

A Glance at Doctoral Preparation Through Websites: How Do Education Policy Studies
Programs Advertise Opportunities for Students to Engage with the Policymaking

Process?

by

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ABSTRACT

Every year, potential graduate students hunt through websites and promotional materials searching for the perfect program to fit their needs. The search requires time and patience, especially for those future scholars who seek a doctoral program in Education Policy Studies (EPS) with a focus on interacting with the policymaking process. The primary objective of this project was to explore the promotional materials of EPS doctoral programs in order to better understand how these programs promote formalized training for students to engage with education policy and the policymaking process. I selected the top 10 EPS programs in the nation along with my own institution (Arizona State University) as the sample for this study. By reviewing their websites, I found that programs provide a comparable training description for similar careers as well as upholding similar goals in the subfield of EPS. Ultimately, the program materials revealed that while these programs advertise significant formalized training in research methods and scholarly pursuits, opportunities to actively engage with policymaking were missing from the materials. Instead, it is more likely that such opportunities occur in informal settings such as apprenticeships and working at research centers. This study provides a detailed discussion of how programs promote training opportunities to students, the types of careers that programs claim to prepare students for, and the important role that faculty projects and additional resources play in the student experience related to engagement with policy and the policymaking process.

DEDICATION

To my children Samaya and Banyan, may this world be a better place for you as you grow.

To Mi Media Naranja, Scott, your love wins above all else. It was a long road, thank you for your patience, strength and for joining me on this journey.

To my parents, for your infinite sacrifice and unwavering belief in me, you have made everything possible.

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I am grateful to my parents for their support. Their encouragement and belief in me could move mountains, and their many sacrifices to help me achieve this dream are above and beyond any possible expectation. I am grateful they always see the best in me, and I vow to do the same for my children.

My children, both born during this journey, are my daily reminders for why I want to see positive changes in education policy. I am thankful for their cheery faces and look forward to all the lessons they have to teach me. I am thankful for my husband, whose patience was tested far more than it should have been during this journey. His willingness to not only accept the challenge of my many roles, but also support me through the process, will always be remembered. I promise that it will all have been worth it.

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CHAPTER 1

INTRODUCTION

Hundreds of Education doctoral programs exist in the United States, several of which offer degrees in Education Policy Studies (EPS). For potential graduate students searching for the best program to meet their needs, sifting through each program's materials can be daunting. The search usually requires researching websites and hunting for details in order to learn more about how the program will provide the right training for their next career move. Doctoral students aiming for a career as a university professor will find that most all programs can meet their needs (Aanerud, Homer, Nerad & Cerny, 2006; Golde & Dore, 2004; Nyquist & Woodford, 2000). However, for students who seek training that prepares them to interact with the policymaking process, the search requires a bit more attention.

As a graduate student myself, I can draw from my own personal experience in this area. When searching for my top choice among several doctoral programs, I had multiple goals in mind. Though I wanted to receive training to become a university professor, I also wanted training that could prepare me to share my research with diverse audiences, especially policymakers. Since my career goal was to not only study education policy, but also engage with the creation of such policy, I knew that I needed to find a program that offered opportunities to sharpen a specific set of skills. After spending several years working in higher education and in the field of public policy, I also knew that I was not alone in seeking a program that could offer training in areas preparing graduates to interact with the policymaking process. After combing through the literature on doctoral program assessment, career preparation, education policy studies and the research-policy

gap, I learned that potential students could greatly benefit from learning about the ways in which EPS program promotional materials claim to provide training for students, especially as it relates to interacting with the policymaking process.

This project draws on several interconnected topics, namely the subfield of EPS, doctoral student preparation, and the research-policy gap. Weaving together each of these topics provides a backdrop for understanding the complicated choice that potential students have in selecting an EPS program. The findings from this project serve to contribute to the larger body of research and literature in higher education regarding the formalized opportunities for students to engage with policy and the ways in which programs describe in their promotional materials the student experience in doctoral preparation. Future research on this topic might dive deeper into drawing a distinction between education policy research and education policymaking. Such a distinction may provide insight into the ways in which EPS programs describe training opportunities for potential students in promotional and recruitment materials.

Engagement with Policy and Policymaking Versus Engagement with Research. For the purposes of this study and by reviewing program materials, “*engage with*” was defined as “participating in or becoming involved with,” as it fits most appropriately within the context of doctoral preparation and policymaking. This can also be interpreted as “interacting with” the policymaking process. For example, interaction can take place in face-to-face meetings, over the phone, and through email. Based on the definition used here, coursework and classroom time would provide little to no opportunities to *engage with* policy and policymaking. Therefore, examining the formal ways in which program materials describe the training of doctoral students outside of the

classroom provides a starting point for better understanding how this group of programs and colleges describes or categorizes training students to *engage with* policy and policymaking.

