

Dissertation Requirements in Professional Practice Education Doctoral Programs to Facilitate K-12 School Improvement in the United States

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The Carnegie Project on the Education Doctorate (CPED) was organized to provide guidance for universities to collaboratively redesign the Education Doctorate (Ed.D) to make it a stronger program for school practitioners (CPED, n.d.). CPED recommended the traditional dissertation be replaced with what they refer to as the Dissertation in Practice (DiP). However, CPED provided no specific guidance for the type of skills, knowledge, and dispositions the DiP should measure. The purpose of this study was to determine the project types that should be allowed for use as the DiP in the professional practice Ed. D. in Education program at a large, public university for students enrolled in the program working in K-12 schools and school districts. The study employed a qualitative approach to a needs analysis to determine results. The results of the research identified specific project types that best support K-12 school improvement. Implications of this research include using the results to determine the range of DiP projects for the Ed. D. in Education program for those students working in the K-12 environment. As this study was a needs analysis that serves as a basis for program instructional decisions, the results may inform other universities offering professional practice education doctorates on how to modify or enhance their programs as well.

Key Words: Education doctorate, needs analysis, professional practice, professional doctorate, dissertation in practice, Carnegie Project on the Education Doctorate (CPED)

Introduction

This study was completed to inform the Ed. D. in Education program within the College of Education and Human Performance. The main purpose of the study was to determine the Dissertation in Practice (DiP) project types that should be allowed for use as the capstone requirement based on a needs analysis of K-12 schools and school districts. The secondary purpose was to inform the instructional design of the program to ensure the necessary skills and knowledge required are included in the program.

Traditional education doctor of philosophy (Ph. D.) programs require two to three years of coursework followed by several years of conducting research and writing a lengthy, formal dissertation. This traditional dissertation format is considered the signature pedagogy of Ph. D. programs. However, education Ph. D. programs were not producing professionals who could make effective and long lasting changes in our schools (Shulman, Golde, Bueschel & Garabedian, 2006). This led to the creation of the Carnegie Project on the Education Doctorate (CPED) with the mission to rethink the research doctorate and develop principles to redefine professional practice doctorates (CPED, n.d.). The CPED vision was for doctor of education (Ed.D.) programs to focus on problems of practice within the field of education with the goal of creating scholar-practitioners as opposed to the Ph. D. trained academic-researchers (Shulman et al., 2006).

History

Doctoral education was introduced in the United States during the mid-1850s based on the German model which focused on scholarly inquiry and research. Yale became the first American university to offer a doctor of philosophy degree, conferring three in 1861. Yale's program became the model and served as the catalyst for the growing trend of professional learning as doctoral programs expanded to both public and private universities across the country (Archbald, 2011). The traditional programs in these early years required full-time residency with two to three years of coursework followed by several years of conducting research and writing a lengthy, formal dissertation. Shulman (2010) defined this process as a

marathon designed for “seeing who has the stamina to stay the course” (p. 2). The goal of these programs was to prepare students for future careers by training them to “think critically, empirically, and creatively” (Archbald, 2011, p. 8).

Much has changed in this country since the traditional form of Ph. D. program became the standard. In the early 1900s, only 15% of school aged children attended high school and only 2% went to college (Archbald, 2011). By the 1950s, over 80% of America’s youth went to high school, and 20% chose to attend college. This dramatic increase in enrollment, along with the trend of industry to seek a more educated workforce, placed a challenging demand on higher education to provide both credentialed college instructors and licensed practitioners in many new fields of study. As a result of these changes, Harvard University first offered an Ed. D. in 1922. Harvard’s program was designed to provide an alternate to the Ph. D. as an advanced program in the field of education (Levine, 2005).

Other changes were occurring during the early 1900s as the US economy shifted from an agricultural to an industrial base during the Industrial Revolution. The traditional Ph. D. programs grounded in research and theory were no longer meeting the needs of practitioners in the field who desired graduate courses and programs in teaching, management, leadership, and policy (Browne-Ferrigno & Jensen, 2012). These problems began when professionals wanted the prestige of having a doctorate but did not plan on obtaining a position focused on conducting research. K-12 educators wanted the acknowledgement of having their work based on “science” (Boote, Wideen, Mayer-Smith, & Yazon, 2004). Another factor that affected doctoral education was the massive expansion of the GI Bill and the increasing number of baby boomers seeking terminal degrees. Until the 1950s, teachers in higher education were only required to have a masters’ degree; however, expectations began to rise to the point where faculty needed to have a doctorate. Both of these factors impacted the design of the Ph. D., as it was acknowledged that Ph. D. training was becoming less relevant for the numerous types of work degree recipients intended to conduct after earning their doctorate. Thus, the first substantive change in doctoral education in the US, the redesign of the Ed. D. and other

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doctoral programs that have come to be known as professional doctorates, emerged due to these factors (Kot & Hendel, 2011).

