

Factors Affecting Student Choice of an Education

Doctorate: A Case Study in the United States

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Abstract

A traditional Doctor of Philosophy program has a basis in research, completed as a full-time student, and culminates in the development and defense of a dissertation. With the changing economy, professional doctorates have become more popular to the nontraditional student as they focus on the needs of professionals to be educated in areas that pertain and relate to the needs of industry (Archbald, 2011). For years the design of this doctorate remained practically indistinguishable with the requirements of a traditional Ph. D. program. Over the past several years the requirements of professional doctorates have begun to change in response to continuing evidence of the need for research-practitioners in the field (Kot & Kendel, 2011). Following guidelines created by the Carnegie Project on the Education Doctorate (CPED), a university in the United States (US) has redesigned their Ed. D. programs to include a practitioner-related curriculum with a capstone or dissertation in practice to replace the traditional format. This case study examines factors influencing doctoral program application in the College of Education at a large public institution in the US. The results show that the Ph. D. and redesigned Ed. D. programs are significantly different and that Ed. D. students are older, have more work experience and choose their program of study for personal growth and career advancement compared to Ph. D. students whose main goal is to teach at a research university. This research is important in order to aid in the development of program marketing and recruitment of future educational leaders.

Keywords: Professional practice, Professional doctorate, Education doctorate, Carnegie Project on the Education Doctorate (CPED)

Introduction

The purpose of this mixed method study is to analyze the differences in doctoral programs within the College of Education at a university in the US and the factors influencing student choice of a doctoral program. The questions to research are “What factors influence student choice of one doctoral program over another and what do they perceive as the differences? Is doctoral degree choice one of convenience, economy, program content, program delivery, program outcomes or another unknown factor? Do factors such as age, work experience, or personal motivation drive the decision for selecting the type of doctoral program?”

Ph. D. programs are commonly defined as the doctoral degree awarded after in-depth study of research methods, subject specific curriculum and the development and defense of a dissertation. A criticism of Ph. D. programs is that their focus is so narrow that they do not prepare graduates for careers inside the industry but instead develop professional researchers (Maxwell & Kupczyk-Romanczuk, 2009). This has added to the critique of Ph. D. programs as few professions outside of universities require advanced skills in conducting research, thereby providing graduates with limited preparation for the workplace (Kot & Hendel, 2011). The problem then is how best to design professional doctoral programs that meet the needs of the community and be accepted by the academic community as being worthy of the recognition of a doctoral degree.

To this date, *like many traditional Ph.D. programs*, there is no standard format for professional doctorates which is followed uniformly from university to university or program to program (Kot & Hendel, 2011). In 2007, the university’s College of Education joined with other universities nationwide to participate in the Carnegie Project on the Education Doctorate (CPED) (www.cpedinitiative.org, 2008). The CPED was tasked to clearly distinguish the differences between the Ph. D and Ed. D. programs and define how the unique outcomes of the two types of programs should differ (Taylor & Storey, 2011).

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 (Archbald, 2011). Yale became the first American university to offer a Doctor of Philosophy (Ph. D.) degree conferring three in 1861. Their program would become a model and serve as a catalyst for the growing trend of professional learning as doctoral programs expanded to both public and private universities across the country. 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. This process has been defined as “a marathon designed to measure who has the stamina to stay the course” (Browne-Ferrigno & Jensen, 2012). 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 percent of schools aged children attended high school and only two percent went to college (Archbald, 2011). By the 1950s over 80 percent went to high school and 20 percent 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.

Other changes were occurring during the early 1900s as our economy was shifting away from an agricultural base towards the Industrial Revolution. The traditional Ph. D. programs grounded with a basis on research and theory “but not particularly useful for the real work that individuals with doctorates are called upon to do” was no longer meeting the needs of practitioners in the field who needed graduate courses and programs in teaching, management, leadership and policy (Browne-Ferrigno & Jensen, 2012, p. 407). Out of these demands came the first substantive change in doctoral education, the development of the Doctor of Education

(Ed. D.) along with many other programs that have come to be known as professional doctorates (Kot & Hendel, 2011).

The Growing Need for Professional Doctorates

Professional doctoral programs have no easily identifiable definition but 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 as the emerging labor markets required workers who possess and could apply advanced skill and knowledge in order to adapt and lead organizations into the 21st century. Other factors have 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 to the forefront the need to create research-practitioners, those that can bring their knowledge of both research and advanced study to the workplace (Guthrie, 2009). Professional doctorates are degrees for practitioners which combine higher learning with research in the workplace (Taylor, 2007).

