



## THE CORRELATION BETWEEN SELF-EFFICACY AND TIME TO DEGREE COMPLETION OF EDUCATIONAL LEADERSHIP DOCTORAL STUDENTS

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### ABSTRACT

Aim/Purpose	This study examined an Ed.D. program redesign to address time to degree completion. The aim was to emphasize the need to improve students' academic writing and embody a scholarly practitioner approach to research.
Background	Doctoral programs have the highest attrition of graduate programs, with almost half of the students taking six to seven years to complete.
Methodology	An ex-post-facto correlational research design examined self-efficacy and educational leadership doctoral students perceived versus actual program progression. This was statistically determined through Pearson's correlation coefficients and a t-test analysis.
Contribution	This study provides other doctoral programs who are struggling with time to degree completion a model to consider as they contemplate a program redesign.

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Findings	Ed.D. students in the 2014 and 2015 cohorts reported high self-efficacy (3.62 and 3.57 respectively, out of 4.00). There was a statistically significant difference in the number of defenses completed per semester based on the program redesign.
Recommendations for Practitioners	Ed.D. programs should consider using a scholarly practitioner approach. This focus may lead to faster rates of degree completion and better prepare students to solve problems of practice in their practitioner setting.
Recommendations for Researchers	While the results are promising as to expediting time to degree completion, like most doctoral programs it does not seem to impact overall completion rates of the program as a whole, thus, warranting further research.
Impact on Society	Expediting time-to-completion enables students to graduate sooner. This will yield cost savings to the student, free up faculty resources, and most importantly prepare students to sooner serve as scholarly practitioners.
Future Research	Future research should continue to examine time to degree completion, as well as students' lived experiences and examine how those shape doctoral students' efforts and abilities in their Ed.D. work from start to program completion.
Keywords	degree completion, educational leadership, leadership preparation, problem of practice, scholarly practitioners

## INTRODUCTION

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The time to complete a doctoral degree is an ongoing concern in the higher education arena. “Doctoral attrition is a decades-old and multifaceted problem, affecting institutions and students worldwide” (Ames, Berman & Casteel, 2018, p. 84). In 2016, the most recent survey data available, the 2017 National Science Foundation (NSF) Survey of Earned Doctorates, an annual report of research doctorate recipients from accredited United States institutions, indicated that national averages showed the following median years to doctorate completion by discipline type: engineering, 5.3 years; physical and life sciences, 5.7 years; psychology and social sciences, 6.0 years; humanities and arts, 7.0 years; and, education, 6.0 years. Of the 54,904 doctoral degrees conferred, 5,153 of those were in the field of education, with 829 specifically in the field of education administration (NSF, 2017). While approximately 20% of all graduate students are pursuing doctoral degrees, 70% of these doctoral students do not persist to graduation (Berman & Ames, 2015). For education majors, the estimated attrition rate is 50%, with an additional 20-30% opting out at the dissertation stage and remaining *All But Dissertation* (Berman & Ames, 2015). In addition, a seminal study from Shulman, Golde, Bueschel, and Garabedian (2006) concluded that the education doctorate does not “serve the needs of professional practice” even though the degree was intended to prepare the highest level of educational leadership practitioners for schools and institutions of higher education (p. 29). These findings should give doctoral faculty pause for concern.

As educational leadership faculty at a designated public, doctoral research university located in the rural southeast United States, we examined graduation rates for our doctoral program and found similar results of increasingly low graduation rates. The need to address educational leadership program effectiveness, specifically time to degree completion, best encapsulated our vision for this study and desire to redesign our educational leadership doctoral program.

In an effort to better understand students' progression, or lack thereof, from the start of program coursework through to dissertation and degree completion, our research team was intentionally composed of multiple educational leadership faculty and a current Ed.D. doctoral student (who also holds a staff position at the university). To combat the increasingly low graduation rates, the Carnegie

Project on the Education Doctorate (CPED) (2018) tenants were utilized to adjust the focus of our traditional doctoral program to one that emphasized scholarly practitioner research and academic writing. Scholarly practitioners are consumers of research and use scholarly research to apply theory to practice in an effort to achieve educational change, as they merge practical knowledge with professional skills to solve problems of practice. We predicted that this redesign would have a positive impact upon student progression and, thus, the overall effectiveness of our educational leadership preparation program, as students would reach degree completion at greater rates because they were better prepared for the dissertation phase because of the programs' new focus on scholarly practitioner research and academic writing.

We sought to determine factors that may relate to the timely progression of doctoral students and this required student input and feedback to determine if the intended goals of our program translated to the field of practice in preparing educational leadership students who are scholarly practitioners with strong academic writing skills. Thus, students' perceptions of their ability in progressing through a doctoral program (their self-efficacy) was the crux of this study.

The first research question for this study was identified as the following: What is the correlation between educational leadership doctoral students' self-efficacy as measured by the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) and program progression as measured by attainment of major transitional points (pre-prospectus, prospectus, and final dissertation defenses)? The second research question for this study was: What is the correlation between educational leadership doctoral students perceived versus actual final defense date and program progression as measured by attainment of major transitional points (pre-prospectus, prospectus, and final dissertation defenses)?

## REVIEW OF THE LITERATURE

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Germaine to the study was an examination of the literature relative to the issues surrounding doctoral students' success in terms of progression. This review of the literature will examine educational leadership program effectiveness, factors impacting doctoral student progression, doctoral student time to degree completion, and self-efficacy through a scholarly practitioner lens as the conceptual framework.

### *EDUCATIONAL LEADERSHIP PREPARATION PROGRAM EFFECTIVENESS*

A pivotal study (Shulman et al., 2006) concluded that the education doctorate faced "chronic and crippling" issues and needed revamping to carry out its mission of advancing knowledge and preparing quality practitioners (p. 25). Doctoral preparation programs have the highest dropout rates of post-baccalaureate programs at a 43% dropout rate and only 41% of students completing their doctoral degrees within six to seven years poses cause for concern in institutions of higher education offering educational leadership doctoral programs (Ampaw & Jaegar, 2012; NSF, 2017). The current need for effective educational leadership preparation is key in ensuring graduates of the program are adequately trained to deal with the increasing complexity of varied administrative roles. Participation in a doctoral program can be a transformative experience that shapes a learner's identity (Kriner, Coffman, Adkisson, Putman, & Monaghan, 2015). When doctoral students do not complete their dissertations, which comes as a great expense to the student, institution, and society, their potential contributions are substantially diminished, which impacts career goals and life plans (Kelley & Salisbury-Glennon, 2015).

### *FACTORS IMPACTING DOCTORAL STUDENT PROGRESSION*

Because students make an investment in pursuit of a doctorate, factors leading to success or hindrance of the degree need to be addressed from both the faculty and student perspectives, as unclear expectations, feelings of isolation, and lack of preparedness for the work of the dissertation as hindrances to doctoral degree completion were cited as factors negatively impacting time to degree

completion (Lake, Koper, Balayan, & Lynch, 2018; Malone, Nelson, & Nelson, 2001). In addition, programs often admit students who do not demonstrate the ability to be successful in a doctoral program but are pressured to meet the university goals of increasing enrollment, and this cannot be overlooked (McConnell, 2015).

However, on a positive note, Storms, Prada, and Donahue (2011) found factors leading to success were a quality relationship between the candidate and major professor and recommended dissertation advisors be trained in how to support students during the final phase of degree completion. By strengthening graduate student-faculty relationships, students have more opportunities to learn to conduct research and get feedback from their mentors, which may increase graduate students' confidence and willingness to conduct future research (Chesnut, Siwatu, Young, & Tong, 2015). "To facilitate the progress of emerging scholars, it is important to develop pragmatic solutions to allow new researchers to become successful as they endeavor to produce academic research" (Ames et al., 2018, p. 84). In addition, promoting doctoral student's communication with their dissertation committee is key to program success (Ames et al., 2018).