Though professional doctoral programs have no common or easily identifiable definition, they generally seek to provide programs that combine research and advanced study with knowledge and practice in a specific profession or field of study (Kot & Hendel, 2011). This is a critical difference from Ph. D. programs and one which has resulted from emerging labor markets requiring workers who possess and can apply advanced skill and knowledge in order to adapt and lead organizations into the 21st century (Nyquist, 2002). Other factors have also influenced the need for professional doctorates. Changes in doctoral student populations, new demographic trends, and technological advances have had a major impact on the demand for new skill sets along with the changing social and economic issues in areas as diverse as health, the environment, and renewable energies (McCarty & Ortloff, 2004). Another change includes the increased requirements of professional associations and more stringent accreditation standards in higher education (Kot & Hendel, 2011). These conditions have brought the need to create research-practitioners, those that can bring their knowledge of both research and advanced study to the workplace, to the forefront (Guthrie, 2009). Professional doctorates are degrees for practitioners which combine higher learning with direct application to the workplace (Taylor, 2007).

Levine (2005) completed an extensive study into educational leadership programs nationwide and concluded that the Ed. D. "is a watered-down doctorate that diminishes the field of education" (p. 67) and should be eliminated completely. His opinion was that those aspiring to school leadership positions needed only a master's degree (Levine, 2005). Over the past 60 years much has been written concerning the role of the Ed. D. with some arguing for the program and others against. Hanchi (2013) and other researchers such as, Archbald (2011), Clifford and Guthrie (1988), Cremin (1978), and Learned and Bagley (1965) have all written articles on the relationship between the Ph. D. and the Ed. D.. The purpose of this paper, however, is not to debate the need or purpose of the professional practice Ed. D. but to accept

it and recognize that it must be further developed by embracing the CPED guidelines, more fully defined, and differentiated from the Ph. D.

In the US, a growing number of professionals in education and other fields, following the guidance provided by the CPED and others, began to rethink the design of the education doctorate. The fundamental questions of any curriculum design or redesign are “What should be learned and how should it be organized” (Petrina, 2004, p. 82). In the case of the professional practice Ed. D., these questions become even more important due to the politics of organizations. In political organizations, e.g., higher education institutions, the question of what should be learned is often overlooked as department chairs and tenured faculty, who wield political power in their organizations, make decisions based on their beliefs and values (Bolman & Deal, 2008). As experts in their fields, they often do not see the need to develop what should be learned (Petrina, 2004). The question of how learning should be organized is left for the program faculty as long as it fits in with the current allocation of resources and course loads. If what is designed meets within the constraints of resources and faculty perceptions, redesign can be easily accomplished. It is when someone suggests a radical change that the politics of the organization become important. This has been the case with the elimination of the traditional dissertation for the Ed. D.. This radical concept has crossed the political comfort zone of those who are entrenched in their beliefs (Bolman & Deal, 2008).

Levine (2005) and others were increasingly critical of the Ed. D. programs and the poor quality of the research being conducted. This criticism included the traditional Ph. D. programs and the reality that these programs were just confirming degrees on researchers. Based on these growing concerns, much attention was focused on the design of both Ph. D. and Ed. D. programs. For many institutions, the redesign of the Ed. D. was based on the guidelines presented by CPED with the goal to create research-practitioners as opposed to the Ph. D. trained academic-researchers (Caboni & Proper, 2009). To achieve this goal, programs were modified to focus on the practical application of educational leadership to adequately prepare scholarly and influential practitioners (Zambo & Isai, 2012). This departure from the original

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design was accomplished to strengthen the problem-based format and establish an approach to prepare educational leaders who were educated in research methods and could apply practical knowledge to the workplace.

Another critical difference between the two programs was the elimination of the traditional dissertation replaced by a dissertation in practice as the culminating outcome. The capstone, or dissertation in practice, is a model frequently used in other disciplines to enhance the critical thinking skills of its graduates (Everson, 2009). Completing a DiP allows students to apply their problem-based learning and methods of inquiry in solving a complex problem of practice. With an understanding that in the world of education practitioners rarely work individually, some of the CPED programs have allowed or required students to work as partners to complete their projects. The value of working in teams is to create educational leaders who are team builders and work to develop professional capital within their organizations (Hargreaves & Fullan, 2012). These requirements came to be supported by many in the education field as the distinct characteristics that separate the professional practice education doctorate from traditional education Ph. D. programs (Shulman et al., 2006).

