMAR framework to explore creating a strategic onboarding process for doctoral students to increase their awareness of program expectations, available resources helpful to their degree completion, and strengthen peer and faculty connections. The diagnosis phase, presented in Chapter 1, included feedback from faculty members and current doctoral students, an exploration of department policies and guidelines, and a literature review on doctoral student attrition and persistence. This phase revealed a need for an onboarding process to support entering online doctoral students. The MMAR framework facilitated an authentic exploration of this issue. It produced a more profound

understanding that allowed the creation of a meaningful intervention (i.e., onboarding process) and a thorough assessment of the intervention's effectiveness. Figure 2 displays the intended flow of this study through the six phases of the MMAR framework (Ivankova, 2015) and the opportunities to revisit phases as needed. The steps support a systematic form of inquiry that is cyclical and iterative. The framework allowed for flexibility because the knowledge gained from each stage informed the next and supported creating the most effective solution for the department.

Figure 2

Action Research Process for the Onboarding of Online Doctoral Students

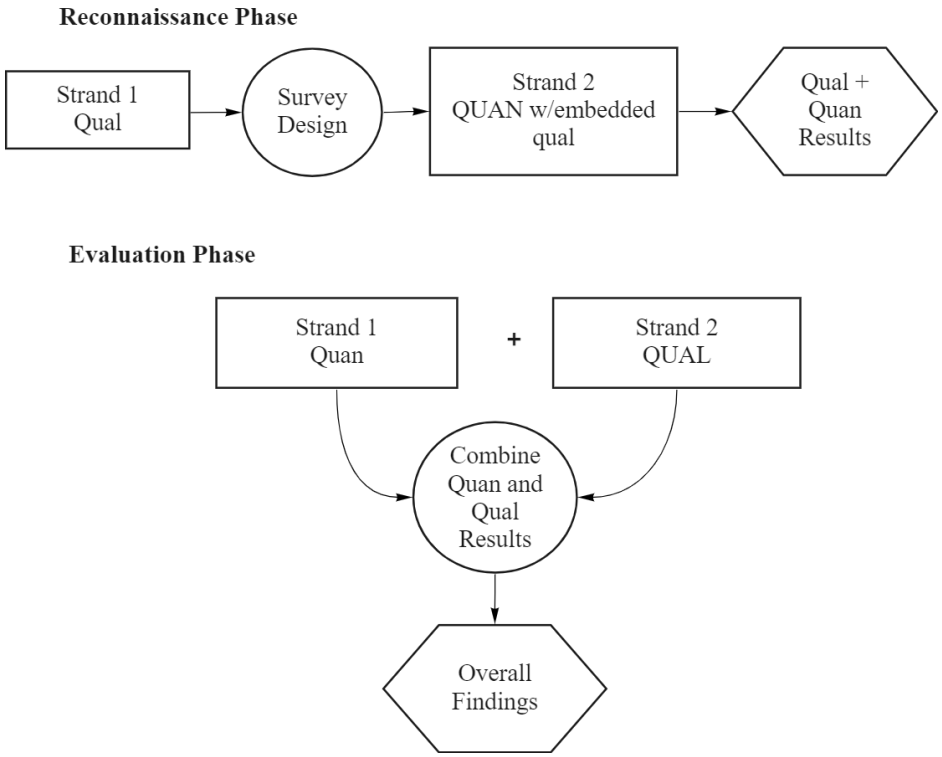


Note. Reprinted from *Mixed Methods Applications in Action Research: From Methods to Community Action* (p. 61), by N.V. Ivankova, 2015, Sage. Copyright 2015 by Sage.

Based on the diagnosis phase, an overarching study design evolved to address the problem of practice. A multistrand design allowed for the use of a sequential mixed methods approach during the reconnaissance phase, and a concurrent mixed methods in the evaluation phase. Figure 3 presents the overarching multistrand design chosen to effectively fulfill this study's purpose.

Figure 3

Multistrand MMAR Study Design



The use of mixed methods throughout the design of this study helped contextualize the issue, identify a rationale for the investigation, and drive the planning of a relevant intervention. A mixed methods approach helps gather different perspectives

and meanings (Ivankova, 2015). A researcher can present a more compelling case than with results from just one method (Yin, 2006). The converging evidence resulting from quantitative and qualitative data allowed a complete understanding of the research problem. Utilizing different data sources and analyzing multiple forms of information allows for triangulation, which clarifies and provides confidence in research findings and supports the development of a practical and relevant intervention. Additionally, triangulation adds to the breadth and depth of a study and enhances validity. Johnson et al. (2007) offered that when a researcher considers the perspectives of different stakeholders, a more informative study with enriched conclusions is produced.

Research Setting

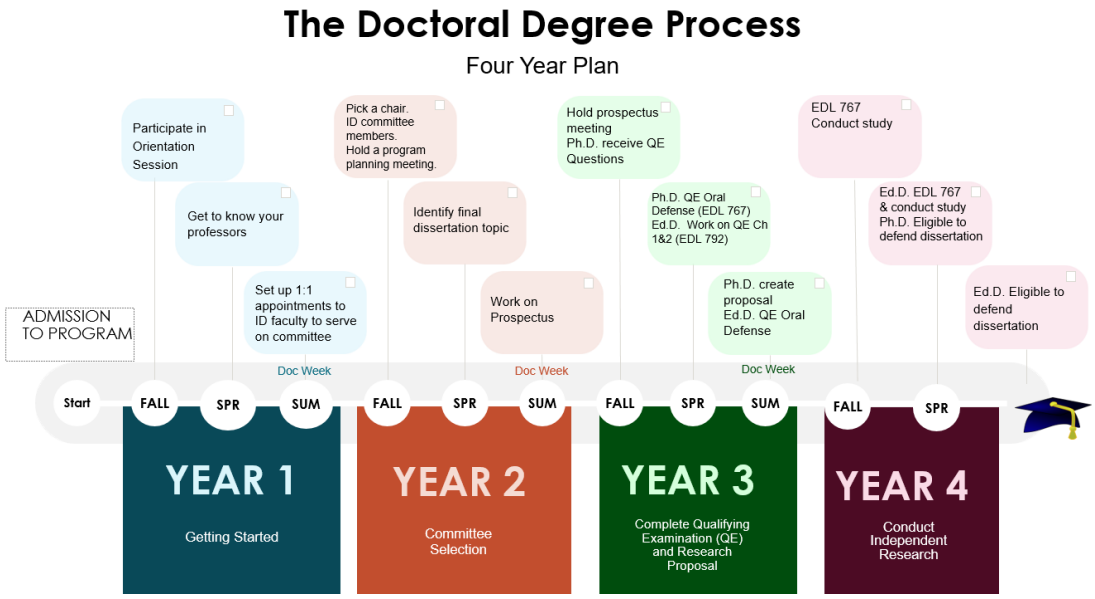
The Department of Educational Leadership offers two doctoral programs, a Ph.D. and Ed.D., and both are primarily delivered online using synchronous and asynchronous formats. Courses are provided through the learning management system, Canvas. Both doctoral programs are typically four–year programs requiring 42 credits followed by qualifying exams and a written dissertation. The Ph.D. program prepares students interested in pursuing positions as university faculty, postdoctoral scholars, social research scientists, or educational professionals outside traditional settings. The Executive Ed.D. program is appropriate for educational professionals interested in a practitioner doctorate to continue or advance their work in leadership roles to stimulate change in educational systems. Students enter yearly in the Fall semester as a cohort of typically 10–15 students. In addition, an online orientation session is offered via Zoom the week before the start of classes. The meeting is usually one hour in length, includes students and faculty members, and is led by the Director of Graduate Studies.

Doctoral Pathway

The program pathway (Figure 4) begins with core coursework for both doctoral degrees. The first year is an entering phase for students. The Director of Graduate Studies (DGS) serves as the student's primary advisor when they enter the program until they choose a dissertation chair. All cohort members enroll in the same two courses in the first semester, EDL 751 Foundations of Inquiry and EDL 700 Knowledge Base for Leaders. The second–semester enrollment keeps cohort members together for EDL 701 Leadership in Educational Organizations and branches students into research core courses based on their dissertation requirements (Ph.D. students complete a traditional dissertation; Ed.D. students complete an action research dissertation). Upon completing the first academic year in the program, students are encouraged to attend a one–week summer seminar on campus called Doc Week.

Figure 4

The Doctoral Degree Process



Note. Academic Advising Hub. By B. Rous, 2020, Retrieved April 2020 from https://uk.instructure.com/courses/1879734

Summer coursework is recommended for both programs. As students move into their second year of the program, the pathway continues with core coursework, and students choose electives to support their individual program goals or academic needs. Students are encouraged to select their dissertation advisor by the fall semester of their second year. The spring semester of the second academic year is the recommended time for students to narrow or begin their research topics. In the third academic year, doctoral students in both programs enroll in coursework designed to support progress towards their research proposal and qualifying exams. Both program pathways intend for students to take their qualifying exams (QE) during or after the spring semester. For the purposes

of this study, students are considered in a pre–QE phase until passing their qualifying exam. Once students pass their QE, they are identified as doctoral candidates and begin the dissertation proposal development and implementation process. In this study, students are in a post–QE phase once they have achieved doctoral candidacy. The last step to degree completion is dissertation defense.

Established EDL Onboarding Efforts

During the design and launch of the online doctoral program in 2013, several key elements and supports were implemented, which have become 'business as usual' practices within the department. Each established onboarding effort is presented and discussed below.

Cohort Model. The current cohort model started in 2013 and offers the dual benefit of creating connections for students and efficiently projecting course offerings. This approach is confirmed in the literature on doctoral persistence as a best practice (Spaulding, & Rockinson–Szapkiw, 2012). The cohort model is well received by EDL leadership, faculty members, and students for various reasons. It may even be considered a hallmark characteristic of EDL doctoral programs and is why some students choose an EDL doctoral program.

Online Orientation. An online orientation session has been part of the doctoral program since 2014. The session typically occurs the week before the start of the semester and is modified each year in response to student feedback.

Backchannel for Entering Cohorts. For EDL doctoral students, a backchannel is a form of digital communication fostering engagement between cohort members outside of coursework. This process was initiated by the first cohort of online doctoral students in

2013 and quickly adopted by the department for new incoming cohorts. Faculty members, who lead the first–year core courses, encourage students to search outside the course delivery system of Canvas and find ways to connect electronically. Entering cohort members agree on a preferred tool such as WhatsApp or Voxer. The backchannel creates a safe space where students chat, confide, and intentionally connect with cohort peers.

EDL Communications with Students. Historically there are two primary ways EDL communicates program information with students. First, an EDL listserv and department emails inform doctoral students as a group about relevant news, upcoming deadlines, and general announcements. The EDL website is another tool used to communicate information to students, such as program requirements, faculty members' research areas, and email contacts.

EDL Doc Week. The EDL department offered the first one–week in–person summer colloquium, now referred to as Doc Week, during Summer 2014. This practice brought online students together to meet face–to–face and interact with faculty members. Goals included supporting student connections with other students and faculty members. Additionally, this format provided students with an intensive opportunity to gather information and resources.

Reconnaissance Phase

The purpose of the reconnaissance phase was to explore the problem identified during the diagnosis phase, a need for enhanced efforts to support entering doctoral students. The reconnaissance phase uses additional facts and information concerning the identified need for change to develop a purposeful and relevant intervention. This section

describes the reconnaissance phase, including the phase design and research questions. A full description of each strand with research questions, description of the data sources or sample, data collection instruments, procedures, and analysis provide the full content of this phase. The integration of data across the strands and issues of reliability and validity are also presented. The section concludes with a summary of how findings from the reconnaissance phase informed the next step of the study, the planning phase.

Reconnaissance Phase Design and Research Questions

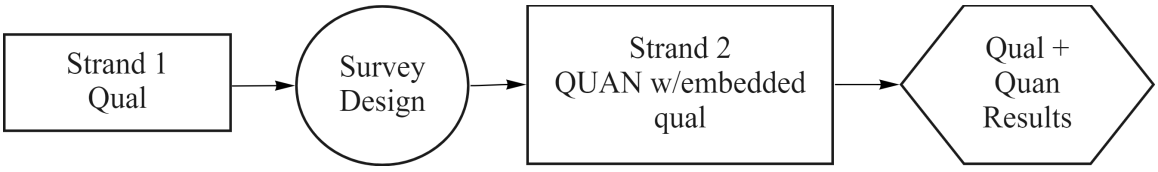
The overarching integrated research questions for the reconnaissance phase were *(a) what are the needs facing entering doctoral students, and (b) what are the supports considered essential for entering doctoral students?* Through a sequential exploratory qualitative–quantitative design, data were collected, analyzed, and interpreted to identify the challenges and needs of entering doctoral students and the perceptions of what doctoral students consider essential supports for incoming students.

Details of the consecutive implementation of the qualitative and quantitative strands are shown in Figure 5. First, the goal of the qualitative strand was additional fact–finding to understand the challenges doctoral students face by using data drawn from institutional reports. Findings from the qualitative strand helped determine data collection efforts for the quantitative strand. Second, the goal of the quantitative strand was to survey current doctoral students regarding their prioritization of specific content, experiences, and resources essential to include in an onboarding process for incoming doctoral students. For the reconnaissance phase, the quantitative portion of the strand was given more weight and helped inform the development of an action plan. The rationale

for integrating qualitative and quantitative methods in this phase was to obtain validated meta–inferences to guide the format and content of the onboarding process.

Figure 5

Reconnaissance Phase Sequential Qual/Quan MMAR Design



Strand 1: Qualitative

The purpose of the qualitative strand was to gain in–depth information and understand the experiences and perceptions of current doctoral students about their first–year experience and personal concerns or unmet needs as they entered the program. The research questions guiding this strand were:

- Research Question 1 (RQ1): *What do students at the end of their first year in the doctoral program identify as significant needs for incoming doctoral students?*
- Research Question 2 (RQ2): *What are the entering experiences of doctoral students?*
- Research Question 3 (RQ3): *What are the personal concerns of doctoral students during the first semester of enrollment?*
- Research Question 4 (RQ4): *How do identified needs of doctoral students relate to the 4 Cs of effective boarding?*

Strand 1 Data Sources. For this strand, the data sources included three institutional summary reports submitted to the Department Chair of EDL during the previous academic year. Each report resulted from assigned responsibilities in my role as a GA in EDL. Overall tasks were directed and supervised by the Department Chair, and

the reports were submitted as information and evidence of completed work assignments. Although primary sources are often preferred, these specific reports, as secondary sources, were selected because each one centers on student feedback regarding aspects of the doctoral experience and program. The summary reports include:

Source #1: Doc Week 2019 Student Focus Group Summary – August 2019

Source #2: Feedback of 2019 Online Orientation – November 2019

Source #3: Cohort 2019 Feedback on the Entering Experience – December 2019

The student perspectives within these reports and their recent date posit the information as relevant and timely based on the research questions for this strand. All three of these reports were created by me as a GA in the EDL department and housed in a protected folder on the EDL SharePoint site. Specific information about the activities that generated the information for the reports is provided below.

The first source (Appendix A), *Doc Week 2019 Student Focus Group Summary,* summarizes feedback from a focus group discussion with doctoral students participating in the 2019 Doc Week. Doc Week is a one–week summer colloquium held on campus. The event provides face–to–face interactions to support students in building connections with their peers and individual faculty members. Current doctoral students and EDL faculty members collaboratively plan the Doc Week agenda. Work sessions across the week provide doctoral program information, resources, and opportunities to progress along their research path.

In my role as a GA, I provided the department with student perspectives regarding challenges and essential needs during the first year of the program. The Director of Graduate Studies included a 45–minute student discussion time during Doc Week to

gather this information. As with all activities during Doc Week, this was an optional activity for students. The discussion was held in a conference room in the university student union. I opened the discussion by explaining my role as the department's GA and the goal of gathering their perspective regarding the doctoral experience of entering EDL students. Ten students participated and had completed their first year or second year in the doctoral program. I prepared four questions on different colored post–it notes in advance. After reading each question aloud, students recorded their answers and reflection anonymously on matching colored post–it notes. After collecting all responses, a time for open discussion or comments occurred. I invited students to share comments, compliments, or confusions regarding their entering doctoral experience to support departmental efforts to strengthen the program and better serve incoming doctoral students. Finally, I summarized the outcomes of this session and submitted the report to the Department Chair in August 2019.

The second report (Appendix B), *Feedback of 2019 Online Orientation Participants,* summarized feedback from entering doctoral students who attended the August online doctoral orientation session for the Fall 2019 cohort. I helped design and implement the online orientation session in August 2019 with the EDL Director of Graduate Studies. A follow–up survey provided student feedback on the session. The survey included questions addressing the orientation's format, time, content, exercises, and activities and an opportunity to offer suggestions and recommendations to the department on addressing entering doctoral student needs effectively. A report sent to the Department Chair in November 2019 summarized these results.

The third source (Appendix C), *Cohort 2019 Student Feedback on the Entering Experience,* summarized student feedback on first–semester experiences and perceptions of additional support needed for entering doctoral students. In Fall 2019, the Department Chair asked me to explore the first–semester experience for new students. At the students' request, a discussion was scheduled at the end of a synchronous class session in EDL 751 Foundations of Inquiry. The class was conducted via Zoom. The professor exited the online class for the last 30 minutes of the session. During this time, I facilitated a whole group discussion focused on students' experiences during their first semester, highlighting challenges, support, and essential needs. The submission of this report to the Department Chair occurred in December 2019.

Strand 1 Data Analysis. Reports were analyzed using content analysis. Content analysis allows a researcher to make qualitative inferences by examining the meaning and relationship of words and concepts found in communication (Elo, & Kyngäs, 2008). Content analyses of these reports helped identify themes of challenges, personal concerns, and unmet needs facing doctoral students during their initial year. A benefit of content analysis is that it is a discreet data collection method because the analysis occurs without the direct involvement of participants, which avoids the influence of the researcher's presence on the results (Franzosi, 2008). Also, it is a highly flexible method that can occur anytime, anywhere, and at a low cost. If the content analysis follows a systematic procedure that is easily replicable, the results can be considered reliable. However, because there is inherently a small level of subjective interpretation, the researcher recognizes that reliability and validity may be affected. This analysis method can also be reductive and time–intensive (Luo, 2019).

The content analysis procedure for this study was adapted from a process shared by Datt and Chetty (2016). Their method of analysis comprises eight steps including (a) preparing data, (b) defining the unit of analysis, (c) developing a coding scheme, (d) testing coding scheme, (e) coding, (f) assessing consistency, (g) drawing inferences, and (h) presenting findings.

For this strand, I used a deductive approach that was concept–driven rather than data–driven. With each of the reports (described above), the analysis focused on doctoral student challenges, needs, and supports. These three concepts and definitions were presented to a faculty member for review to ensure they were well defined and distinct prior to analysis. Data were then coded based on the Four Cs of effective onboarding (i.e., compliance, clarification, culture, or connections), as described in Chapter 1.

For analysis, I created a table and assigned column names to each of the Four Cs. Before examining each report, I reviewed the purpose of each. While reading each document, I extracted words or phrases that addressed the concepts of doctoral student challenges, needs, or supports and assigned them to one of the Four Cs strands within the table. Items were not duplicated across the Four C designations. After completing the table, I returned to the Four Cs definitions to confirm the assignment of the selected words or phrases to each "C.". Adjustments were made where inconsistencies of assignment occurred. Returning to each document and repeating the established process brought a level of confirmation that all relevant words or phrases were captured and documented. Following a developed process made the task more manageable, transparent, and reliable. All text were coded manually according to the determined steps.

The data sources were "interpreted not just consulted" (Sapsford & Jupp, 2006, p. 145). This required consideration of how the sources came into being, who authored them, what motives, assumptions, or constraints existed in their creation. Because I wrote the three sources chosen for content analysis, this approach had advantages and potential limitations. I was familiar with the documents and the summarized findings, which helped while coding the content; however, this presented an immediate threat of researcher bias. Therefore, unintended bias was addressed by creating a transparent deductive coding scheme and adhering to an established coding process.

Strand 1 Findings. Four research questions guided the qualitative component of this strand. A summary of the findings focused on challenges, needs, and supports is presented in Table 1. The first research question focused on *what students at the end of their first year in the doctoral program identify as significant needs for incoming doctoral students.* Data revealed a need for students to build connections with their peers in and across cohorts, coupled with a need for opportunities to get to know faculty members. Students also indicated a need to receive clarifying information about various program elements.

Table 1

Content Analysis Results of Doctoral Student Challenges/Needs/Suggested Support

Data Source	Challenges	Needs	Supports
Document 1: *Doc Week 2019 Student Focus Group Summary* **Purpose:** Feedback from post–first–year students about the entering doctoral experience	• Knowing degree timelines • Academic writing • How to use Zoom and Canvas • How to set up email, join listserv • How to read research • Connecting theory to research	• Knowing program expectations • Knowing staff and their roles and dept. resources • Understanding work/life/school balance • Meeting faculty members • Cohort connections	• Program pathway • Use of backchannel • Comfort with peers • Cohort connections in later phases • A sense of belonging through cohort model
Document 2: *Feedback of 2019 Online Orientation Participants* **Purpose:** Feedback of entering cohort members' experience with online orientation	• Understanding how first courses are delivered	• Program information before orientation • More time with faculty members	• Interact with faculty members • Get to know faculty members
Document 3: *Cohort 2019 Student Feedback on the Entering Experience* **Purpose:** Feedback of entering students about challenges, supports, and needs during entering semester		• Info on graduate certificates • Info on electives	• Choosing an advisor • Feeling of connectedness • Importance of backchannel

The second research question focused on understanding the *experiences of entering doctoral students.* The overall entering experiences of doctoral students include

benefits of the cohort model, use of the backchannel, and orientation experiences. However, needs exist for intentional opportunities to build relationships with other peers and faculty members outside the first semester of coursework.

The third research question focused on the *personal concerns of doctoral students during the first semester of enrollment,* which clustered around developing a feeling of connectedness with peers and faculty members and understanding program elements and expectations. Specifically, program elements such as choosing electives, managing technical components, and acquiring essential academic skills were revealed as needing clarification during the first semester.

The final research question was designed to determine *how doctoral student needs related to the 4 Cs of effective boarding.* Table 2 presents a summary of the findings. Overall, the most common needs are related to *connections*. Connections refer to building relationships and networks between cohorts and faculty members. For EDL students, these needs included meeting and getting to know faculty members, gaining comfort and developing trust with peers in the online environment, and building connections with cohort and other peers for support beyond the coursework phase. Consistent representation across all three reports indicates that elements of connection are a primary concern for students and a dominant perceived need.

The second most noted area of needs was related to *clarification.* Clarification refers to knowing the roles and expectations for performance in the doctoral program. Needs associated with clarification included a better understanding of program expectations, elective tracks, technology areas such as zoom, canvas, university email, and department listserv, and academic clarification in areas such as academic writing,

reading research, and connecting theory to research. The next noted area of needs was related to *culture*. Culture refers to understanding the formal and informal norms of the doctoral program and department. For EDL students, these needs consist of an awareness of leadership and staff positions and their roles and areas of responsibility, understanding how first core courses are delivered, and explanations on choosing an advisor within EDL. There was only one need related to *compliance*, and it is knowing degree timelines. Compliance refers to knowledge of elements considered "non–negotiable" or required as part of the doctoral pathway.

Table 2

Content Analysis Results of Student Needs Using the 4 Cs of Effective Onboarding

4 Cs of Effective Onboarding			
Compliance	**Clarification**	**Culture**	**Connections**
• Knowing degree timelines	• Program expectations • Program elements • Support for academic writing • How to use Zoom & Canvas • How to set up email, join listserv • How to read the research • Connecting theory to research	• Program pathway • Knowing Staff & department resources and their roles	• Meeting faculty • Use of backchannel • Personal support of others to create a sense of belonging • Comfort with peers • Work/ life/school balance • The cohort model is helpful • Cohort connections in later phases
	• Program information provided before orientation	• How first courses are delivered	• More time with faculty members • Interact with Faculty in a smaller group or one on one • Get to know faculty and their background
	• Info on graduate certificates • Info on electives	• Choosing an advisor	• Importance of backchannel • Feeling of connectedness

In summary, the needs of incoming postgraduate students were found in each of the Four Cs, with connections to peers and faculty members holding the most significant

importance. Also, during the beginning of a student's program, needs exist in clarification and culture.

Strand 2: Quantitative with Embedded Qualitative

The integration strategies of *connecting* and *combining* were used to design the quantitative strand of the reconnaissance phase. Thus, inferences from the qualitative analysis were used to inform the design of a survey. The purpose of this strand was to gain the perspective of currently enrolled doctoral students to determine what format, content, or experiences were considered essential for inclusion in an onboarding process for entering postgraduate students. The research questions driving this strand and the approach are presented in Table 3.

Table 3

Strand 2 Research Questions and Approaches

Research Question	Quantitative	Qualitative
RQ1 How do current supports available to students address the needs of first–year doctoral students?	X	
RQ2 What are the essential needs of first–year doctoral students as perceived by current postgraduate students?	X	X
RQ3 What do current doctoral students select as critical components of a first–year onboarding process?	X	
RQ4 Which of the 4 C's (compliance, clarification, culture, or connection) do doctoral students consider most important during the onboarding process?	X	

Strand 2 Sample. A sample of doctoral students, who began their doctoral program between Fall 2013 and Fall 2019 and were considered enrolled and progressing by faculty members, was targeted for this stage of the study (N=60). This purposive

sample was chosen because of the convenient access to currently enrolled students and consideration that those making progress may be more likely to participate in the survey. Using this targeted group supported a solid fact–finding mission of the reconnaissance phase.

A criticism of purposive sampling is the potential for researcher bias. The researcher acknowledges that specific characteristics influenced the selection of this sample. Still, the need for a particular perspective was pertinent to the study's goal and critical to answering the research questions. All individuals who met the criteria comprised the sample. Using a purposive sampling method also provided benefits of reduced time and cost. The limited size of the EDL community and the goal of the study to address an identified issue within this community prevents the researcher from seeking any generalizability of results.

Strand 2 Instrument. Using inferences from the qualitative strand, a survey instrument (Appendix D) was designed to gather specific information on the types of experiences and content students perceived as essential to an onboarding process for incoming doctoral students. The survey was entered into Qualtrics, an online survey administration tool. Before data collection, the survey questions were reviewed by the EDL faculty member supervising this study. The survey started with a consent section, which asked students to confirm their consent to complete the survey. The remainder of the survey included ten questions and one open–ended item. The first four questions of the survey were designed to gather general information about the respondents. Questions focused on their program (Ph.D. or EdD.), the year they entered the program (i.e., cohort

year), current phase in the doctoral program, and whether they had attended an orientation session before the start of their doctoral journey (i.e., yes, no, not sure).