Lake et al. (2018) noted that the three elements of personal motivation, faculty support, and the cohort model contributed to the success of individual students and recommended that institutions begin to systematically gather and share retention data at the graduate level to improve attrition rates. Completion time is potentially impacted by a host of factors, both internal and external to a graduate program, that are difficult to capture and/or measure. Some of these factors include how a program is defined, carried out, and monitored, availability of faculty and academic resources, lack of faculty support, and varied institutional failings. Faculty often struggle to find the right combination of program design and support to retain students through to degree completion. Increasing doctoral retention requires developing holistic approaches that create opportunities for growth of doctoral students who are in the challenging dissertation stage (Ames et al., 2018). The reasons for high attrition rates in doctoral programs vary and research in this area is scant, as such, there is a gap in the literature and need for further research to combat these high attrition rates

### ***DOCTORAL STUDENT TIME TO DEGREE COMPLETION***

Time to degree completion was an issue for the doctoral students involved in the study, with many remaining *All But Dissertation (ABD)* within the seven-year window required for degree completion. This resulted in students requiring an extension or dropping out and never progressing beyond this ABD status. We viewed this as a failing that needed to be addressed. According to Ross (2010), "any graduate level educational leadership faculty seeking to continually reform and transform to better meet the needs of their stakeholders should engage in discussions about their underlying assumptions and needs in order to develop a coherent and consistent program" (p. 495). Thus, this concern with doctoral degree completion led us to the decision to re-envision our educational leadership doctoral program.

### ***EDUCATIONAL LEADERSHIP PREPARATION PROGRAM REDESIGN***

In the years since Levine's (2005) scathing critique regarding the demise of the Ed.D., educational leadership professors across the country have been challenged to reimagine and redesign Ed.D. programs, in which the focus is on developing the knowledge and skills doctoral students need to serve as effective educational leaders to ensure school improvement (Andrews & Grogan, 2005; Evans, 2007; Perry, 2012; Shulman, 2005; Shulman et al., 2006). Schools of education, specifically doctoral programs in educational leadership, have been criticized for lack of sufficient academic rigor and have received recommendations calling for redesign and reform (Maranto, Ritter, & Levine, 2010; Zirkel, 2012). In this challenge, concerned academics have concentrated on what makes an Ed.D. dissertation unique from the Doctorate of Philosophy (Ph.D.) traditional study. One view is that while the Ed.D. is generally regarded as a degree of practice and applied degree by design, focused on preparing practitioners to lead educational organizations, and the traditional Ph.D. is considered a

research-oriented degree focused on preparing researchers and future faculty; in many universities the distinction between the two is quite hazy (Goldring & Schuermann, 2009). As Aiken and Gerstl-Pepin (2013) stated:

[We too] use examples such as Shulman's (2005) comparison of the EdD degree as similar in purpose to the role of a surgeon and the PhD as being similar to the role of a physiologist. The surgeon (like the EdD practitioner) diagnoses the problem and then uses surgical means and research knowledge in order to decide how best to treat the problem. The physiologist (like the PhD in education), in comparison, studies the human body so they can contribute to new knowledge and understanding about possible treatments and diagnoses. (p. 170)

Active redesign of doctoral programs could potentially aid educational leadership preparation programs in better distinguishing between these two pathways with one for scholars preparing for research and academic roles, and one for scholar-practitioners who wish to focus on problems of practice and implementation (Zambo, Zambo, Buss, Perry, & Williams, 2014) with the latter being the goal of our program.

### ***CONCEPTUAL FRAMEWORK: GENERAL SELF-EFFICACY***

During this redesign, we agreed it was vital to get feedback from students about their ability and confidence in progressing through the educational leadership doctoral program from admission through to program completion (coursework and dissertation). Initially, we examined archival data to explore whether or not any of the variables that served as admissions criteria had any relationship with completion rates. Finding none, we centered on the notion of general self-efficacy as the conceptual framework for this study to better understand our students' abilities. The concept of self-efficacy was first proposed as a new framework for behavioral change by Bandura (1977) in his seminal publication. Bandura (1977) defined students' general self-efficacy as "the conviction that one can successfully execute desired behavior", and more specifically, included students' perceptions of their own ability to be successful (p. 93). According to Bandura (2012), perceived self-efficacy affects people's choice of actions and behaviors, how much effort they exert, and the time they will commit to persisting in the face of obstacles and in this case the obstacles being progression and time to degree completion. Bandura (2012) expanded his view of self-efficacy to include "a judgment of capability" (p. 29).

Seminal work by Bandura (2001) also noted that the higher the perceived self-efficacy, the more aggressive the efforts will be to achieve the intended goal. Additionally, research has shown there is a positive relationship between students' self-efficacy and academic performance (Lambie, Hayes, Griffith, Limburg, & Mullen, 2014; Lent, Brown, & Larkin, 1984, 1986; Multon, Brown, & Lent, 1991). Lane, Lane, and Kyprianou (2004), seeking to examine the effects of self-efficacy, self-esteem, and their impact on academic performance in 205 postgraduate graduates, found that there was a significant correlation between self-efficacy and performance accomplishments. While the study provided an examination of the predictive power of self-efficacy, due to the challenge of isolating factors that influence self-efficacy judgments, the researchers encouraged further study on this relationship. In Honicke and Briadbend's (2016) systematic review of the past 12 years of research on the influence of self-efficacy on academic performance, findings indicated that academic self-efficacy moderately correlates with academic performance; however, general self-efficacy was not part of the study. Similarly, in a seminal study, Multon et al. (1991) conducted a meta-analysis of 39 studies investigating the relationship of self-efficacy to academic performance and persistence. Once again, results revealed positive and statistically significant relationships between self-efficacy beliefs and academic performance and persistence outcomes. However, researchers have cautioned that there existed problems with differentiating the effects of self-efficacy and other constructs, such as self-concept, expectancy value, student demographics, measures, personal, psychosocial, and institutional factors, and study characteristics (Gardner, 2009; Pajares, 1996; Spalding & Rockinson-Szapkiw, 2012; Stallone, 2011).

For the purposes of this study, self-efficacy was examined through the lens of a scholarly practitioner preparing to be an effective educational leader. To better understand how students tackled a highly challenging task and for the purposes of this study, doctoral students' self-efficacy, based on the work of Bandura (2012), was noted as students' perceptions of their confidence in their ability to transition through each program milestone as a scholarly practitioner to attain degree completion.

## METHODOLOGY

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### *RESEARCH DESIGN*

An ex-post-facto correlational research design utilized quantitative data to determine whether a correlation existed between self-efficacy and educational leadership doctoral students' program progression. Ex-post facto, meaning *after the fact*, is the most relevant approach to the research questions of this study due to the fact that data had been collected initially for program assessment and improvement prior to engagement in this research study (Gay & Airasian, 2003).

The purpose of this study was to determine if there was a correlation between educational leadership doctoral students' self-efficacy and program progression as measured by attainment of major transitional points, as well as to determine if there was a correlation between educational leadership doctoral students perceived versus actual final dissertation defense date.

To place the program in context, doctoral students are required to complete a minimum of 69 graduate credit hours that are offered in three tiers. In Tier I, students are required to complete 30 graduate semester hours post-Masters; these credits can be completed as part of the doctoral program or as part of an Educational Specialist degree. In Tier II, students complete an additional 30 graduate semester hours in a sequential mode over a two-year period. Tier II is a cohort model with hybrid content delivery consisting of approximately 20 students representing the areas of both P-12 educational school leadership and higher education leadership. During Tier II, students take two courses for a total of five semesters. Upon completion of Tier II, doctoral students move to the dissertation candidacy component of the program, Tier III. The goal of the doctoral program timeline is to finish Tier II in five semesters and to complete the minimum of nine graduate credit hours of dissertation in three semesters in Tier III to attain degree completion.

While the educational leadership doctoral program identified in this study underwent several iterations of redesign over its lifetime, each change had a different focus and no formal evaluations were conducted. Thus, at the start of the 2015-2016 academic year, we began to formalize this assessment process and utilized descriptive measures to determine graduation rates from 2011 to present, and these findings yielded increasingly low graduation rates; thus, continued redesign and assessment were warranted. We set our focus on Carnegie Project on the Education Doctorate (CPED), an organization dedicated to the development and implementation of rigorous Ed.D. programs. We began researching the tenets of the CPED initiative in relation to how it might shape our doctoral program. The CPED tenants served as the bar for which to strive, as we set our efforts on distinguishing our program as one that prepares scholarly practitioners. CPED has placed an emphasis on moving beyond a traditional dissertation to focusing on alternatives, such as dissertations of practice, which are conducted as applied research and focus on real-world problems of practice. CPED explains a dissertation of practice as a project that exhibits the doctoral candidate's ability to think, to perform, and to act with integrity (Shulman, 2005). According to the working tenants compiled by CPED (2018), the professional doctorate to prepare scholarly practitioners in education is framed around questions of equity, ethics, and social justice, and, thus, these were the tenants that shaped our educational leadership doctoral program in an effort to improve overall program effectiveness.