Carnegie Project on the Education Doctorate (CPED)

The CPED was organized to provide guidance for universities to collaboratively redesign the Ed. D. to make it a stronger program for school practitioners (CPED, n.d.). They concluded the purpose of the education Ed. D. should be to create scholar practitioners who can use research methods, analyze data, collaborate with others, and have practical knowledge of leadership including organizational realities. To assist in the redesign efforts, CPED defined six working principles as a guide for the development of professional practice doctorates (CPED, n.d.). CPED also recommended the traditional dissertation to be replaced with what was referred to as the Dissertation in Practice (DiP). The basic premise for the DiP is that it would be as in-depth as the traditional dissertation but focus on an actual problem of educational practice in a real-world setting. However, CPED provided no specific guidance on DiP formats or the type of skills, knowledge, and dispositions it should measure. At the time of this study, the faculty

implementing the redesign of the Ed. D. in Education program at a major public university's College of Education and Human Performance (COEHP) remained unsure as to what types of projects should be considered appropriate for the dissertation in practice. For the purpose of this study, the word project is used to define any type of initiative or process conducted within a school or school district that would lead to school improvement. Their goal was to ensure the capstone requirements provide the necessary investigation and scholarship while providing an authentic representation of professional work that best meets the needs of the graduates in the program who are practitioners in K-12 environments. The purpose of the study was to identify the most appropriate K-12 school improvement projects that could then be used as the focus for the DiP in the Ed. D. in Education program for those students employed in K-12 school environments.

In an effort to meet CPED recommendations, member universities have been redesigning their education doctoral programs. Although Ed. D. programs are being successfully redesigned based on the CPED principles by experienced and knowledgeable faculty, the purpose and format of the DiP remains unclear. With no specific guidance, institutions are left to determine how to evaluate the attainment of skills, knowledge, and dispositions of their students through the use of the undefined DiP as the capstone requirement.

Another issue concerning the capstone project in the professional practice Ed. D. in Education program is that it should provide for an assessment of students' learning and their ability to perform successfully in the workplace (Willis, Inman & Valenti, 2010). Many educators agree that the best assessments of classroom learning are those that are authentic (Archbald & Newman, 1988). Most all definitions of authentic assessments include the requirement to have application in the real world (Frey, Schmitt, & Allen, 2012). Others define it as the process of "judging student learning by measuring performance according to real-life-skills criteria" (Yen & Hynes, 2011, p. 423). All of these definitions support the theories on teaching for understanding espoused by Wiggins & McTighe (2005) and their principles of results-focused design. Rule (2006) conducted a literature review on the subject of authentic assessment in

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higher education and determined that there were four commonly agreed to characteristics of authentic assessment: (a) involve real world problems, (b) include open-ended inquiry, thinking skills and metacognition, (c) engage students in discourse and social learning, and (d) empower students through choice to direct their own learning. These form the basis of defining the purpose of the DiP as representation of authentic learning.

Based on the CPED working principles, students completing a project that involves solving a complex problem of practice in the real world would be an authentic assessment. Applying this principle to the Ed. D. in Education, an appropriate DiP should require the student to conduct open-ended inquiry, improve thinking skills, be involved in social environments, and direct their own learning to solve a problem of practice in the workplace. These guidelines serve as further support for the importance of defining appropriate DiP projects which will be authentic and help ensure student success in the workplace.

Methodology

The purpose of this study was to complete a needs analysis to determine what projects best support school improvement and, therefore, should be included as appropriate project types to be used as the Dissertation in Practice in the Ed.D. in Education program for those students enrolled in the program employed in K-12 schools. Although students from many disciplines including business, government and non-profits have been enrolled in the Ed. D. in Education, the majority of the students enrolled were currently employed in K-12 education (Biddle, 2013). Thus, this research was focused only on that environment.

The study was conducted in an Ed. D. in Education program at a major public university and employed a qualitative approach to a needs analysis. Interviews were conducted with two distinctly different participant groups. The first group was comprised of administrators and teacher-leaders identified by a superintendent of a rural school district in Central Florida as "highly effective". The second group of participants was comprised of current Ed. D. students working in K-12 education with more than 10 years' experience.

The study was initiated with a thorough literature review to discover the purpose and concerns of the Dissertation in Practice (DiP) and to conceptualize the issues and problems related to the redesign of professional practice Ed. D. programs. The researcher did not find literature that addressed these questions or identified analysis of student outcomes as a basis for the curriculum and instruction or the selection of DiP projects or formats. Because the CPED initiative represents a new direction in doctoral education and very few existing faculty members are graduates of a CPED based program, it was important to determine the needs of the ever-changing expectations of K-12 educators.

To determine which types of projects would best meet the needs of K-12 educators who may be attracted to this program, a client-centered, responsive evaluation (Stufflebeam, 2001) which included current Ed. D. in Education students, K-12 administrators, and teacher-leaders was conducted in order to include as many stakeholders as possible. A key aspect of responsive evaluation is that it allows for flexible, changing methods and approaches which allow the evaluator to adapt to new knowledge as it emerges (Stufflebeam, 2001). This evaluation focused solely on the current Ed. D. in Education program at a major public university and was not intended to address other CPED member school programs. The goal of the evaluation was to acquire the knowledge that would help program planners relate program activities to outcomes students may need to be successful as scholar practitioners.