The following two questions (Q6 and Q7) were designed to provide data on how EDL's current support efforts met students' needs. Question six focused on the usefulness of the online orientation using a five–point Likert scale (not at all useful; slightly useful; moderately useful; very useful; or extremely useful). Question seven asked students to indicate under which "C" five supports (i.e., website, faculty, cohort members, others, and orientation session) received during their first year in the program fell using a matrix format and forced–choice design. The Cs were labeled as; Rules and regulations (compliance), Program next steps (clarification), Culture in EDL (culture), and interpersonal connections (connections). A matrix format was chosen as it efficiently uses space, reduces the length of the survey, and allows the researcher to assess multiple items of data using the same scale (Liu & Cernat, 2018). It also reduces the monotony of reading a repeated question.

The survey also included three matrix formatted questions (Q8, Q10, Q11), which explored specific activities and experiences as critical components of an onboarding process and which phase of the doctoral journey each would benefit. In question eight, 16 items considered supportive to doctoral students were generated from a literature review, qualitative data from strand one, and personal experiences in the program. Respondents were asked to indicate the timeframe for when each would benefit students in the doctoral program (i.e., *first year – fall semester, first year – spring semester, second/third year of coursework,* and *after passing the qualifying exam*). In question ten, students were provided with a condensed list of seven general supports and asked to indicate the phase

in the program when it would be beneficial to receive the support. In question 11, students were asked to indicate how effective eight events or experiences would be in providing support specifically during the first year in the program using a four–point Likert scale (1= not effective, 2=somewhat effective, 3=effective, and 4=highly effective). Items included in this list were derived from the literature on doctoral persistence, data from strand one, and the lists from questions eight and ten.

Items across questions 8, 10, and 11 were designed to be purposively redundant in relation to major components of an onboarding process. For example, in constructing the items for question 10, a few items from question 8 were rephrased and included in the 7–item list (e.g., *understanding your program pathway* was rephrased to *knowing deadlines and pathway milestones*).

Survey question nine asked students to use a sliding percentage scale (0 – 100%) to indicate how much focus should be placed on each "C" during a first–semester onboarding experience. The last question on the survey was an open–ended question asking students to share additional suggestions regarding the support they consider essential to the success of doctoral students. Specifically, students were asked to state what should be kept or added as part of the entering experience.

Strand 2 Data Collection Procedures. Upon approval from the Institutional Review Board (Appendix E), an email containing the web survey link was sent to students. The email included a general explanation of the survey's purpose and a requested date for completion (Appendix F). Students received the same email as a reminder one week later, and the survey was closed two weeks after the initial email. Of the 60 currently enrolled doctoral students targeted, two declined to participate, and 19

completed the survey for a response rate of 32%. Table 4 shows the characteristics of the targeted sample (N=60) and respondents (n=19). Characteristics include program type, cohort year, and the program phase using *integrating* or *candidacy*. The *integrating* phase refers to students in their second year of coursework or beyond who have not taken their qualifying exam (QE). The *candidacy* phase consists of any student who has passed their QE, achieving doctoral candidacy status but has not yet graduated. A higher percentage of respondents were Ph.D. students (68%), compared to EdD students (32%). The cohort years for respondents ranged from 2014 to 2019 but clustered in 2016–2019, with most respondents being in years two, three, or four of their programs. A majority of respondents were in the candidacy phase (58%), with three having passed their qualifying exams, seven were collecting data, and one respondent was writing up their results and preparing their dissertation. Overall, respondents represented both doctoral programs, different cohort years, and distinct phases of the program, thus offering varying perspectives.

Table 4

Characteristics of Survey Population (N=60) and Survey Respondents (n=19)

Participant Characteristic	Sample		Respondents	
	%	N	%	n
Gender				
Male	50	30	Not collected	
Female	50	30	Not collected	
Doctoral Program				
EdD	52	31	68	13
PhD	48	29	32	6
Cohort Year				
2013	8	5	0	0
2014	10	6	11	2
2015	5	3	5	1
2016	23	14	21	4
2017	25	15	26	5
2018	8	5	16	3
2019	20	12	21	4
Program Phase				
Integrating	78	47	42	9
Candidacy	22	13	58	11
Attended an EDL department orientation				
Yes			63	12
No			21	4
Not sure			16	3

Strand 2 Data Analysis. Survey responses were exported from Qualtrics into an Excel worksheet for analysis. Information other than responses to survey items such as location, IP addresses, and duration of the survey were deleted. Closed–ended responses were analyzed by measures of frequency and central tendency.

To answer the second research question for this strand, open–ended responses on the survey were downloaded from Qualtrics and placed in a table format. As each response was read, words and phrases were highlighted that addressed doctoral student needs or

essential elements considered important to a successful doctoral journey. Specific themes that emerged were placed in another column on the table. This deductive approach allowed a focused examination of what students perceive as lacking in the current doctoral experience and support efforts critical to student success.

Strand 2 Findings. The first research question was designed to determine how current practices provided by EDL addressed the needs of first–year doctoral students, which was addressed via closed–ended responses on the survey. A slight majority of respondents (63%) indicated they had attended an online orientation, while 21% had not and 16% were unsure. Survey respondents who reported attending their orientation, they found it moderately useful, with an overall mean 3.46 (SD .67) on a scale of 1 (not at all useful) to 5 (extremely useful).

When considering their first year in the program, students were asked to indicate supports that were helpful to them and the area in which the support was most helpful (see Table 5). Almost all respondents (95%) reported that the *website, Faculty in first–year courses, and cohort members* provided support during their first year in the program. However, respondents differed slightly on the areas in which these supports were helpful. The highest level of agreement was for *cohort members*, with 83% of respondents indicating they supported interpersonal connections.

Table 5

Helpfulness of Current EDL Student Supports and Areas Addressed

	Helpful		Rules & regulations		Program next steps		How things are done		Interpersonal connections	
Current Support	%	N	%	N	%	N	%	N	%	N
Website	95	18	28	5	61	11	0	0	11	2
Faculty in 1st year courses	95	18	11	2	0	0	72	13	17	3
Cohort member(s)	95	18	6	1	0	0	11	2	83	15
Orientation session	74	14	36	5	43	6	7	1	14	2
*Other Individual**	68	13	8	1	15	2	46	6	31	4

* Specific information about 'other individual' was not collected.

Another goal of strand two was to identify the essential needs of first–year doctoral students and the critical components of a first–year onboarding process. To address this goal, respondents were asked to consider a list of activities/supports and indicate the period (Q8) and phase (Q10) during their program each provided benefit. In analyzing the data, I considered the supports marked as helpful by a majority of respondents (>50%) as indicative of an underlying student need.

As presented in Table 6 respondents indicated that a majority of the 16 supports listed (75%) were identified as being helpful in the Fall semester of a student's first year in the program, with six of those helpful only in the Fall semester. The two supports related to graduation and dissertation guidelines were seen as helpful only in the second to third year in the program.

Table 6

Doctoral Student Supports and Period Each Benefit (N=19)

	Fall semester		1st year spring semester		2nd–3rd year coursework		Passed QE	
Activities/Supports	%	N	%	N	%	N	%	N
Academic writing supports (workshop on resources, APA tutorial, access to UK writing center)	63	12	53	10	42	8	16	3
Awareness of university resources such as UK library, free software downloads, Graduate School website	84	16	32	6	21	4	0	0
Building relationships with faculty	79	15	68	13	32	6	16	3
Choosing an advisor	26	5	84	16	32	6	0	0
Creating a support network of people and resources	100	19	47	9	42	8	32	6
Deciding on your research area	32	6	58	11	58	11	0	0
Knowing graduation requirements and deadlines	42	8	26	5	53	10	58	11
Knowing dissertation guidelines and requirements	21	4	32	6	79	15	37	7
Meeting all faculty	58	11	58	11	37	7	11	2
Resources to support mental/physical wellness	89	17	58	11	58	11	47	9
Self–assessment of technology readiness for an online learning environment	95	18	16	3	0	0	0	0
Sense of community within your cohort	95	18	58	11	47	9	26	5
Strategies for achieving work/life/school balance	95	18	47	9	26	5	37	7
Strategies to Identify your individual strengths and challenges as a student in an online doctoral program	84	16	37	7	11	2	0	0
Understanding Doctoral Program vocabulary	89	17	37	7	0	0	0	0
Understanding your program pathway (what to do and when to do it)	74	14	79	15	26	5	5	1

* Multiple response option

Further examination of the needs of first–year doctoral students and the essential components of an onboarding experience (see Table 7) indicated an elevated level of agreement on the benefit of the seven types of support listed. However, there was less agreement on when within each phase of the doctoral program supports should be provided. A majority of students indicated needs for a *sense of connectedness with their cohort* (65%), and a *sense of support from a faculty member(s)* (61%) and *support from family* (56%) were needed during the first year of the program.

Table 7

Phases During the Doctoral Program that Types of Student Support Provide Benefit

			Phases during the doctoral program*									
Type of student support	Beneficial		First–Year % (N)		Course taking % (N)		Writing QE % (N)		Passed QE Collecting Data % (N)		Writing Dissertation % (N)	
Annual cohort check–in with Q/A for upcoming year	95	18	44	8	33	6	11	2	0	0	11	2
Information found from websites, books, or other resources	89	17	35	6	53	9	6	1	0	0	6	1
Knowing deadlines and pathway milestones	95	18	50	9	50	9	0	0	0	0	0	0
Mini orientation upon entering a new phase of the program	95	18	33	6	22	4	39	7	6	1	0	0
Sense of connectedness with cohort	89	17	65	11	29	5	6	1	0	0	0	0
Sense of support from a faculty member(s)	95	18	61	11	11	2	22	4	6	1	0	0
Support from family	95	18	56	10	6	1	11	2	6	12	22	4

* Forced choice response option

When asked about the effectiveness of onboarding events and experiences (see Table 8), respondents rated four of the six as effective (mean of 3 or higher) on a scale of 1 = not effective to 4 = highly effective. The *online repository of resources* was rated the highest, with a mean of 3.26 (*SD* = .64), while the experience of *monthly seminars addressing doctoral program topics of interest facilitated by doctoral faculty* was the lowest (*M* = 2.53; *SD* = .75).

Table 8

Effectiveness of Events/Experiences in Supporting Students (N =19)

Proposed event or experience	Mean	SD	Range
Monthly seminars addressing doctoral program topics of interest facilitated by doctoral Faculty	2.53	.75	2–4
Online repository of resources, guidelines, support strategies a student could access asynchronously as needed	3.26	.64	2–4
Planned experiences to meet and interact with faculty members in the department	3.17	.76	1–4
Q & A panel discussions with students further along; offered once or twice each semester	3.11	.85	2–4
Scheduled opportunities to connect with cohort peers to build relationships	3.21	.69	2–4
Suggested activities designed to help students identify individual strengths and areas of growth as a doctoral student	2.89	.85	1–4

1= not effective 2= somewhat effective 3= effective 4=highly effective

The open–ended question embedded within the survey asked students to share suggestions of supports they considered essential to the success of doctoral students. Of the 19 completed surveys, 11 students provided a response to this question. Comments clustered around three areas; the critical importance of connections to peers and faculty, positive aspects of current practices, and a need for support in later stages of the doctoral journey. Nine responses directly referenced connections to students and faculty members as critical to the success of doctoral students. For example, one student stated, “I believe the cohort connection is very helpful and adds greatly to the experience and chances of

sticking with it and finishing." Several comments from the open–ended question provided information about how current supports such as orientation, backchannel and Doc Week address student needs. One student commented:

> I think the program functions quite well. The orientation was a great kickoff and intro to the experience. Additionally, the effects of a strong cohort cannot be overstated. Having a reliable scaffold of colleagues to work with through coursework, as well as being sounding boards for one another is ultimately invaluable. In my experience, the UK faculty has been amazing and having a strong cohort support system only benefits the individual more and more throughout the process.

Another student wrote, "Maintain: high faculty connection / encouragement to do a backchannel", and another student referenced current practices by stating, "I really appreciate the backchannel I have with my cohort and that faculty suggest it as part of the culture in the program."

One response suggested a way to broaden current support by the statement, "Maintain the orientation to review the guidelines and the EDL website. Additionally, giving students a chance to hear from those in the cohort above them can be really helpful even beyond Doc Week."

The data from this question also revealed doctoral student needs across the phases. One student stated:

> Supports in the program after finishing coursework can't be minimized. I've tried at times to maintain cohort communications and it has seemed to not go anywhere when we don't see each other in required coursework. It's a lonely road later on and I wouldn't be surprised if this negatively impacts students' ability to complete.

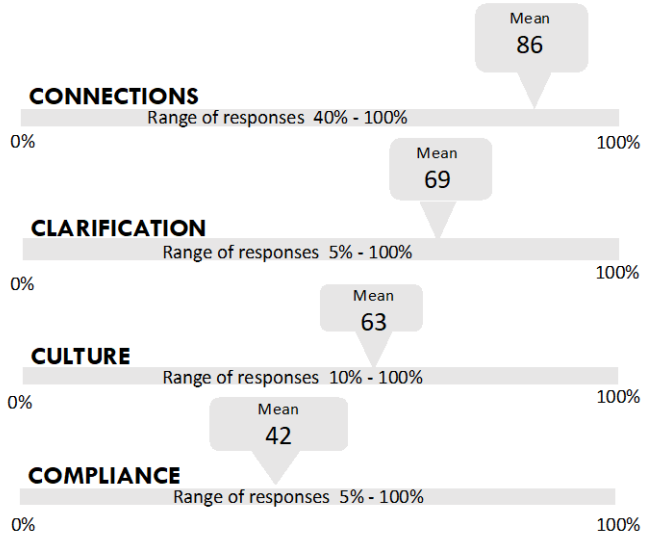
Another student suggested, "The EDL program should offer annual support of interpersonal cohesion between students and between students and faculty prior to the

first year of coursework beginning, through a doctoral candidate successfully defending their dissertation."

Data from one survey question addressed the fourth research question for this strand. Regarding the importance of the Four Cs during an onboarding process, participants used a sliding scale (0 – 100) to indicate where the focus of activities should be placed during the first semester of a doctoral program. Respondents indicated that the most focus (M= 85.95; SD = 14.94) should be placed on activities to support connections and building interpersonal relationships between peers and faculty (see Figure 6). The least focus (M = 42.21; SD = 28.55) should be placed on compliance such as following university and department rules and regulations.

Figure 6

Percentage of Focus on Four Cs Needed during Onboarding Entering Doctoral Students

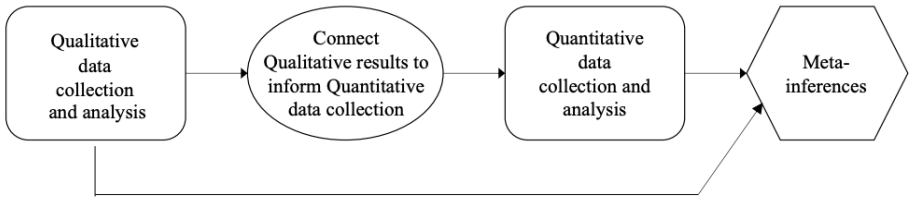


Reconnaissance Phase Findings and Discussion

The goal of the reconnaissance phase was to understand the needs facing entering doctoral students and the support they consider essential when entering a doctoral program. To accomplish this, I used a sequential qualitative + quantitative with embedded qualitative design. An essential component of mixed methods is integration (Creswell, 2011). Approaches to integration include combining, connecting, or merging. A study's purpose, design, and data collection strategies influence the choice of the integration approach. In this phase, the first strand influenced the second strand. Identified themes regarding the challenges and needs of incoming doctoral students from the qualitative exploration of institutional documents served to guide the next strand. The qualitative inferences connected to the quantitative strand and informed the development of a survey tool to address the research questions in the quantitative strand. The objective of the quantitative measurement instrument in strand two was to collect data regarding essential experiences and content for entering doctoral students to assist in creating the format and scope of the intervention. An embedded qualitative element through an open–ended question targeted specific supports students consider critical to doctoral student success. Inferences from both strands were *combined* during the interpretation of the reconnaissance phase, and the quantitative results with the embedded qualitative element confirmed and narrowed the qualitative findings from the initial strand. Figure 7 displays a conceptual model of the integration strategy for the sequential Qualitative + Quantitative MMAR study design used in this phase.

Figure 7

Conceptual Model of Integrating Strategy in a Sequential Qual + Quan Study Design



Note. *Mixed Methods Applications in Action Research: From Methods to Community Action* (p. 159), by N.V. Ivankova, 2015, Sage. Copyright 2015 by Sage.

The inferences drawn from combining the qualitative and quantitative strands provide the culminating piece of the reconnaissance phase by helping to answer the overarching integrated research questions *(a) what are the needs facing entering doctoral students, and (b) what supports are considered essential for entering doctoral students?*

The most significant finding resulting from the reconnaissance phase was that doctoral student needs occur across all phases of the doctoral program, not just upon entering. Findings from this phase also helped to understand the specific needs of students and how these needs connect to the Four Cs of onboarding discussed in the literature: compliance, clarification, culture, and connection. Connections to cohort peers or other doctoral students and individual faculty members were identified as a dominant need early on and this need remains constant throughout the doctoral journey. This need for connections included a sense of connectedness with a cohort, a sense of support from a faculty member, and a connection to information and resources.

Most students believe that the cohort model, the encouraged use of a backchannel for communication, and building a sense of community within the cohort are all crucial

support tools. Additionally, experience in interacting with faculty members and opportunities to build relationships with peers were seen as essential supports. Lastly, students indicated a desire for support in accessing or connecting with information and resources as a tool for knowing what they need to do next to be successful in the program.

Through the reconnaissance phase, a deeper understanding of EDL doctoral student needs evolved. These needs can be clustered into three types of connections: Student to Student, Student to Faculty, and Student to Information. A review of EDL practices demonstrates how current practices address each of the three types of connection and helped identify gaps in current practice (see Table 9).

Table 9

Current EDL Support and Area of Connection Addressed

Current EDL Practice	Areas of Connection Addressed		
	Student to Student	**Student to Faculty**	**Student to Information**
Cohort model	X		
Backchannel	X		X
Orientation	X	X	X
Department emails and website			X
EDL Doc Week	X	X	X

Two current practices, the EDL Doc Week and online orientation, address all three areas of connection. Survey responses, however, reflect the average rating for the orientation is only slightly higher than moderately effective. As the orientation session remains part of established practices of support, efforts to improve the session should be considered. Although students find support for compliance (rules and regulations) from the website, orientation session, and Faculty teaching their first courses, data showed

students desire help building connections. The data may indicate that students need support in dealing with the issues and elements they are least comfortable initiating independently, specifically their relationships with peers and faculty members.

Planning

The purpose of the reconnaissance phase of an MMAR study is to dig deeper into the diagnosis and develop a fuller understanding of the practice problem, in this case, that enhancing efforts to support doctoral students should not be limited to the entering phase but expand to include doctoral students across all phases of the doctoral journey. Additionally, the enhanced efforts should focus on strengthening students' connectedness to their peers, and faculty members, and increasing their awareness of program expectations and resources. The planning phase builds on this understanding and includes designing the action plan, setting action objectives, and considering expected outcomes. Action planning can occur at various levels ranging from an individual level, where the action will improve an individual's practice, up to a regional level where the impact of an implemented action plan can affect an entire region (Ivankova, 2015). This MMAR study embraced group–level action planning because it included developing and evaluating a new process for supporting doctoral students throughout their doctoral journey. The planning phase included collaboration with stakeholders, continued review of research, and an iterative approach to developing a substantive and effective action plan.

For the study's planning phase, I worked directly with two key stakeholders: the Chair of Doctoral Programs and the Department Chair (who, at the end of their term as Department Chair, became the Director of Graduate Studies). We met weekly from May through November to ensure progress towards developing, finalizing, and implementing

an action plan. Although the occurring pandemic of COVID–19 was not a focus in this study, the impact this societal challenge presented on all facets of life, including our online doctoral programs, was part of discussions and considerations as an action plan was developed.

The weekly collaborations included discussions of reconnaissance findings, current doctoral program needs, and department initiatives. All meetings were held virtually via Microsoft Teams, allowing for individual chat messages, document sharing, and discussion threads through Team posts between meetings. As part of the planning process, we identified five current practices within the department that students indicated as beneficial. These practices included using a cohort model, encouraging a backchannel for communication with cohort members, offering an online orientation for entering students, providing department email communications and a website, and arranging a one–week summer colloquium called Doc Week. Students who have previously attended Doc Week resoundingly stated that it is an essential experience in building connections with students and faculty members and accessing critical information and resources. This awareness influenced the development of our action plan as we discussed ways to extend elements of Doc Week throughout the academic year in a virtual environment. The planning process centered on maintaining these supports or considering ways to weave beneficial aspects into a comprehensive approach across all phases.

Initially, the study's purpose centered on entering doctoral students and efforts to increase their awareness of program expectations, resources helpful to their degree completion, and sense of connectedness with peers and faculty in the Educational Leadership Studies doctoral program. Moving through the action research methodology,

revealed doctoral student needs at each phase of the doctoral journey compelling the creation of a strategic onboarding process that considered doctoral students across all phases of the journey. The findings from the reconnaissance phase deepened and broadened an understanding of doctoral student needs.

First, findings suggested needs exist across all phases of the doctoral journey, not just at the beginning. Also, identified needs of doctoral students align with the Four Cs and can be addressed through attention to compliance, clarification, culture, or connection. Third, connecting to peers and faculty members is a dominant need early in the doctoral journey and remains a constant need throughout all phases. Last, students desire help accessing and connecting to information and resources to understand what to do next. These findings clarified the components essential to an effective action plan. Using the findings from the reconnaissance phase, the focus for planning actions expanded from first–year doctoral students to an overarching onboarding process supporting students across all phases of the doctoral journey. In addition to the broadened scope, three critical areas emerged related to connections: connecting students to students, connecting students to faculty members, and connecting students to information and resources. A return to literature confirmed the existence of doctoral student needs for connections. Connections between students are key in developing peer relations and can support doctoral student identity development and organizational socialization (Gardner & Gopaul, 2012). A sense of connectedness with doctoral peers can reduce feelings of imposter syndrome and build a sense of community (Sverdlik et al., 2020).

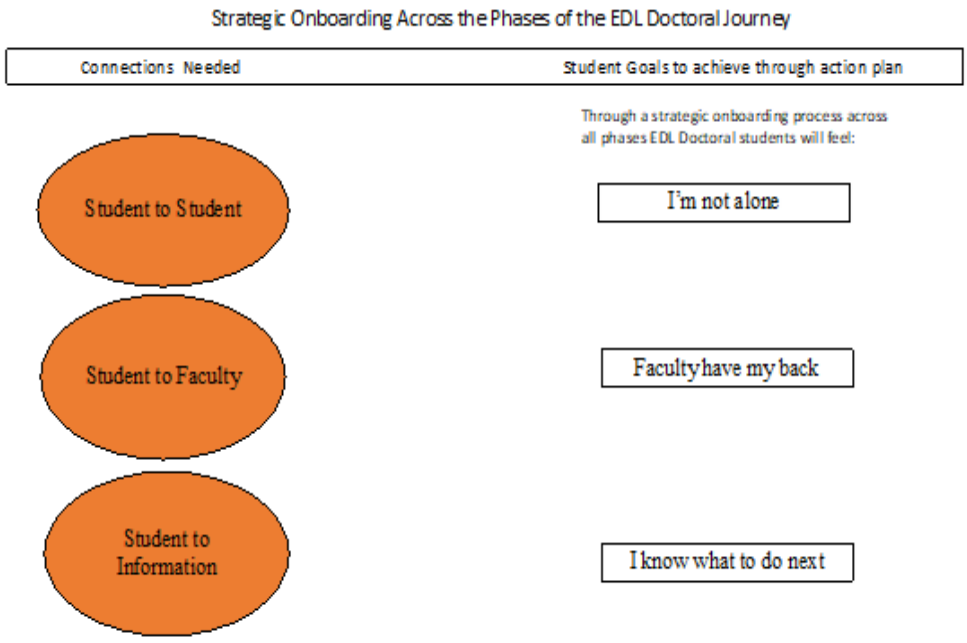
Connecting with faculty members provides students with the knowledge that someone is prepared to support them and creates a sense of trust. Knowing that Faculty

are willing and available as a resource encourages students to seek assistance and persevere (Holmes et al., 2016). When students are connected to information and resources, they become aware of program goals, milestones, and deadlines and feel more confident and prepared. Research shows that ambiguity, lack of clarification, and poor department communication increase feelings of frustration, isolation, and the consideration of attrition by doctoral students (Gardner, 2005; Golde, 2005; Lovitts, 2001; Terrell et al., 2009).

Based on the identified needs around connections, three targeted student goals were developed (Figure 8): *I'm not alone*, *Faculty have my back*, and *I know what to do next*. These goals are supported in the research. Specifically, connecting students to an awareness of program expectations and resources and strengthening a sense of connectedness with other students and faculty members are fundamental to a positive doctoral experience leading to doctoral student persistence and degree completion (Golde, 2005; Mullendore, & Banahan, 2005). Each student goal expresses one of the areas of connection identified as necessary by postgraduate students.

Figure 8

Connections Needed by Doctoral Students with Developed Student Goals



Viewed through a lens of the Four Cs for effective onboarding and grounded in inferences produced in the reconnaissance phase and research about doctoral persistence, the planning phase continued with efforts directed at developing experiences, resources, and activities to support students in achieving these three goals. Equipped with reconnaissance data confirming the appropriateness of applying the Four Cs to a strategic onboarding process, student–friendly descriptions of the Four Cs were developed to use as a framework during the planning phase. Each is presented in Figure 9.

Figure 9

Four Cs of Effective Onboarding

Compliance refers to *knowledge of elements considered "non–negotiable" or required as part of the doctoral pathway.* Compliance issues are the gatekeepers to degree completion and success. These issues include accessing essential information such as academic deadlines, financial obligations, advising requirements, enrollment registration, and specific forms required by The Graduate School.

Clarification refers to *knowing the roles and expectations for performance in the doctoral program.* Clarification is necessary to obtain a complete and thorough understanding of the organization's expectations. Examples of Clarification include descriptions of the program pathways, information on Canvas navigation, academic progress regulations, research requirements, or appropriate course electives and graduate certificates. Knowing the roles and expectations for performance in the EDL doctoral program helps reduce feelings of ambiguity and confusion.

Culture refers to *understanding the formal and informal norms of the doctoral program and department.* Efforts focused on culture provide a sense of formal and informal organizational norms. This information relates to "how we do things around here". Culture includes collective commitments of faculty members, academic socialization opportunities, and ways of communicating with each other.

Connection refers to *building relationships and networks between cohorts and faculty members.* Documented in the scholarly research on doctoral persistence and supported by our own doctoral student feedback, connections are a fundamental building block of doctoral support. Efforts in this area help build relationships and networks needed for student success. Interpersonal relationships with cohort peers and faculty members provide a sense of connectedness that benefits a student across all phases of the doctoral journey.