From these conversations about CPED and with a new focus on implementing innovative course content aligned with research initiatives, keeping a hybrid delivery model that was cohort-based, offering intensive research courses focused on scholarly practitioner research with an emphasis on aca-

demic writing, and new options for completing the dissertation, a commitment to program redesign was established. A unique characteristic of the redesign was that students were provided several options to use their skills, abilities, and dispositions to resolve educational issues and problems based on their practice and go beyond the traditional dissertation (Perry, 2012). While doctoral students were given the option of writing a traditional dissertation based on a problem of practice, they were also given the option of using applied research to complete a program evaluation dissertation, a policy development dissertation, an organizational problem analysis dissertation, or a systems analysis dissertation (CPED, 2018). The framework of these dissertation options allows candidates to enhance the practice of professional leadership by working through a lens of evaluative consideration as they engage in solving the contemporary problems of practice rather than completing a traditional dissertation more aligned to the research-heavy Ph.D. versus the Ed.D., which emphasizes impacting problems of practice.

The redesign occurred in a three-phase cycle. Phase 1 of the redesign occurred from fall 2011 to spring 2013, included a 2011 Cohort and a 2012 Cohort, and was focused on offering a traditional educational leadership doctoral program with an emphasis on beginning to plan and embed the tenants of CPED into the program. Phase 2 of the redesign occurred from fall 2013 to spring 2015 with a 2013 Cohort and 2014 Cohort and was also focused on offering a traditional educational leadership doctoral program with an emphasis on more heavily embedding the tenants of CPED into the program. Phases 1 and 2 were the times in which educational leadership faculty began to further explore CPED, joined CPED in 2014, and began engaging in the developmental phase of CPED, but were yet to have an applicable focus on training scholarly practitioners. A third iteration of redesign, Phase 3, occurred during fall 2015 with a 2015 Cohort and 2016 Cohort based on fully embracing the CPED model to move from the developmental level to implementation level to better prepare students as scholarly practitioners. Phase 3 redesign was the point at which we agreed that there was a major issue with time to doctoral degree completion for students with many in the dissertation tier, making minimum to no progress. Areas of weakness that were continually cited by students were research and academic writing. It is this need to address time to completion via research and writing that solidified our vision for the educational leadership doctoral program to engage in redesign to strengthen the effectiveness of our program. Each of the phases of redesign will be presented in detail below.

### **Phase 1 Redesign**

Initially from 2011-2013 Phase 1 redesign offered a bifurcated program where P-12 school leadership and higher education leadership courses were offered separately. The format in Phase 1 included external research methods courses and internal program content and research seminar courses, the latter being the focus of this redesign. The first course, Research Seminar I, focused on helping students write the first half of the pre-prospectus (chapter one of the traditional five-chapter dissertation) to include the introduction through to the significance of the study, and the second course, Research Seminar II, focused on writing the second half of the pre-prospectus to include the procedures through to the chapter summary. Both courses were offered at the end of the program in the fifth semester of Tier II coursework.

While the Phase 1 program redesign addressed the CPED tenants and was deemed an improvement, enrollment challenges resulted in another redesign phase of content courses so they were no longer bifurcated, but instead, they addressed the needs of both P-12 school leaders and higher education leaders collectively. Having the program co-mingled provided students with valuable insight across the P-20 educational spectrum and not just in their area of focus, as the belief was much could be gained by having all educational leaders in class together. Lastly, based on faculty and student feedback, a more intentional focus on scholarly research and academic writing was desired and deemed necessary.

## Phase 2 Redesign

For Phase 2 of the redesign from 2013-2015, the decision was made to offer Research Seminar I in the first semester of Tier II coursework and then offer Research Seminar II in the final (fifth) semester of Tier II. Under this model students could develop their research topic and focus on scholarly research and academic writing in tandem throughout all of their coursework. Another major difference in Research Seminar I and II was that class size was limited to ten students by offering two course sections. Although two sections, both professors specializing in research studies intermingled these courses to collaboratively provide extensive support and feedback to all students.

## Phase 3 Redesign

During the 2015-2016 academic year, the continuation to gather feedback on program changes needed for the 2016-2017 academic-year in Phase 3 of the redesign was ongoing. The areas of scholarly research and academic writing remained the major areas in need of improvement. Thus, the content courses were further redesigned and faculty agreed the research seminar courses (I and II) needed to be further developed to include a Research Seminar Series. Thus, Research Seminar I was offered in the first semester, Research Seminar II in the third semester, and a new course, Research Seminar III, was offered as a double section in the final (fifth) semester of Tier II so candidates could solely focus on the dissertation in their last semester of coursework.

The Research Seminar Series focused on the following: the first course (Research Seminar I) aimed at developing and completing the first half of the pre-prospectus to include the introduction through the significance of the study (chapter one); the second course (Research Seminar II) directed student efforts on the review of the literature (chapter two); and, the third course (Research Seminar III) emphasis was placed on refining the details of the methodology of the study (chapter three), as well as completing and honing the previous two chapters of the dissertation.

Thus, the focus through Phase 1 and 2 was helping students to research and draft the pre-prospectus (chapter one) as an overview/outline of their study. However, in Phase 3 the focus shifted to developing and completing both the pre-prospectus and the prospectus based on resolving a problem of practice in preparation for the candidate's first and second defenses (pre-prospectus and prospectus). The goal of these changes was intended to prepare students to progress through the dissertation in a more timely manner. Current research noted a key issue that caused attrition, specifically for those considered *All But Dissertation* in nursing doctoral programs, was substantive problems with dissertation research (Robinson & Tagher, 2017), and, although health science is a different discipline, both are practitioner-based service professions and dissertation work shows similarities in their effort to address a problem of practice. Thus, this corroborated the feedback from faculty and students to make the restructured seminar series focus on the research work of scholarly practitioners. When preparing practitioner-researchers, coursework contributes to self-efficacy, and it has been proposed that Ed.D. programs consider designing their research courses to provide students opportunities to conduct research, as well as apply research skills to "data-driven accountability expectations that occur in the workplace" (Kerrigan & Hayes, 2016, p. 159). A key component of doctoral education is for students to transform from students to independent scholarly researchers, and doctoral students must apply what they have learned from their coursework to add new knowledge in their field of study (Ames et al., 2018). Our intentions with this study was to go beyond general self-efficacy to better understand student's perceptions of their abilities to transition through a doctoral program that was redesigned to have a larger focus on scholarly practitioner research (based on the CPED tenants) and academic writing. Prior to redesign, our early phases of program redesign (phase 1 and 2) was very content-driven and research and writing were areas we expected student to be prepared for as doctoral students, but we found that this was not the case and thus, redesign was further warranted in phase 3. See Figure 1.

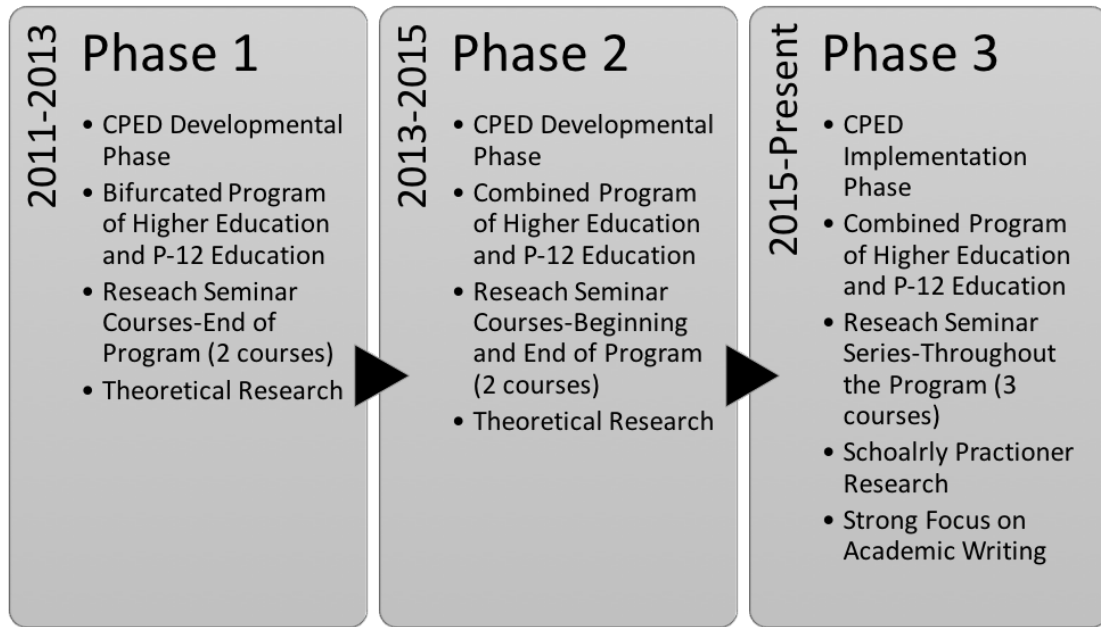


Figure 1. The phases of redesign of the Ed.D. program since the Phase 1 design in 2011.