Using Stake's (1967) responsive evaluation model, the focus was to engage in-service practitioners to determine what specific knowledge, skills, and dispositions they need in the workplace. This method takes into account the multiple realities that exist in the K-12 workplace so that the opinions of students and administrators are obtained. As there were no graduates of the program at this university, this assessment served as a formative evaluation with a focus on organizational learning. This type of evaluation has proven to be very effective in providing transformative information which can be best used in smaller organizations to

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determine their understanding and intentions of the program (Fitzpatrick, Sanders, & Worthen, 2011).

To answer the research question, interviews were conducted with a number of individuals defined in the next section. The intent was to allow the participants in the study to discuss their experiences in K-12 education (Creswell, 2013) as they pertained to school improvement and to share their top concerns in the organization.

Participants

In order to collect relevant data, semi-structured interviews of two distinct groups of participants were conducted. The first group of five (n=5) K-12 administrators and/or teacher-leaders was selected based on a purposive sampling method (Fraenkel & Wallen, 2009). The first participant selected was a school district superintendent. Based on her position as an appointed leader of a rural school district with over 40,000 students in Central Florida, her knowledge and experience of school improvement was essential to this study. The superintendent was asked to recommend administrators and teachers-leaders who she considered to be highly effective. For the purposes of this study, the school district superintendent defined "highly effective" based on her experience and position in the district. The remaining participants in this category were selected based on her definition and recommendation.

Understanding that students currently enrolled in the Ed. D. in Education program represent many levels of K-12 education, this purposive sample included administrators and teacher leaders from the school district office, elementary schools, middle schools, and high schools in the positions of teacher, program specialist, principal, and district administrator. This method of identification was chosen in order to obtain data concerning the skills a wide range of K-12 educators believed were necessary to be effective teacher-leaders and the types of school projects they believed would be most beneficial to support school improvement. By using this sampling method, the relatively small sample size was anticipated to yield the best responses

and be representative of the entire population of highly effective administrators and teacher leaders in Central Florida (Fraenkel & Wallen, 2009). As this research was confidential, each participant in this category was assigned the letter A (administrator) and a sequential number resulting in the five administrator/teacher-leaders who participated being identified as A-1 through A-5.

Table 1: *Demographic Characteristics of Effective Administrator/Teacher-Leader Participants*

ID	Position	Race/ Gender	Years in Education	Previous Experience, Duties, Subjects Taught
A1	District Superintendent	Caucasian Female	32	Administration, Assistant Superintendent in large urban school district
A2	Middle School Principal	Caucasian Male	27	Principal at Elementary, Middle and High School, Taught Physical Education, Mathematics
A3	High School Teacher	Asian Male	6	Only position. School Rookie Teacher of the Year, 2011. History, physics, and government
A4	Middle School Science Teacher	Caucasian Female	8	District Teacher of the Year 2012, Advancement Via Individual Determination (AVID) Coordinator, Science
A5	Program Specialist for Teaching and Learning	Caucasian Female	9	Develop professional development, lead school and curriculum improvement. High School teacher for 5 years, instructional leader, chemistry, biology and reading endorsement for 6 -12.

The second group of participants (n=6) was also selected using purposive sampling (Fraenkel & Wallen, 2009). Students enrolled in the Ed. D. in Education program must have earned a graduate degree and have chosen to pursue a terminal degree. This sets them apart and above their counterparts and made them viable candidates for this study. To obtain the best possible

responses, only students who, at the time of the study, were enrolled in the Ed. D. in Education program and who were employed in and had more than 10 years of experience in K-12 education were selected. Previous research conducted involving students enrolled in the Ed. D. in Education program showed they were considerably older than their Ph. D. counterparts and had an average of over 10 years of experience in the field of education (Biddle, 2013). Golde and Dore (2001) observed, in their assessment of doctoral programs, that students involved in the program can make a significant contribution to the program content and their input should be valued. Thus, these students were included as they possessed valuable and important knowledge as to the types of projects that would have the most relevance in supporting school improvement.

From this sample of students, two male and four female students were selected for participation. This ratio of males and females represented the approximate gender ratio of students in the program. To ensure different cultural perspectives were accounted for, ethnicity was also used as selection criteria to ensure representation of the entire student population of K-12 educators enrolled in the program. This resulted in the inclusion of one Hispanic female, one Asian male, one Caucasian male and three Caucasian females. The lack of African-American participation was unfortunate but was based on the fact that none of the African-American students in the three cohorts met the selection criteria of working in K-12 for more than 10 years. Participants in this category were assigned the letter S (student) and a sequential number resulting in the six student participants being identified as S-1 through S-6. As this study was not intended to be generalizable, I believe this sample size, based on the selection criteria, was sufficient to collect the necessary relevant data to inform the research (Fraenkel & Wallen, 2009).