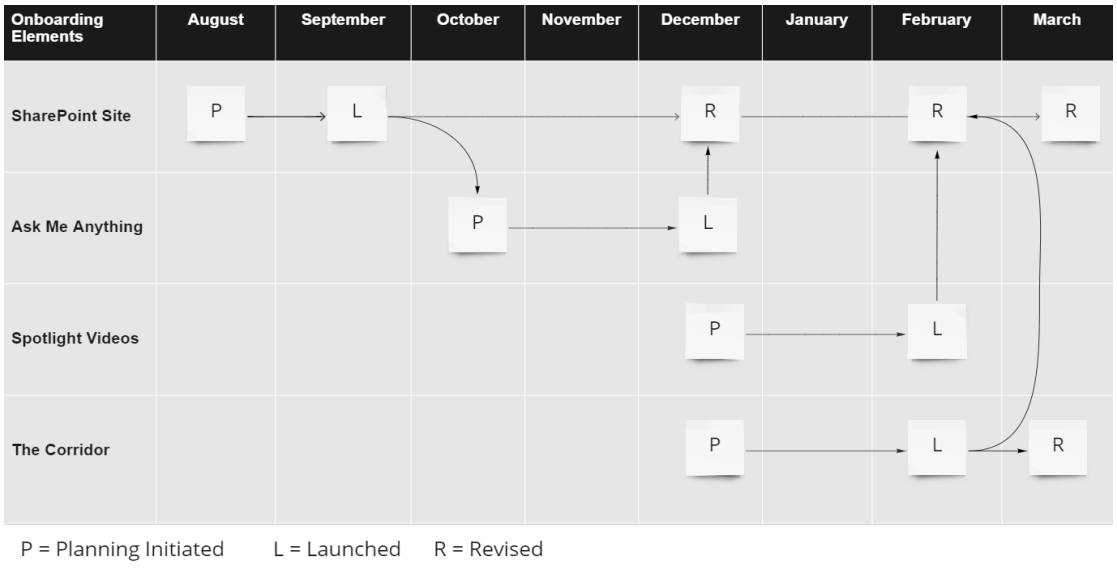
Ivankova (2015) noted that action research is “systematic, cyclical, and flexible” (p.48). These aspects of action research were particularly evident during this study’s planning and acting phases. The planning and action phases blended in an iterative and formative way and occurred concurrently. As each action plan element occurred, the

coordination, delivery, and overall experiences were examined in a back–and–forth exchange during our regular meetings. All actions were rooted in the three student goals, which acted as guideposts for developing activities and experiences. Key stakeholders had a role in delivering many of the tasks within the action plan. This approach exemplified the critical characteristic of action research being collaborative and cyclical. The knowledge produced underscores the view of McNiff and Whitehead (2011) stating, "Knowledge generation is a collaborative process and requires collegial interactions, active participation, and joint problem solving by all stakeholders and at all stages in the study process" (as cited in Ivankova, 2015, p. 57).

In collaboration with key stakeholders I drafted activities and experiences (planning) to achieve the three student goals. Four additional elements of onboarding were planned and implemented; a SharePoint site, Ask Me Anything Sessions, Faculty Spotlight Videos, and a MS Team named The Corridor. Figure 10 illustrates the iterative nature of the planning and acting phases of these elements during the fall and spring semesters. As pieces of the plan rolled out (action), feedback and reflection informed the upcoming planned elements. The spiral of formative feedback helped progress both phases concurrently. The tasks comprising the intentional onboarding plan occurred through the fall and early spring semesters. The next chapter provides specifics of each action task as part of the acting phase description.

Figure 10

Planning and Action Tasks Timeline



This chapter presented the study design with information about the reconnaissance phase. The rationale for using a sequential qualitative + quantitative with embedded qualitative MMAR study design and details of each strand were described. Also, the inferences produced from the reconnaissance mixed–method data analyses were provided. Finally, an explanation of the blended and iterative approach of the planning and action phases was presented as part of the description of the planning process.

In chapter three, details of the action plan and evaluation phase will be presented. A justification and explanation of the concurrent mixed method design is presented. Data collection and analyses efforts including meta–inferences from both strands and major findings are explained. Additionally, the chapter will include details of the monitoring phase and overall implications for educational leadership policy and practice.

Chapter 3

In this chapter, the acting and evaluation phases are presented. Each action plan effort, comprising the overall onboarding process developed for EDL doctoral students, is described. As part of the evaluation phase description, a justification of the design, a concurrent mixed method, is provided. An explanation of data collection and analysis efforts is presented, followed by meta–inferences from both strands of analysis and major findings. The chapter concludes with a description of the monitoring phase and overall implications for educational leadership policy and practice.

Acting Phase

The acting phase is the implementation of an action plan, defined by Craig (2009) as "a framework or blueprint that is implemented to improve practice, conditions, or the environment in general" (p. 237). Craig (2009) stated that the purpose of an action plan is "to target information gleaned from the action research study findings to set goals and establish a plan for meeting the goals" (p. 221).

During the planning phase, referencing the 4 Cs of effective onboarding (compliance, clarification, culture, and connections) ensured that the action plan addressed each. Additionally, a three–pronged approach emerged to support connections of doctoral students with other students, with EDL faculty members, and to increase awareness of information and resources regarding the doctoral journey. Creating experiences and activities to strengthen the essential areas of connections identified as *Student to Student*, *Student to Faculty*, and *Student to Resources* would also help EDL address the three student goals identified through the reconnaissance phase: *I'm not*

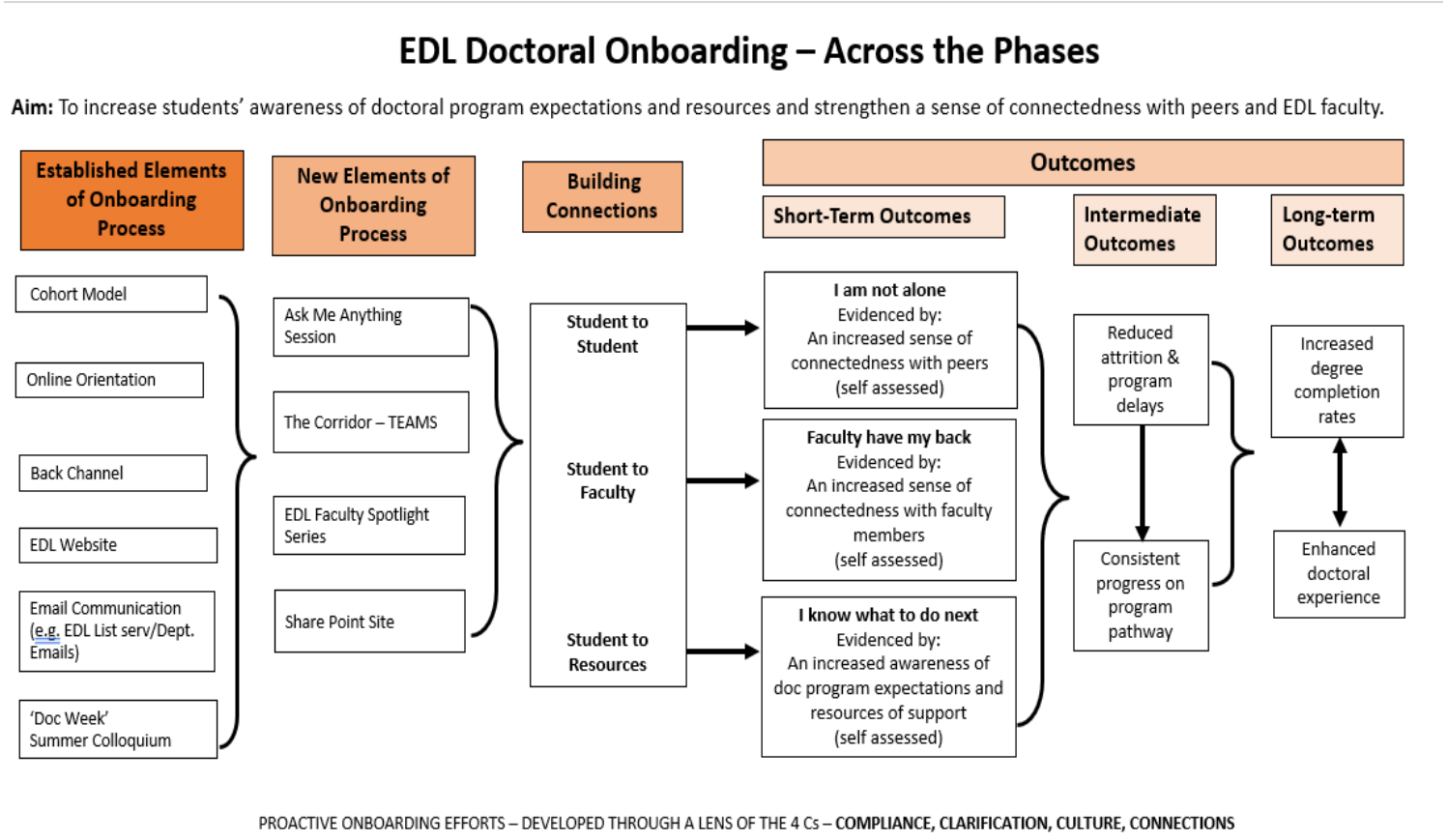
alone, Faculty have my back, and *I know what to do next.* The following section presents the overall action plan and describes each element added to the existing onboarding process.

Action Plan for Adding Elements to the Onboarding Process

An action plan was designed to support the addition of four new elements that could be implemented across the doctoral phases to enhance the onboarding process for EDL students. This plan was implemented throughout the fall and spring semesters of the 2020–2021 academic year. A logic model (Figure 11) was created to help ensure the new elements aligned with the overall purpose of the action research study. This model served as a guidepost for implementing the action and denoted the short, intermediate, and long–term outcomes to support the evaluation phase of the study.

Figure 11

Action Plan – EDL Doctoral Onboarding Across the Phases



New Elements in the Onboarding Process

As denoted in the Action Plan, four new elements were added to the existing elements of the EDL onboarding process: (a) a *SharePoint* site designed as a repository or 'one–stop shop' to connect students to doctoral information and resources; (b) planned synchronous online sessions titled *Ask Me Anything* to connect students to other students across cohort years; (c) *Spotlight Videos* to assist students in learning more about EDL Faculty; (d) an MS TEAM called *The Corridor* to support communication. The following section provides detailed descriptions of the four elements of the onboarding process.

SharePoint Site. The SharePoint site was designed to be a welcoming and supportive online environment for doctoral students. Students can choose information and resources to explore and return when there is a relevant need for the information. This approach supports research indicating that adult learners and online learners enjoy "just in time" resources (EAB Report, 2019). Additionally, the creation of this Site directly employed the reconnaissance data that students perceive an online repository of information as beneficial. Using MS Teams also supported an upcoming initiative of using MS Teams across the EDL Department.

The SharePoint site was officially launched in Fall 2020 by the Department Chair and Doctoral Program Chair via an email announcement to all doctoral students. Simultaneously, The Department Chair formed a group of volunteer students called the Champion Network. Students interested and willing to explore Microsoft Teams as a tool to support doctoral students within EDL joined this student team. The previously formed Doctoral Community Development Team discussed relevant student feedback and recommendations from the monthly Teams Champions meetings. The initial pages on the

SharePoint site included each doctoral program's pathway and course requirements, a welcome from the Program Chair of Doctoral programs, and a description of the three student success goals established by the EDL Department. Table 10 lists a title and description of the pages developed throughout the planning and action phases. A screenshot of the introductory page is presented in Appendix G.

Table 10

EDL Doctoral SharePoint Site Pages and Descriptions

Title of SharePoint Page	Brief description
Welcome Page	Welcome from the Chair of Doctoral Programs; Links to Pages focused on program, students, and Faculty
News and Announcements	Posted news and upcoming events/deadlines
Program pathways for both EdD and PhD	Degree pathways and core coursework requirements and suggested timeline
Definitions of the Four Cs	Explanation of the Four Cs: compliance, clarification, culture, and connection
EDL Faculty Spotlights and Profiles	Individual faculty video interviews and research profiles
Selecting and Forming Your Dissertation Committee	Guidelines and suggestions for committee selection and choosing a chair
Navigating the IRB (Institutional Review Board)	Information and resources around the IRB process; interview with IRB staff
Connecting with EDL Doctoral Students	Student biographies; student contact info, and current phase

Ask Me Anything Online Sessions. Ask Me Anything Sessions offered doctoral students a way to connect with students across cohort years. These synchronous online sessions highlighted doctoral students' topics of interest or concern at distinct program

phases. Table 11 shows the subject and targeted phase of each session offered during the fall and spring semesters. To encourage an online environment that felt confidential and safe for students to ask questions and share concerns, faculty members did not attend. Students further along the doctoral journey offered guidance and support by sharing their lived experiences throughout the program. Session topics were driven by either expressed needs or milestones of a phase. Acting as a student liaison, I emailed students further along in the program and requested their participation in an online session. Volunteers for a student panel were emailed details about the session, including a description, purpose, date, time, and zoom link. Each session was announced through a news post on the SharePoint site and an email to current doctoral students. Each session was scheduled for one hour and I facilitated the sessions by hosting the zoom room, providing a welcome, introductions, and a closing thank you. Appendix H provides an example of student announcements for some of the implemented sessions.

Table 11

Synchronous Online Sessions, Intended Doctoral Phase and Date Offered

Ask Me Anything Sessions	Doctoral Phase Focus	Semester/Month Offered
Ask Me Anything – General	Entering Phase	Fall 2020/October 14th
How to Choose Your Chair	Integrating Phase	Fall 2020/October 21st
Tips for the Doctoral Candidate	Candidacy Phase	Fall 2020/November 18th
Ask Me Anything – General	Integrating Phase	Spring 2021/February 11th
Navigating the IRB Process	Candidacy Phase	Spring 2021/February 18th

Faculty Spotlight Videos. Each EDL faculty member was contacted and requested to participate in a recorded interview via zoom to provide students with personal insights beyond the classroom. Questions for the interview were available to faculty members in advance (Appendix I). The recorded interviews were compiled into individual spotlight videos. Weekly during the spring semester, faculty members were highlighted by having their spotlight videos uploaded and available to view.

Simultaneously, the *Faculty Mind* channel, described below, became available to support communication between students and faculty. Faculty members agreed to monitor the channel during their highlight week and respond to questions or comments posted by students. A SharePoint news post announced that the highlighted faculty member would access the *Faculty Mind* channel and respond to student questions or comments. The weekly announcement of new faculty spotlight videos and the faculty's availability within *The Faculty Mind* channel provided an opportunity for communication and connection between faculty members and students. A screenshot of the SharePoint page that housed the videos is presented in Appendix I.

The Corridor. An MS Team, named *The Corridor* by student vote, was developed as a partner tool to the SharePoint site for ongoing communication with faculty and across students. Four channels within *The Corridor* were created, each with a defined purpose. The *General Channel* was reserved for general announcements and governance of *The Corridor.* To ensure accuracy and relevance, only team owners and moderators may make announcements to this channel. The *Watercooler* was *The Corridor's* social channel. The purpose was to provide a place where students, faculty, and staff of the EDL doctoral programs can congregate online and share news and

happenings from outside the program. The idea of replicating a workplace breakroom in an online environment spurred the creation of this channel. The *EDL TV* channel was a designated space for video within *The Corridor.* This channel was a repository for videos and recorded sessions, and the content ranged from virtual lectures, tech tips, panel discussions to community interviews. Students may return to view videos as the topic becomes relevant. The *Faculty Mind Channel* became active during the delivery of the Faculty Spotlight Videos. This channel created a space for students to pose questions to the EDL faculty, request support, or gain a faculty member's opinion or perspective on a matter. Students and faculty members interacted within the channels, including reading posts; responding to posts with an emoji or reaction; posting comments, or engaging in conversations through back–and–forth posts with individuals. Appendix J shows examples of how the *Watercooler* channel in The Corridor has been utilized.

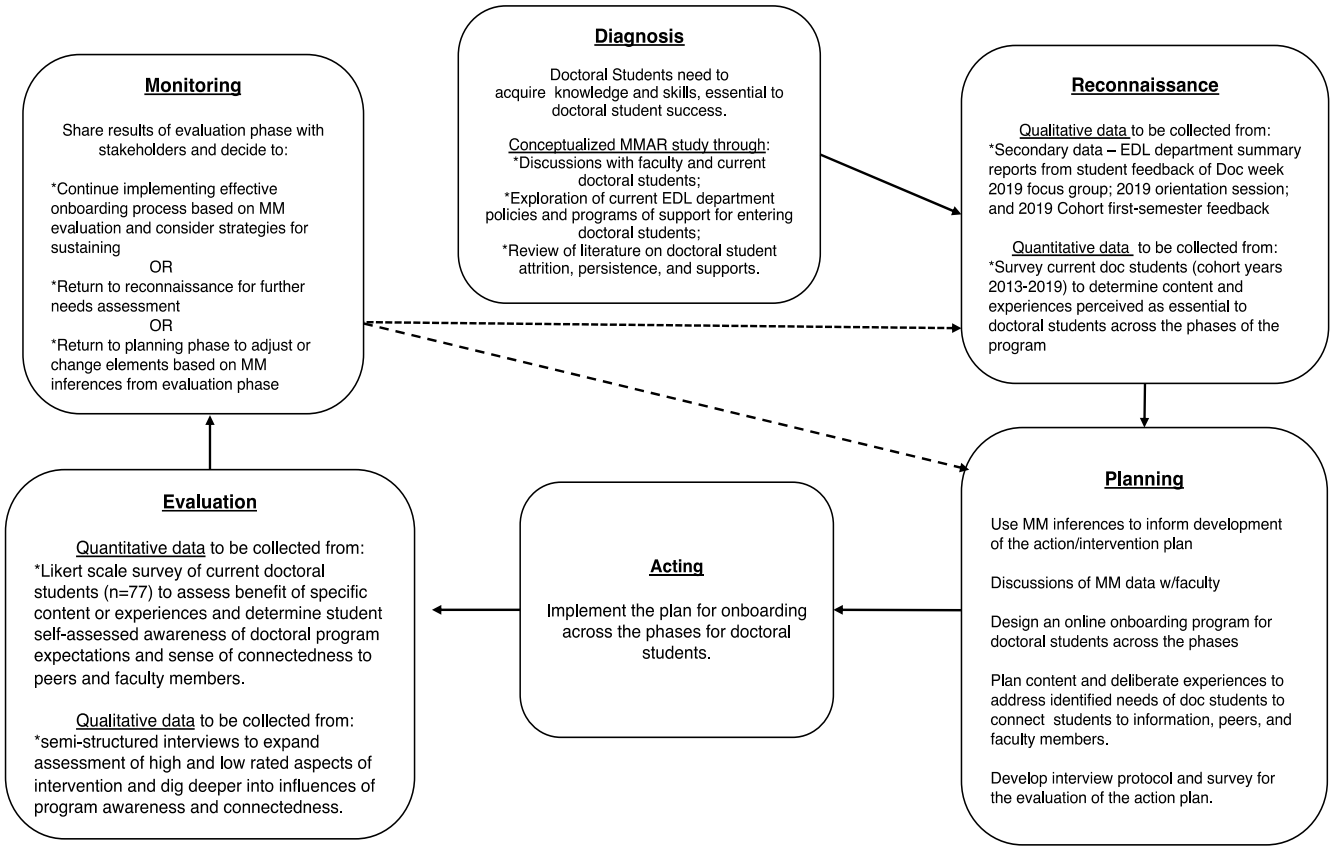
Evaluation Phase

An action research study aims to identify a problem within a community or organization and develop a relevant and effective action plan to produce an improved process or human condition (Ivankova, 2015). A critical phase within this design must include an evaluation of the implemented action. The evaluation phase includes efforts towards determining the achievement of established goals, the effectiveness of the action, and the sustainability of the action plan. During this phase, evidence is collected about the efficacy of the action, how stakeholders embraced the action plan, and whether adjustments or a revision should occur. The analyses determine the action plan's success or if further investigation of the problem is necessary. The completion of a well–planned evaluation phase positions the researcher and stakeholders to confidently consider the

effectiveness of the actions and prepare for the monitoring phase where next steps and sustainability efforts are considered. Figure 12 revisits the methodological characteristics of the MMAR (Mixed Method Action Research) process and provides specifics of the evaluation phase described in this section.

Figure 12

The Methodological Characteristics of the Mixed Methods Action Research Process



Note. Adapted from *Mixed Methods Applications in Action Research: From Methods to Community Action* (p. 61), N.V. Ivankova, 2015, Sage. Copyright 2015 by Sage.

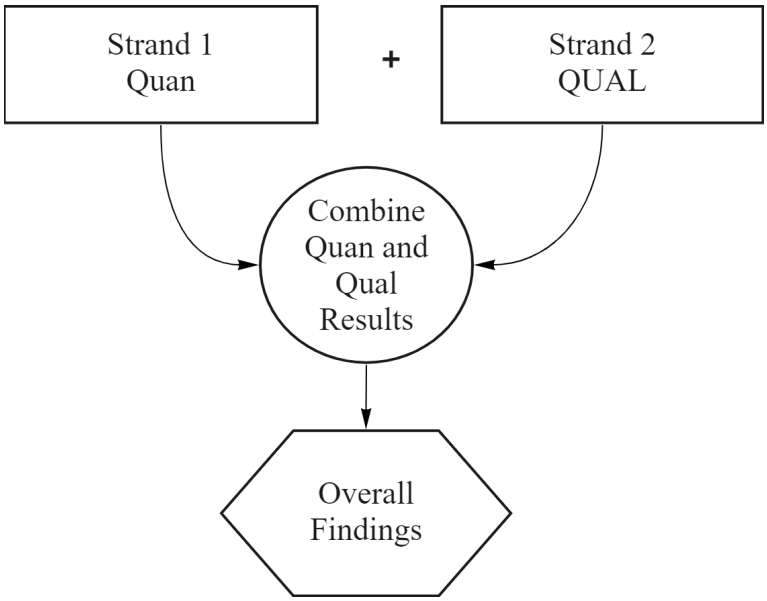
Evaluation Phase Design and Research Question

The researcher embraced the evaluation phase as an opportunity to consider whether the four new elements of the onboarding process led to the desired short–term outcomes, as presented previously in Figure 12. The evaluation phase was designed to answer the research question: *During the past year, how has the onboarding process impacted students' awareness of doctoral expectations and resources and their sense of connectedness with doctoral peers and faculty members?*

A concurrent mixed methods design was chosen to investigate the influence of the four new elements as part of the onboarding process across the phases of the doctoral journey (Figure 13). In the concurrent Quan + Qual design, two strands were conducted independently. This design allowed the comparison of quantitative and qualitative data. Distinct data collected from the concurrent strands provided complementary evidence and supported well–validated conclusions. This approach also allowed for the verification of knowledge and generation of new knowledge (Ivankova, 2015). The first strand produced quantitative data collected from an online survey. The survey queried the respondents' sense of connectedness to their cohort, other peers, and faculty members. The second strand drew from the sample of survey respondents willing to participate in an online semi–structured interview. The interview session was designed to solicit data regarding the individual experiences of doctoral students

Figure 13

Evaluation Phase Concurrent Quan/Qual MMAR Design



The evaluation phase began near the end of the Spring 2021 semester. The effectiveness of the onboarding process was determined by student perceptions of whether the process helped them acquire an awareness of doctoral program information and resources and strengthened connections with peers and faculty members.

Strand 1: Quantitative

The quantitative strand during the evaluation phase was designed to answer four research questions focused on the students' perceived levels of (1) connectedness to their peers, (2) connectedness to EDL faculty, (3) awareness of doctoral expectations, and (4) achievement of the three student goals. The data collected from this strand described present–status perspectives (Thomas, 2003) of EDL doctoral students.

Essential to this phase was establishing a student's perceived level of connectedness with peers and faculty and their awareness of expectations and resources.

Sample. Due to the limited size of the EDL community, a total population sampling frame was used. All currently enrolled doctoral students (N=77) were recruited to provide feedback to an online survey. Students included in this sample were engaged at all stages of the doctoral journey in EdD and Ph.D. programs and represented cohort years from 2012 to 2020. Insights gained through the inclusion of all doctoral student perspectives were critical in answering the research questions of this strand. The use of total population sampling allows for analytical generalizations about a population, which in this study is all EDL doctoral students (Sapsford & Jupp, 2006).

Instrument. A survey instrument was designed to gather information about students' sense of connectedness to peers and EDL faculty members, awareness of doctoral expectations, and achievement of three student goals. The survey was entered via Qualtrics, and questions were reviewed before data collection by the EDL faculty member supervising this research study.

The survey developed for this strand started with an explanation of the study's purpose and the voluntary and confidential nature of the survey. Students were asked to confirm their consent to complete the survey. Next, students rated their level of agreement to 26 statements using a five–point Likert scale format with levels arranged in ascending order of strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree (Appendix K).

Of the 26 statements on the survey, 17 were associated with a sense of connectedness to students and faculty members, six statements related to an awareness of

doctoral expectations, and three statements addressed the achievement of student success goals. The 17 statements directly addressing a sense of connectedness to students and faculty members were adapted from the *Doctoral Student Connectedness Scale* (Terrell et al., 2009). Rooted in Rovai's (2002) research and authorship of the *Classroom Community Scale,* Terrell's *Doctoral Student Connectedness Scale* (DSCS) was developed to understand limited–residency doctoral students' feelings of connectedness with peers and their faculty. Terrell's initial scale prepared in 2007 and 2008 included 24 statements designed to measure a participant's sense of community. Items included were adapted from Rovai's *Classroom Community Scale* or based on Terrell's professional experience supervising dissertation students. The current scale consists of 18 statements that were identified based on the evaluation of the instrument by subject–matter experts (Terrell et al., 2009). Items were presented in the form of statements, and participants rated their level of agreement to each from 1 (strongly disagree) to 5 (strongly agree). In a 2009 study by Terrell et al., students enrolled in a limited residency doctoral program (N=469) were invited to complete the DSCS, and responses from 223 students were analyzed. The measure's reliability was reported as acceptable with Cronbach's *alpha* = .873. The DSCS has subsequently been referenced in other studies examining doctoral student connectedness (Erwee et al., 2011; Spaulding & Rockinson–Szapkiw, 2012).