### ***PARTICIPANTS***

The participants for the study were educational leadership doctoral students at a designated large public, doctoral research university located in the rural southeast of the United States. Participants were identified by initial start date of the academic-year in which they entered Tier II of the educational leadership doctoral program. The current sample consisted of the two cohorts of students admitted in fall 2014 (completed Tier II in spring 2016) and fall 2015 (completed Tier II in spring 2017). These students were selected as they were the first two cohorts to yield quantifiable and equitable data, which was captured at the post-assessment transition point (end of Tier II). Both Cohort 2014 and Cohort 2015 had 16 students each for a total of 32 participants. Although a seemingly low number of participants, our program admits at maximum 20 students per cohort yearly, and these two cohorts were the only ones we had comparable post-assessment data sets for analysis.

### ***DATA COLLECTION***

An online questionnaire (Appendix) was utilized to attain information from students about their successes and challenges with program progression. In addition, program data for each student was included as demographic data to collectively capture the cohort year, the expected semesters to complete the dissertation, the calculated self-efficacy score in completing doctoral coursework from the lens of a scholarly practitioner, gender, race, age, field concentration, graduate degree-granting institutions and field, grade point average, candidacy exam score, start date for Tier II and Tier III, expected defense dates for all three required milestones (pre-prospectus, prospectus, and final defenses), and graduation date, as applicable. In addition, open-ended questions about program progression, as well as scholarly research and academic writing were included.

In addition, the questionnaire included the General Self-Efficacy (GSE) Scale modified to reflect the perceptions of students as scholarly practitioners (Schwarzer & Jerusalem, 1995). This scale measures the positive factors of emotion, optimism, and work, and the negative factors of depression, stress, health complaints, burnout, and anxiety (Schwarzer & Jerusalem, 1995), all factors associated with doctoral work. The GSE Scale was embedded into the questionnaire to measure self-efficacy, as the scale was designed for use with adults to predict coping with a variety of stressful life events. The

scale consisted of 10 questions each with a 4-point response, yielding a composite score of 10-40, which was converted to a mean score by dividing by a factor of 10. The GSE Scale presents high validity and reliability with Cronbach's alphas ranging from .79 to .90, with the majority falling in the high .80s (Schwarzer & Jerusalem, 1995). While the GSE Scale takes approximately four minutes to complete, the entire questionnaire took approximately 30 minutes to complete due to the additional questions to attain information about demographics and students' experiences throughout the program.

The questionnaire was utilized to collect data at the conclusion of Tier II as post-assessment data sets for both the 2014 Cohort and the 2015 Cohort as part of program assessment and improvement. We examined the post-assessment 2014 Cohort data from those students matriculating through the Phase 2 redesign and post-assessment data for the 2015 Cohort for those matriculating through the Phase 3 redesign. The questionnaire was distributed online through *Qualtrics*<sup>TM</sup> over a two-week time period. Students were asked to complete the questionnaire for program assessment purposes during the final research course of Tier II resulting in a 100% response rate. Written informed consent was confirmed for each student, opting out was an option, and no risk was involved beyond that of everyday life. Responses were downloaded to an excel spreadsheet by a staff member in the Graduate Academic Services Center and the actual defense dates were then coded and indicated for each student as number of semesters to reach the specified milestone. A three-digit identifier was assigned to each student to maintain confidentiality and de-identified data were provided to the researchers.

## DATA ANALYSIS

Descriptive statistics were calculated to determine mean scores of cohort GSE scores, as well as to present participant demographics and additional information about program progression. For both Research Questions 1 and 2, the SPSS statistical package was utilized and Pearson's correlation coefficients were implemented to determine if there was a correlation between the independent variable and the dependent variable as in each case the two sets are continuous variables (Creswell & Shope, 2002). For the first research question, the independent variable was GSE and the dependent variable was time to reach dissertation milestones (number of semesters). For the second research question, the independent variable was candidates' perceived semesters to final dissertation defense and degree completion, and the dependent variable was, once again, time to reach milestones.

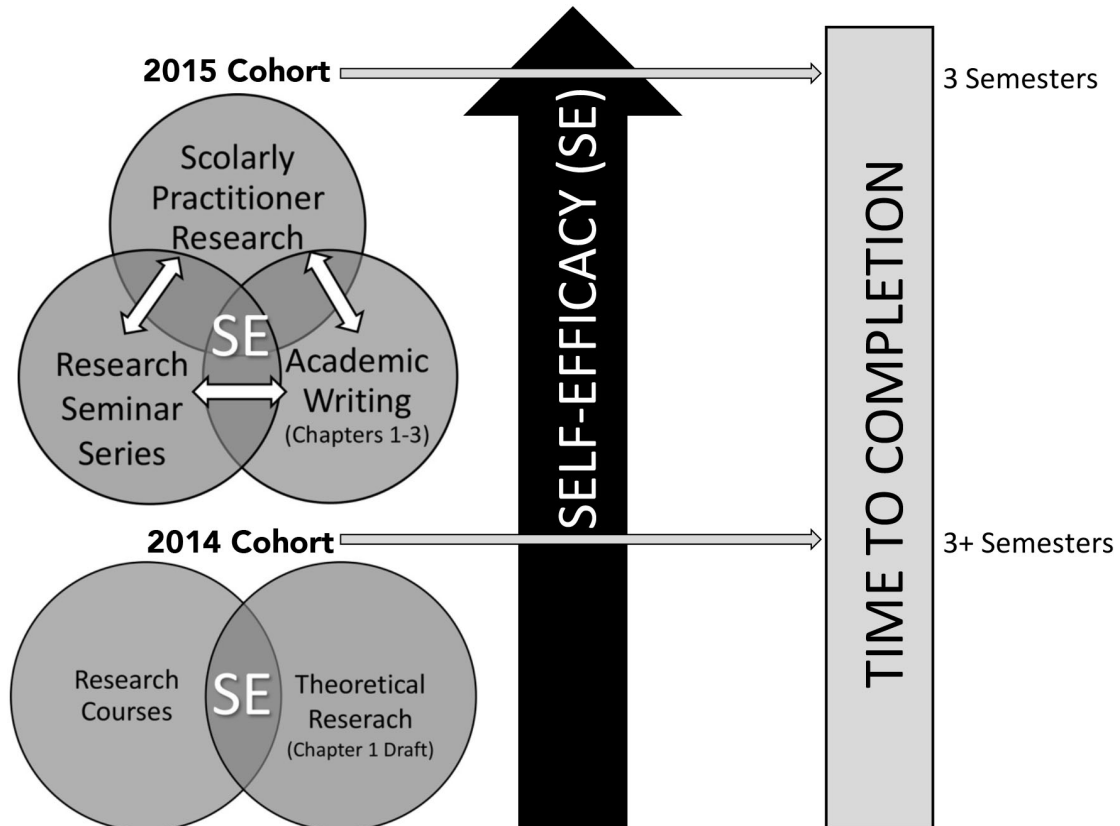
Lastly, data were reviewed in terms of alignment with program redesign phases to determine students' overall general self-efficacy as scholarly practitioners, as well to ascertain if students were reaching milestones to graduation at more timely rates based on their cohort's phase in the redesign. A t-test analysis was conducted to determine if there was a significant difference in the self-efficacy scores between the two cohorts, and if there was statistically significant difference in the number of perceived versus actual defenses completed per semester between the two cohorts. A summary of the study's methodology is provided in Table 1.