The Education Doctorate

From the first conveyance of an education doctorate in the United States, Ed. D. programs have mirrored the requirements of Ph. D. programs as many of the same courses were taken by students in both programs (Caboni & Proper, 2009). Many in the field of education believed that education doctoral programs must focus on research and include a dissertation and that an Ed. D. was nothing more than a “low end Ph. D.” (Shulman, Golde, Bueschel & Garabedian, 2006, p. 25). This blend of coursework has been successful at creating research professionals capable of filling the need for competent university faculty. However, the traditional doctoral programs were not producing professionals that could make effective and long lasting changes in our schools (Zambo, 2011). As a result, education doctorates began to undergo changes in

order to meet the goals of practicing professionals who wanted to learn education principles with practical applications in order to make a positive impact in the workplace (Costley & Lester, 2012). These professionals were traditionally older and already working in the field of education as school teachers, administrators, or private sector managers (Loss, 2009).

A growing number of education professionals, following the guidance provided by the Carnegie Project on the Education Doctorate, began to rethink the design of the education doctorate. Their goal was to create research-practitioners as opposed to the Ph. D. trained academic-researchers (Costley & Armsby, 2010). 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 design was done to strengthen the problem-based format and establish an approach to prepare educational leaders that were educated in research methods and could apply practical knowledge to the workplace.

The changes in program design are many and following the CPED model, reasonably consistent across programs. Incoming students are placed in cohorts with a typical timeline for completion of three years (Everson, 2009). The many research courses required of Ph. D.s were replaced with subjects such as organizational theory, project management and evaluation, curriculum and instructional leadership, personnel development, data based decision-making, and accountability for student achievement (Taylor & Storey, 2011).

Another critical difference between the programs was the elimination of the dissertation replaced with a portfolio requirement or capstone project as the culminating outcome. The portfolio is an option used by some universities that require students to produce published works over the duration of their program for review and evaluation as the culminating project (Neumann, 2005) The capstone, or dissertation of practice, is a model frequently used in other disciplines including medicine and business as it enhances the critical thinking skills of its graduates (Everson, 2009). It allows students to apply their problem-based learning and

research methods to focus on solving a complex problem of practice in the education community. With an understanding that in the world of education practitioners rarely work individually, the capstone requirement allows students to work as partners to complete their project (Everson, 2006). The value of working in teams is to create educational leaders that 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 the traditional education Ph. D. programs (Shulman, et al, 2006).

Doctoral Programs at a University in the US

The university's College of Education currently offers those individuals seeking a doctoral degree with three distinct options, giving prospective students the ability to choose the program they feel best suits their needs. These programs consist of the traditional Doctor of Philosophy (Ph. D.), Education Leadership Doctor of Education (Ed. D.), and the newly created Education Ed. D. referred to in the university catalog as the Professional Practice Ed. D. (Graduate Catalog 2013). Each program offers students a unique curriculum based on the educational track chosen by the student. The Ph. D. offers 14 different tracks in a wide range of educational programs. The Education Leadership Ed. D. program has recently been redesigned to incorporate aspects of the CPED program and offers two tracks, one in Higher Education and the other referred to as the Executive track. The Executive Educational Leadership Ed. D. track and the Professional Practice Ed. D. are based on the CPED guidelines and offer specific programs requiring each student to select an area of specialization in an education related field. *Even though the redesigned Ed.D. programs serve a unique set of stakeholders and expected outcomes based on solving complex problems of practice, they represent the same rigor and value as the traditional Ph.D. and Ed.D. programs.* The Professional Practice Ed. D. program began with its first cohort group in Fall, 2011. Each of these three programs is designed to prepare students for specific outcomes unique to the program.

Program Comparison

In reviewing each type of doctoral program within the College of Education it is clear that each includes unique curriculum requirements to allow the students to achieve the program stated outcomes. According to the graduate catalog, the Education Ph. D. “prepares students for careers in teaching positions at research universities” (Graduate Catalog, 2013). This description clearly identifies that the program focuses on learning and completing a variety of research courses along with track specific curriculum and concludes with a traditional dissertation.

The curriculum for each of the Ph. D. tracks requires core research classes and dissertation hours that all students must complete as each track requires 24 student credit hours (SCH) in direct research related courses and 24 SCH in a formal dissertation. *Student credit hours are the standard designation for all undergraduate and graduates courses at this university. A typical single one semester course would equal three student credit hours. The 24 SCH identified above would equate to eight separate and individual classes.* There are minor differences in the number of SCH required for each specialization concerning electives and internships courses and the total number of SCH required for all tracks range from a minimum of 69 to maximum of 84 SCH for completion. Table 1 provides a breakdown of the requirements.