For this stage of the study, statements from the DSCS were rephrased to apply to doctoral students across all phases and address connectedness to students within a cohort, across cohorts, and faculty members. Phrasing was examined in each statement and changed from specifically addressing dissertation or dissertation writing to overall doctoral program. For example, the *DSCS* statement *I feel that students currently working*

on their dissertation care about each other was rephrased to read *I feel that students currently in my cohort care about each other.* Being mindful of the length and time to complete the survey, the nine statements from the DSCS addressing student–to–student connectedness, were separated to address connectedness within and across cohorts. Five were adapted to focus on students within a cohort. Four statements were adjusted to apply to students across cohorts. There were nine statements from the DSCS pertaining to connectedness to faculty members, and eight were adapted and used in this instrument. The omitted statement related to communication which was addressed in another statement. A comparison of the original *DSCS* items with the adjusted statements for this instrument rephrased to address connectedness with students within and across cohorts and faculty is provided in Appendix L. A preface was placed before each group on the survey clarifying the focus of the upcoming statements (e.g., *The following statements are designed to help better understand your doctoral experiences in EDL involving your cohort).*

Six statements were written in a format similar to the DSCS to explore awareness of EDL doctoral program expectations. Three additional survey items focused on EDL's recently established student goals: I'm not alone; Faculty have my back; I know what to do next. Respondents were asked to indicate their level of agreement to statements using the same Likert five–point rating scale ranging from strongly disagree to strongly agree.

The survey also included a repeated question from the quantitative strand's survey used in the reconnaissance phase. Students were given a list of seven general supports and asked to indicate the phase in the program when it would be beneficial to receive the support. Using a matrix format, students could mark multiple phases (*e.g.*, *First Year,*

Course taking, Writing Qualifying Exams, Passed Qualifying Exams, Writing the Dissertation). At the end of the survey, students were asked to participate in an individual online interview to share additional information about their experiences with the onboarding process. Those willing to be interviewed provided contact information to facilitate the scheduling of a zoom session.

Data Collection Procedures. Upon approval from the Institutional Review Board, all currently enrolled EDL doctoral students (N=77) were emailed an invitation to participate in the online survey (Appendix M). Student email information was obtained from the Doctoral Student SharePoint site. The invitation's cover letter contained the details of the study, elements of consent to participate, assurances of confidentiality, the voluntary nature of their participation, and a link to the online survey. Students completing the survey and providing an email to schedule an interview were removed from the recruitment email list. A duplicate email was sent five days later to remind students about the invitation to participate. The same email was sent eight days after the initial email as a final reminder.

Of the 77 students invited to participate, 51 (66%) opened the survey link. Of those, five declined participation, and 45 completed the survey for a response rate of 45%. Data were exported from Qualtrics into an Excel spreadsheet. Columns containing identifying information such as IP address and location were deleted, and respondents were assigned an identification number. The email addresses of participants volunteering for an interview remained on the spreadsheet and were not deleted until the survey and interview responses were linked during strand two.

Data Analyses. The data analysis for this strand included both central measures of tendency and variance. EDL doctoral students' sense of connectedness was examined across three areas: cohort members, peers across cohorts, and faculty members. The overall mean and standard deviation were calculated for each group of statements addressing an area of connectedness. Following the analysis performed in Terrell's work, the mean and standard deviation for each survey statement were calculated (see Table 12). The percentages and number of responses for each rating were also calculated (see Table 13). Finally, the statements relating to the three student goals and the question concerning when supports would benefit during the doctoral journey were analyzed using descriptive statistics, including mean, standard deviation, percentages, and number of responses.

Findings. Considering the first research question of student–to–student connectedness, data revealed a higher overall mean of connectedness to students within their cohort (M=4.20: SD= 0.36) compared to a mean of 3.62 (SD =.18) for connectedness with peers across cohorts (see Table 12). Looking closer at student–to–student connectedness, data indicated the highest level of agreement was for the statement *I feel that students currently in my cohort care about each other* (M = 4.56: SD =.78). The lowest level of agreement was for the statement *I feel like fellow students who are in my cohort are like a family* (M = 3.80: SD =.96), which also had the largest percentage of students who were neutral on the statement (18%: see Table 13).

Table 12

*Mean Scores for Questions Related to Connectedness (*N = *45)*

Items	Mean	SD
Within Cohort Student–to–Student Connectedness	**4.20**	**0.36**
I feel that students currently in my cohort care about each other.	4.56	.78
I feel like fellow students who are in my cohort are like a family.	3.80	.96
I communicate regularly with other students in my cohort.	3.82	1.35
I feel I can trust other students who are in my cohort.	4.44	.86
I feel like I can rely on the students in my cohort for support.	4.40	.98
Across cohort Student–to–Student Connectedness	**3.62**	**.18**
I feel connected to other students in the doctoral program	3.76	1.19
I feel like I can rely on other doctoral students outside my cohort for support	3.36	1.09
I feel like I can easily communicate with other students about the program	3.71	1.06
I feel a spirit of community with other doctoral students in EDL	3.64	1.05
Student–to–Faculty	**4.43**	**.27**
I feel that I am encouraged to ask questions to the EDL faculty.	4.64	.68
I feel a spirit of community between the faculty and myself.	4.33	1.02
When I ask questions or submit work to a faculty member, I feel like I receive timely feedback.	4.29	1.06
I communicate with faculty members about the doctoral process on a regular basis.	3.89	1.03
I feel that I am receiving adequate support from the faculty while I am working on my coursework or dissertation.	4.38	1.05
I feel that the feedback I receive from the faculty is valuable.	4.69	.67
I feel confident that the faculty will support me while I am working through my doctoral program.	4.60	.75
I feel I can trust the faculty while I am working through my program pathway (e.g., rely on faculty members to follow through on commitments, keep confidences, treat people with respect, help me learn).	4.67	.74
Student Awareness of Doctoral Expectations	**4.28**	**.26**
I am aware of compliance information regarding the EDL doctoral program	3.93	.91
I know how to find clarification regarding aspects of the doctoral program.	4.38	.68
I am aware of program expectations of the EDL doctoral program	4.53	.66
I am aware of how a doctoral program is different than other degrees I have pursued.	4.58	.72
I am aware of the culture and values of the EDL department.	4.08	.87
I am aware of doctoral student resources offered by the EDL department.	4.17	.72

Table 13

*Levels of Agreement for Questions Related to Connectedness (*N = *45)*

Items	Level of Agreement to Connectedness Statements									
	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	N	%	N	%	N	%	N	%	N
Within cohort Student–to–Student Connectedness										
I feel that students currently in my cohort care about each other.	0	0	4	2	4	2	22	10	69	31
I feel like fellow students who are in my cohort are like a family.	0	0	13	6	18	8	44	20	24	11
I communicate regularly with other students in my cohort.	13	6	7	3	0	0	44	20	36	16
I feel I can trust other students who are in my cohort.	2	1	0	0	11	5	24	11	62	28
I feel like I can rely on the students in my cohort for support.	2	1	7	3	2	1	27	12	62	28
Across cohort Student–to–Student Connectedness										
I feel connected to other students in the doctoral program.	9	4	7	3	11	5	47	21	27	12
I feel like I can rely on other doctoral students outside my cohort for support.	2	1	22	10	31	14	27	12	18	8
I feel like I can easily communicate with other students about the program.	2	1	11	5	27	12	33	15	27	12
I feel a spirit of community with other doctoral students in EDL.	2	1	18	8	11	5	51	23	18	8
Student–to–Faculty										

Items	Level of Agreement to Connectedness Statements									
	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	N	%	N	%	N	%	N	%	N
I feel that I am encouraged to ask questions to the EDL faculty.	0	0	2	1	4	2	20	9	73	33
I feel a spirit of community between the faculty and myself.	4	2	2	1	7	3	29	13	58	25
When I ask questions or submit work to a faculty member, I feel like I receive timely feedback.	4	2	4	2	4	2	31	14	56	25
I communicate with faculty members about the doctoral process on a regular basis.	2	1	9	4	18	8	40	18	31	14
I feel that I am receiving adequate support from the faculty while I am working on my coursework or dissertation.	4	2	4	2	2	1	27	12	62	28
I feel that the feedback I receive from the faculty is valuable.	0	0	2	1	4	2	16	7	78	35
I feel confident that the faculty will support me while I am working through my doctoral program.	0	0	2	1	9	4	16	7	73	33
I feel I can trust the faculty while I am working through my program pathway (e.g., rely on faculty members to follow through on commitments, keep confidences, treat people with respect, help me learn).	0	0	2	1	9	4	9	4	80	36
Student Awareness of Doctoral Expectations										
I am aware of compliance information regarding the EDL doctoral program.	2	1	7	3	11	5	56	25	24	11
I know how to find clarification regarding aspects of the doctoral program.	0	0	2	1	4	2	47	21	47	21

Items	Level of Agreement to Connectedness Statements									
	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	N	%	N	%	N	%	N	%	N
I am aware of program expectations of the EDL doctoral program.	0	0	2	1	2	1	36	16	60	27
I am aware of how a doctoral program is different than other degrees I have pursued.	0	0	0	0	13	6	16	7	71	32
I am aware of the culture and values of the EDL department.	0	0	9	4	7	3	51	23	33	15
I am aware of doctoral student resources offered by the EDL department.	0	0	2	1	11	5	53	24	33	15

Concerning their sense of connectedness with students across cohorts, student survey responses showed the highest agreement with the statement; *I feel connected to other students in the doctoral program* (*M* = 3.76: *SD* = 1.19). The lowest level of agreement was with the statement *I feel that I can rely on other students outside my cohort for support* (*M* = 3.36: *SD* = 1.09). This statement also received the most significant percentage of students who were neutral on the statement (31%). Overall, the statements concerned with connectedness across cohorts held higher rates of neutral responses.

The following section of the survey focused on a student's sense of connectedness with faculty members and addressed the second research question in this strand. Data indicated an elevated level of trust with faculty members, shown by an overall calculated mean of 4.43 (*SD*=.27). The statement about receiving valuable feedback from faculty held the highest mean (*M*=4.69: *SD*=.74). Respondents also strongly agreed (80%) that faculty can be trusted, as evidenced by following through with commitments, keeping confidences, and treating people with respect (*M*=4.67: *SD*=.74). After combining responses of agreement, somewhat agreed and strongly agreed, data showed a high prevalence of students (93%) feel encouraged to ask questions to the EDL faculty and 89% of respondents feel confident that faculty would support them through their doctoral program. The statement about communicating with faculty regularly about the doctoral process produced the lowest mean rating of 3.89 (*SD*=1.03) and reflected responses of neutral (18%) and somewhat disagree (9%).

The data gathered about students' awareness of doctoral expectations and available resources indicated that 96% of the respondents *somewhat* or *strongly agreed*

that they were aware of program expectations of the EDL doctoral program. This statement generated a mean of 4.53 (*SD*=.66). Looking more deeply at a student's awareness of doctoral expectations, the highest level of agreement was to the statement; I *am aware of how a doctoral program is different than other degrees I have pursued,* as shown by a mean of 4.58 (*SD*=.72). Data regarding awareness of compliance information and understanding the culture and values of EDL showed lower levels of awareness with combined ratings of neutral, somewhat disagree, or disagree of 20% and 16%, respectively.

The survey presented three statements to answer the research question relating to a student's perceived achievement of each student goal. Table 14 displays each statement with the calculated mean and standard deviation and Table 15, the percentages and response counts for the ratings. The data shows that most students surveyed either somewhat agreed or strongly agreed with each statement. The means and standard deviations for all three statements displayed were similar. The highest mean existed for the student goal of '*Faculty have my back' (M*=4.42: *SD*=1.01). Considering the standard deviation, a closer look at the percentages and response counts shows this statement had responses across all ratings and is the only statement of the three with responses of strongly disagree. The next highest mean was for the statement relating to the goal of '*I'm not alone'* (*M*= 4.35: *SD*= .80), with the largest percentage of students (89%) responding with either somewhat or strongly agree. Important to note is the data revealing higher neutral and negative responses for both goals, with 10% of combined responses being neutral or in disagreement about the statement '*Faculty have my* back', and 11% regarding the statement, '*I am not alone'*. Examining the data collected about

the student goal, '*I know what to do next'* revealed the lowest mean of 4.26, and only 13% responded with strongly agree.

Table 14

*Mean Scores for Questions Related to Student Goals (*N= *45)*

Statements addressing student goals	Mean	SD
I feel there is a structure of available student support and that "*I am not alone".*	4.35	.80
I feel I am familiar with faculty members and that "*Faculty have my back".*	4.42	1.01
I feel I am aware of program expectations and resources and that "*I know what to do next."*	4.26	.65

Table 15

*Percent of Agreement and Number Responses for Statements About Student Goals (*N=*45)*

Statements about student goals	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	N	%	N	%	N	%	N	%	N
I feel there is a structure of available student support and that "*I am not alone."*	0	0	4	2	7	3	38	17	51	23
I feel I am familiar with faculty members and that "*Faculty have my back."*	4	2	2	1	4	2	24	11	64	29
I feel I am aware of program expectations and resources and that "*I know what to do next."*	0	0	2	1	4	2	58	26	13	16

A question about types of student support and the phase when each provides benefit was repeated from the survey used during the reconnaissance phase. Students considered seven types of support and indicated the phase(s) the support provides benefit. During the reconnaissance phase, this question limited respondents to choosing one phase. As reported in the previous chapter, the two phases most frequently selected were first–year and course taking. In this strand of the evaluation phase, the question was presented in a format allowing multiple responses. Allowing respondents to choose more than one phase revealed that students considered the support beneficial across the phases of the doctoral journey. The findings shown in percentages and response counts are represented in Table 16. At each phase, survey participants marked support from a faculty member and support from family as beneficial at each phase, evidenced by a percentage greater than 50%. The support of information from websites, books, or other resources and knowing deadlines and pathway milestones were also considered beneficial across all phases.

Table 16

*Phases During the Doctoral Program, that Types of Student Support Provide Benefit (*N=*45)*

Type of student support		**Phases during the doctoral program***									
		First Year		Course taking		Writing QE		Passed QE Collecting Data		Writing Dissertation	
	N	%	n	%	n	%	n	%	n	%	n
Annual cohort check–in with Q/A for upcoming year	125	78	35	69	31	58	26	40	18	33	15

Type of student support		Phases during the doctoral program*									
		First Year		Course taking		Writing QE		Passed QE Collecting Data		Writing Dissertation	
	N	%	n	%	n	%	n	%	n	%	n
Information found from Websites, books, or other resources	119	78	35	56	25	56	26	33	15	42	19
Knowing deadlines and pathway milestones	133	78	35	69	31	58	26	47	21	44	20
Mini orientation upon entering a new phase of the program	106	73	33	38	17	58	26	29	13	38	17
Sense of connectedness with Cohort	127	87	39	62	28	47	21	42	19	44	20
Sense of support from a faculty member(s)	159	76	34	69	31	67	30	71	32	71	32
Support from family	156	71	32	62	28	71	32	69	31	73	33

* More than one phase could be chosen

Inferences. Survey data shows a sense of connectedness for students within and across their cohorts. The strongest sense of connectedness is present within the cohort. Overall, there is a strong sense of connectedness with faculty members. Although the connectedness level of students across cohorts is less and could be targeted as an area for focus, the reported sense of connectedness across cohorts is still considered acceptable (*M*= 3.62). The possibility exists that the strategic onboarding efforts of the acting phase strengthened this sense of connectedness from its previously unknown level. The qualitative approach employed in strand two investigated possible influencing factors.

Although most students (over 80%) agreed they were aware of compliance information and department resources, these statements also received the highest neutral scores at 11%. Selecting the neutral score indicates a student did not agree or disagree with the statement and may be unsure of their awareness.

In terms of the student goals, data show that most students agree they are achieving each goal. However, ratings of strongly agree for the statement '*knowing what to do next'* are lower (13%) than the other two goals. The data collected from an earlier section of the survey shows a strong awareness of doctoral program expectations (see Table 13). Sixty percent of respondents strongly agreed they were aware of program expectations. Therefore, it is noteworthy that a student's awareness of expectations may not result in a student 'knowing what to do next'.

The student goal about *faculty have my back* stands out with the highest ratings for strongly agree (64%); however, it is also the student goal producing neutral, disagree, and strongly disagree ratings. These data indicate that students who have achieved this goal feel confident when it is reached. Until then, the feeling of faculty support is either lacking or questionable.

Strand 2: Qualitative

The purpose of Strand 2 was to gain a deeper understanding of the onboarding experiences of EDL online doctoral students during the past year and factors contributing to their sense of connectedness and awareness of doctoral expectations. The qualitative strand of the evaluation phase allowed participants to expand on survey responses related to their doctoral experience and sense of connectedness by sharing specifics about their journey. Hesse–Biber (2015) purports that qualitative approaches embrace the lived experiences of individuals and assist researchers in understanding, gaining knowledge, and furthering social change. Collecting qualitative data through individual interviews supported a more thorough evaluation of the effectiveness of the onboarding process.

The data gathered through the interview sessions expanded the understanding of the doctoral experience and explored which features of the onboarding process provided benefit. Additionally, the interview format allowed follow–up questions to extract details and key elements that influenced a student's experience. Questions for the interview were designed to seek personal reflections of doctoral experiences during the last year and draw out themes of influence resulting from the onboarding experience. Using experience narratives or personal stories reveals individual perceptions of certain life experiences through an individual's unique style of communication rather than the words of the researcher (Thomas, 2003). The advantages of this approach include the cooperative nature developed between researcher and participant and the potential to demonstrate both the differences and similarities among individuals. Most importantly, a deeper understanding of the experience within a particular community creates a benefit that negates the inability to generalize beyond these narratives.

The following research questions drove the design of this strand:

Research Question 1: *Which elements of the onboarding process provided benefit? How?*

Research Question 2: *To what degree did elements of the onboarding experience affect your awareness of doctoral expectations?*

Research Question 3: *To what degree did elements of the onboarding experience affect your sense of connectedness to peers or faculty members.*

Sample. Students agreeing to participate in a post–survey online interview comprised the sample population for the qualitative strand of this phase. Volunteers for individual interviews were recruited via the online survey. In the last question of the

survey, respondents were asked if they were willing to provide additional information about their doctoral experience through an online interview. Interested participants provided an email address to coordinate a day and time for a Zoom session.

A cover letter was emailed to each respondent volunteering for an interview requesting a day and time for the Zoom session within the next ten–day period, details of the interview session, consent to participate, and contact information for questions about the research (Appendix N). After five days, the same cover letter was sent to remind those yet to respond. A final email was sent eight days after the initial email if a date and time had not been received. As volunteers emailed a day and time for an interview, I responded within 24 hours with an Outlook invitation and zoom link as confirmation.

Of the 45 survey respondents, 33 individuals consented to an interview; however, five did not reply to scheduling requests. Thus, 28 interviews were subsequently scheduled and completed, resulting in a 62% response rate. Interviewees included students enrolled in the Ed.D and Ph.D. programs across the cohort years of 2014 – 2020. Also represented were students at three distinct phases of the doctoral program, including the first–year, integrating, and candidacy. Characteristics of the interviewees are presented in Table 17.

Table 17

Characteristics of Interview Participants (N=*28*)

Participant Characteristic	%	N
Gender		
Male	46	13
Female	54	15
Doctoral Program		
EdD	46	13
PhD	54	15
Cohort Year		
2012	0	0
2013	0	0
2014	7	2
2015	4	1
2016	11	13
2017	25	7
2018	4	1
2019	18	5
2020	32	9
Program Phase		
First Year	32	9
Integrating	21	6
Candidacy	46	13

Interview Protocol. A semi–structured interview protocol was used (Appendix O). A semi–structured script guided the interview sessions yet allowed participants to expand their answers. The design of the interview protocol allowed students to reveal factors contributing to their sense of connectedness and awareness of doctoral expectations. The interview questions were intentionally general to allow students to identify impactful experiences outside of the four new onboarding elements implemented through the acting phase of the study.

Each interview began with thanking and welcoming each participant. Volunteers were reminded of the confidential nature of the interview, the content of the previously

emailed consent form, and the session recording. The remainder of the interview comprised questions designed to explore participants' doctoral experiences.

Using a general question at the beginning of an interview can help establish comfort and trust between the researcher and participant (Sapsford & Jupp, 2006). Therefore, the first interview question asked students to share how they had engaged with EDL peers, faculty members, and program information and resources during the past year. This format allowed students to share experiences without feeling there was a right or wrong answer. Responses would also reveal if any of the four action plan steps were referenced by students as engagement methods. Next, students were asked to consider how and when they became aware of doctoral program expectations. This question addressed the second research question in this strand and determined whether any action plan elements contributed to an awareness of expectations.

The next portion of the interviews focused on each of the four added elements implemented as part of the onboarding process during the last year; EDL Doctoral SharePoint Site, Ask Me Anything Sessions (AMA), Faculty Spotlight Videos (FV), and the Teams *The Corridor*. First, students were asked if they were aware of the feature and, if so, to describe their experience with the feature and the frequency of access or level of engagement. Anyone stating limited or no involvement was prompted to share reasons why. Near the end of the interview protocol, students were asked to consider their doctoral journey and describe what strengthened their sense of connectedness to their peers, EDL faculty, and program information/resources. With the final question, students considered the future of their program experience. They were asked to choose which area of connectedness was most important in supporting their progress towards degree

completion, a connectedness to peers, faculty, or resources and information. Interview sessions lasted an average of 15–20 minutes. Prompts and additional strands of questioning throughout the interview were not pursued to avoid creating a sense of coercion or bias towards a certain response. To close the session, participants were thanked for their participation and reminded of the researcher's contact information for any questions.

Data Collection and Analysis. Interviews were conducted via Zoom and recorded. Recording the interviews allowed for the collection of verbatim responses, which exposed ways of reasoning and unique perspectives of each participant. The contact information provided by participants volunteering for an interview was entered on an electronic spreadsheet and connected to their survey ID # for later data analysis. This was the only place where the identifying information resided. Only I had access to this spreadsheet, which was kept in a separate file and folder from all other research materials on the researcher's passcode–protected personal computer.

The audio and video recording and a written transcript available from Zoom were downloaded at the end of each interview. Each transcript was assigned a participant number, read and edited for errors in language occurring from transcription, and all identifiers were removed. The audio file was used to confirm participant responses to ensure transcript accuracy if needed. The transcripts were stored in files with password protection on my personal laptop computer, and the audio and video recordings were deleted.

Interview transcripts were read, and direct responses to each area of the interview protocol were highlighted. A deductive approach was used to create an analysis

framework to ensure each major area of the interview protocol and associated research question was addressed during the analysis process. Thus, an Excel spreadsheet was created with participant ID listed vertically and major areas placed horizontally. A keyword or phrase was selected and recorded under the appropriate area on the spreadsheet from the highlighted responses on each transcript, regardless of the question the respondent was answering. Within each area, an inductive approach was used to assign codes to the responses. Responses could have been coded in multiple areas. For example, if a student's response to how they engaged with peers included a response to how they engaged with faculty members, the information was coded in both areas. Table 18 presents the connections between the interview protocol, research questions for this strand, areas addressed, and codes utilized in this strand's analyses.

Table 18

Interview Protocol, Research Question, Area Addressed, and Codes

Interview Protocol	RQ addressed	Areas Addressed	Codes
How have you engaged with peers, faculty members, and info/resources (over the last year)?	RQ 3	Peer Engagement	Backchannel Zoom with coursework Email Text Teams AMA
		Faculty Engagement	Zoom during coursework Email The Corridor Teams Zoom Videos/SharePoint
		Information and Resources	SP site UK grad school IRB website

Interview Protocol	RQ addressed	Areas Addressed	Codes
			EDL emails Advisor hub EDL website Faculty as resources
How did you gain an awareness of doctoral expectations?	RQ 2	Gaining Awareness of Doctoral Expectations	Orientation Orientation and SharePoint After the first year – going through the first–year Summer Doc Week Candidacy and independent research phase At the end of the program by going through all phases
Share your experience with each of the four additional elements added to EDL's onboarding process.	RQ1,2,3	SharePoint Site Ask Me Anything (AMA) Sessions Faculty Spotlight Videos The Corridor	Deductive framework using the Four Cs Compliance Clarification Culture Connections
What has made the greatest impact on your sense of connectedness to students, faculty, and resources/information	RQ 3	Connectedness to students Connectedness to Faculty	Doc Week, Backchannel, Teams, Doc Week and AMA, Coursework, Doc Week/Backchannel, AMA session

Interview Protocol	RQ addressed	Areas Addressed	Codes
		Connectedness to Resources/Info	Doc Week, Orientation, Zoom Conversations, Doc Week & Teams, Teams
			Doc Week, SharePoint, Peers and Faculty Coursework, Doc Week & Teams
As you complete your degree, what will be the most important connection?	RQ 3	Most important connection to support degree completion	Peers, Faculty, Resources, Early on students but later faculty, Peers and faculty, Peers and resources

The interview protocol also included a query of students to determine their awareness of the four additional onboarding elements. Responses were recorded as either aware or not aware. Additionally, students who stated an awareness of an onboarding element were asked to describe their level of engagement or access to each during the last year. Keywords or phrases were selected from each interview transcript and recorded on the spreadsheet. Based on responses, levels of access were identified and defined for each action step, and responses were grouped into one of four levels (no access, minimal access, moderate access, or frequent access). Definitions crafted for each level are presented in Table 19. A numeric code was assigned to each response. (0 = no access, 1 = minimal, 2 = moderate, 3 = frequent).

Table 19

Definitions of Student Reported Level of Access

	Onboarding Action Step			
	SharePoint Site	Ask Me Anything Sessions	Faculty Spotlight Videos	The Corridor
Minimal Access	Access the site 1 – 2 times per semester	Attended one session	Viewed one video	Read, or posted at least once
Moderate Access	Access 3+ times per semester – 1 time per month	Attended one or more sessions	Viewed more than one video	Read, or posted several times
Frequent Access	Access 1+ times/month – weekly access or more	Attended every session	Viewed most or all videos	Read, or posted consistently

While reading the transcripts, I considered the research questions for this strand which focused on the added elements to the onboarding process; however, the format of interview protocol allowed for expanded answers and revealed details of the student experience including aspects outside the study's action plan. As each transcript was read, I diligently recorded all responses that impacted connectedness to students, faculty members, and information, including those outside the action plan for this study.

A numbered coding system was assigned to the individual codes and used to organize the data into a numerical format for further analyses. Coding the qualitative data in numerical form assisted in revealing likeminded responses and consensus among participants through the calculation of the frequency of responses. This approach is referred to as quantitizing, understood to mean the transformation of qualitative data into a numerical translation. Sandelowski et al., (2009) present that quantitizing qualitative

data is the forming of experiences into data and then converting the data into numbers. This approach facilitates qualitative analyses through pattern recognition, verifying interpretations, and providing order to the qualitative data resulting from open–ended and minimally structured techniques. Incorporating numbers in qualitative research has advantages according to Maxwell (2010). These include an ability to generalize within the setting studied referred to as *internal generalizability,* to identify the diversity of beliefs within the group, to identify patterns, and an ability to provide evidence to support interpretations and refute claims of biased data selection.