**Table 1. Methodology of the study on Leadership Self-efficacy**

Study Attributes	Methods
Research Design	Ex-post-facto correlational utilizing quantitative data based on redesign and CPED tenants
Participants	Doctoral students at a large, R3, rural, public institution in the southeastern United States
Participants (Ed.D. Students)	16 students in the 2014 cohort and 16 students in the 2015 cohort.
Data Collection	Online questionnaire distributed through <i>Qualtrics</i> <sup>TM</sup>
Data Analysis	Mean, Inferential statistics, Pearson correlation and t-test

## FINDINGS

Based on the theoretical framework of self-efficacy, the findings of this study support the notion that doctoral students had high levels of self-efficacy, and we hypothesized that students with high self-efficacy will be more successful in their academic pursuits. Based on this hypothesis, we designed a logic model illustrating the correlation between self-efficacy and time to degree completion. The outcome of this study led to a logic model denoting that students in the newly redesigned doctoral program focused on scholarly practitioner research and academic writing could in turn be more successful, and thus doctoral programs can focus efforts on increasing self-efficacy within their students, which in turn may impact time to degree completion. See Figure 2.



**Figure 2. Logic model illustrating the correlation between self-efficacy and time to completion.**

Archival data were collected from two cohorts of educational leadership doctoral students to address both of the equally weighted research questions. One cohort was subject to a program that was heavily content-focused (2014 Cohort), and one cohort occurred after a program redesign in which an emphasis was placed on scholarly practitioner research and academic writing (2015 Cohort). The 2014 Cohort included 16 educational leadership doctoral students with backgrounds in higher education or P-12 leadership. From this group, 56% were male and 44% were female, 44% self-identified as White and 56% self-identified as Black. Students ranged in age from 25-69, with 50% of the cohort falling between the ages of 30-39. Of students in this cohort, 31% attended the same institution for their Master's degree (ME.d.) and 50% of students in this cohort attended the same institution for their Education Specialist (Ed.S.) degree (or equivalent). Additionally, 63% of the cohort pursued the school leadership concentration and 37% pursued the higher education leadership concentration.

The 2015 Cohort also included 16 educational leadership doctoral students with backgrounds in higher education or P-12 leadership. This cohort was 75% female and 25% male. Of the group 75%

self-identified as White and 25% self-identified as Black. This group ranged in age from 25-54, with 63% falling between the ages of 30-39. Of the students in this cohort, 37% attended the same institution for their MEd. and 94% of the students in this cohort attended the same institution for their Ed.S. degree (or equivalent). Finally, 44% pursued the school leadership concentration and 56% of the cohort pursued the higher education leadership concentration.

Descriptive measures yielded an average overall self-efficacy score of 3.62 (out of 4.00) for the 2014 Cohort, and their individual overall self-efficacy scores ranged from 2.90 to 4.00. Similarly, the 2015 Cohort reported an average overall self-efficacy score of 3.57 (out of 4.00), with individual overall self-efficacy scores ranging from 2.70 to 4.00. Higher self-efficacy scores represented greater levels of general self-efficacy. Overall, the majority of educational leadership students in these cohorts self-reported high levels of self-efficacy. While the 2015 Cohort's average self-efficacy score was slightly lower, they also expected to complete their dissertation in a shorter amount of time. The 2015 Cohort's perceived number of semesters that would be necessary to complete dissertation was 3.19 semesters, whereas the 2014 Cohort's number was 3.50 semesters. In addition, the 2015 group also scored higher on their Qualifying for Candidacy Exams (42.31 versus 41.13 out of 50), which was a written examination to establish a student's eligibility to pursue their dissertation work and move from *student* to *candidate*.

A t-test analysis showed no significant difference in the self-efficacy scores between the two cohorts. However, a statistically significant ( $p < .05$ ) difference did exist in the number of defenses completed per semester between the two cohorts. To date, students in the 2014 Cohort completed an average of 0.26 defenses per semester, whereas students in the 2015 Cohort completed an average of 0.67 defenses per semester. Therefore, while no difference in self-efficacy existed among the 2014 and 2015 cohorts because that all students maintained generally high levels of self-efficacy, the candidates in the 2015 Cohort were reaching transitional points at a quicker pace on average than the 2014 Cohort. Further t-test analyses showed no significant differences between gender, race, candidacy exam scores, nor the anticipated number of semesters required to finish one's dissertation, which could be attributed to the small sample size. See Table 2.

**Table 2. T-test and Descriptive Statistics for Defenses per Semester and Self-Efficacy by Cohort**

	<u>2014</u>			<u>2015</u>				
	M	SD	N	M	SD	n	T	df
Defenses per Semester	0.26	0.27	16	0.67	0.55	16	-0.72, -0.10	-2.69*
Self-Efficacy	3.62	0.35	16	3.57	0.40	16	-0.22, 0.32	0.39

\*  $p < .05$ .

*Note.* There is not a statistically significant mean difference in self-efficacy scores between the 2014 and 2015 Cohorts. There is a statistically significant difference between the number of defenses completed per semester by the 2014 Cohort and the number of defenses completed per semester by the 2015 Cohort. Results show that the 2015 cohort is completing more defenses per semester than the 2014 Cohort (95% Confidence Interval [CI] for mean difference).

A statistically significant ( $p < .05$ ) correlation and relatively strong positive correlation ( $r = 0.79$ ) existed between the self-reported anticipated timelines to complete dissertation for both cohorts. The 2014 Cohort ( $n = 16$ ) anticipated completing their dissertation in 3.50 semesters on average, while the 2015 Cohort ( $n = 16$ ) self-reported an expectation of completing dissertation in an average of 3.19 semesters. Student expectations ranged from three to five semesters to completion for the 2014 Cohort and from two to five semesters to completion for the 2015 Cohort, with 63% of students across both cohorts self-reporting an expectation of three semesters (one academic-year) to complete their dissertations. See Table 3.

**Table 3. Correlations and Descriptive Statistics for Perceived Semesters to Complete Dissertation by Cohort**

	1	2
<b>1. 2014</b>	---	
<b>2. 2015</b>	.79*	---
<b>M</b>	3.50	3.19
<b>SD</b>	0.73	0.75
<b>Scale Min/Max Values</b>	3 to 5	2 to 5

Note. n = 32.

\* p < .05

Note. Statistical analysis reveals that the self-reported perceived number of semesters anticipated to complete one's dissertation for the 2014 Cohort was positively and statistically related, at the .05 level of significance, to the self-reported perceived number of semesters anticipated to complete one's dissertation for the 2015 Cohort.

While a majority of students reported an expectation to complete their dissertations in one academic-year, 0/16 (0%) students in the 2014 Cohort were able to complete dissertation and graduate within three semesters. In comparison, a majority of students in the 2015 Cohort also reported an expectation to complete their dissertations in one academic-year. In this case, 7/16 (44%) were able to complete dissertation and graduate within three semesters. In fact, three students in the 2015 Cohort were able to complete their dissertation in just two semesters. Students' self-reported perceived number of semesters to complete the final defense (PSFD) revealed that the 2014 Cohort reported an average of 3.50 perceived semesters to completion, and the 2015 Cohort reported a slightly faster 3.19 perceived semesters to complete dissertation. Data also showed that dissertation completion rates for the 2014 Cohort through two years (seven semesters) were slightly lower, but generally comparable, to the 2015 Cohort through one-year (four semesters). Or, the 2015 Cohort showed similar progress in one year to what the 2014 Cohort achieved through two years. See Tables 4 and 5.