Table 2: *Demographic Characteristics of Student Participants*

ID	Current Position	Race/ Gender	Years in Education	Previous Experience, Duties, Subjects Taught
S1	High School Special Education Teacher	Caucasian Female	26	Department chair five times, teaches special education, composes lessons for seven levels of mathematics and 14 in reading, biology, economics, and social skills
S2	Elementary School Curriculum Resource Teacher	Hispanic Female	12	Instructional coach, testing administration, planning, organizing data, school improvement plans
S3	High School Math Teacher	Asian Male	15	Teach math, math team coach, math club sponsor, part time coach for Algebra 1, help other teachers, test writing
S4	High School Literacy Coach	Caucasian Female	25	District literacy coach for K-12, resource teacher, taught reading for university for four years
S5	Elementary School Music Teacher	Caucasian Male	18	Teaches seven classes, taught Physical Education for four years.
S6	District Department of Curriculum and Instruction.	Caucasian Female	24	Instructional coach for Secondary Social Studies 6-12, creates instructional standards-based support documents to support teaching and learning for planning, teaching, and assessment

Procedures

All of the administrator-teacher/leader interviews were conducted face-to-face. These interviews typically lasted from 20 – 40 minutes. Of the student interviews, five were conducted via telephone, and one was conducted face to face. The telephone interviews tended to be shorter than the face-to-face lasting only 15 – 25 minutes each. All were audio

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recorded to capture as much important data as possible and to ensure the actual words and phrases used by the participants could be accurately captured and used for codification. As the interview process progressed, I began receiving the same responses which led me to conclude that I had reached saturation with both groups of participants, indicating the sample size was appropriate to obtain the necessary information to answer the research questions (Seidman, 2006).

A key aspect of responsive evaluation is that it allows for flexible, changing methods and approaches which allow the evaluator to adapt to new knowledge as it emerges (Fitzpatrick et al., 2011). Open-ended interview questions were developed for both participant groups which served as a guide during the interview process. Both student and administrator/teacher-leader responses generated additional, probing questions that added to the fidelity of the research (Seidman, 2006). To be effective, the right questions must be asked concerning characteristics of effective teacher-leaders, their top concerns, and the types of improvement projects in which program graduates will most likely be involved in the field.

A pilot interview was conducted for both sets of interview questions. For the Administrator/Teacher Leader questions, I interviewed an area superintendent of a public school district in Central Florida. The student interview questions were also used in a pilot interview with a member of the Ed. D. in Education cohort. During this process, the interview questions were changed in order to collect data more pertinent to inform the research. Because the changes made were considered minor, further pilot sessions were not required. In order to keep the administrator/teacher-leader interviewees focused on the context of the interview, the following preamble was read to each participant prior to beginning of the interview (Seidman, 2006).

I have asked you to participate in this interview because I believe that your experiences and perceptions can help to inform the professional practice doctoral program at a major public university. Specifically I am interested in improving the program for students who are or wish to become better teacher-leaders; that is, I am focusing on k-

12 classroom teachers, instructional coaches, curriculum resource teachers, and teachers who work at the district level who support other teachers with curriculum and instruction. As you answer these interview questions please try to focus on the people who fill these positions.

Tables were created that contain the lists of questions asked during the student and administrator/teacher-leader interviews. Also shown is the rationale for asking the question, the data expected to be obtained, the expected product, and additional question prompts. As these were semi-structured interviews, these questions formed the basis of the interview process.

Table 3: *Interview Questions: Student Participants*

Rationale/Data	Questions	Product/Prompts
Ice Breaker Personal and professional history	Where do you currently work? What are some of the activities you are involved in on a weekly basis?	Personal/work experience What they do in their job.
Why they value an Ed. D. What they hope to learn in the program.	What was your motivation to enroll in the Ed. D. program?	What do you expect to gain from the program? What do you expect to learn?
Beliefs on the important issues in the organization.	Thinking about your organization, what types of problems are your top concerns?	What do you see as the biggest problems?
What improvement projects are the most useful.	If there was one project you could do to improve your school, what would it be?	What needs improvement the most?

Do they value what they have learned?	What impact do you think you will make at work as a result of completing this program?	How will your new knowledge and experience help your career goals?
Member check	<p>Paraphrase what I hear as the central beliefs of this student:</p> <ol style="list-style-type: none"> 1. Beliefs on why they chose the Ed. D. program 2. What types of improvement projects they expect to be involved in. 3. Beliefs on the value of what they are learning and the impact they can make in their organization 4. Beliefs on how program completion will support career goals 	

Table 4: *Interview Questions: Administrator/Teacher Leader Participants*

Rationale/Data	Questions	Product/Prompts
Ice Breaker Personal and professional history	How long have you been in your current position? How long have you been involved in education?	Personal/work experience What is your career experience? How did you achieve this position?
What skills and knowledge are important to be successful.	Please think about a person you know who has been very effective teacher leader. What did this teacher leader understand that others did not?	Please describe how they demonstrated that understanding. Please describe how they differ from others.
Beliefs on what makes some teacher leaders more effective.	Thinking of this same person, what skills did they possess that others did not have?	Please describe how they demonstrated those skills. Please describe how they differ from others.
Beliefs on what types of improvement projects would best improve organizational effectiveness.	If you were given the money to hire an outside expert, what would that person do to help you with some of your current problems? What would you ask that person to do?	What specific activities do you help with?