Engaging with *policy and policymaking* is distinguished from engaging in *policy research* in a couple of key ways. Firstly, education policy research is a key output of any EPS scholar. EPS programs ideally prepare scholars to conduct research in education policy by utilizing a broad spectrum of skills on complex educational issues; indeed, this was confirmed in the findings in this study. The output of research, while an important part of scholarship, is often documented with primarily an academic audience in mind. As such, the opportunity for interaction is contained within the parameters of the researcher, the subject and the scholars who later read it. However, engaging with policy and the policymaking process involves additional key players in influencing education policy, and that is *the policymakers themselves*. Engaging with the policymaking process allows for additional interaction, where a scholar's involvement evolves to include the realm where the creation or augmentation of policy takes place (see Figure 1). In place of a scholar publishing their research into a journal or policy brief, a dialog can take place, where policymakers and scholars can jointly contribute to the policymaking process. Secondly, the space where interaction occurs also changes, for example, from an academic journal to a conference room – essentially a space where interaction can move in more than a single direction. When a scholar's research is published into a written piece of work, it is one-directional and offers a limited interaction with policymakers. However, when scholars move the communication to a space where interaction and participation can take place simultaneously, the opportunity for engagement then changes

to one where scholars can contribute to policy development well beyond the confines of a report or journal article.

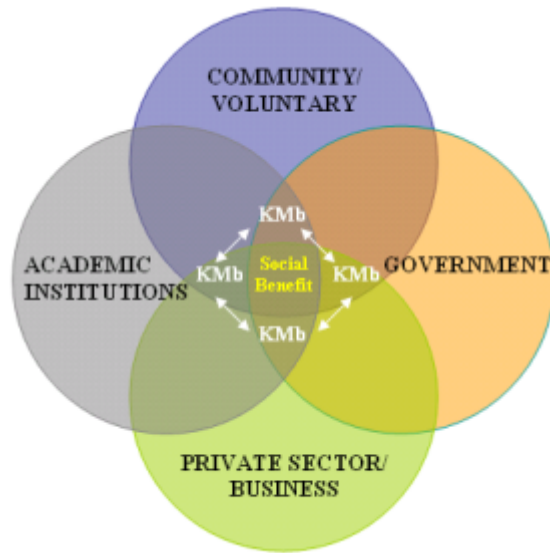


Figure 1. Knowledge Mobilization, (KMbeing, 2011).

While producing research is a hallmark characteristic of an EPS scholar, engaging in policy and policymaking is not the traditional role of the academic (Henig, 2008; Weiss, 2004; Wong, 1998). Yet according to the EPS programs' own guidelines, they seek to influence policy (for example see Chapter 4, Findings), and EPS scholars similarly aim to have their research influence policy as well (Sundquist, 1978; Hess, 2008; Weiss, 1977, 1979). In fact, EPS scholars are unique in this aim among their academic colleagues.

Background. Education Policy Studies (EPS) is a relatively young academic field that often struggles to maintain an identity amid competing priorities (Henig, 2008). Situated in the school of education, which itself battles a dual mission of being both a research enterprise and a professional school (Judge, 1982; Clifford, 1986; Labaree, 2004; Carpenter, 1987; D. Ball & Fornazi, 2007), EPS has yet to carve out adequate space in the scholarly landscape to be considered more than a subfield of education, yet

the scholars produced from EPS graduate programs hold great promise to influence, impact and shape education policy. In many ways, EPS scholars interact with policy on a daily basis; however, one criticism may be that they are not maximizing the potential effect they could have on education policy to make meaningful change.

Several factors may account for why education scholars are often missing from the research and policymaking process. Every year in the United States, millions of dollars are allocated for social science research in universities and think tank organizations to further knowledge and solve society's greatest ills. Nevertheless, despite the best of intentions by policymakers and academic scholars alike, concerns have been raised that much of what is learned through research in fact has a very limited impact on education policy. Discussions concerning how the policymaking process utilizes knowledge have been documented in academic literature since before the 1960s and more extensively in recent years (Backer, 1991; Ball, 1998; Firestone, 1989; Hood, 2002; Kirst & Mosher, 1969; Knight & Lightowler, 2010; Lagemann, 1997; Marshall, 1988; McDonnell, 1988; Pauly, 1978; Snow, 1959; Weiss, 1977, 1979; Whitchurch, 2009). The literature tends to cluster around two main groups of policy actors: those conducting the research and those making policy. Of particular interest to this study is the group conducting research in academic settings, such as universities and research centers. To date, little is known about how research scholars who attempt to engage in the policymaking process—also known as knowledge brokers (KB)—are trained in the academic setting (Sa, 2011). The importance of knowledge brokers has been an active topic in the literature since the 1970s (Sundquist, 1978; Weiss, 1977, 1979), with an

emphasis on understanding how they contribute to policymaking discussions as well as what role they play in communicating research findings.