**Table 4. Perceived semesters to complete dissertation (PSFD) and actual dissertation progress (Preprospectus, Prospectus, and Final Defense) through three semesters**

2014 Cohort	PSFD	PRE	PRO	FD
Student 1	4	1	3	--
Student 2	3	2	3	--
Student 3	3	2	3	--
Student 4	4	1	--	--
Student 5	3	2	--	--
Student 6	5	2	--	--
Student 7	4	2	--	--
Student 8	3	3	--	--
Student 9	4	--	--	--
Student 10	3	--	--	--
Student 11	3	--	--	--
Student 12	3	--	--	--
Student 13	3	--	--	--
Student 14	3	--	--	--
Student 15	3	--	--	--
Student 16	5	--	--	--
Completion Rate	n/a	50%	19%	0%
Average Semesters	3.50	1.88	3.00	n/a

2015 Cohort	PSFD	PRE	PRO	FD
Student 1	3	1	1	2
Student 2	3	1	1	2
Student 3	2	1	2	2
Student 4	3	1	2	3
Student 5	3	1	2	3
Student 6	4	1	2	3
Student 7	3	1	2	3
Student 8	3	1	3	--
Student 9	3	1	3	--
Student 10	4	2	3	--
Student 11	5	1	--	--
Student 12	3	1	--	--
Student 13	3	3	--	--
Student 14	2	--	--	--
Student 15	4	--	--	--
Student 16	3	--	--	--
Completion Rate	n/a	81%	63%	44%
Average Semesters	3.19	1.23	2.10	2.57

**Table 5. Perceived semesters to complete dissertation (PSFD) and actual dissertation progress (Preprospectus, Prospectus, and Final Defense) through seven semesters (2014 cohort) and through four semesters (2015 cohort)**

2014 Cohort	PSFD	PRE	PRO	DEF	2015 Cohort	PSFD	PRE	PRO	DEF
Student 1	4	1	3	5	Student 1	3	1	1	2
Student 2	3	2	3	4	Student 2	3	1	1	2
Student 3	3	2	3	5	Student 3	2	1	2	3
Student 5	3	2	4	5	Student 4	3	1	2	2
Student 6	5	2	4	6	Student 5	3	1	2	3
Student 7	4	2	5	7	Student 6	4	1	2	3
Student 9	4	6	7	--	Student 7	3	1	2	3
Student 4	4	1	--	--	Student 8	3	1	3	--
Student 8	3	3	--	--	Student 9	3	1	3	--
Student 10	3	5	--	--	Student 10	4	2	3	--
Student 11	3	--	--	--	Student 11	5	1	--	--
Student 12	3	--	--	--	Student 12	3	1	--	--
Student 13	3	--	--	--	Student 13	3	3	--	--
Student 14	3	--	--	--	Student 14	2	--	--	--
Student 15	3	--	--	--	Student 15	4	--	--	--
Student 16	5	--	--	--	Student 16	3	--	--	--
Completion Rate	n/a	63%	44%	38%	Completion Rate	n/a	81%	63%	44%

Lastly, important to note, as of summer 2018, 6/16 (38%) 2014 Cohort students have completed their EdD degrees and 10/16 (62%) have not completed their degrees within two years (seven semesters is the total number of semesters completed to date) from starting their dissertation. Comparatively, 7/16 (44%) 2015 Cohort students had completed their EdD degrees and 9/16 (56%) had not completed their dissertations within one year (four semesters is the total number of semesters completed to date) of starting their dissertation.

## DISCUSSION

The purpose of this study was to determine if there was a correlation between educational leadership doctoral students' self-efficacy and program progression as measured by attainment of major transitional points, as well as determine if there is a correlation between educational leadership doctoral students perceived versus actual final defense date and program progression as measured by attainment of major transitional points.

The findings indicated that the majority of the students self-reported high levels of self-efficacy (mean for 2014=3.62 and 2015=3.57). However, as redesign was implemented, students maintained high levels of self-efficacy in conjunction with improved program progression. While no statistical significance revealed itself about the correlation between educational leadership doctoral students' self-efficacy as scholarly practitioners in relation to program progress and degree completion, the finding suggested that shifting the program focus to preparing scholarly practitioners with an emphasis on academic writing may have resulted in students completing degrees at quicker paces on average while maintaining high levels of self-efficacy.

For example, of particular note, 63% of students across both cohorts self-reported an expectation of three semesters (one academic-year) or less to complete their dissertations. While the majority of

students reported an expectation to complete their dissertations in one academic-year, none of the students in the 2014 Cohort with this expectation were able to complete their dissertation in this timeframe and meet their goal. However, the 2015 Cohort showed improvement with a little less than half of students completing their dissertations within their anticipated three semester timeframe.

As of summer 2018 and through seven possible semesters of dissertation (two-years), 38% of the 2014 Cohort students have completed their Ed.D. degrees and 62% have not completed their degrees. In comparison and through just four semesters (one-year), 44% of the 2015 Cohort students have completed their degrees and 56% have not. Thus, a larger percentage of the 2015 Cohort had completed the dissertation process in just one year compared to the 2015 Cohort through two years. We determined that the majority of our students had a high self-efficacy and perceived time to degree completion in the dissertation phase to be three semesters; the number of students completing their degree was higher in the 2015 Cohort after redesign because students were better prepared to conduct scholarly practitioner research and student writing. This preparation required extensive support in the areas of research and writing, specifically with the first three chapters of their dissertation, which led to students being prepared to defend in a timelier manner in the newly designed Research Seminar Series.

We believe the focus upon scholarly practitioner efforts and academic writing had a positive impact upon student progression and, thus, the overall effectiveness of the program, as evidenced by a closer alignment between students' perceived time to completion and their actual time to completion. The recommendation for other educational leadership preparation programs is to utilize this scholarly practitioner approach within doctoral programs to prepare students to solve problems of practice in their educational leadership setting. We posit that with more emphasis placed upon research and academic writing during coursework, students may be better prepared to complete their dissertation and have a more accurate assessment of their ability to successfully complete their doctoral degree. These sustained efforts of program improvement suggest continual analysis of program data to ensure educational leadership preparation programs are indeed preparing students in the manner intended.

However, we do acknowledge that although we have a sub-group in each cohort completing their doctoral degree in a timely manner, we still have many students transitioning through the program at extended rates. A cause for concern in the 2014 Cohort was that 8/16 (50%) of our candidates did not complete any of their three dissertation defenses during the first year of dissertation; however, we saw an improvement in the 2015 Cohort in that only 3/16 (19%) failed to complete a single defense through one year. Continued progress after the first year of dissertation is also a concern and will continue to be tracked in the future when more program data is available, as well we will conduct further research to learn from other institutions about their track records in time to degree completion to be able to compare our outcomes.

Thus, for future research, we plan to continue to collect longitudinal data in an effort to further support our hypothesis denoting that students in the newly redesigned doctoral program focused on scholarly practitioner research and academic writing could in turn be more successful, and thus doctoral programs can focus efforts on increasing self-efficacy within their students, which in turn may impact time to degree completion. In addition, we plan to delve deeper into self-efficacy, specifically leadership self-efficacy, as well as students' lived experiences and examine how those shape their efforts to conduct scholarly research and engage in academic writing. We know we need more work in addressing time to degree completion, and these findings provide us a point of reference to examine our program more in depth and continue to learn from program outcomes, as well as student feedback. When students make the investment to pursue a doctorate degree, factors leading to success or hindering successful completion of the degree need to be addressed, from both the faculty and student perspectives. Our findings to provide more emphasis on research is corroborated by the work

of Ames et al. (2018) as we facilitated the progress of emerging scholars by developing pragmatic solutions to allow new researchers to be successful.

We need to further examine what the literature noted as hindrances to doctoral degree completion, such as unclear expectations, feelings of isolation, and lack of preparedness for the work of the dissertation (Lake et al., 2018; Malone et al., 2001) and learn if indeed these factors presented progression challenges to our own students. We can also examine the literature further and learn from our students to see if the findings from Lake et al. (2018), such as elements of personal motivation, faculty support, and the cohort model, contributed to the success of individual students and how these elements impacted our own students. We know completion time is potentially impacted by a host of factors, both internal and external to a graduate program, that are difficult to capture and measure. Thus, we need to continue to conduct research to better understand what these factors are and how they may impact our students. Finally, faculty struggle to find the right combination of program design and support to retain students through to degree completion. From our findings, we need to conceptualize what this support is and be diligent in making sure our students get what they need from us as a program to be successful.

The larger implications for these findings could encourage other doctoral educational leadership programs, as well as programs in other fields, to reflect on their practices and determine if a redesign may be needed to better support their own doctoral students. Programs may wish to explore the idea of an intentional focus on training scholarly practitioners and addressing academic writing. This may increase programmatic structure and offer students additional guidance and direction throughout the academic process. As criticisms for schools of education continue due to a perceived lack of academic rigor, program redesign has been recommended as one possible reaction. In a redesign, a program focus on effective programs with well-established academic excellence can lead to the development of a program with the qualities and content educational leaders need supporting a host of research (Andrews & Grogan, 2005; Evans, 2007; Levine, 2005; Maranto et al., 2010; Perry, 2012; Shulman, 2005; Shulman et al., 2006). This intentional redesign may be what doctoral programs need to be effective in preparing scholarly practitioners who can apply theory to practice and achieve educational change by disseminating sound work to key constituents, such as the university, educational institutions, and the community.