What activities would have the greatest impact on school improvement?

Member check

Paraphrase what I hear as the central beliefs of this administrator:

1. Beliefs on what skills and knowledge are important
 2. Beliefs on what makes an effective teacher leader
 3. Beliefs on what types of improvement projects are most important for organizational success.
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Data Analysis

According to Creswell (2013), the most difficult and time consuming aspect of qualitative research is the data collection and coding process. Data analysis conducted during qualitative research must follow a systematic and defined process in order to correctly identify the important key words and phrases (Creswell, 2013). I began the process by using open coding to develop specific categories on which to focus. The interview responses were coded using descriptive transcription to identify primary themes. Although some responses were quite specific and clear as to the project type, others needed to be analyzed, and key words and phrases were categorized into broad concepts. The context of the words the participant used during the interview had to be taken into consideration. For example, the response of “professional development” sometimes related to teacher quality and other times to school improvement.

Using axial coding, words and phrases were linked to primary themes and categories were identified. Any comments concerning “teacher/teaching improvement” were placed in the professional development category. At this juncture in the research, the audio results were reviewed a second time in order to perform selective coding to assemble the project types that best characterized the responses in the context given (Creswell, 2013). This process was intended to develop a narrative in order to connect all of the categories. The results in this

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phase included making decisions as to how the concepts, key words, and phrases linked together to answer the research questions.

Results

The research question was what types of school improvement projects are needed to improve K-12 schools? Interviews yielded a clear list of project types participants believed would result in significant improvement within their school or school district. These project types included curriculum improvement, policy improvement, school redesign, program evaluation, professional development, and school improvement plans. The following section contains narrative descriptions of the results of interviews for each of these project types.

Curriculum Improvement

Curriculum includes the external standards, mixed with local goals to create a plan for effective and engaging teaching that guides the learning process (Wiggins & McTighe, 2005). Curriculum, therefore, represents the critical component, along with the teachers themselves, in achieving the desired student performance in the classroom. This project type was identified based on the comments by the study participants who stated their school had a "lack of new curriculum." For one participant, new curriculum had not been purchased/developed in her subject area for over seven years. Another participant voiced a concern that the curriculum did not align with the subject area and grade level for which it was being used. Based on the importance of curriculum for effective teaching and learning, curriculum in use that does not align with current subject area standards or is being used in inappropriate grade levels could have a significant detrimental effect on school effectiveness. Based on these results, curriculum improvement was identified as an appropriate project type and recommended by this researcher.

Policy Improvement

A policy report can be defined as an assessment of the effectiveness, equity, or efficiency of an organizational policy, program, or practice (Fitzpatrick et al., 2011). Administrators and

teacher-leaders work in school environments controlled by policies created at the federal, state, and local levels. Many times these policies are designed without the input or consideration of those who are affected (Burns, 2010). It was clear during the interview process that district and state policies were a major concern to all of the participants. Most of these concerns centered on teacher and student evaluations. “Too much high stakes testing” and “unfair teacher evaluations” were mentioned numerous times. One participant stated that policies were “creating poor morale and high frustration” within his school, with many employees choosing to leave the system or retire early from their positions. Participant S-3, a mathematics teacher, stated that a component of his evaluation last year was “based on FCAT (Florida Comprehensive Achievement Test) reading scores that had nothing to do with me.” Another mentioned that poor teachers were allowed to continue teaching because of seniority or the School District’s Collective Bargaining Agreement, both of which represented policies created at a district or state level. A question I kept hearing was “Do current policies really work?” Most participants believed that many current policies, especially those concerning testing and teacher evaluations did not. Evaluating a teacher based on the results of subject tests not taught by teacher is clearly unfair and could lead to high job dissatisfaction.

School Redesign

In the context of this study, school design (or redesign) was defined as the development and implementation of “purposeful, coherent, effective, and engaging programs or organizational change to achieve identified results” (Wiggins & McTighe, 2005, p. 341). Participant A-1, a district superintendent, stated that she wanted “not a compliance activity but a design, not a redesign” of how schools are organized stating, “Give me a clean canvas and let’s create what a new model looks like.” Other administrator/teacher-leader participants expressed their beliefs that in order to increase school improvement, there was a need to “create a teacher-leader position” in the schools, a new design in teacher responsibilities and duties. The teachers placed in this new position would “redesign high-stakes testing, help other teachers monitor student progress and help build an academic schedule.” This topic was the most often discussed and with the most passion by the participants. I found the comments quite

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interesting and definitely believe school redesign initiatives would be an important topic for a DiP.