(Table 1: Ph. D. Tracks and Student Credit Hour (SCH) Requirements Here)

The Education Leadership Ed. D. “is designed to prepare educators for leadership positions at all levels of educational administration from PK-12 to higher education, as well as leadership positions in various educational settings or organizations” (Graduate Catalog, 2013). This statement implies a change of focus for the program from a research based doctorate to more of a practice based program. Both tracks in the Education Leadership Ed. D. require 9 SCH in research classes but shift the focus of the curriculum to program specific core classes. The Executive track is very specific in this area as it requires 30 SCH in core classes and 15 SCH in completing a field study which replaces the dissertation requirement. The Higher Education track allows more flexibility as it requires 15 SCH in core classes, 12 SCH in specialization

courses, and six SCH in electives. Unlike the Executive track, this program requires 21 SCH in a traditional dissertation. Total SCH needed for completion are 54 SCH for the Executive track and 63 SCH for the Higher Education track.

The third program offered is the Education Ed. D. referred to as the Professional Practice Ed. D. and, just as the Executive Ed. D., is based on the Carnegie Program for Education Doctorates (CPED). According to the program description, this program “is problem-based and designed for practitioners who aspire to positions of influence through their engagement in the development of others” (Graduate Catalog, 2013). The program includes a core of courses in learning, development, and motivation; data, accountability and leadership, and the use of research to drive decision-making and is “intended for professionals who are interested in teaching in a college, university, or community college, or leading program improvement in a school or school district, higher education, social service agencies, military or business settings” (Graduate Catalog, 2013). An analysis of the requirements for each of the Ed. D. programs IS shown below in Table 2.

(Table 2: Ed. D. Tracks and Student Credit Hour (SCH) Requirements Here)

Methodology

Procedure

To determine what motivates students to choose a particular doctoral program and factors that affect their choice, a survey was developed as the most effective means to gather qualitative *and quantitative* data from a large number of participants (Creswell, 2013). Using a convenience sample, the survey was administered to all 240 students currently enrolled in a doctoral program in the College of Education. Based on current research, the goal was to achieve a response rate of 25% or higher in order to attain valid results (Fowler, 2009). A total of 76 surveys (31%) were completed and returned thereby exceeding our minimum requirements. Although a higher than expected response rate was obtained, the researcher is not claiming that this is a ‘representative sample’ of the students surveyed, only that these are the responses that were received. The researcher does believe the responses received were a

valid representation of the entire population and made no attempt to calculate the effect of non-response rates on the data (Fowler, 2009).

Survey Development

The methodology used for creating the survey was based on a study conducted by Wellington and Sikes (2006). Their study had as a target population a doctoral program in the United Kingdom with the purpose of identifying the motivation of students who chose to enroll in a professional doctorate program. To conduct their study they created a survey that asked each respondent four questions. Each of those *open-ended questions* was included in this survey represented as questions 5, 6, 9 and 10 (Wellington & Sikes, 2006). This current research extends this study to the United States with the *inclusion of quantitative methods to include choice between Ph. D. and Ed. D. programs, age, experience, and gender*. For the purpose of this research, demographic data was gathered in questions 1 through 4 and *open-ended* questions 7 and 8 were included to help further define differences as why each student chose their particular program and their expectations. Answers to each question were coded using a grounded-theory approach and themed categories related to specific responses were created (Creswell, 2013). Answers that represented less than 10% of the respondents were considered outliers and not included in this report.

The first question was used to identify which program each respondent was enrolled in order to compare the data between each group. Demographic data (gender, age, and work experience) was gathered on all respondents as well as their opinions on why they chose their individual program, what they planned on doing after graduation and the impact their program has had on their personal and professional lives. The specific questions included in the survey are listed below:

1. Which program are you currently enrolled in?
2. What is your gender?
3. How old were you when you started in your current doctoral program?
4. How many years of industry experience do you have in the field of study?

5. Why are you pursuing a doctoral degree?
6. Why did you choose your current doctoral program?
7. How will this degree help you?
8. What do you plan on doing after graduation?
9. What impact, if any, has working on a doctorate had on your professional life?
10. What impact, if any, has working on a doctorate had on your personal life?