In addition, other institutions of higher education may look to our program as a replicable or modifiable model when developing or redesigning their doctoral programs within the area of educational leadership and beyond. Continuous program improvement is vital to attaining positive program outcomes and preparing doctoral students to be scholarly practitioners who are dedicated to solving problems of practice in the ever-changing field of educational leadership.

## LIMITATIONS

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We do note that there were limitations in our study, such as the small *n*, but the data were attained from all students from which we had post-assessment data from the questionnaire utilized in this study. In addition, our maximum number of students admitted into each annual cohort is 20. However, the researchers do intend to gather longitudinal data and look further at the correlation between self-efficacy as scholarly practitioners and time to degree completion as we make improvements within our program. The researchers did not establish validity or reliability in this initial study but will do so moving forward. We feel at this time that the findings support our program redesign and these improvements led to more timely degree completion. However, we acknowledge a need to compare our findings to other institutions so we can determine the status of our program and see if we are on pace with them and if they are preparing students in a more timely manner, learn from them strategies to potentially implement in our own program. Lastly, we did not find a correlation between GSE and time to transition points. Some researchers have also found that general self-efficacy did not predict academic self-efficacy (Feldman & Kubota, 2015), so we will consider using another instrument in the future such as the academic self-efficacy scale (ASES) (Chemers, Hu, & Garcia, 2001).

## CONCLUSION

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Overall, the findings showed that each cohort self-reported high levels of scholarly practitioner self-efficacy and a general expectation of one academic year to complete the dissertation. However, none of the students in the 2014 Cohort met this reported goal and in the 2015 Cohort slightly less than half met this reported goal and completed their dissertation in one year. While this number could certainly improve, it does demonstrate improvement. We hypothesized that the number of students to complete their degree was higher in the 2015 Cohort in part due to the program redesign. Due to the redesign, students were better prepared to conduct scholarly practitioner research. Additionally, student academic writing improved due to a heavier emphasis on writing in the newly implemented research series which better prepared students to conduct successful defenses. Our newly designed research series offered students extensive support in the areas of research and writing, specifically with the first chapters of their dissertation. This contributed to students being more prepared to defend in a timelier manner. However, a less than half completion rate for students who completed coursework in 2015 is in need of significant attention, and continued program assessment is necessary in the area of program improvement. In addition, program stakeholders need to consider strategies that can help our students continue to progress after coursework and complete their dissertation in a timely manner. Students must maintain access to the resources they need to be successful in the less structured dissertation phase.

We will continue future research to collect longitudinal data on doctoral cohorts as they continue to cycle through the program. There is a need for doctoral programs to engage in continual reform to better meet the needs of our constituents, and this must be promoted by engagement with our students in discussions to ascertain what they need to be successful practitioners in their varied educational settings. We plan to delve deeper into self-efficacy, specifically leadership and school leaders' self-efficacy, and to examine how that shapes the efforts of students conducting scholarly research and engaging in academic writing. In addition, we plan to further explore students' lived experiences while in our program to always include student success at the forefront of the intended outcomes of our programs.

In conclusion, the goal of this research was to contribute to the educational leadership program preparation and effectiveness literature. The findings supported program redesign, which is noted as a factor that led to improved student progression while maintaining high levels of self-efficacy, as students were better prepared to conduct scholarly research and write their dissertations. This positive progression represented a self-fulfilling prophecy where students actually met their own expectations of success, whereas in years past this may not have been the case. This will continue as a sustained effort to provide an effective leadership preparation program that can prepare scholarly practitioners to solve problems of practice. Our findings are in accordance with the work of Perry (2012) and Zambo et al. (2014) in that active redesign of doctoral programs to better differentiate the pathways of the Ed.D. from the Ph.D. by focusing on preparing scholarly practitioners who wish to focus on problems of practice to leverage for educational change is relevant. The findings of this study may provide other programs with the impetus to explore the idea of training scholarly practitioners and providing more guidance and direction throughout the academic writing and research process. This can help ensure that students not only have the self-perceived ability to progress through a program to degree completion in a timely manner, but actually demonstrate such in their outcomes.

## REFERENCES

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- Aiken, J., & Gerstl-Pepin, C. (2013). Envisioning the EdD and PhD as a partnership for change. *Planning and Changing*, 44(3), 162-180.
- Ames, C., Berman, R., & Casteel, A. (2018). A preliminary examination of doctoral student retention factors in private online workspaces. *International Journal of Doctoral Studies*, 13, 79-107.  
<https://doi.org/10.28945/3958>

## Correlation between Self-Efficacy and Time to Degree Completion

- Ampaw, F., & Jaeger, A. (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>
- Andrews, R., & Grogan, M. (2005). Form should follow function: Removing the EdD dissertation from the PhD straight jacket. *UCEA Review*, 46(2), 10-13.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44. <https://doi.org/10.1177/0149206311410606>
- Berman, R., & Ames, C. (2015). Private online workspaces for doctoral learners – Enhanced communication and reduced isolation. *Proceedings of Informing Science & IT Education Conference (InSITE) 2015*, 101-112. <https://doi.org/10.28945/2182>
- Carnegie Project on the Education Doctorate (CPED). (2018). *CPED Initiative*. Retrieved from <http://www.cpedinitiative.org>
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93, 55-64. <https://doi.org/10.1037/0022-0663.93.1.55>
- Chesnut, S. R., Siwatu, K. O., Young, H. A., & Tong, Y. (2015). Examining the relationship between the research training environment, course experiences, and graduate students' research self-efficacy beliefs. *International Journal of Doctoral Studies*, 10, 399-418. <https://doi.org/10.28945/2310>
- Creswell, J., & Shope, R. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education, Inc.
- Evans, A. (2007). Horton, Highlander, and leadership education: Lessons for preparing educational leaders for social justice. *Journal of School Leadership*, 17(3), 250-275.
- Feldman, D. B., & Kubota, M. (2015). Hope, self-efficacy, optimism, and academic achievement: Distinguishing constructs and levels of specificity in predicting college grade-point average. *Learning and Individual Differences*, 37(2015), 210-216. <https://doi.org/10.1016/j.lindif.2014.11.022>
- Gay, L. R., & Airasian, P. (2003). *Education research: Competences for analysis and applications* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Gardner, S. K. (2009). Student and faculty attributions of attrition in high and low-completing doctoral programs in the United States. *Higher Education*, 58(1), 97-112. <https://doi.org/10.1007/s10734-008-9184-7>
- Goldring, E., & Schuermann, P. (2009). The changing context of k-12 education administration: Consequences for Ed.D. program design and delivery. *Peabody Journal of Education*, 84(1), 9-43. <https://doi.org/10.1080/01619560802679583>
- Honicke, T., & Broadbent, J. (2016). Review: The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, 17(2016), 63-84. <https://doi.org/10.1016/j.edurev.2015.11.002>
- Kerrigan, M. R., & Hayes, K. M. (2016). EdD students' self-efficacy and interest in conducting research. *International Journal of Doctoral Studies*, 11, 147-162. <https://doi.org/10.28945/3413>
- Kelley, M., & Salisbury-Glennon, J. (2016). The role of self-regulation in doctoral students' status of All But Dissertation (ABD). *Innovative Higher Education*, 41(1), 87-100. <https://doi.org/10.1007/s10755-015-9336-5>
- Kriner, B., Coffman, K., Adkisson, A., Putman, P., & Monaghan, C. (2015). From students to scholars: The transformative power of communities of practice. *Adult Learning*, 26(2), 73-80. <https://doi.org/10.1177/1045159515573021>
- Lake, E., Koper, E., Balayan, A., & Lynch, L. (2018). Cohorts and connections: Doctoral retention at a mid-Atlantic comprehensive institution. *Journal of College Student Retention: Research, Theory & Practice*, 20(2), 197-214. <https://doi.org/10.1177/1521025116656386>