Table 20 shows a summary of the major areas addressed (deductive frame) and codes with numerical values.

Table 20

Areas Addressed and Codes with Numerical Values

Areas Addressed	Codes with Numerical Value
Cohort year	2014, 2015, 2016, 2017, 2018, 2019, 2020
Gender	1 = F, 2 = M
Program Type	1=EdD, 2= Ph.D.
Phase of program	1= First–year, 2= Integrating, 3=Candidacy
Peer Engagement	1 = Backchannel, 2 = Zoom with coursework 3 = Email, 4 = Text, 5 = Teams, 6 = AMA
Faculty Engagement	1 = Zoom coursework, 2 = Email, 3 = The Corridor, 4 = Teams, 5 = Zoom, 6 = Videos/SharePoint
Information and Resources	1 = SP site, 2 = UK grad school, 3 = IRB website, 4 = EDL emails, 5 = Advisor hub, 6 = EDL website, 7 = Faculty as resources
Gaining Doctoral Expectations	1 = Orientation 2 = Orientation and SharePoint 3=After the first year by going through the first year 4 = Summer Doc Week participation

Areas Addressed	Codes with Numerical Value
	5 = Candidacy and independent research phase 6 = At the end of the program by going through all milestones/phases
SharePoint Site	**Level of Awareness** 0=not aware, 1= aware **Level of Access** 0=no access, 1=minimal access, 2=moderate access, 3=frequent access **Reason for minimal or no access** 0=no time, 1=not needed yet, 2=no longer relevant 3=no interest
Ask Me Anything (AMA) Sessions	**Level of Awareness** 0=not aware, 1= aware **Level of Access** 0=no access, 1=minimal access, 2=moderate access, 3=frequent access **Reason for minimal or no access** 0=no time, 1=not needed yet, 2=no longer relevant 3=no interest
Faculty Spotlight Videos	**Level of Awareness** 0=not aware, 1= aware **Level of Access** 0=no access, 1=minimal access, 2=moderate access, 3=frequent access **Reason for minimal or no access** 0=no time, 1=not needed yet, 2=no longer relevant
The Corridor	**Level of Awareness** 0=not aware, 1= aware **Level of Access** 0=no access, 1=minimal access, 2=moderate access, 3=frequent access **Reason for minimal or no access** 0=no time, 1=not needed yet, 2=no longer relevant, 3= difficult due to work (toggle)
Connectedness to students	1= Doc Week, 2 = Backchannel, 3 = Teams, 4 = Doc Week and AMA, 5 = Coursework, 6 = Doc Week/Backchannel, 7= AMA session
Connectedness to Faculty	1 = Doc Week, 2 = Orientation, 3 = Zoom Conversations, 4 = Doc Week & Teams, 5 = Teams

Areas Addressed	Codes with Numerical Value
Connectedness to Resources/Info	1= Doc Week, 2=SharePoint, 3= Peers and Faculty 4=Coursework, 5= Doc Week & Teams
Most important connection to support degree completion	1=Peers, 2=Faculty, 3=Recourses, 4= early on students, later faculty, 5= peers and faculty, 6= peers and resources

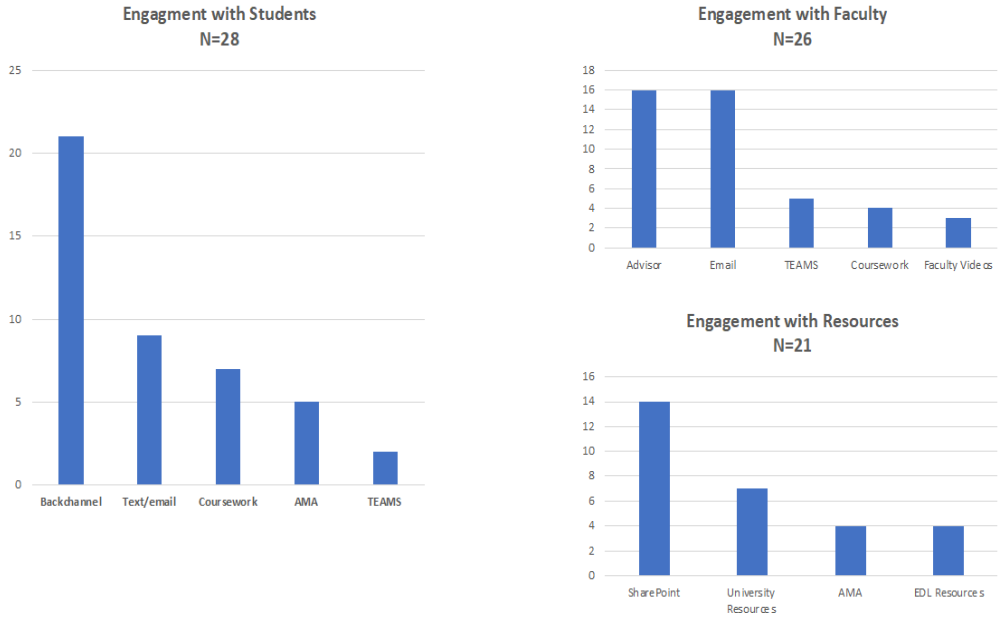
Strand 2 Findings. Across the areas, the number of responses varied due to the semi–structured format and the participants' conversational approach to sharing their lived experiences along their doctoral journey. Findings of each area of the interview are described below.

Engagement During the Last Year. Students described their type of engagement with peers, faculty members, and doctoral information and resources during the past year. Figure 14 displays the frequency of responses to the developed codes for each area. Regarding engagement with students, of the twenty–eight responses, most students (21) cited the use of their cohort's backchannel. To a lesser degree, text or email and coursework were indicated by students as a form of engagement with peers. The only onboarding elements cited, and by only a few respondents, were AMA and Teams. When discussing their engagement with Faculty during the last year, the twenty–six recorded responses revealed engagement with their advisor and engagement via email were the most common ways of engaging with faculty members. Teams and Faculty Videos were the only onboarding elements cited. The use of Teams was stated by five interviewees and viewing Faculty Videos was identified by three people. In the area of engagement with resources, twenty–one interviewees shared ways they had engaged with doctoral information and resources. SharePoint was stated as the most frequent way with fourteen

responses. The other onboarding effort cited was AMA sessions with four students indicating they engaged with doctoral information through the sessions. University resources such as the UK Library, IRB website, and UK Graduate school website were additional ways of engaging with information cited by students.

Figure 14

Types of Engagement with Peers, Faculty and Resources



Gaining Awareness of Doctoral Expectations. The interview protocol included an inquiry of how and when students believed they gained an awareness of doctoral expectations. Responses (*N= 23*) clustered around the following areas; *orientation, first–year courses*, *Doc Week*, *candidacy and the independent research phase,* and *near program end having experienced the entire journey*. Eight students responded that going through first–year courses had provided them an awareness of expectations while seven

students shared that it was not until the candidacy phase and independent research that an awareness of expectations occurred. Three respondents considered Summer Doc Week, and three participants reported the orientation session as when an awareness was gained. Two others stated that this awareness is gained throughout the entire doctoral journey**.**

Noting that a participant's current phase in the program could be considered a contributing factor to their response, Table 21 displays the data broken out by a participant's current phase in the doctoral journey. Two students in their first year of the program responded that the orientation session and the added SharePoint site provided an awareness of doctoral expectations, and four others named the first year of coursework. Seven students, currently in the candidacy phase, indicated that an awareness is only gained at the point when the independent research phase or candidacy begins.

Table 21

Gaining an Awareness of Doctoral Expectations Based on Participant's Phase (N=*23*)

	Respondent's Current Phase					
Area	First–year n = 6		Integrating n = 5		Candidacy n=12	
	%	n	%	n	%	n
Orientation	0	0	20	1	0	0
Orientation and SharePoint	33	2	0	0	0	0
First year coursework	67	4	40	2	17	2
Doc Week participation	0	0	20	1	17	2
Candidacy and independent research phase	0	0	0	0	50	7
End of program – going through all phases	0	0	20	1	8	1

Awareness and Access to Action Plan Steps. Students described their awareness and level of access to each of the four action plan efforts (see Table 22). Anyone stating minimal or no awareness was asked to share a reason. For three of the onboarding efforts, SharePoint, Faculty Videos, and The Corridor, 93% of the students interviewed stated they were aware of these efforts. Two students said they were unaware, but each noted they were primarily focused on preparing to defend their dissertation. All twenty–eight of the interviewees were aware of the AMA sessions. The two students who were not aware of the other onboarding efforts were farther along in the program and had been solicited to participate in an AMA session, resulting in their awareness.

Table 22

*Level of Awareness to the Onboarding Action Steps (*N=*28)*

	Onboarding Action Step							
	SharePoint Site		AMA Sessions		Faculty Spotlight Videos		The Corridor	
	%	N	%	N	%	N	%	N
Awareness								
Aware	93	26	100	28	93	26	93	26
Not Aware	7	2	0	0	7	2	7	2

Next, the students who were aware of the onboarding elements were asked to describe their level of access or engagement with each. As stated previously, the responses were used to generate definitions of four levels of access. Table 23 shows the levels of access students self–reported to each onboarding element. SharePoint site hosted the highest percentage of students accessing at a frequent level. Although the AMA sessions had responses that included minimal and moderate and Faculty videos even showed some reporting frequent access, both of these onboarding efforts held the highest

count of no access. A majority of students reported only minimal engagement with The Corridor.

Table 23

Level of Access to Each Added Onboarding Element (N=*28*)

Level of Access	SharePoint		Ask Me Anything		Faculty Spotlight Videos		The Corridor	
	%	N	%	N	%	N	%	N
No Access	18	5	50	14	50	14	21	6
Minimal	36	10	29	8	11	3	71	20
Moderate	11	3	21	6	11	3	4	1
Frequent	36	10	0	0	29	8	4	1

Table 24 presents the data for the reasons why participants did not access or minimally accessed the onboarding elements. For all four onboarding efforts, students cited reasons centered on the following: *no time*, *the support was not needed yet, but they would return to it later*, or it was *no longer relevant due to the student's current phase in the program*. Additionally, *time zone* and being *difficult to use at work* were cited as reasons for minimal or no access of the AMA sessions, and The Corridor, respectively. Across the four onboarding efforts, the highest frequency reason for minimal or no access of each was relevance. It was too early for some, and they said they would return later, and for others, the late phase of their program meant the support no longer provided benefit.

Table 24

Reasons for Minimal or no Access of Onboarding Efforts

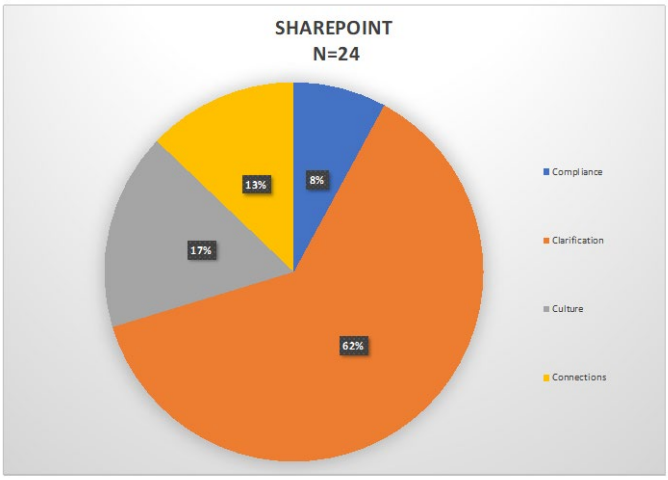
Reason for no access or minimal access (N)	SharePoint Site (N=15)		AMA sessions (N=22)		Faculty Spotlight Videos (N=17)		The Corridor (N=26)	
	%	n	%	n	%	n	%	n
No time	13	2	36	8	12	2	4	1
Not needed yet, will return	0	0	9	2	24	4	35	9
No longer relevant	87	13	41	9	65	11	42	11
Time zone			14	3				
Difficult to use at work							19	5

Experiences with Onboarding Elements. Students were asked to describe their experiences with each of the onboarding elements. All responses were organized using the Four Cs as a deductive framework. Each onboarding element is presented displaying how students' comments about their experiences aligned to the Four Cs (compliance, clarification, culture, and connection)**.**

SharePoint Site. The SharePoint site aligned with all four of the Four Cs as displayed in Figure 15. The largest was clarification. One participant remarked, "I like the SharePoint site, it is one place to go to and get my information." Another mentioned, "I like the SharePoint site because I can return to certain topics….it is one place to get all the information I need."

Figure 15

Student Experience with SharePoint through Four Cs Lens



Faculty Spotlight Videos. The Faculty Videos aligned with the area of culture and clarification. Regarding the experience with the Faculty Spotlight Videos, one student shared, "I thought the videos were great – it gave a human side to the faculty and gave me insight to the culture of the department."

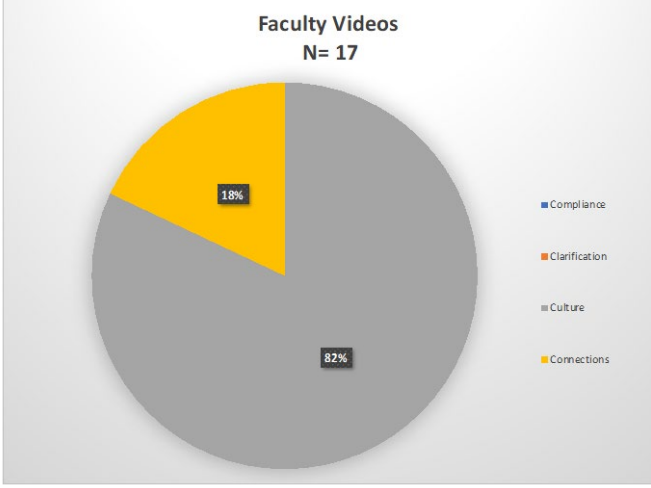
Another student stated, "They were very well, done; fun to watch and great to see candid responses; I learned new things about them even though I've now known them for years and I think new students watching these will gain a sense of the department culture."

Still another student spoke directly to the ability of the videos to connect with faculty members by sharing, "The videos made them seem like real people – it was like what you would learn if you had coffee with them; it increased connectedness because we learned specific things about them."

Finally, a student's comment highlighted the clearly positive connections that EDL has developed between students and Faculty. The student stated, "Watching these would help new students feel comfortable to contact faculty; Every time I have reached out to professors I have been met with such grace and support." Figure 16 presents the responses grouped considering the Four Cs. Most experiences with viewing the Faculty Videos related to culture and connections.

Figure 16

Student Experience with Faculty Videos through Four Cs Lens

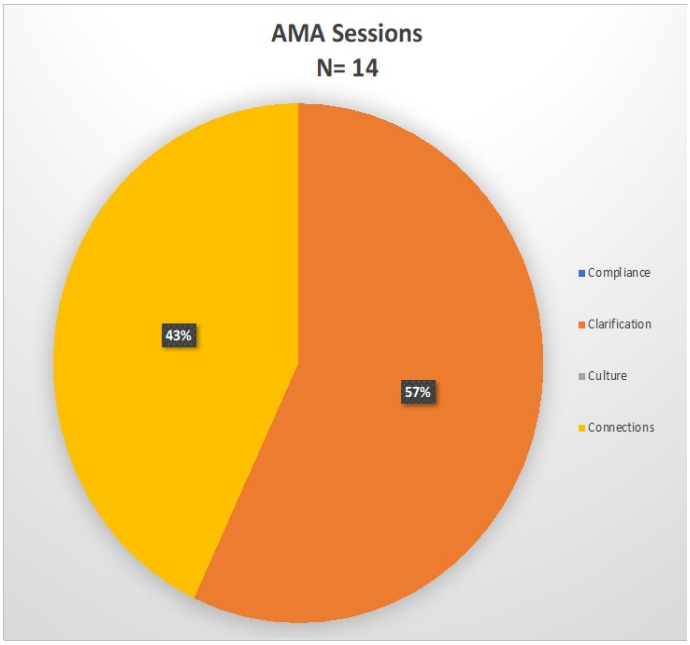


Ask Me Anything Sessions. Students also found the AMA sessions supported both the student goals established as part of the action plan and the elements of the Four Cs evidenced by a student statement, "AMA sessions increased my comfort level with knowing what to do next." Another student stated, "I liked the informal, comfortable format; it made me feel support and encouraged and that I'm not alone." Finally, another student revealed how the sessions met her needs even at a later stage in the program by sharing, "I enjoyed hearing other people's similar stories; those validated my experience.

After being part the panel in a session, I met after with a student and shared support with her – it felt great to give back. I participated as a student later on and loved the cross cohort aspect; it was fresh, relevant and accessible." Figure 17 presents the percentage of responses grouped by the Four Cs.

Figure 17

Student Experience with AMA through Four Cs Lens



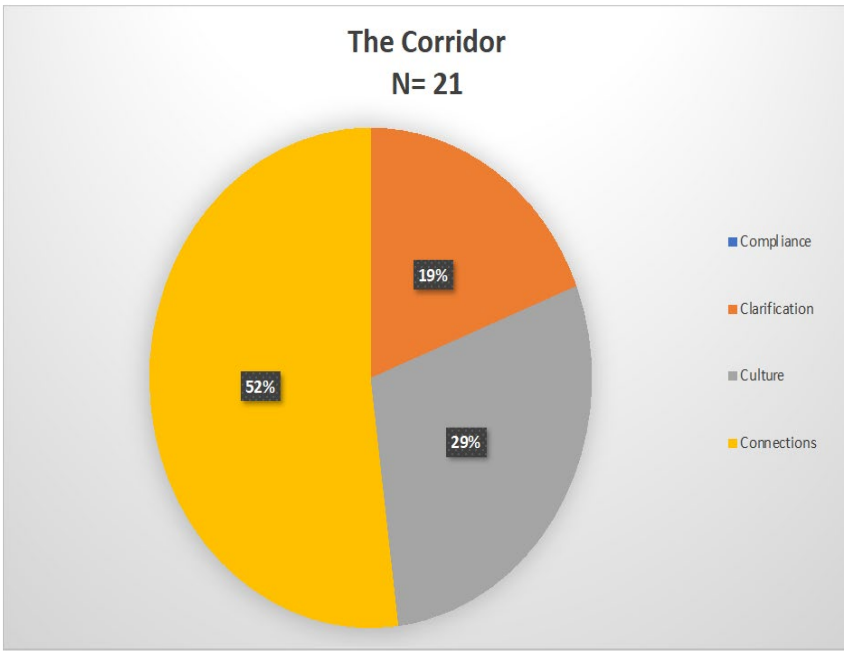
The Corridor. Students' experiences with The Corridor indicate it is a tool for strengthening connections. One student shared, "The Corridor allowed me to feel connected with both peers across cohort and also faculty by being able to post small comments or pictures to get to know each other".

Still another student spoke directly to how their experience was aligned with the C for Culture. The student stated, "New students will find Teams as a part of the culture". Also, a student shared the following, "The Corridor is the how and where that allows students to share information; it has increased interaction with other peers across cohorts

as well as connections with Faculty." One student summarized the general consensus of many by commenting, "Teams has helped increase my interaction with other students and faculty." Figure 18 presents how responses from students about their experiences with The Corridor fell within the Four Cs.

Figure 18

Student Experience with The Corridor through Four Cs Lens



Impact on Connectedness. Students shared what strengthened their connectedness with peers, faculty members, and resources and information. Due to the conversational flow of the semi–structured interview, responses to each of the three areas were not always provided and therefore the total (N) varies. Table 25 shows the frequency of responses and percentages % for each identified area separated by connectedness to peers, faculty members, and resources and information.

Regarding factors strengthening their connectedness to peers over half of respondents included Doc Week, although some responses also identified backchannel and AMA along with Doc Week. The backchannel alone was the most frequently cited responses. Students responded most frequently that strengthening a connectedness to faculty members occurred during Doc Week (42%), followed by the use of Zoom (32%). Coursework was cited as the primary way connections to resources and information had been strengthened, followed by the SharePoint site.

Table 25

Student Responses to: What has Strengthened Connectedness

Connectedness to Students N=24	%	N
Doc Week	17	4
Backchannel	38	9
Teams	8	2
Doc Week/AMA	4	1
Coursework	8	2
Doc Week/Backchannel	17	4
Ask Me Anything Session (AMA)	8	2
Connectedness to Faculty N=19	%	N
Doc Week	42	8
Orientation	5	1
Zoom	32	6
Doc Week and Teams	11	2
Teams	11	2
Connectedness to Resources and Information N=14	%	N
Doc Week	7	1
SharePoint	29	4
Peers and Faculty	7	1
Coursework	43	6
Doc Week and Teams	14	2

Connectedness and Program Completion. Students were asked to consider the future of their program experience and choose the area of connectedness most important in supporting their progress towards degree completion – a connectedness to peers, faculty, or resources and information. Nine of the 21 students who responded to this final question (43%) stated that connectedness to faculty was the most important. In comparison, five students said a connectedness to peers is most important. Several respondents shared that a combination would be most helpful. A combination of peers and resources was cited by one student as the support needed in the future. Six participants responded that most helpful to supporting their completion would be a combination of connectedness to peers and faculty. Four of those six elaborated that early on, a connectedness to peers was the most important, followed later in the journey by connectedness with faculty members.

Strand 2 Inferences

The use of a qualitative approach provided a deeper understanding of EDL doctoral students' experience regarding strategic onboarding efforts during the last year to strengthen connectedness with students, faculty members, and doctoral information and resources. Additionally, the semi–structured format of the interview broadened awareness of contributing factors to a student's sense of connectedness outside of newly added elements to the onboarding process.

Data Integration

The integration of the data from both strands addressed the study's overarching research question regarding the impact of the interventions on students' sense of connectedness. The qualitative data analyses (strand two) and survey data analyses

(strand one) were integrated to consider the level of influence or impact of the onboarding process on students' sense of connectedness and areas for improvement or sustainability to the onboarding process. The integrated research questions were as follows:

Does participating in the designed experiences for EDL doctoral students improve a student's sense of connectedness to peers?

Does participating in the designed experiences for EDL doctoral students improve a student's sense of connectedness to EDL faculty members?

To answer these questions, I used data from respondents who had participated in the survey and the interview (n = 28) to examine the effect of participant's self–reported level of access (interview data) with the four onboarding elements with the calculated levels of their connectedness to the connectedness dimensions of their cohort (cohort), other students (students), Faculty (faculty), and EDL resources (resources) (survey data). These analyses required the stating of a null hypothesis. A null hypothesis states there is no relationship between two variables or that one variable does not affect the other. This indicates that the results are due to chance and not significant in terms of whatever is being investigated.

Therefore, the null hypotheses are stated as:

Participating in designed experiences for EDL doctoral students does not improve a student's sense of connectedness to peers?

Participating in designed experiences for EDL doctoral students does not improve a student's sense of connectedness to EDL faculty members?

Data Analyses

In strand one, for each area of connectedness surveyed (*e.g., student to cohort, student to other students, student to faculty, and student to information),* a connectedness

score was computed based on answers in each survey section. In strand one, separate connectedness scores were computed from the survey data for each participant, according to how they answered the survey questions related to the following areas of connectedness: cohort, other students, Faculty, and EDL resources.

Four connectedness scores (Table 26) were computed according to how the students answered survey questions related to the following items: their cohort (cohort), other students across cohorts (students), faculty members (faculty), and EDL information and resources (resources). The overall connectedness scores computed for each area (cohort, other students, faculty, and resources) were compared with reported levels of access collected during strand two (0 = no access, 1 = minimal access, 2= moderate access, and 3= frequent access) to each of the four onboarding efforts – SharePoint, AMA sessions, Faculty Videos, and The Corridor.

Table 26

Connectedness Score

Connection Dimension	M	SD
Cohort	4.37	0.73
Other Doctoral Students	3.76	0.77
Faculty	4.6	0.4
Resources	4.31	0.54
Overall Combined Connectedness Score	4.26	0.36

Regression analyses were performed using the Julia programming language through the Jupyter Notebook application to better understand the impact each onboarding effort had on various dimensions of student connectedness. Linear regression

models were constructed that considered the relationships between onboarding efforts and each dimension of connectedness, where the independent variables were the levels of access to onboarding efforts, and the dependent variables were the connectedness dimensions. A linear regression model explores a linear relationship between two variables. The regression model uses the equation of a straight line, y= a + bx to estimate the values of y, in this study the calculated student's connectedness score, based on the values of x, self–reported level of access to the four onboarding efforts. Linear regression finds a best fit line (the line that minimizes mean squared error between the line and the data points) for explaining the variance in the dependent variable due to the independent variables. For these analyses a .05 criterion of statistical significance was used.

Several of the onboarding efforts, in isolation, appear to have a slight effect, however, the most relevant findings among these analyses were those that related SharePoint site access to the areas of connectedness (Table 27). Individually, the effect sizes were small (see Figure 19). With respect to a connectedness to faculty, SharePoint site access did not lead to an increase in connectedness. Note however that the sense of connectedness to faculty was reported *a priori* to be high (an intercept of 4.5) leaving little room for improvement of this dimension (see Figure 20).