The last decade has seen a resurgence of interest internationally in connecting the work of academic scholars to dissemination efforts specific to its effect or influence on public policy (Knight & Lightowler, 2010; Phipps & Morton, 2013; Sa, 2011; Whitchurch, 2009). Increased attention to the research-policy gap has been attributed to economic shifts, both domestic and global, and to the need to demonstrate public benefit for university research, especially as it pertains to policy issues such as education (Henig, 2008; Phipps & Morton, 2013). The call from policymakers and other decision makers to better integrate research findings remains paramount in policy discussions (Henig, 2008; Phipps & Morton, 2013). Both researchers and policymakers work diligently to improve educational outcomes through collaboration endeavors, but communication between them often falls short of meeting with success (Hess, 2008; McCarthy, 1990; McDonnell, 1988 & 2009; Weiss, 1979; Wong, 2008). As a solution to the communication problem, efforts have been underway since the 1980s to increase the dissemination of research results in federally funded programs through clearinghouses and online databases (Henig, 2008; Hess, 2008; Lagemann, 1997; McDonnell, 2009; Weiss, 2008; Wong, 2008). Other solutions have involved requiring research faculty to include public access to publications created through public funding (*What Works Clearinghouse* and *ERIC*, for example). Moreover, federal funding for research centers at universities and community partnerships has been prevalent in funding streams from various agencies for decades. Indeed, efforts on several fronts have occupied both government and scholarly time to improve success between the two groups in the hope of advancing education (Henig,

2008; Hess, 2008; Hood, 2002; Lagemann, 1997; McDonnell, 1998; Phipps & Morton, 2013; Sa, 2011; Weiss, 2008; Whitchurch, 2009). However, despite these national and international efforts, a gap persists between university research in education policy and the policymaking process.

Now, more than ever, we must gain a better understanding of how education policy research is being used in the policymaking process. Heated debates regarding how to both improve schools and address dwindling financial resources have entered the public domain, situating education at the forefront of budget cuts. In recent years, disputes concerning what is needed to improve America's school systems have been at the forefront of local and national elections, but changes to education efforts in both realms are being implemented with little or poorly interpreted evidence to support their success. Although the academic research community may be well aware of what works and what is needed to remedy numerous concerns in public education, the effective communication of such information between researchers and policymakers is unfortunately still being stymied. Too little progress has been made to bridge the research-policy gap despite decades of research to identify its cause (Hess, 2008; Weiss, 1979, 2008; Wong, 2008). Recent federal, state, and local policies have begun to make a swift impact on education budgets, teacher preparation, classroom resources, and curriculum (see, for example, the No Child Left Behind Act [2001], Common Core State Standards Initiative, high-stakes testing initiatives, and the English-only movement). Contentious, inappropriate, and often damaging policies continue to make their way through various levels of government in spite of university research that may advise against them.

Knowledge brokers (KB) who specialize in education policy most commonly operate in graduate schools of education that have several subfields in which faculty may concentrate their efforts, such as curriculum or educational psychology. KBs often hold faculty appointments in the Education Policy Studies department. EPS evolved during the Nixon Administration as part of a government push to evaluate educational outcomes through research (Lagemann, 1997). In fact, the subfield of Education Policy Studies has gained enough recognition that most of the top universities in the United States now offer a concentrated doctoral degree program in this area. Although specialists in the fields of economics, finance, psychology, and sociology still produce research concerning education matters, this educational subfield truly specializes in studying these phenomena (D. Ball & Forzani, 2007).

Students in EPS programs focus on numerous aspects of policy, ranging from international affairs to literacy. EPS programs have expanded over the past decade and have even earned a place in the specialty rankings of U.S. News and World Report's "Best Grad Schools" feature published each year, indicating their popularity among both consumers and graduate school deans who nominate programs for specialty rankings (Flannigan & Morse, 2013; Whitaker Lamb, 2010). The degree program, though young in the history of education doctorates, currently serves as one of the main training grounds for future EPS scholars and knowledge brokers. This project explores EPS doctoral programs in order to better understand how they train scholars to engage with the policymaking process.