Program Evaluation

Program evaluation may be defined as the determination of the worth or value of an existing program, policy, or practice (Fitzpatrick et al., 2011). Many interview responses were questions concerning the value of existing policies or practices such as "Why don't at-risk kids graduate?" or "How can we increase literacy?" Some interviewees questioned the quality of the curriculum they were forced to follow and wondered if it was effective. Another respondent wanted to conduct a study on the effectiveness of site-based professional development. Additional comments were more generic and dealt with the question of "How do we know this program is effective?" All of these questions can be answered by conducting an evaluation to make the determination if certain programs or curriculum are indeed effective. Program evaluation would be a defined and effective method for making those determinations. Program evaluation is also a very well defined process and therefore would be an important process to identify school improvement issues.

Professional Development

Professional development (PD) is defined as an activity that leads to the creation of "specialized knowledge, expertise, and professional language" (Hargreaves & Fullan, 2012, p. 80). Study participants reported that professional development in their schools usually involved some type of structured training that had been approved by the local school district and that all teachers were required to attend. I did not receive any comments that were positive concerning the professional development the interviewees had been exposed to over the years. In fact, this subject received more attention than any other topic, with almost every participant making a statement on the quality or lack of quality of professional development. Respondents mentioned that the purpose of PD should be to "improve instruction and best practices" and should "build teacher capacity." Also mentioned was the need to "look at different ways of teaching," "help teachers that are teaching poorly," and "help teachers to be

more innovative.” Interviewees did not indicate that these purposes were being addressed. Participant A-1, the school district superintendent, stated that she would get rid of all PD as it presently existed in her district. Cited often was the dislike of someone outside the school coming in to present the PD. Many felt that PD is best when “taught by respected teachers from within the school.” These responses clearly indicated that both participant groups valued PD but not as it was currently being delivered. Most of the comments received could have been categorized under school redesign. However, because of so many negative comments, it warranted its own improvement project type. Most all respondents, and the researcher, believe improved professional development is critical for school improvement.

School Improvement Plans

This was a difficult topic to categorize as many of the comments could fit into school redesign, policy improvement, or program evaluation. However, I felt that the comments obtained related to different topics that did not fit neatly into one of the other categories. The comment of “find money and resources to provide services not currently being provided” was different enough to define this as a unique project type. One participant stated that her school “had no transportation for after-school programs.” To me, this represented a concern related to how the school could improve its practice and was not an issue of design or policy. Another participant stated that he “can’t cover 50 standards in 40 days,” and another stated that his school was “unorganized.” It was difficult to determine if these statements related to policy, design, or some other project type. However, based on the comments I believe school improvement plans, being similar but different from other project types identified, deserved to be a separate improvement project type.

A table was created which contains a comprehensive list of the key words and phrases used in interviews by both by the highly effective administrators/teacher-leaders and the Ed. D. students with 10 or more years’ experience in K-12 schools. Also displayed are the resulting project types identified based on the words and phrases used in the context provided by the participants.

(Insert Table 5)

Discussion

The goal of CPED was for institutions to design or redesign their Ed. D. programs in order to “prepare educators for the application of appropriate and specific practices, the generation of new knowledge and for the stewardship of the profession” (CPED, n.d., n.p.). This study focused on determining more specifically what appropriate and specific types of improvement projects should be used as the focus for the DiP in the Ed. D. in Education program. The results corroborated the goals of CPED, as the participants identified many types of specific projects they believed were necessary to facilitate school improvement.

Archbald (2008) espoused that an educational doctoral thesis should include four qualities: (a) developmental efficacy, (b) community benefit, (c) intellectual stewardship, and (d) distinctive form. The results of this study, if incorporated into a DiP, would solve a problem of practice and therefore benefit the local school or school district. Although not the focus of this study, the finding that a DiP should include a systematic literature review supports the quality of developmental efficacy. The finding that highly effective teacher-leaders should be effective evaluators and able to conduct research, analyze data, and form an analysis supports the quality of intellectual stewardship. The fourth quality, a distinctive form, was not addressed in this study however with the DiP format not being established it could lead to each DiP having a distinctive form. Although Archbald’s four qualities do not directly match the working principles of CPED, they are consistent with the principles including solving a community-based complex problems of practice, preparing leaders who can make a difference, demonstrate collaboration and communication skills, and is grounded in both practical and research knowledge (CPED, n.d.)