- Lambie, G., Hayes, B., Griffith, C., Limberg, D., & Mullen, P. (2014). An exploratory investigation of the research self-efficacy, interest in research, and research knowledge of Ph.D. in education students. *Innovative Higher Education*, 39(2), 139-153. <https://doi.org/10.1007/s10755-013-9264-1>
- Lane, J., Lane, A., & Kyprianou, A. (2004). Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality: An International Journal*, 32, 247-256. <https://doi.org/10.2224/sbp.2004.32.3.247>
- Levine, A. (2005). *Educating school leaders*. New York, NY: Education Schools Project.
- Lent, R., Brown, S., & Larkin, K. (1984). Relation of self-efficacy expectations to academic achievement and persistence. *Journal of Counseling Psychology*, 31, 356-362. <https://doi.org/10.1037/0022-0167.31.3.356>
- Lent, R., Brown, S., & Larkin, K. (1986). Self-efficacy in the prediction of academic performance and perceived career options. *Journal of Counseling Psychology*, 33, 265-269. <https://doi.org/10.1037/0022-0167.33.3.265>
- Malone, B., Nelson, J., & Nelson, C. (2001). *An analysis of factors contributing to the completion and attrition rates of doctoral students in Educational Administration*. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Chicago, IL, October 24-27, 2001.
- Maranto, R., Ritter, G., & Levine, A. (2010). The future of ed. schools. *Education Week*, 29(16), 36-25.
- McConnell, K. (2015). Rethinking admissions: Recruiting for retention. *NAGAP Perspectives*, 27(2), 14–15.
- Multon, K., Brown, S., & Lent, R. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38(1), 30-38. <https://doi.org/10.1037/0022-0167.38.1.30>
- National Science Foundation, National Center for Science and Engineering Statistics (2017). *Survey of Earned Doctorates* (SED). Retrieved from <https://www.nsf.gov/statistics/2018/nsf18304/data/tab12.pdf>
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543-578. <https://doi.org/10.3102/00346543066004543>
- Perry, J. (2012). To Ed.D. or not to Ed.D.? *Kappan Magazine*, 94(1), 41-44. <https://doi.org/10.1177/003172171209400108>
- Robinson, E., & Tagher, C. (2017). The companion dissertation: Enriching the doctoral experience. *Journal of Nursing Education*, 56(9), 564-566. <https://doi.org/10.3928/01484834-20170817-10>
- Ross, M. (2010). Designing and using program evaluation as a tool for reform. *Journal of Research on Leadership Education*, 5(12.7), 481-506. <https://doi.org/10.1177/194277511000501207>
- Shulman, L. (2005). Signature pedagogies in the professions. *Daedalus*, 134(3), 52-59. <https://doi.org/10.1162/0011526054622015>
- Shulman, L., Golde, C., Bueschel, A., & Garabedian, K. (2006). Reclaiming education's doctorates: A critique and a proposal. *Educational Researcher*, 35(3), 25-32. <https://doi.org/10.3102/0013189X035003025>
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self Efficacy Scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (p. 3537). Windsor, UK: NFERNELSON.
- Spaulding, L. S., & Rockinson-Szapkiw, A. J. (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. (2011). Factors associated with student attrition and retention in an educational leadership doctoral program. *Journal of College Teaching & Learning (TLC)*, 1(6). <https://doi.org/10.19030/tlc.v1i6.1952>
- Storms, B., Prada, M., & Donahue, E. (September 2011). *Advising doctoral candidates to degree completion*. California Association of Professors of Education Administration. ERIC No: ED-04-CO-0005. Retrieved from <https://files.eric.ed.gov/fulltext/EJ965229.pdf>
- Zirkel, P. (2012). Doctoral programs in educational leadership: A duality framework of commonality and differences. *Educational Considerations*, 40(1), 20-32. <https://doi.org/10.4148/0146-9282.1078>
- Zambo, R., Zambo, D., Buss, R., Perry, J., & Williams, T. (2014). Seven years after the call: Students' and graduates' perceptions of the re-envisioned EdD. *Innovative Higher Education* (39)2, 123–137. <https://doi.org/10.1007/s10755-013-9262-3>

## APPENDIX

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### Edd Program Completion Factors Questionnaire

Adapted from:

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self Efficacy Scale. In J. Weinman, S. Wright & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 3537). Windsor, UK: NFERNELSON.

Q1 What is your legal name?

Q2 What is your gender?

☐ Female (1)

☐ Male (2)

☐ Other (3)

Q3 How do you self-identify in terms of race/ethnicity?

☐ White/Caucasian (1)

☐ Black/African American (2)

☐ Hispanic/Latino (3)

☐ American Indian/Alaska Native (4)

☐ Asian (5)

☐ Native Hawaiian/ Other Pacific Islander (6)

☐ Other (7)

Q4 What is your age?

☐ 25-29 (1)

☐ 30-34 (2)

☐ 35-39 (3)

☐ 40-44 (4)

☐ 45-49 (5)

☐ 50-54 (6)

☐ 55-59 (7)

☐ 60-64 (8)

☐ 65-69 (9)

☐ 70-74 (10)

☐ 75 or Above (11)

Q5 What is your employment status?

☐ Full-Time (1)

☐ Part-Time (2)

☐ Other (3)

Q6 What arena are you employed within?

☐ P-12 (1)

☐ Higher Education (2)

☐ Not-Employed (3)

☐ Other (4)

Q7 What is your position/role in your employment? If not employed, indicate NA.

Q8 At what institution did you earn your Master's degree?

Q9 What is the field of your Master's degree?

Q10 What was your Master's degree Grade Point Average (GPA)?

Q11 Did you earn an Educational Specialist (EdS) degree as part of Tier I completion?

☐ Yes (1)

☐ No (2)

Q12 At what institution did you earn your EdS degree/Tier I?

## Correlation between Self-Efficacy and Time to Degree Completion

Q13 What was the field of your EdS/Tier I?

Q14 What was your EdS/Tier I GPA?

Q15 When did you begin Tier I?

Q16 When did you begin Tier II?

Q17 What is the date you anticipate completing Tier II or completed Tier II?

Q18 What is the date you anticipate successfully defending your Dissertation?

Q19 GSE 1

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly re- search, I can al- ways manage to solve difficult problems if I try hard enough.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 GSE 2

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly re- search, if some- one opposes me, I can find the means and ways to get what I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Q21 GSE 3

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly research, it is easy for me to stick to my aims and accom- plish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Q22 GSE 4

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly research, I am confident that I could deal efficiently with unexpected events.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Q23 GSE 5

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of schol- arly research, thanks to my re- sourcefulness, I know how to han- dle unforeseen situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Correlation between Self-Efficacy and Time to Degree Completion

Q24 GSE 6

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly re- search, I can solve most prob- lems if I invest the necessary effort. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25 GSE 7

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly research, I can remain calm when facing diffi- culties because I can rely on my coping abilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 GSE 8

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly research, when I am con- fronted with a problem, I can usually find sever- al solutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q27 GSE 9

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly re- search, If I am in trouble, I can usually think of a solution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q28 GSE 10

	4-Exactly True (1)	3=Moderately True (2)	2=Hardly True (3)	1=Not At All True (4)
In terms of scholarly re- search, I can usu- ally handle what- ever comes my way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q29 Discuss what factors played a role in making decisions to enroll in a doctoral program?

Q30 Discuss your thoughts about being able to be successful in your coursework scholarly research?

Q31 Discuss what factors will be impediments or challenges to completing your coursework scholarly research?

Q32 Discuss your thoughts about being able to be successful in your dissertation scholarly research?

Q33 Discuss any challenges that you may anticipate in completing your dissertation scholarly research?

Q34 Do you consider yourself proficient as a scholarly researcher? Please speak to these skills.

Q35 Do you consider yourself a proficient scholarly writer? Please speak to these skills.

Q36 Do you plan to conduct a quantitative, qualitative, or mixed methods study?

Q37 How many semesters do you think it will take after coursework in Tier II to defend your Pre-Prospectus in Tier III

Q38 How many semesters do you think it will take after coursework in Tier II to defend your Prospectus in Tier III?

Q39 How many semesters do you think it will take after coursework in Tier II to defend your Final Dissertation in Tier III?

Q40 So overall, how many semesters do you think it will take to complete Tier III and defend your Final Dissertation (all defenses including Pre-Prospectus, Prospectus, and Final)?

## BIOGRAPHIES

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**Juliann Sergi McBrayer, Ed.D.** is an Assistant Professor and M.Ed. Program Coordinator in Educational Leadership at Georgia Southern University. Prior to joining higher education, she served as an educational program coordinator, instructional school leader, certification program director, professional development coordinator, federal programs director, classroom teacher leader, and classroom teacher. Her research interests include the development, implementation, and assessment of educational leadership and teacher preparation programs to ensure effectiveness and accountability with an emphasis on educational leadership self-efficacy, teacher leadership, and purposeful and sustainable professional learning, with a specified focus on professional learning communities.



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