Table 27

Parameters Obtained Through Regression Analysis

Connectedness Scores	Estimate	*SE*	t	95% CI		*p*
				LL	UL	
Cohort						
Intercept	4.04	0.23	17.31	3.56	4.52	
SP Access	0.20	0.12	1.72	–0.04	0.44	0.10
Other Student						
Intercept	3.50	0.25	13.83	2.98	4.02	
SP Access	0.16	0.13	1.27	–0.099	0.42	0.22
Faculty						
Intercept	4.58	0.13	34.23	4.31	4.86	
SP Access	0.01	0.07	0.16	–0.13	0.15	0.87
Resources						
Intercept	4.07	0.17	23.40	3.71	4.43	
SP Access	0.14	0.09	1.66	–0.03	0.32	0.10
Overall						
Intercept	4.05	0.12	32.46	3.79	4.30	
SP Access	0.13	0.06	2.07	0.0009	0.26	0.049

Figure 19

Regression Analyses of SharePoint Access and Areas of Connectedness

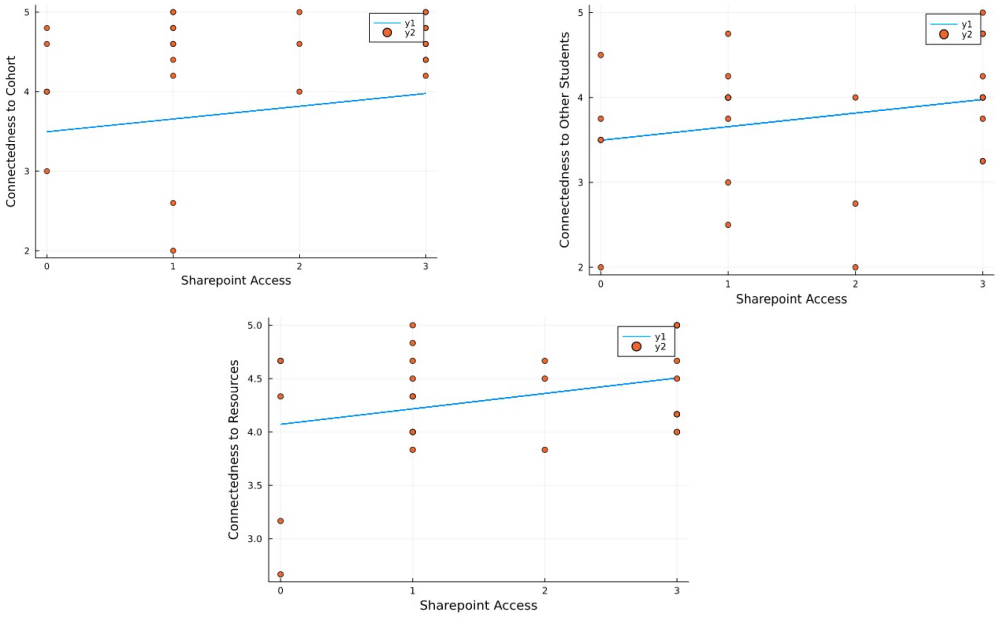
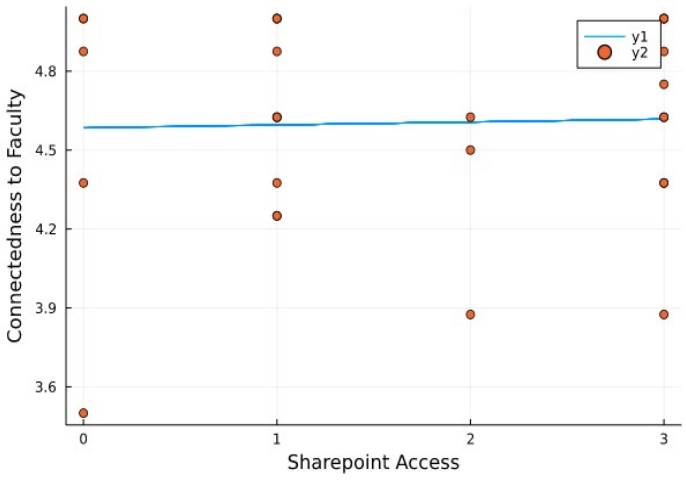


Figure 20

Regression Analyses of SharePoint Access and Connectedness with Faculty

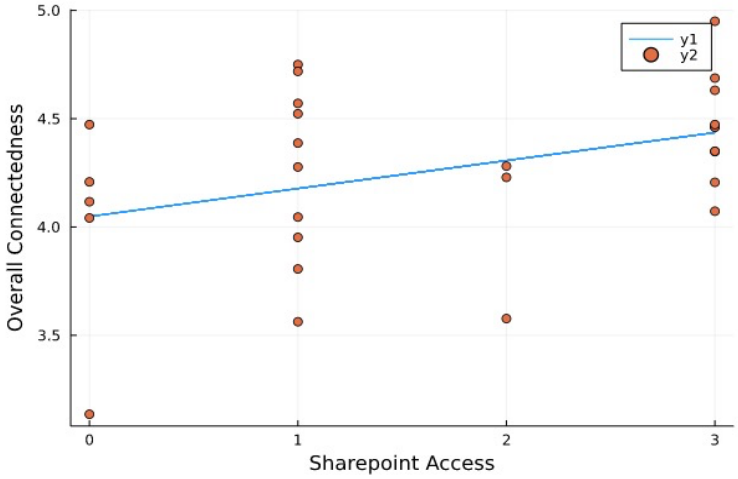


Next, an *overall connectedness score* was constructed by combining (summing) all the individual connectedness dimensions, and a linear regression analysis relating SharePoint site access to this overall connectedness score was performed. An overall connectedness and SharePoint access shows to be statistically significant. Specifically, Table 27 shows $p = .049$ with a 95% confidence interval, indicating the null hypothesis (i.e., SharePoint site access has no positive impact on the overall connectedness score) should be rejected. Thus, the alternative hypothesis holds, and the influence of SharePoint access on sense of connectedness to the doctoral program is relevant and not due to chance.

Figure 21 presents the graph illustrating the outcome of the regression analysis between the access to the SharePoint site and the combined connectedness areas, where a significant relationship was found between the level of access to the SharePoint site and the linear combination of the four connectedness dimensions

Figure 21

Regression Analysis of SharePoint Access and Overall Connectedness



Summary of Evaluation Phase

The overall evaluation phase question was, *how has the onboarding process impacted students' awareness of doctoral expectations and resources and their sense of connectedness with doctoral peers and faculty members.* A summary of each onboarding effort is described below followed by a summary regarding effective current practices. Finally, remarks concerning the three student goals developed during the study and the use of the Four Cs lens are presented.

New Elements to the Onboarding Process

Of the four newly added onboarding efforts, the *SharePoint site* was shown to have a statistically significant effect on overall connectedness for students. The site is a sustainable student support effort because it is one that department leadership and faculty

members have control over. In conjunction with student feedback, department leaders can use this tool as a response to student needs. It is sustainable, flexible, and responsive to the changing needs of entering cohorts, and feedback from students growing through the doctoral journey.

Where the *SharePoint site* expanded on elements similar to the department's previous informational website, the *Ask Me Anything Sessions* were a brand–new experience and support offered to students. Lessons learned from student feedback regarding these sessions included the challenges of finding convenient synchronous times, the unfamiliarity of potential benefits of experiencing these sessions, and a need to vary the topics throughout the journey. In the future, this type of support may adjust in response to current student needs or become obsolete if other supports achieve the primary purpose of the AMAs, interacting across cohorts and demystifying the next steps of the journey.

The *Faculty Spotlight Videos* are a standalone support that should be updated as faculty members change to remain timely and relevant. Data indicated this support is most important to students in their early phase of the program, prior to selecting an advisor. Although no significant effect was found between watching the *Faculty Spotlight* videos and a strengthened sense of connectedness with faculty members, students cited this support as critical in demystifying faculty members. Students felt more comfortable and willing to reach out and request time to speak with faculty members after viewing the video clips.

The Corridor is a Teams site that intends to support communication across faculty and students. However, the individual cohort's use of a backchannel is used primarily by

students to strengthen their connectedness to peers within their cohorts. However, the Corridor may still have relevance as a doctoral community–wide communication tool for students and faculty.

Established Onboarding Practices

Three current practices also emerged as important in the onboarding process. These included Doc Week, orientation, and a cohort model**.** It is important for faculty members to understand the profound value students place on the Doc Week experience. EDL faculty members graciously volunteer their time in the summer and participate. It is a sacrifice that is paying clear dividends in strengthening connectedness for students with peers, faculty members and gaining awareness of doctoral expectations and information. The established online *orientation* introduces incoming students to the department's programs and faculty members and establishes a commitment to the Four Cs of onboarding. Finally, the cohort model and backchannel clearly are established practices yielding benefits of connectedness and support students identify as reasons for persistence and degree completion.

Three Student Goals

The three student goals developed in response to identified doctoral student needs revealed during the reconnaissance phase, (*I'm not alone, Faculty have my back,* and *I know what to do next*) have the potential to become guideposts for the EDL department. During the qualitative strand students provided evidence that these goals are taking root within the department culture by referencing them within their answers when sharing experiences about the onboarding experience.

The Four Cs

Developing doctoral student support activities and experiences through a lens of the Four Cs (compliance, clarification, culture, and connection) to achieve effective onboarding of doctoral students across all phases was shown to be a successful strategy. As students shared experiences with the onboarding process, each of the areas was mentioned in some manner across the four newly added elements.

Limitations

In this study, the action research methodology was appropriate and robust in addressing this organization's (EDL) diagnosed problem of practice, a need for a strategic onboarding process across the doctoral phases. Still, several limitations exist and are offered below.

First, the reliability is weakened because the sample was small, and a non–probability convenient sample was drawn from one department within an institution. This study's research setting may not represent all institutions or doctoral programs; therefore, generalizations are limited to the sample itself. Second, the cross–sectional nature of this study, collecting data at only one point in time, limits drawing conclusions or causal relationships because changes that might occur over an extended period were not investigated. Validity refers to how accurately a method measures what it is intended to measure. Ways to strengthen validity include controlling more variables, improving the measuring technique, and adding control or placebo groups. There is room for strengthening validity, however, if focused strictly on the community the MMAR study

was designed to support, the action plan did achieve the original purpose; to provide additional support for doctoral students to enhance their experience.

Ethical Considerations

Each stage of a research study should include ethical considerations. The evaluation phase yields specific ethical considerations, including researcher and participant bias, coercion or influence on subjects, and limits of generalizability. A natural desire to find results that successfully address the study's diagnosed problem of practice elevates the concern of researcher bias. To minimize researcher bias, I consistently referred to information regarding risks to quality research during each phase of the study. Consistently self–checking my objectivity and repeatedly reviewing quality research practices and guidelines of action research methodology supported my efforts to minimize researcher bias.

As a current doctoral candidate, the students I interviewed were my peers, creating the potential of participant bias. Fellow peers may have wanted to respond in ways they thought would support the success of my study. Reminders of the volunteer nature and confidentiality of participation were provided at all interactions with subjects, including survey and interview. A semi–structured interview format provided more naturalistic procedures. Students were asked to share their experiences during the last year. This general approach was intended to reduce students from considering the question's intent and minimize reactivity. Although this study's small sample sizes and unique research context limit generalizability, each phase's details support future studies in other settings. During this study's initial diagnosis, planning, and execution, diligent efforts addressing ethical considerations of veracity, confidentiality, anonymity, and

fidelity existed. I set aside personal biases and predetermined opinions. Efforts to focus intently on what participants were saying when sharing their lived experiences helped me avert filtering or minimizing their insights when contrary to my experience. Additionally, I avoided granting more acknowledgment or acceptance to shared needs or challenges I recognized from my personal experience.

Monitoring Phase

The final phase of an action research design is the monitoring phase. It has been suggested that the evaluation phase should be ongoing and blended with the monitoring phase for an iterative approach to continuous improvement. Bryman (2006) noted that a mixed methods study "frequently brings more to researchers' understanding than they anticipated at the outset" (Bryman, 2006, p. 111). The monitoring phase's next steps are determined based on the integration of data analyses from the evaluation phase. The researcher uses the results of the evaluation phase to determine revisions of the action plan or if additional study is required. In this final phase, researchers also consider sustainability issues and the transferability of results to other contexts.

The evaluation phase occurred during the late spring and early summer semesters. After interpreting quantitative and qualitative results during the evaluation phase, the researcher prepared for the monitoring phase. Doctoral Program leadership members were consulted regarding the initial findings of the evaluation phase. Based on evaluation analyses and experiences, needs to revise, adjust, and add to areas of the action plan were considered.

A student liaison position was created to support the sustainability of the enhanced onboarding process and maintain a student–centered approach. The primary

role was to act as a connector between students and doctoral program leadership. The responsibilities of this role included surveying student needs and reporting these to doctoral program leadership, facilitating student–to–student sessions, organizing the annual summer Doc Week, and being part of the doctoral community development team to continue exploring efforts of support.

In addition to the liaison position, doctoral program leadership refined efforts and alerts to help students stay on target. Housing the annual program plans within the student folder on SharePoint supported a consistent annual review and helped identify and communicate with students who were not following the pathway. When students fail to register, request several incompletes, or accumulate dissertation hours without progress, it can mean a student may be 'sitting and spinning', indicating their progress is slowing or stopping. Life events can cause students to veer off the degree pathway, like exiting a freeway and moving slower on a frontage road. The sooner a student can merge back onto the 'freeway to the dissertation' and engage in their doctoral work, the greater their chance of completion. Remaining too long on the frontage road can lead to students progressing too slowly or coming to a complete standstill, analogous to a traffic jam.

The monitoring phase included adding information pages to the SharePoint site pages. The Director of Graduate Studies (DGS) began a weekly 'walk and talk' to encourage questions and communication. Monthly newsletters from the Chair of Doctoral Programs offered reminders of important deadlines and relevant SharePoint sites. The DGS sent a brief survey in the fall semester to collect students' perceptions of achieving the three student goals; *I am not alone, Faculty have my back, and I know what to do*

next. Repeating this survey each year could be used as a temperature check to assess the current effectiveness of student support.

A channel in *The Corridor* called, *The Commons – Student to Student*, was added as a place for student–to–student conversations around research, questions about the program, and peer advice. This channel connects students to other students to support their coursework and research, regardless of their cohort.

True to a student–centered approach and a continuous improvement mindset, it is noteworthy that the monitoring phase of this study is ongoing. Continued collaboration with the team of doctoral leadership faculty and doctoral student liaison, support of the current department chair to continue focusing on the three student goals and successful aspects of the onboarding process indicate a sustainable future for strategic onboarding across the doctoral phases for EDL students.

Leadership and Research Implications

Across higher education institutions, degree programs are designed to prepare students with specific knowledge and skillsets and support their degree completion. Critical to this goal is for leaders to consider and provide the support needed by their students. Research confirms the negative impact doctoral attrition has on the institution and the individual (Gardner, 2009). With doctoral attrition documented at almost 50% and even higher for online programs, research findings addressing this challenge are relevant to higher education (Ivankova & Stick, 2007). Leadership implications exist for any effort that decreases attrition, increases student success, or enhances the student experience. These issues impact leadership across higher education programs at undergraduate and graduate levels.

Research within the literature confirms shared challenges experienced by doctoral students in online programs (Morrow & Ackermann, 2012; Spaulding & Rockinson–Szapkiw, 2012). The findings of this study support efforts to strengthen a student's connectedness with peers and faculty members and increase their awareness of expectations and available resources. Doctoral program leadership should consider their role in helping build these essential connections. Strong connections enhance the doctoral experience (Erwee et al., 2011; Terrell et al., 2009). Additionally, this study suggests that connecting students to information and resources provides a needed awareness of doctoral expectations and strengthens an overall sense of connectedness.

Applying the Four Cs of effective onboarding to doctoral student support across the phases of the doctoral journey proved helpful in effectively addressing the established needs of postgraduate students in EDL. Creating support across all phases of the doctoral program can assist struggling students and equip all students with skills and resources to resolve challenges. These efforts could reduce attrition, encourage timely degree completion, and produce a more enhanced doctoral experience. Therefore, leaders of doctoral programs should consider the potential impact of similar intervention efforts in their specific programs.

Additionally, this study reminds leaders of learning organizations of the importance of partnering our commitment to student learning with a continuous improvement mindset. This study supported a department's desire to improve its program processes through a student–centered approach. The iterative nature of the action research methodology explored a shift in behaviors that increased students' sense of connectedness with other students and faculty members. The results of the enhanced onboarding process

encouraged a culture shift for the department, promoting a sense of doctoral community through efforts of connecting students to peers, faculty members, and information and resources. Leaders should consider the potential positive impact of this organizational effort on their community.

Another implication is the current relevance of supporting students in an online environment. This research study began before the onset of the COVID–19 pandemic. The purpose and design of the study focused on an online doctoral program developed before the quarantine–imposed push towards distance learning. As this study progressed, in step with the continued COVID experience, the relevance and interest of findings to leadership across educational institutions became evident. Even with the onset of the pandemic, the common goals of all educational leaders to help students acquire knowledge and skills and complete their degrees have remained. Yet these goals are now coupled with a shared consideration of content delivery, pedagogical shifts, and quality of experience in an online environment. Moving forward, considering the challenges and needs of students in an online environment is no longer specific to online programs but necessary across all educational institutions. Therefore, the benefits and relevance of this study's findings are no longer exclusive to online degree programs.

Considering an intentional onboarding process may require a culture shift for many departments. An EDL professor described culture as the “way we do business” (J. Nash, personal communication, Aug. 2020). As action research seeks to change behavior to improve a condition or experience, it can be considered a culture shift. If true, this study can be seen as an effort to shift culture and, therefore, relevant to educational leadership. There are numerous guidelines and leadership suggestions for addressing

change in culture or organizational change. The action research methodology of this study engaged several of these accepted leadership approaches. Through my personal experience with this study, a few were noteworthy. First, it is critical to consider the stakeholders and identify the needs of the 'user'. Involving stakeholders in the process is the most reliable way of identifying user needs. When participating stakeholders or organization members feel engaged, a desire to create and implement relevant and realistic solutions exists to support a culture shift. This applies to students and faculty.

Second, considering essential components of transformational change must be part of addressing the sustainability of any action plan. Muhammad and Cruz (2019), in their book *Time to Change,* share that a transformational leader must be able to: communicate effectively, build trust, increase the skills of those they lead, and maintain a mindset towards results. Additionally, sustainable change is supported by answering the three questions: Why, Who, and How? In his book, *It Starts with Why,* Simon Sinek echoes this, establishing that stakeholders must be invested and understand the organization's purpose before understanding or embracing a need for change. The action research methodology of this study embraced these tenets and therefore provided a contextual example of efforts towards organizational change.

Finally, as part of considering the importance of achieving sustainability of change, the Diffusion of Innovation theory is suggested as a reference. Everitt Roger's developed this theory to explain how, why, and at what rate innovative ideas and technology spread. It has been frequently utilized in investigating the adoption of technology in higher education and educational environments (Kardasz, 2013). Exploring

Roger's theoretical framework in connection with the implemented action plan for this study encourages further analysis and expanded studies.

Future Research

Future research may include considering the idea of survivor bias, a form of selection bias. It is the error of concentrating on successful people or things, overlooking the consideration of factors that may have attributed to failure (Bazzi, 2020). This type of bias can occur when researching student success at the doctoral level. This study focused on 'surviving' doctoral students, those currently enrolled and progressing through their degree program. Future research should examine students who have dropped out or been victims of other attrition factors. Exploring and digging deeper into "why did they drop out?" may produce more relevant ways of supporting doctoral student success.

Through a lens of the Four Cs, this study examined the addition of four elements to an overall onboarding process and the impact on a student's sense of connectedness. Future research could strengthen the findings by examining a single effort and comparing a pre–assessment and post–assessment of connectedness.

Personal Reflections

This action research process focused on supporting a specific community in a problem–solving effort towards an improvement in a condition. As an educational leader, especially when referencing student learning, I often used phrases such as 'keep our eye on the prize' to encourage stakeholders to embrace innovation and forward–thinking. Also, I would encourage stakeholders to avoid complacency and stagnation by saying, 'don't always look in the rearview mirror or you'll crash going forward.' Through this research process and my doctoral journey, I am proud to say I kept my *eye on the prize.*

Although sometimes it felt blurry and confusing, I did not lose focus of the end goal. I am proud of the new additions developed and implemented for the EDL department and appreciative of the unwavering support EDL leadership and faculty members provided by embracing the work of this study and exemplifying an authentic student–centered and continuous improvement mindset. Additionally, I kept my sights set forward, seeking innovative yet sustainable ways to meet the needs of doctoral students at all phases of the journey. As this study and my doctoral journey conclude, it is appropriate to use that rearview mirror and reflect on the journey and process.

The mixed method action research methodology is an exciting and rigorous research approach that allows the potential for meaningful impact on a community. The support offered as part of the strategic onboarding elements was designed to help students connect to each other and *not feel alone*. Togetherness is a fundamental human need, and the designed efforts intended to strengthen connectedness were meaningful. Other efforts provided opportunities for students and faculty to connect so students would feel that *faculty have their back* which was cited both by EDL students as a need (reconnaissance phase) and by faculty members as a goal (diagnosis phase). Finally, an online 'home base' for 'just in time' information, program pathways, milestones, and a repository of and resources was established so students would *know what to do next*. Each of the four added onboarding elements was designed specifically to cover the Four Cs of effectively onboarding people within an organization.

Within the title of the dissertation, *the power of connections* was chosen because the greatest reveal, through the process and findings of the study, was the need for connections to peers, faculty members and information and the impact those connections

have on enhancing the doctoral journey. Supports across the entire journey help grow a student into a doctoral student and ultimately moves them to the other side of the table as a *doctor* to sit alongside their professors as a peer. The word *strategic* was chosen because the added onboarding efforts were research supported and designed to address specific needs. Finally, the term *onboarding experience* was chosen rather than *orientation* because onboarding indicates a process or an ongoing experience rather than just a singular session or a handout of rules and information. The need for an ongoing effort and process became evident as data revealed similar needs of support, connections, and information across phases of the doctoral journey.

I return to the first phrase 'keep your eye on the prize' which in education is first about student learning but this study was also concerned with enhancing the student experience to support student learning. Designing and implementing this study, digging deep into both the needs of the doctoral community and into my own personal motivation for pursuing a doctorate resulted in my own enhanced doctoral experience.

APPENDICES

Appendix A: Content Analysis – Source 1

Doc Week 2019 Student Focus Group Summary

Summary Report: ***Doc Week 2019 Student Focus Group Summary***

EDL 2019 Doctoral Focus Group

Summer Doc Week 2019

Prepared by: J. Heileman, Graduate Assistant

Submitted to Dr. John Nash, EDL Chair

August 2019

During Summer Doc Week 2019, an informal focus group created the opportunity to receive student input and student perspectives regarding challenges and needs of entering doctoral students. Students completing the first year and the second year of doctoral work participated in the activity.

Four questions were presented individually, and students were asked to record their answers and reflections on colored post–it notes before being given the next question. I began by asking students to reflect on their 'first semester' selves and consider challenges and benefits they remember. Having survived the first semester and beyond, I asked all students to identify skills, knowledge, and mindsets they consider essential for entering doctoral students to possess to be successful. The third question addressed their experience with the cohort model. The final question asked first–year students and second year students a different question. First–year students shared comments regarding their experience with the proseminar and second–year students shared suggestions of how the department might have provided more support during their first semester.

Question 1: Doctoral Challenges and Identified Supports

Think back to your entering' first semester' self as a doctoral student and your beginning interaction with the doctoral program and department……identify challenges you experienced (notate that comment with a "C") and benefits (notate that comment with a "B")

I grouped the comments on *challenges* in the following areas:

- **Online issues** – including challenges with understanding Zoom, navigating Canvas, email, listserv
- **Program issues** – understanding pathway, meeting with faculty, expectations of papers, content connecting to research, 2 classes on a Saturday, inconsistent organization of course content on Canvas by faculty
- **Personal issues** – organization, time management, work/life balance, feeling comfortable (on zoom and with peers)
- **Skill issues** – challenges with academic writing, reading research articles, connecting theory to research

I grouped the comments regarding *benefits* in the following areas:

- **Program** – benefits such as the tour of canvas, ability to rewrite papers, and content of courses
- **Cohort** – comments included the use of backchannel to give support, cohort members providing information and confirmation, and sense of bonding and connectedness
- **Faculty** – one comment related to online support– the tour of Canvas by Dr. Rous (fall 2018) others included the support from faculty by way of guidance, advice, and communication

Many comments cited the cohort model as the greatest benefit experienced in the first semester. The quality of support from faculty as well as program elements were equal in the number of comments by students as benefits in the first semester.

Question 2: Essential skills, knowledge, mindsets

What are essential skills, knowledge, or mindsets entering doctoral students should possess to complete the program?

I grouped these comments in the following areas:

- **Skills** – skills were primarily personal management such as time management, organization, or work/life balance. Two comments cited academic skills of typing and writing.
- **Mindsets –** these comments included taking risks, being open to teaching and other people, growth, thinking ahead and big picture thinking. One word was considered an academic mindset of trusting that content would be repeated so don't feel overwhelmed
- **Knowledge –** comments grouped under knowledge included knowledge of content and knowledge about the program. Foundational readings and just reading a lot were grouped with content knowledge. Program knowledge (know faculty, understand timeline, leadership dilemma, research area)

Question 3: Cohort Model

Consider the cohort model and your experience thus far…..identify words or phrases that describe your view of that model.

I grouped these comments in the following areas:

- **Personal Support** (reassurance, increasing confidence, encouragement)
- **Program Support** (peer advice/info about program elements or academics)
- **Social Connection** (sense of belonging, collaboration, togetherness)

The greatest number of comments (10) fell into the category of personal support. These comments indicated a view of the cohort model as an important way to provide personal support. Seven comments attributed the cohort model as a tool for peers to provide program support to other peers. This included offering information about program timelines, and reassurance

regarding program expectations. Equal to this number, another seven comments considered the cohort model as beneficial in creating a sense of belonging, providing opportunities for collaboration, and developing unity and a team feeling.

Question 4: Proseminar and Department Supports

First year students: provide comments regarding this year's offering of a first year proseminar Student comments indicated either a lack of awareness or engagement with the proseminar because they weren't required to attend or weren't encouraged/reminded to engage. Comment highlighted the benefit of the module introducing faculty through flip grid videos.

Second year students: How might the EDL department support entering doctoral students in the acquisition of skills, knowledge, and mindsets essential to the completion of the program.

I grouped these suggestions into the following areas:

- **Program –** Nine comments were focused on areas of program structure in the doctoral programs. Second year students indicated ways the EDL department could provide more support to students:
    - Reinforcement of timeline for degree completion, checklist for important deadlines, thorough understanding of the program pathway
    - Schedule of courses to avoid two classes on a Saturday and consider international time zones
    - Elective tracks and Graduate Certificates – what are the available options and who should take them
    - Point person – to provide better communication and guidance. Staff person, initial advisor, faculty contact
    - Online format support for utilizing and accessing Zoom and Canvas
- **Orientation/Onboarding –** Six comments specifically addressed a need for stronger onboarding strategies. Three of the comments suggested a more substantive orientation covering more topics, or a first semester module/class. Three other comments suggested

offering a summer doc week experience for entering cohort members to build relationships, meet faculty, understand pathway with long range planning, and explore research topics,

- **Whole Group open discussion**: What are other compliments, confusion, or comments can be shared with the department as part of a continuous improvement cycle to better serve incoming doctoral students and enhance their doctoral journey?
  - Confusion around leadership positions in the department and duties – who do you go to for what? Director of Graduate Studies? Chair of Doctoral Programs? Department Chair?
  - Cohort model and back channel is essential but drifts apart as core coursework changes for PhD and EdD
  - Priorities for students in the beginning are the social connections between cohort members and getting to know faculty. Cohort connections provide students with a sense of social support (peers) and communicating with faculty provides access to resources and an awareness of doctoral expectations.

Appendix B: Content Analysis – Source 2

Summary Report: *Feedback of 2019 Online Orientation*

EDL 2019 Doctoral Cohort

Orientation 2019 Feedback Survey

Prepared by: J. Heileman, Graduate Assistant

Submitted to: Dr. John Nash, EDL Chair

November 2019

The EDL Department hosted its Doctoral Student Orientation via Zoom on August 21, 2019. The Director of Graduate Studies (DGS) usually hosts the online orientation session. The agenda includes aspects such as a welcome by the DGS and Department Chair, an overview of the doctoral program, handbook, and highlights of the graduate school website. Also included are introductions of the faculty, an opportunity for faculty to share their background and research interests, student introductions, and a time for questions/answers. In planning this year's orientation, we developed activities based on research evidence on adequate support for doctoral students and focus areas that impact doctoral persistence.