(Insert table 6)

Another goal of CPED (n.d.) was to differentiate the Ed. D. from the Ph. D. in education programs. The results of this study supported the need to educate program faculty in alternate

types of DiPs. In an attempt to differentiate the Ed. D., programs have adopted the term Dissertation in Practice but have continued to require the same types of projects that focus on research and/or evaluation found in Ph. D. programs (Everson, 2009; Slater, Brown-Welty, Cohn & Rodriguez, 2009; Stevens, 2010; Zambo, 2011). The types of projects identified in this research should contribute to further differentiating programs by adopting the specific improvement projects that do not necessarily require in-depth research or evaluation while maintaining the need to solve a complex problem of practice to support a local school or business entity. This would not only differentiate the programs but would support the goal of training scholar practitioners as opposed to academic researchers as advocated by Shulman and his colleagues (2006). Implications of this research include using the results to inform instructional practices and the allowable DiP projects for professional practice Ed. D. programs. As this study was a needs analysis that serves as a basis for program instructional decisions, the results of this study may inform other Carnegie Project on the Education Doctorate (CPED) member institutions how to modify or enhance their programs as well.

The findings of the present study contradicted the opinions espoused by Levine (2005) who wrote that the Ed. D. should be eliminated. The results of my interviews showed that administrators and teacher-leaders in K-12 schools deal with many problems in the field, and programs need to integrate both practical and research knowledge to link theory with application to help them in solving those problems. Traditional Ph. D. programs do not require dissertations that solve problems of practice (Archbald, 2011) as the skills required for effective administrators and teacher-leaders in K-12 schools differ from those required of individuals who occupy university faculty positions (Neumann, 2005; Shulman et al., 2006). Redesigning Ed. D. programs based on the CPED working principles should include the development of those skills.

Limitations and Delimitations

The sample of students selected for this study was drawn from a single institution and, therefore, results may not be generalizable to other institutions. As participants in the study

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were primarily students working on their DiPs, it was assumed that they would answer questions truthfully and that they were not biased by their own DiPs. The administrators and teacher-leaders were drawn from a single, rural school district in Central Florida and may not be generalizable to other school districts. The relatively small sample size should still yield quality responses and be representative of the entire population of highly effective administrators and teacher leaders in Central Florida.

According to Creswell (2013), researchers are often heavily involved with the topic to be studied. As a member of the first cohort in the Ed. D. in Education program, I conducted this study, understanding that my personal experiences and beliefs could bias many aspects of the research. The challenge was in asking the right questions and coding the responses of those interviewed. In the interviews with administrators and teacher-leaders, I did not offer a specific definition of highly effective. This could have led to subjective identification of the participants selected for this study and limited the participants' abilities to be truthful and comprehensive. Rather, each participant was encouraged to identify specific traits they determined to be highly effective based on their professional experiences.

Conclusion

The purpose of this study was to complete a needs analysis to determine what projects best support school improvement and, therefore, should be included as appropriate project types to be used as the focus for the Dissertation in Practice in the Ed. D. in Education program at a large public university. The hope was that other professional practice Ed.D. programs can also benefit from this research as they consider a redesign or enhancement of their Ed. D. programs to include appropriate instructional design and a DiP based on a needs analysis.

Based on the results of this study, programs that are still working to identify appropriate DiP projects now have a basis for their decisions. By defining the needs of K-12 schools, DiP projects can be implemented at other professional practice Ed.D. programs that will ensure students obtain the necessary investigation skills and scholarship in a rigorous program and

provide an authentic representation of professional work that best meets the needs of the graduates in the program who are practitioners in K-12 environments. This will, in turn, support school improvement at the local and district level.

Programs that offer a professional practice Ed.D. must define the purpose of the Dissertation in Practice if they are to provide the necessary rigor, scholarship, investigative skills, and training expected in any doctoral program. Many educators involved in providing Ph. D. programs believe that any doctoral program that does not include a traditional dissertation is not adequate. Faculty members who currently hold an Ed. D. are concerned that any doctoral program that does not require a traditional dissertation will result in decreased credibility of their degrees by their colleagues (D. Boote, personal communication, November 13, 2013). Students enrolled in the redesigned programs worry that they will be perceived as completing something less than a true doctoral degree (In-class discussion, September 3, 2012).

It is the role of program faculty in colleges and universities to define the Dissertation in Practice in professional practice Ed. D. programs to meet the needs of program graduates to be effective in the workplace and to provide sufficient evidence of a high quality program. This will ensure that scholar practitioners can “construct and apply knowledge to make a positive difference in the lives of individuals, families, organizations, and communities” (CPED, n.d., n.p.) while using their practical knowledge of leadership and operating under the reality of organizational constraints. A well-defined and authentic DiP, respected by both faculty and students, must be implemented by universities providing professional practice doctoral programs in order to maintain the credibility of both past and future graduates of education Ed. D. programs and to successfully differentiate the Ed. D. from the Ph. D.

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