Results

Responses were analyzed to determine if differences between respondents could be identified across each program. Of the 76 respondents, 17 were enrolled in a Ph. D. program, 45 in the Education Leadership Ed.D. program (referred to in the rest of this report simply the Ed.D. program) and 14 in the CPED Ed.D program with 24 of the respondents being male (32%) and 52 female (68%). The percentage of male and female respondents represents approximately the same gender ratio as those enrolled in a doctoral program. Their responses did not show a significant variance so differences in gender were not pursued as a factor that required further analysis. Differences in age and work experience were deemed to be significant between programs.

Age

Sixty nine percent of students who enrolled in the CPED Ed. D. program were 41 years old or older compared to only 20 percent of students enrolled in a Ph. D. program and 40 percent enrolled in an Ed.D. program. The results are shown in Figure 1. These findings show those students choosing to pursue a Ph. D. as being typically much younger than those choosing either Ed. D. program.

(Figure 1: Age at time of enrollment here)

Experience

Seventy six percent of those students enrolled in the CPED Ed. D. had 11 years or more years of work experience compared to only 20 percent of Ph. D. students and 54 percent of Ed. D. students. The difference between the two Ed. D. programs is interesting. The results are shown in Figure 2 below. These findings show that students who chose to enroll in an Ed. D. program have significantly more work experience than those choosing a Ph. D. program.

(Figure 2: Years of work experience here)

Qualitative Data

Questions five through 10 required short, narrative answers relating to why respondents chose their specific program and other issues impacting their choice. For all but question 10, responses were identified as being significantly different between programs. Responses for each question are summarized below. In tables 5 through 10 below, an * is used to indicate that less than 10% of the respondents within each program provided a similar answer.

Question 5. Why are you pursuing a doctoral degree?

For Ph. D. students, the overwhelming reason to pursue a doctoral degree was to become a college professor and to conduct research. For both of the Ed. D. programs, the major reasons respondents choose to pursue a doctorate was to advance their careers, increase their knowledge and for personal or professional growth. Results are summarized in Table 3 below.

(Table 3 here)

Question 6. Why did you choose your current doctoral program?

Most of the Ph. D. students chose their program to learn more about their specific field of study. This correlates to the fact that there are fourteen tracks allowing the students to choose a specific subject area. The respondents for both Ed. D. programs stated that it did not require full-time status and class schedules allowed them to continue working were very important factors. The CPED Ed. D. students felt that the focus on professional practice and industry related knowledge that could be used on the job was most significant. Table 4 summarizes the responses.

(Table 4 here)

Question 7. How will this degree help you?

Respondents in all three programs stated that improved career opportunities was a main factor in pursuing a doctoral degree and was much higher in the Ph. D. program when compared to the Ed. D. programs. The CPED Ed. D. respondents had the highest results of the three for the

desire to increase their knowledge in the field of education. Results are summarized in Table 5 below.

(Table 5 here)

Question 8. What do you plan on doing after you graduate?

These responses show a clear difference as the majority of the Ph. D. respondents (88%) plan on obtaining a faculty position at a college or university while the Ed. D. respondents either hope for a promotion in their current job, obtain a new position (in the education field) or plan on continuing their current job. Results are summarized in Table 6 below.

(Table 6 here)

Question 9. What impact, if any, has working on your doctorate had on your professional life?

The results of this question show the difference of completing a Ph. D. that requires full-time enrollment compared to the Ed. D. programs that are designed for students to be able to work while completing the program as 29% responded that they were forced to “place their career on hold” while none of the Ed. D. respondents identified this as an impact. The 64% response rate from Ph. D. students that said the program has “changed my way of thinking” was the most interesting of the responses received. Also of interest was the response by the CPED Ed. D. students that felt the program has “increased my knowledge.” Results are summarized in Table 7 below.

(Table 7 here)

Question 10. What impact, if any, has working on your doctorate had on your personal life?

This question provided by far the most consistent answers across programs with all respondents stating the impact on their personal lives as being time away from family or that they “have no personal life.” These responses emphasize that working toward a doctorate in any field requires a major time commitment. The responses were also consistent in stating that they had “grown as a person” as a result of their program. Results are summarized in Table 8 below.

(Table 8 here)

Discussion

The Doctor of Philosophy programs offered in the College of Education require 24 student credit hours of research-based coursework and 24 student credit hours for the completion and defense of a dissertation. These programs follow the traditional model of doctoral education that prepares graduates to conduct research as faculty members in colleges and universities. The redesign of the education doctoral programs reflect the goals of CPED as the total semester hour requirement has been reduced, mainly as a result of a decreased focus on research methods although all still require some curriculum in research methods. Within the Ed. D. programs the Higher Education track requires a 21 semester hour traditional dissertation however the Executive track requires a 15 semester hour field study and the CPED Ed. D. requires a 12 semester hour capstone requirement, both replace the formal dissertation and allow the students to focus on issues of professional practice, working with and for an organization to help solve educational issues in a practical sense. The Ed. D. programs prepare its graduates to use their knowledge in leadership roles to make a positive impact on educational programs in public and private schools and elsewhere in the education industry. This represents the main difference between the Ph. D. and the Ed. D. programs.