Before the general orientation session, Dr. Bathon, Director of Graduate Studies and Jeri Heileman, Graduate Assistant, hosted a pre–orientation session. The goal of the pre–orientation time was to increase students' feelings of confidence and comfort before meeting with faculty in the larger group. The session activities were designed to reduce feelings of isolation, create initial connections with cohort peers, and provide awareness of available departmental support. Activities included experiencing a breakout zoom session, interacting with each other to reveal commonalities and diversity within their

cohort, discussing and planning the use of a backchannel for peer support, and developing a list of questions that faculty could answer regarding the doctoral program. The general session maintained the goals as established from previous years.

All cohort members received a survey through email to gather student feedback as part of an assessment of the orientation format and activities for this year.

Summary of Survey results:

Participants

11 out of the 12 students in this year's cohort responded to the survey. One student reported they did not receive notification of the orientation and, therefore, did not attend either session. All other respondents participated in both sessions.

Pre–orientation Session

Students indicated which session activities provided the most value. The activities included creating a list of questions for faculty, experiencing a breakout session in Zoom, meeting cohort members, and receiving information about the use of a backchannel. The most valuable activities included meeting fellow cohort members and developing a backchannel. Experiencing a breakout session in Zoom was determined to be a 'great deal' or 'a lot' of value by over half the students. A majority of students judged all activities in the session as providing at least a moderate amount of value. When asked to rank a list of items based on personal benefit, a majority of students ranked interacting with peers and receiving information on the backchannel in their top three for offering the most significant benefit. The item 'built confidence with Zoom' was ranked last by six students in providing personal benefit yet was the top–ranked by two students. This disparity supports research findings, which indicate that students arrive with varying

degrees of experience and efficacy regarding the online learning environment. An open–ended question asked students to share how the pre–orientation session influenced their feelings about beginning doctoral work. All students responded that the session had a positive influence. Comments indicated increased levels of excitement, confidence, feelings of encouragement, and identification and connection with cohort peers. One student remarked about feeling a sense of support from faculty and recognized the department's efforts to help students feel comfortable.

General Session

Students indicated which elements of the general session most influenced their doctoral student self–confidence. Most students indicated that hearing the faculty share their background and receiving answers to the list of student questions were the most influential parts of the general session. When asked which elements the session should have contained more or less of, an overall majority of students rated all elements as needing 'about the same amount'. These elements included time to interact with faculty, time to interact with peers, and time to ask questions. A few students indicated a desire for 'slightly more' time to interact with faculty and information on doctoral expectations. An open–ended question asked students to share how the general session influenced their feelings about beginning doctoral work. Although one student said the session had no influence, all others indicated positive influence. One student directly highlighted experiencing the positive culture of the department. Comments indicated less anxiety, more excitement, more confidence about fitting in with the cohort, becoming inspired, and eager to work with faculty. One student remarked that although it was helpful to see

the faculty altogether, the large group made it less comfortable to speak up, and they felt more in 'receive' mode.

Student suggestions

When asked for recommendations to strengthen the orientation, responses included the following:

*Enjoyed it – continue it for next students

*More faculty interaction and possibly connect with faculty mentor earlier

*More introduction to the first semester classes

*More information about the program earlier than orientation (did not know about Saturday classes)

*More advanced notice about the orientation session

Recommendations:

Based on the findings in the research literature and the students' feedback:

*Continue interaction with cohort members and information about using a backchannel

*Increase advanced notice and publicity of orientation session. Possibly use an RSVP system to confirm all students have received a notification.

*Continued use of the breakout session format and use it with faculty to increase faculty interaction

*Continue to develop a list of student questions

*Drop activity of 'emoji' – held little value

*Pre–orientation session could be condensed to a shorter time, allowing more time with faculty in the general orientation

*Reduce time highlighting the graduate web page and use it to offer highlights of first semester courses

*Responses indicated the goals of the pre–orientation session were achieved

Additional Questions to consider:

*Which was more important for increasing student comfort, the pre–orientation experiences, or meeting ahead of faculty?

*Is there value in having a doctoral student co–host the session and help present the importance of the backchannel?

*Would an asynchronous online module with information and technology supports offered to those interested before the orientation session be of value?

Appendix C: Content Analysis – Source 3

Summary Report: *Cohort 2019 Feedback on the Entering Experience*

EDL 2019 Doctoral Cohort

Fall Semester – Check–in/Check–up Session

Prepared by: J. Heileman, Graduate Assistant

Submitted to Dr. John Nash, EDL Chair

December 2019

Email communications between the EDL Graduate Assistant and individual cohort members indicated a desire to meet and discuss reflections on the first semester. Due to the diversity of student locations and various time zones, several students requested the meeting be held after a scheduled Saturday class meeting. Rous graciously offered a portion of her EDL 751 class time on November 16. The following is a summary of the session and student feedback. Appreciation is given to Dr. Rous for supporting this opportunity.

Session Summary:

I began by sharing the results of the recent orientation survey that cohort members recently completed[1] The summary report submitted to the Department Chair indicated that a majority of cohort members found that both the pre–orientation session and general orientation session reduced feelings of anxiousness and increased feelings of confidence and competence in beginning the doctoral program. Cohort members emphasized the overall benefit of the orientation and appreciated the opportunity to meet both peers and faculty in advance of the semester.

Previously, a faculty member suggested possible benefits of newly admitted doctoral students attending the summer Doc Week. I posed this question to the cohort members and consensus of the group indicated that attending the summer Doc Week prior to beginning the

program would be premature. Students felt they would not 'know enough' to receive substantial benefit from Doc Week activities, but a thorough online orientation would provide more help.

The cohort remained in a whole group to allow everyone the benefit of hearing individual responses. Each student shared a positive 'surprise' regarding their first semester experience. I asked them to describe something that turned out different from their beginning expectations. Several students shared that they felt they achieved a satisfactory work/life/school balance. This was an area of noted concern by several during the August 2019 orientation. Students admitted, however, they are concerned about work/life/school balance shifting in a negative direction as they move through their program and thus experience less course structure and more independent demands. Several students spoke about the importance of the backchannel and how that particular vehicle of support was a surprise. Using the backchannel helped members get to know each other personally and socially, which increased feelings of connectedness. Students noted the ability to reach out and ask a peer a question regarding an assignment produced a feeling of support. One student mentioned that conversations in the backchannel provided an awareness of the various professional endeavors of the cohort. The student expressed an appreciation of the diversity and viewed it as a benefit of the online environment that she had not previously considered. Another student shared success in engaging with Canvas and modules for the first courses. The student had braced for the technological aspect of the online courses to be problematic, and this was not the experience. Several students mentioned a positive experience with the online text in Dr. Rous' course. Many students shared positive comments regarding Dr. Rous' delivery of the course material and additional support during the first semester. They described this particular course experience with words such as encouraging, supportive, and helpful.

The final portion of the session provided insights into potential support areas for next semester. These areas include:

- Information on Graduate Certificates
- Choosing electives
- Time Management to achieve work/school/life balance

- Summer Doc Week
- Choosing an Advisor
- Using Endnote, Qualtrics

Next Steps:

- Present to Faculty at retreat to update them on information and insights gathered from students regarding orientation and first semester experience.
- Join the Onboarding team and prepare for next semester's support
- Stay active on Slack – communicating about work and progress

[1] See Summary of Orientation Survey

Appendix D: Survey - Doctoral Student Needs and Support

Q1. **This survey is part of the data collection efforts of a doctoral candidate in EDL.** Please refer to the cover letter to this survey link for details of the study. You are asked to participate in this survey because of your status as an enrolled doctoral student in EDL. Your participation in this survey is voluntary and your responses will remain anonymous. There will be no negative impact if you choose not to complete the survey. Information shared through this survey will deepen an understanding of doctoral student needs and help create effective student support. Thank you for your feedback. Please acknowledge that you have read the cover letter and confirm your consent to participate.

- I have read the cover letter with details of the study and give consent to participate.
- I have read the cover letter with details of the study and choose not to participate.

Q2. **What EDL doctoral program are you enrolled in?**

- EdD
- PhD

Q3. **What year did you enter the program?**
Choices included years 2012 – 2019

- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019

Q4. **Which of the following best describes your current phase in the doctoral program?**

- Taking coursework
- Writing Qualifying exams
- Passed Qualifying exams
- Collecting dissertation data
- Writing up dissertation results

Q5. **Did you attend an EDL department orientation session before your first semester?**

- Yes
- No
- Not sure

Q6. **How useful was the orientation you received as an incoming doctoral student?**

- Extremely useful
- Very useful
- Moderately useful
- Slightly useful
- Not at all useful

Q7. **During your first year of your program, which of the following provided support in each area?**

Areas included: Rules and regulations; Program Next Steps; Culture in EDL and how things are done; and Interpersonal connections

- Department or UK Website
- Faculty in first year courses
- Cohort member(s)
- Other individual
- Orientation session

Q8. **Check the period during the doctoral program when each of the following items would provide benefit to a student.**

The choices of period during the doctoral program included: First year – Fall Semester; First year – Spring Semester; Second/Third year of coursework; After Passing Qualifying Exams

- Academic writing supports (workshop on resources, APA tutorial, access to UK writing center)
- Awareness of university resources such as UK library, free software downloads, Graduate School website
- Building relationships with faculty
- Choosing an advisor
- Creating a support network of people and resources
- Deciding on your research area
- Knowing graduation requirements and deadlines
- Knowing dissertation guidelines and requirements
- Meeting all faculty
- Resources to support mental/physical wellness
- Self–assessment of technology readiness for an online learning environment
- Sense of community within your cohort
- Strategies for achieving work/life/school balance
- Strategies to Identify your individual strengths and challenges as a student in an online doctoral program
- Understanding Doctoral Program vocabulary
- Understanding your program pathway (what to do and when to do it)

Q9. During a first semester onboarding experience for entering students, how much focus should be placed on the following areas?
Answer with sliding scale from 0 – 100

Compliance – University and department rules and regulations (grading policies; course registration; attendance policies)

Clarification – organizational expectations – academic progress (program pathway; online discussion participation; use of Canvas

Culture – organizational norms – dept. procedures and practices; cohort model, online format
Connections – building interpersonal relationships with peers and faculty

Q10. **During which phase(s)of the program would each item provide benefit?**

Consider the phases as: First Year; Coursetaking; Writing Qualifying Exams; Passed Qualifying Exams; Writing Dissertation

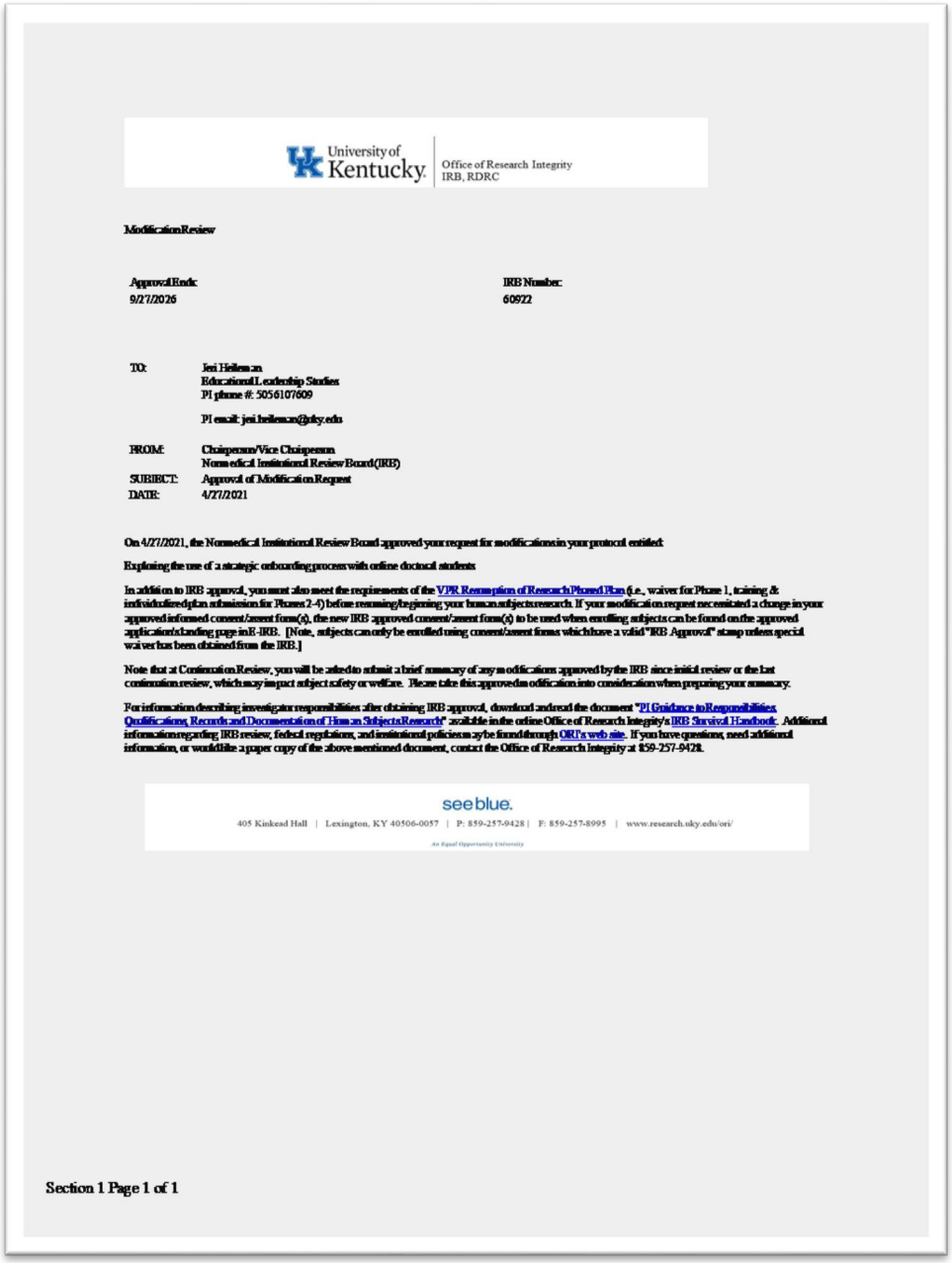
- Annual cohort focus group check–in with Q/A for upcoming year
- Information found from Websites, books, or other resources
- Knowing deadlines and pathway milestones
- Mini–orientation upon entering a new phase of the program
- Sense of connectedness with Cohort
- Sense of support from a faculty member(s)
- Support from family

Q11. **How effective would each of the following items be in providing support during the first year of the program?**
Choices were: Not Effective; Somewhat Effective; Effective; Highly Effective

- Monthly seminars addressing doctoral program topics of interest facilitated by doctoral faculty (how to choose an advisor; tech tips and software; strategies for self–care)
- Online repository of resources, guidelines, support strategies a student could access asynchronously as needed
- Planned experiences to meet and interact with faculty in the department
- Q&A panel discussions with students further along offered once or twice each semester
- Scheduled opportunities to connect with cohort peers to build relationships
- Suggested activities designed to help students identify individual strengths and areas of growth as a doctoral student

Q12. Please share any additional suggestions regarding supports important to the success of doctoral students. What should EDL maintain in the entering experience? What should EDL add to the entering experience?

Appendix E: IRB Letter of Approval



University of Kentucky | Office of Research Integrity
IRB, RDRC

Modification Review

Approval Ends:
9/27/2026

IRB Number:
60922

TO: Jesi Hellesen
Educational Leadership Studies
PI phone #: 5056107609

PI email: jesi.hellesen@uky.edu

FROM: Chairperson/Vice Chairperson
Nonmedical Institutional Review Board (IRB)

SUBJECT: Approval of Modification Request

DATE: 4/27/2021

On 4/27/2021, the Nonmedical Institutional Review Board approved your request for modifications in your protocol entitled:

Exploring the use of a strategic onboarding process with online doctoral students

In addition to IRB approval, you must also meet the requirements of the VPR Resumption of Research Phased Plan (i.e., waiver for Phase 1, training & individualized plan submission for Phases 2-4) before resuming/beginning your human subjects research. If your modification request necessitated a change in your approved informed consent/assent form(s), the new IRB approved consent/assent form(s) to be used when enrolling subjects can be found on the approved application's landing page in e-IRB. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approved" stamp unless special waiver has been obtained from the IRB.]

Note that at Continuation Review, you will be asked to submit a brief summary of any modifications approved by the IRB since initial review or the last continuation review, which may impact subject safety or welfare. Please take this approved modification into consideration when preparing your summary.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" available in the online Office of Research Integrity's IRB Survival Handbook. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at 859-257-9428.

seeblue.
405 Kinkead Hall | Lexington, KY 40506-0057 | P: 859-257-9428 | F: 859-257-8995 | www.research.uky.edu/ori/
An Equal Opportunity University

Section 1 Page 1 of 1

Appendix F: Email Invitation for Reconnaissance Phase

To XXXXX:

As a doctoral candidate at the University of Kentucky I am inviting you to take part in a survey about supports for online doctoral students. You are being asked to participate in this survey because you are a currently enrolled doctoral student in the Department of Educational Leadership Studies at the University of Kentucky. Specifically, this survey explores the onboarding process across the phases of the doctoral journey offered by the department and how it may have impacted your doctoral experience.

The survey will take about 10 minutes to complete and there are no known risks to participating in this survey. There is no compensation for responding to the survey, however, your responses may help us understand more about the sense of connectedness of doctoral students. Some volunteers experience satisfaction from knowing they have contributed to research that may possibly benefit others in the future.

We hope to receive completed questionnaires from 77 people, so your answers are important to us. You have a choice about whether or not to complete the survey. You are free to skip any questions or end responding to the survey at any point. If you decide not to take part in this survey, your choice will have no effect on your academic status or class grade(s).

Your response to the survey will be kept confidential and only viewed by the researcher. At the end of the survey, if you would like to volunteer to participate in an individual interview, you will provide your name and email contact to assist in arranging a post survey interview. These interviews will provide the researcher with additional information regarding individual doctoral student experiences. Your information collected for this study will NOT be used or shared for future research studies, even if we remove identifiable information you provide like your name or email contact.

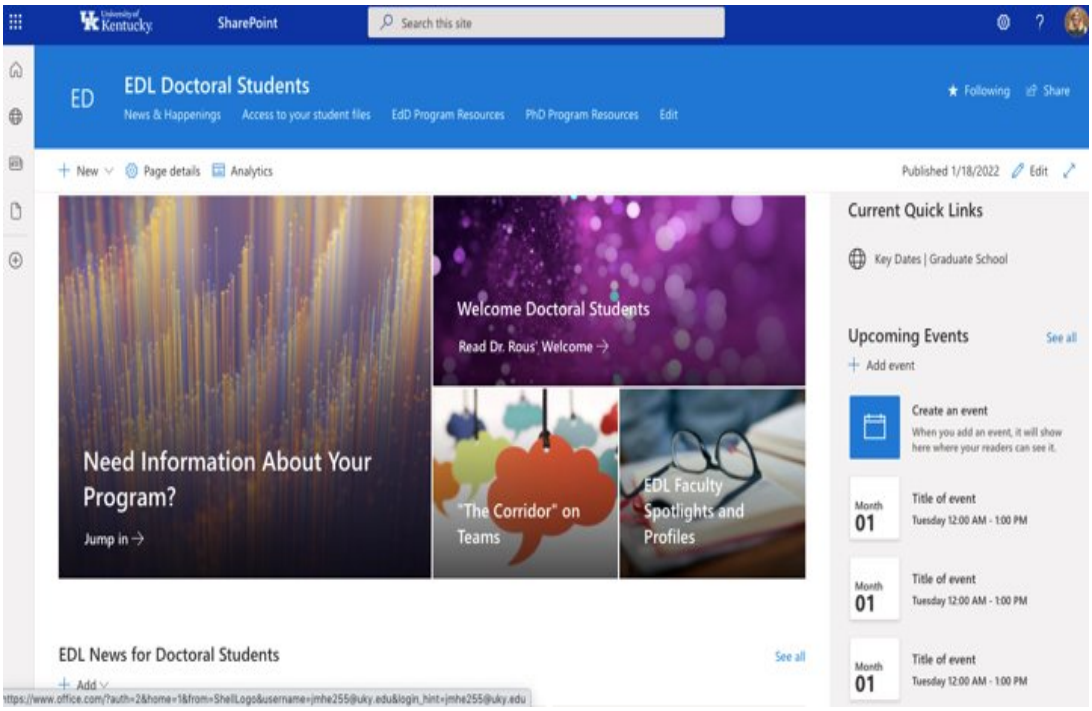
We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained via the Internet. Third-party applications used in this study may have Terms of Service and Privacy policies outside of the control of the University of Kentucky.

We will keep confidential all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or tell authorities if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Kentucky.

I am the principal investigator of this research so please contact me if you have questions. My contact information is listed below, or you may contact my supervising faculty, Dr. Beth Rous at brous@uky.edu. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky (UK) Office of Research Integrity (ORI) at 859-257-9428 or toll-free at 1-866-400-9428 between the business hours of 8am and 5pm EST, Monday-Friday.

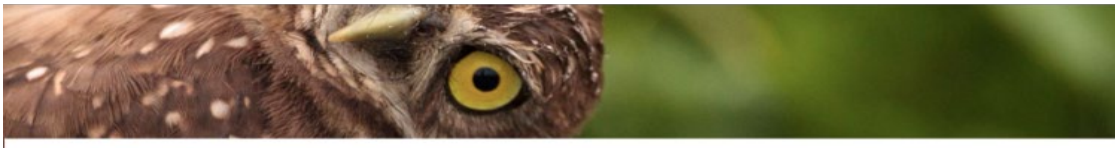
Appendix G: EDL Doctoral SharePoint Site

Screenshot of SharePoint introductory page



Appendix H: Ask Me Anything Sessions

Screenshot of announcements for Ask Me Anything Sessions



Ask a Doc Student Anything! Special AMA for 2019 Cohort Students

Heileman, Jeri M.

EDL is offering an "Ask Me Anything" session for second-year students (Cohort 2019) interested in discussing the process of selecting a committee chair and members.

A panel of doctoral students in year three and beyond will share and answer your questions about this step on the doctoral journey.

This online event is scheduled for Wednesday, October 21st from 7-8pm EST via a Zoom session https://uky.zoom.us/j/84056642731

Password: 922819

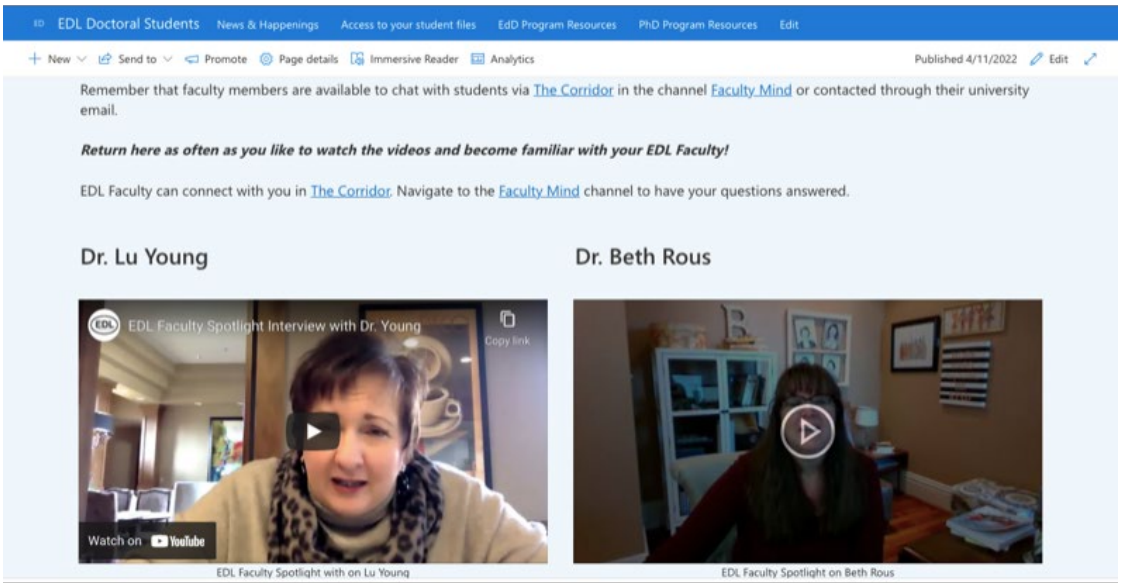
Ask a Graduate Anything! Special AMA Session for Doctoral Candidates

Heileman, Jeri M.

EDL is offering a special Ask Me Anything (AMA) session for doctoral students in the candidacy phase. A panel of recent EDL graduates will answer questions and share their experiences regarding this important phase of the doctoral journey. Join this session to ask questions and hear about strategies that may help you cross the finish line. The session will be held via Zoom on **Wednesday, November 18th from 7-8 pm EST.** The Zoom link for this session is: https://uky.zoom.us/j/6219796401

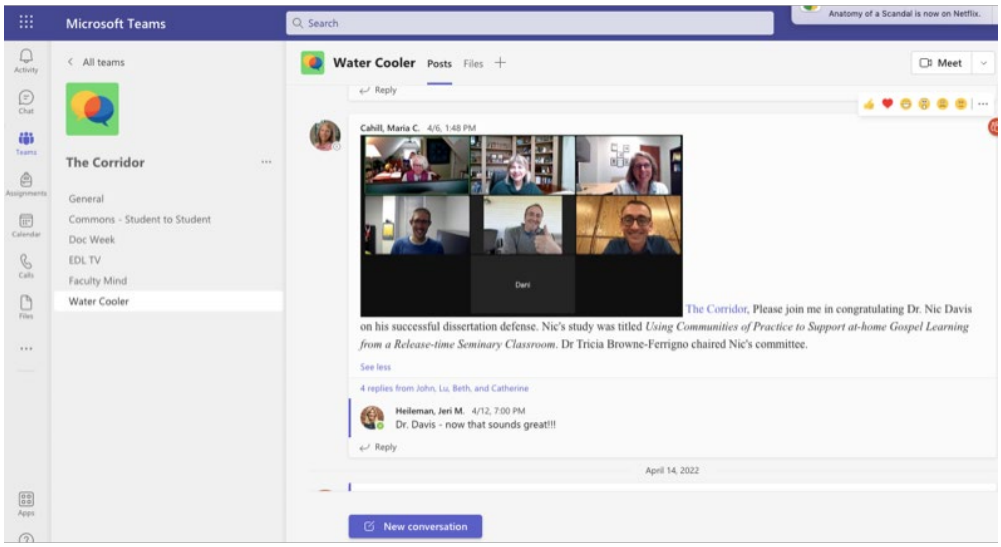
Appendix I: Faculty Spotlight Videos

Screenshot of SharePoint page posting Faculty Spotlight Videos



Appendix J: The Corridor

Screenshots of Communication on The Corridor



Appendix K: EDL Faculty Spotlight Interview Questions

The format of the Faculty Spotlight session is as follows:

- We will join together on Zoom. A current EDL work study, Roma Karma, will join the session because she is helping to record and edit the videos.
- By design, the 'spotlight' is meant to be a casual, comfortable 'chat' to get to know our faculty members, so tuxedos and evening gowns are not required. I'm still searching for a 'young' and 'wrinkle–free' filter.
- I will introduce and welcome you to the series and begin asking the list of questions (below). Let me know if there are any questions you prefer that I omit
- Please expand or elaborate as you would like – we do not have a time limit, and it is easier to edit down than be left with too little.
- Near the end, the questions are part of *Rapid Fire.* It is meant as a fun, quick, one–word response to the last six questions. We are acting like it is the first answer to come to your mind (even though we have let you peek in advance)
- I will close the session with a thank you. The video will be edited, and a copy will be sent to you before posting it to the EDL Doctoral SharePoint site.