In analyzing the results from the surveys, it is clear that there are distinguishing characteristics between students enrolled in the doctoral programs within the College of Education at this university. The Ph. D. students are younger and have less work experience. Their reason for choosing a Ph. D. focused on learning more in a specific field as there are 14 specialized tracks, each for a different subject area. Almost all respondents hoped to gain a full time position as a tenure-earning faculty member at a college or university.

The differences between students in the Ed. D. programs were less distinct but still distinguishable. Ed. D. students were older, had more work experience in the field, work full time and chose to pursue a doctorate degree to advance their careers in education. The CPED Ed. D. respondents showed a higher level of intrinsic motivation as a majority stated that they chose the program to “increase their knowledge” and wanted to “become a better teacher”.

They also had the highest responses for appreciation of the industry-based curriculum that provided practical experience, a goal of the CPED program.

All respondents indicated that pursuing a doctoral degree had made a major impact on their personal lives due to the time it takes to complete coursework. The Ph. D. students responded highest for impact on their professional life as many had to give up working to pursue their doctorate on a full-time basis which is not required of the Ed. D. students.

Based on these results, current students perceive the Ed.D. as equivalent to a Ph.D. and are choosing it because it is based on professional practice, they can attend classes at night, and it provides the knowledge and skills that can be directly applied in the workplace. The professional practice doctorate, although relatively new to doctoral education in the US and perceived by many as something less than a Ph.D., should gain a new respect as it prepares our future leaders to solve the many problems that exist in our educational system. This is a critical difference as traditional Ph.D. programs continue to focus on preparing students for academic careers of research and teaching at universities while requiring full time attendance. By following the guidelines established by the CPED, including the requirement for a dissertation in practice to replace the traditional dissertation, the redesigned Ed.D. programs should provide the necessary education and experience for graduates to succeed in the workplace and improve educational organizations at all levels while maintaining the rigor and quality of a Ph.D. program.

Limitations

This university is a large urban university that attracts students from across the United States. The results of this research may not be representative or generalizable to students attending smaller public or private universities in a rural setting. The random survey responses represent another limitation. While the researcher believes the results were a valid representation of the entire population, no attempt was made to calculate the effect of non-response rates on the data (Fowler, 2009). An additional limitation is that both professional practice Ed.D. programs

defined in this report have been recently redesigned and are still under review. Course content and program requirements may be modified in the future which could impact student perceptions.

Conclusion

The purpose of this research was to determine the differences in doctoral education programs by comparing the Ph.D. and Ed.D. programs offered by the College of Education at this university, the differences between students in these doctoral programs and what factors impact their decision to enroll in one type program over another. The results have provided answers for these questions. The Ph. D. programs offer the traditional blend of research methods, subject specific curriculum and the development and defense of a dissertation. These programs, by design, adequately prepare graduates for faculty positions at colleges and universities where they will teach and conduct research in their subject areas. Ph. D. students tend to be younger, have little work experience in the field and attend classes on a full-time basis. Their main motivation is to earn a terminal degree to begin a career in academia. In the opinion of the researcher, this traditional Ph. D. model serves them well.

Those students that enroll in either of the Ed. D. programs are demographically different and are motivated in more intrinsic ways. The Ed. D. students tend to be older, have years of work experience in the field and are pursuing a doctoral degree for career advancement and to learn principles that can be applied in the field. They work full time as their doctoral programs are taught in the evening hours, require fewer classes in research methods and focus on practical application of educational theory and practice. These students are more intrinsically motivated to improve their knowledge in the field and to make a positive difference within the industry of education. Based on the principles of the CPED program, the Ed. D. programs, especially the CPED Ed. D. is succeeding in the development of education professionals that want to apply their new found knowledge for the good of educational programs at all levels in a practical way.

This research was not conducted to make a judgement on which programs are better. Each prospective student chooses a program based on their needs, goals and motivation. Since the

Ed. D. programs have been redesigned, further research should be conducted to measure what impacts the graduates of professional practice programs such as the Doctor of Education are having on educational organizations. Only through continued study can we determine if the CPED project is having the positive outcomes it was designed to produce and how we may continue to improve the content and direction of the professional doctoral programs to meet the needs of all prospective students and educational organizations.

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