QUESTIONS FOR THE SPOTLIGHT SESSION

Hello, Dr. _____, Thank you for participating in our Doctoral Faculty Spotlight Series. This opportunity was designed to help students become more familiar with their doctoral faculty and strengthen connections beyond the classroom. Let's get right to it!

Interview Questions:

1. When did you join the EDL department, and what was your job before coming to the University of Kentucky?
2. What do you enjoy most about your position as a professor?
3. What is your area of research, and what drew you to that?
4. What is one of your favorite courses to teach, and why?
5. Outside of work, what is important in your life?
6. Tell us something interesting about yourself that people might not know or would find surprising.

7. What is your favorite way to spend a day off?
8. What is the next place on your travel bucket list?
9. What are your hobbies, and how did you become interested in them?
10. What is the last thing you read?
11. Can you share a meaningful quote or saying that is important to you?
12. What did you want to be when you were younger?
13. Who has been a major influence in either your personal or professional life?
14. Please share a piece of advice or strategy you give to all of your advisees?

We will now end our interview with a quick, rapid–fire response set of questions....Ready?

Rapid Fire: What is your favorite:

Type of music....

Vacation spot ….

Sport to watch.....

Type of Literature....

Type of candy.....

Morning Beverage.....

Thank you for taking the time to participate in this interview. We definitely know you better now and find you even more interesting! Getting to know our faculty members in areas beyond the classroom builds connections for us as students.

Appendix L: Evaluation Phase Survey

This survey is part of the data collection efforts of a doctoral candidate in EDL. The cover letter which provided this link explains details of the study. You are asked to participate in this survey because of your status as an enrolled doctoral student in EDL. Your participation in this survey is voluntary and your responses will remain confidential. There will be no negative impact if you choose not to complete the survey. Information shared through this survey will deepen an understanding of how the process of onboarding EDL doctoral students has impacted your experience. Thank you for your feedback. Please indicate that you read the cover letter and details of the study and provide consent for your participation in this survey.

The following statements are designed to help better understand your doctoral experiences in EDL involving your cohort, across cohorts, with faculty members, and with awareness of doctoral expectations. Please rate your level of agreement with each statement from Strongly disagree (1) to Strongly agree (5) **at this point in your doctoral journey.**

Within cohort Student–to–Student Connectedness

I feel that students currently in my cohort care about each other.
I feel like fellow students who are in my cohort are like a family.
I communicate regularly with other students in my cohort.
I feel I can trust other students who are in my cohort.
I feel like I can rely on the students in my cohort for support.

Across cohort Student–to–Student Connectedness

I feel connected to other students in the doctoral program
I feel like I can rely on other doctoral students outside my cohort for support
I feel like I can easily communicate with other students about the program
I feel a spirit of community with other doctoral students in EDL

Student–to–Faculty

I feel that I am encouraged to ask questions to the EDL faculty.
I feel a spirit of community between the faculty and myself.
When I ask questions or submit work to a faculty member, I feel like I receive timely feedback.
I communicate with faculty members about the doctoral process on a regular basis.
I feel that I am receiving adequate support from the faculty while I am working on my coursework or dissertation.
I feel that the feedback I receive from the faculty is valuable.
I feel confident that the faculty will support me while I am working through my doctoral program.
I feel I can trust the faculty while I am working through my program pathway (e.g., rely on faculty members to follow through on commitments, keep confidences, treat people with respect, help me learn).

Student Awareness of Doctoral Expectations

I am aware of compliance information regarding the EDL doctoral program
I know how to find clarification regarding aspects of the doctoral program.
I am aware of program expectations of the EDL doctoral program
I am aware of how a doctoral program is different than other degrees I have pursued.
I am aware of the culture and values of the EDL department.
I am aware of doctoral student resources offered by the EDL department.

Student Goals

I feel there is a structure of available student support and that "I am not alone".

I feel familiar with faculty members and that "Faculty have my back"
I feel I am aware of program expectations and resources and that "I know what to do next".

During which phase(s)of the program would each item provide benefit? You may choose more than one phase.

The choices of period during the doctoral program included: First year – Fall Semester; First year – Spring Semester; Second/Third year of coursework; After Passing Qualifying Exams

- Academic writing supports (workshop on resources, APA tutorial, access to UK writing center)
- Awareness of university resources such as UK library, free software downloads, Graduate School website
- Building relationships with faculty
- Choosing an advisor
- Creating a support network of people and resources
- Deciding on your research area
- Knowing graduation requirements and deadlines
- Knowing dissertation guidelines and requirements
- Meeting all faculty
- Resources to support mental/physical wellness
- Self–assessment of technology readiness for an online learning environment
- Sense of community within your cohort
- Strategies for achieving work/life/school balance
- Strategies to Identify your individual strengths and challenges as a student in an online doctoral program
- Understanding Doctoral Program vocabulary
- Understanding your program pathway (what to do and when to do it)

An important part of this research is the collection of qualitative data drawn from individual student experiences. Would you be willing to participate in a short individual interview designed to deepen the researcher's understanding of your doctoral experience?

Please provide an email address and the researcher will send details of scheduling a short online interview at your convenience. Survey Completed. Thank you for your time

Appendix M: Adapted Statements on Survey Instrument

Survey statements adapted from Doctoral Student Connectedness Scale

Area	Original Item	Adapted Statement
***DSCS* Statement Student–to–Student**	I feel that students currently working on their dissertation care about each other.	*I feel that students currently in my cohort care about each other.
	I feel I can easily communicate with other students about the dissertation.	Omitted – did not use (another statement involves communication)
	I feel like fellow students who are working on their dissertation are like a family.	*I feel like fellow students who are in my cohort are like a family.
	I communicate regularly with other students who are working on their dissertation.	*I communicate regularly with other students in my cohort.
	I feel I can trust other students who are working on their dissertation.	*I feel I can trust students who are in my cohort.
	I feel like I can rely on other students who are working on their dissertations form their support.	*I feel like I can rely on the students in my cohort for support. ** I feel like I can rely on other doctoral students outside my cohort for support.
	I feel a spirit of community between other students and myself while working on the dissertation.	**I feel a spirit of community with other doctoral students in EDL.
	I feel connected to other students in the program who are working on their dissertation.	**I feel connected to other students in the doctoral program.
	I feel like I can easily communicate with other students who are working on their dissertations.	**I feel like I can easily communicate with other students about the program.
*= adapted to within cohort; ** = adapted to across cohorts		

Area	Original Item	Adapted Statement
DSCS Statement Student to Faculty	I feel that I am encouraged to ask questions to the faculty about the dissertation process.	I feel that I am encouraged to ask questions to the EDL faculty.
	I feel a spirit of community between the faculty and myself while I am working on my dissertation.	I feel a spirit of community between the faculty and myself.
	When I ask questions or submit work to my dissertation advisor, I feel like I receive timely feedback.	When I ask questions or submit work to a faculty member, I feel like I receive timely feedback.
	I communicate with faculty members about the dissertation process on a regular basis.	I communicate with faculty members about the doctoral process on a regular basis.
	I feel that I am receiving adequate support from the faculty while I am working on my dissertation.	I feel that I am receiving adequate support from the faculty while I am working on my coursework or dissertation.
	I feel that the feedback I receive from the faculty is valuable.	I feel that the feedback I receive from the faculty is valuable.
	I feel confident that the faculty will support me while I am working on my dissertation.	I feel confident that faculty will support me while I am working through my doctoral program.
	I feel I can trust faculty while I am working on my dissertation (e.g., rely on faculty members to follow through on commitments, keep confidences, treat people with respect, and help me learn).	I feel I can trust faculty while I am working through my program pathway (e.g., rely on faculty members to follow through on commitments, keep confidences, treat people with respect and help me learn)
	I feel like I can easily communicate with faculty about the dissertation.	Omitted – did not use (already had a statement involving communication)

Appendix N: Invitation for Evaluation Survey

To XXXXX:

As a doctoral candidate at the University of Kentucky I am inviting you to take part in a survey about supports for online doctoral students. You are being asked to participate in this survey because you are a currently enrolled doctoral student in the Department of Educational Leadership Studies at the University of Kentucky. Specifically, this survey explores the onboarding process across the phases of the doctoral journey offered by the department and how it may have impacted your doctoral experience.

The survey will take about 10 minutes to complete and there are no known risks to participating in this survey. There is no compensation for responding to the survey, however, your responses may help us understand more about the sense of connectedness of doctoral students. Some volunteers experience satisfaction from knowing they have contributed to research that may possibly benefit others in the future.

We hope to receive completed questionnaires from about 80 people, so your answers are important to us. You have a choice about whether or not to complete the survey. You are free to skip any questions or end responding to the survey at any point. If you decide not to take part in this survey, your choice will have no effect on your academic status or class grade(s).

Your response to the survey will be kept confidential, which means no names, IP addresses, email addresses, or any other identifiable information will be available to anyone other than the researcher. At the end of the survey, if you would like to volunteer to participate in an individual interview, you will provide your name and email contact to assist in arranging a post survey interview. These interviews will provide the researcher with additional information regarding individual doctoral student experiences.

We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained via the Internet. Third–party applications used in this study may have Terms of Service and Privacy policies outside of the control of the University of Kentucky.

We will keep confidential all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or tell authorities if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Kentucky.

I am the principal investigator of this research so please contact me if you have questions. My contact information is listed below, or you may contact my supervising faculty, Dr. Beth Rous at brous@uky.edu. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky (UK) Office of Research Integrity (ORI) at 859–257–9428 or toll–free at 1–866–400–9428 between the business hours of 8am and 5pm EST, Monday–Friday.

Thank you in advance for your assistance with this important project. To ensure your responses/opinions will be included, please submit your completed survey/questionnaire within one week (7 days). The link to the Qualtrics survey is:

https://uky.az1.qualtrics.com/jfe/form/SV_bClVux5dhArLXHD

Sincerely,

Jeri Heileman

Department of Educational Leadership Studies, College of Education, University of Kentucky

PHONE: 505–610–7609 E–MAIL: jmhe255@uky.edu

Appendix O: Invitation for Interview

To XXXXX:

As a doctoral candidate at the University of Kentucky I am inviting you to take part in a short interview regarding your experience as an online doctoral student in the Department of Educational Leadership. You are being asked to participate in this interview because you are enrolled as a doctoral student within the Department of Educational Leadership Studies at the University of Kentucky. The interview will examine how onboarding process across the phases of a doctoral journey impacts a student's doctoral experience.

The interview will take about 20 minutes to complete and will occur at your convenience via a scheduled Zoom session online. There are no known risks to participating in this interview session. There is no compensation for participating, however, your responses may help us understand more about the experience of doctoral students and effective onboarding strategies to support students across the phases of their program. Some volunteers experience satisfaction from knowing they have contributed to research that may possibly benefit others in the future.

We hope to interview about 20 people, so your insights are important to us. You have a choice about whether or not to participate, and if you do participate, you are free to not answer any question or stop the interview at any point. As a student, if you decide not to take part in this interview, your choice will have no effect on your academic status or class grade(s).

We will keep confidential all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or tell authorities if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Kentucky.

We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained via the internet. Third–party applications used in this study may have Terms of Service and Privacy policies outside the control of the University of Kentucky.

The interview will take place via Zoom at a prearranged date and time convenient for you. The session will be recorded using the Zoom recording feature to assist with data analysis. If you do not wish to have the session recorded then the researcher will not proceed with the interview. Zoom records both audio and video and provides an audio transcription of the meeting. The audio transcription is the portion that will be used for data analysis. The video of the session will be immediately deleted after the session. The audio recording will be deleted as soon as the audio transcript is verified as accurate. Until such time all recordings will be secured on the researcher's personal computer which is password protected. The audio transcription will be secured in a file on the same computer.

If you are willing to participate in this short interview session, please reply to this email within the next week (7 days) with a day and time that is convenient prior to the end of May. I will confirm the interview session with a calendar invite and provide the zoom room link.

As the principal investigator of this research, please contact me if you have questions. My contact information is listed below, or you may contact my supervising faculty, Dr. Beth Rous at brous@uky.edu. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky (UK) Office of Research Integrity (ORI) at 859–257–9428 or toll–free at 1–866–400–9428 between the business hours of 8am and 5pm EST, Monday–Friday.

Thank you in advance for your assistance with this important project. Your willingness to share your experience is greatly appreciated. Please reply to this email and submit a date and time for this brief interview to be scheduled within one week (7 days) to confirm your participation.

Sincerely,
Jeri Heileman
Department of Educational Leadership Studies, College of Education, University of Kentucky
PHONE: 505–610–7609. E–MAIL: jmhe255@uky.edu

Appendix P: Interview Script

Evaluation Phase Qualitative Strand

University of Kentucky IRB Protocol #60922
Script for Semi–structured Interview Session

Researcher: Greet, thank, and welcome the participant.

Researcher: Data collected from this interview session will be used in my dissertation study about the experiences of online doctoral students in the EDL doctoral programs. As a volunteer participant in this interview, you have previously been emailed a research consent form with details of the study and its voluntary and confidential nature, however, I would like to share that document on my screen and provide a few reminders.

[share screen to show the consent form]

- Your participation is voluntary
- You may omit answering any question and end the session at any time
- Your answers will be kept confidential and no identifying information will be connected to their transcribed answers
- Any questions or concerns you have may be addressed to the researcher (me), the supervising faculty (Dr. Beth Rous) or the ORI.
- Contact information for the lead researcher, Dr. Rous, and the ORI is listed in the email invitation
- The Zoom session will be recorded but after the audio contents have been transcribed the audio and video of the session will be destroyed/deleted.

Do you have any questions about the interview session?
Do you give your consent to begin the interview session and record the session?

Begin recording the session.

Questions for the Semi–structured Interview

Researcher:
As you may know, EDL has been redesigning the onboarding process to help our doctoral students better connect with their doctoral peers, EDL faculty members, and increase their awareness of doctoral program expectations and available resources. This interview will be asking you to share about your doctoral experience over the last year.

Question:
Talk to me about the ways you have engaged with EDL students, faculty, and resources outside your coursework over the last year.

Question:

How and when do you feel you gained an awareness of doctoral expectations?

Researcher:
Now I will ask some questions about some specific experiences that were offered this past year. You may or may not be aware or able to answer these questions and that is fine. Just share what you can.

<Ask the following questions for each of the onboarding elements: SharePoint, Ask Me Anything Sessions, Faculty Spotlight Videos, Teams The Corridor>

Question:
Were you aware of <SharePoint, Ask Me Anything Sessions, Faculty Spotlight Videos, Teams The Corridor>? If so, please describe your level of access or engagement.

*If interviewee answers no access or a minimal amount, ask for reasons why.

Question:
Thinking about your journey up to this point. What do think has strengthened your sense of connectedness to your peers? To faculty members? and to resources and information?

Question:
Thinking about the rest of your doctoral journey, which will be the most important to supporting your completion? A connectedness to peers, faculty members, or resources and information?

Researcher: Thank you for participating in this interview session.

END THE RECORDING.

References

Ampaw, F. D., & Jaeger, A. J. (2012). Completing the Three Stages of Doctoral Education: An Event History Analysis. *Research in Higher Education*, *53*(6), 640–660. https://doi.org/10.1007/s11162–011–9250–3

Bair, C.R. (1999). *Doctoral student attrition and persistence: A meta–synthesis.* (Doctoral dissertation, Loyola University, Chicago, 1999). Dissertation Abstracts International.

Bauer, T. N. (2010). Maximizing Success. *SHRM Foundation's Effective Practice Guidelines Series*.

Bauer, T. N., & Erdogan, B. (2011). Organizational socialization: The effective onboarding of new employees. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology, Vol. 3. Maintaining, expanding, and contracting the organization* (pp. 51–64). American Psychological Association. https://doi.org/10.1037/12171-002

Bazzi, A. (2020, October 29). *Survivorship Bias: The Mathematician who helped win World War II*. Cantors Paradise.

Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, *6*(1), 97–113. https://doi.org/10.1177/1468794106058877

Creswell, J. W., & L., P. C. (2011). *Designing and conducting mixed methods research*. Los Angeles: Sage.

Craig, D. V. (2009). *Action research essentials* (Vol. 11). John Wiley & Sons.

Datt, S., & Chetty, P. (2016, October 16). 8–step procedure to conduct qualitative content analysis in research. Retrieved April 29, 2020. from https://www.projectguru.in/qualitative-content-analysis-research/

Davis, S. N., Bissler, D. L., & Leiter, J. (2001). Leveling the playing field: An orientation to graduate study in sociology. *Teaching Sociology, 29*(4), 454- 462. https://doi.org/10.2307/1318946

Education at a glance 2013: OECD indicators. OECD. (n.d.). Retrieved April, 2021, from https://www.oecd.org/education/eag2013.htm

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Erwee, R., Albion, P., Van Rensburg, H., & Malan, R. (2011). Dealing with doctoral students: Tips from the trenches. *South African Journal of Higher Education*, *25*(5), 889–901.

Exter, M. E., Korkmaz, N., Harlin, N. M., & Bichelmeyer, B. A. (2009). Sense of community within a fully online program. *Quarterly Review of Distance Education, 10*(2), 177–194.

Franzosi, R. (Ed.) (2008). *Content analysis*. (Vol. 1–4). Sage Publications.

Gardner, S. K., & Gopaul, B. (2012). The part–time doctoral student experience. *International Journal of Doctoral Studies*, *7*(12), 63–78.

Gardner, S. K. (2009). *The development of doctoral students: Phases of challenge and support*. Jossey–Bass.

Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *Journal of Higher Education, (Columbus, Ohio), 76*(6), 669–700. https://doi.org/10.1353/jhe.2005.0039

Hall, L. A., & Burns, L. D. (2009). Identity development and mentoring in doctoral education. *Harvard Educational Review, 79*(1), 49–70, 166–167. https://doi.org/10.17763/haer.79.1.wr25486891279345

Hesse–Biber, S. (2015). The problems and prospects in the teaching of mixed methods research. *International Journal of Social Research. Methodology: European Journal of Research Methods for the Behavioral and Social Sciences, 18*(5), 463–477. https://doi.org/10.1080/13645579.2015.1062622

Holmes, B., Willis, K., & Woods, E. (2016). Strategic Onboarding of Online Doctoral Students: Creating a Pathway to Academic Persistence. *Asian Journal of Social Sciences and Management Studies*, *3*(2),136-139. https://doi.org/10.20448/journal.500/2016.3.2/500.2.136.139

Ivankova, N. V. (2015). *Mixed methods applications in action research: From Methods to Community Action*. SAGE Publications.

Ivankova, N., & Stick, S., (2007). Students' persistence in a distributed doctoral program in Educational Leadership in Higher Education: A mixed methods study. *Research in Higher Education, 48*(1), 93–135. https://doi.org/10.1007/s11162-006-9025-4

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133. https://doi.org/10.1177/1558689806298224

Jorissen, S. L., Keen, J. P., & Riedel, E. S. (2015). Online Ph.D. program delivery models and student success. *American Journal of Distance Education, 29*(4), 232–247. https://doi.org/10.1080/08923647.2015.1084839

Kardasz, S. M. (2013). What are the best approaches for encouraging the diffusion of a new instructional technology among faculty members in Higher Education? A look at eportfolio use at Stony Brook University. *Journal of Educational Technology Systems*, *42*(1), 43–68. https://doi.org/10.2190/ET.42.1.e

Langer, L. J. (2008). The implementation of a proseminar course to lead change in the MS.MBA Biotechnology Programme at Johns Hopkins University. *Journal of Commercial Biotechnology, 15*(2), 113–124.

Liu, M., & Cernat, A.. (2018). Item–by–item versus matrix questions. *Social Science Computer Review*, *36*(6), 690–706. https://doi.org/10.1177/0894439316674459

Luo, A. (2019, July 18). *What is content analysis and how can you use it in your research?*. Scribbr. Retrieved April 2020, from https://www.scribbr.com/methodology/content-analysis/

Lovitts, B. E. (2001). *Leaving the ivory tower: the causes and consequences of departure from doctoral study*. Rowman & Littlefield Publishers.

Maxwell, J. A. (2010). Using numbers in qualitative research. *Qualitative Inquiry*, *16*(6), 475–482. https://doi.org/10.1177/1077800410364740

McNiff, J., & Whitehead, J. (2011). *All you need to know about action research*. SAGE Publications.

Morrow, J., & Ackermann, M. (2012). Intention to persist and retention of first–year students: The importance of motivation and sense of belonging. *College Student Journal*, *46*(3), 483–491.

Muhammad, A., & Cruz, L. F. (2019). *Time for change: Four essential skills for transformational school and district leaders*. Solution Tree Press, a division of Solution Tree.

Mullendore, R. H. & Banahan, L. A. (2005). Designing orientation programs. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot &Associates. (Eds.), Challenging and supporting the first–year student. Jossey–Bass.

Palloff, R. M., & Pratt, K. (2005). *Collaborating online: Learning together in community*. Jossey–Bass.

Rovai, A. P. (2002). Building sense of community at a distance. *The International Review of Research in Open and Distance Learning*, *3*(1). https://doi.org/10.19173/irrodl.v3i1.79

Sandelowski, M., Voils, C. I., & Knafl, G. (2009). On quantitizing. *Journal of Mixed Methods Research*, *3*(3), 208 – 222. https://doi.org/10.1177/1558689809334210 PMID:19865603

Sapsford, R., & Jupp, V.(Eds.) (2006). *Data collection and analysis*. Sage Publications Ltd. https://doi.org/10.4135/9781849208802

Schaffhouser, D. (2016). Taking Student Orientation Online. Retrieved April 2020, from https://campustechnology.com/articles/2016/08/25/taking–student–orientation–online.aspx

Shackelford, J. L., & Maxwell, M. (2012). Sense of community in graduate online education: Contribution of learner to learner interaction. *The International Review of Research in Open and Distributed Learning*, *13*(4), 228.

Shambaugh, R. N. (1999). Reframing doctoral programs: A program of human inquiry for doctoral students and faculty advisors. *Innovative Higher Education*, *24*(4), 295–308. https://doi.org/10.1023/B:IHIE.0000047416.30089.88

Spaulding, L., & Rockinson–Szapkiw, A. (2012). Hearing their voices: Factors doctoral candidates attribute to their persistence. *International Journal of Doctoral Studies*, *7*, 199–219. https://doi.org/10.28945/1589

Stallone, M. N. (2004). Factors associated with student attrition and retention in an educational leadership doctoral program. *Journal of College Teaching and Learning (TLC)*, *1*(6). https://doi.org/10.19030/tlc.v1i6.1952

Sverdlik, A., Hall, N., & McAlpine, L. (2020). PhD imposter syndrome: Exploring antecedents, consequences, and implications for doctoral well–being. *International Journal of Doctoral Studies*, *15*, 737–758. https://doi.org/10.28945/4670

Terrell, S. R., Snyder, M. M., & Dringus, L. P. (2009). The development, validation, and application of the doctoral student connectedness scale. *The Internet and Higher Education*, *12*(2), 112–116. https://doi.org/10.1016/j.iheduc.2009.06.004

Thomas, R. M. (2003). *Blending qualitative & quantitative research methods in theses and dissertations*. SAGE distributor.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, *45*(1), 89–125. https://doi.org/10.3102/00346543045001089

Tinto, V. (2012). *Leaving college: Rethinking the causes and cures of student attrition*. University of Chicago Press.

Understanding the Shifting Adult Learner Mindset: Insights for Growth from EAB's Adult Learner Survey. (2019).

UK College of Education. (2020). *College of Education History.* https://education.uky.edu/history/

UK College of Education. (2020). *About Educational Leadership.* https://education.uky.edu/edl/about/

University of Kentucky. (n.d.) *State of the University: 2015–2020 Strategic Plan.* https://www.uky.edu/sotu/2015–2020–strategic–plan

West, I. J., Gokalp, G., Edlyn, V., Fischer, L., & Gupton, J. (2011). Exploring effective support practices for doctoral students' degree completion. *College Student Journal*, *45*(2), 310–323.

Yin, R. K. (2006). Mixed methods research: Are the methods genuinely integrated or merely parallel? *Research in the Schools, 13*(1), 41–47.

Vita

Jeri M Heileman

EDUCATION

Graduate Certificate 2019, Executive Educational Leadership

University of Kentucky, Lexington, Kentucky
Ed.S. 2012 Educational Specialist Certificate
University of New Mexico, Albuquerque, New Mexico
M.A. 1990 Foundations of Education
University of New Mexico, Albuquerque, New Mexico
B.A. 1982 Elementary Education
University of Florida, Gainesville, Florida

PROFESSIONAL POSITIONS

Professional Experience: Public and Private School Administration
Albuquerque Public Schools
Van Buren Middle School, Principal (2015–17), Assistant Principal (2014–15)
Georgia O'Keefee, Assistant Principal (2013–14)
Albuquerque Public Schools
District Level, Instructional Manager for Instructional Coaches (2012–13)
Albuquerque Public Schools
District Level, Instructional Math Coach (2009–2012)
St. John's UMC Preschool Plus Kindergarten, Albuquerque, New Mexico (1995–2007)
Albuquerque Manor, Licensed Kindergarten, Albuquerque, New Mexico (1992–95)

Professional Experience: Public School Teaching
Albuquerque Public Schools, Albuquerque, New Mexico
McKinley Middle School – Sixth Grade, Eighth Grade
Seminole County Public Schools, Lake Mary, Florida
Lake Mary Elementary – Kindergarten, Third Grade
Greenwood Lakes Middle School – Sixth Grade, Eighth Grade
Durham County Public Schools, Durham, North Carolina
Lowe's Grove Elementary – Sixth Grade