The gap between research and policy is essentially the disconnected space between social science research and the policies that could benefit from their insights.

Throughout the past 40 years, government agencies and scholars have studied this gap extensively (Davies, 2000; Hetrick & Van Horn, 1988; Kirst, 2000; Sundquist, 1978; McDonnell, 1998; Weiss, 1979), producing various recommendations for how to bridge it. Although the gap is better understood today than it was just a couple of decades ago, effective strategies are yet to be established (Hess, 2008; McDonnell, 2008; Weiss, 1997). In fact, based on extant research, more than one solution may be needed, as several causes have received significant attention (Hess, 2008; Levine, 2007; McDonnell, 1998; Phipps & Morton, 2013; Sa, 2011; Weiss, 1979). Among the list of documented explanations for the disconnect between research and policy are the academic incentive structure, the lack of concrete recommendations, conflicting results from research, academic jargon, the length of time to publish research results, limited dissemination efforts, and the contextual relevance of the research. Piles of articles and books illuminate the causes and present strong evidence supporting each claim; however, a comprehensive solution that addresses multiple concerns has yet to rise to the top (Hess, 2008; McDonnell, 1998; Weiss, 1979, 2008; Wong, 2008).

In his 2008 book *When Research Matters: How Scholarship Influences Education Policy*, Frederick Hess wrote about the urgent need for a better understanding of how research can influence policy, especially in light of new trends in education reform that require “scientifically based research” to inform policy decisions. As such, some academic scholars have stepped up efforts to make research results more accessible, timely, and free of academic jargon. For example, the National Education Policy Center (NEPC) situated within the University of Colorado uses social media and a devoted group of scholars to provide a quick response that informs education policy discussions.

Several new online journals are also seeking to shorten the length of time it takes for peer-reviewed journals to publish and make articles open to the public (Henig, 2008; Muir, 1999). However, the contextual relevance, academic jargon, and academic incentive structure are still slow to change in the university setting (Henig, 2008; Kirst, 2000; Labaree, 2004). Unfortunately, these impediments come as no surprise, considering that the academic incentive structure for publishing, tenure, and promotion has evolved little over the past 100 years (Hess, 2008).

Much of the research-policy gap has also been attributed to issues of communication between researchers and policymakers (Davies, 2000; Henig, 2008; Hess, 2008; Kirst, 2000; Knight & Lightowler, 2010; McDonnell, 1998; Sa, 2009; Schwartz & Kardos, 2009; Weiss, 1997). This breakdown in the transfer of vital information results in mediocre policies, unhappy communities, and frustrated policymakers. Therefore, a formidable challenge remains as policymakers still struggle to find the right policies to solve education problems, and scholars continue to investigate solutions while neither group achieves desirable results. A new perspective that sheds light on the research-policy gap is clearly needed, as the stakes in education policy are rising at the local, state, and national level.

From the decades of work examining research utilization, policymaking, and education problems, a new wave of burgeoning scholars has emerged. Much like the birth of EPS—which materialized with a concentration on research and evaluation in education policy—every year throughout the country, hungry new doctoral students are embarking on their scholarly careers in EPS programs with a desire to influence education policy. Recent nationally conducted assessment studies show that graduates from doctoral

programs will end up in a variety of careers such as professors, administrators, and researchers (Aanerud, Homer, Nerad & Cerny, 2006; Golde & Dore, 2004).

These promising new scholars know that academic positions and funding are scarce, and despite the fact that they have several doctoral programs to choose from when launching this challenging career, they select EPS as their area of specialization. While their insight, background, interests, and desire to *influence* education policy may differ from that of their colleagues with other specializations, they are choosing policy studies over other topic-specific areas, such as teacher preparation or special education. Each year, graduates in EPS programs enter their professional circles as newly minted scholars, armed with valuable skills and an in-depth understanding of education *and* policy.

However, little is known about the way doctoral programs prepare students to understand and engage with the policymaking process; indeed, even a general understanding of this new group of scholars is negligible (Phipps & Morton, 2013; Sa, 2011).

Purpose of the Study

The primary objective of this project was to explore the publicly available promotional materials of EPS doctoral programs in order to better understand how these programs promote formalized training for students to engage with education policy and the policymaking process. This study was qualitative in nature, using a grounded theory approach (Boeije, 2002; Glaser, 1965; Glaser & Strauss, 1967) to gather data on EPS programs using two sources for data. The first phase of the project involved gathering information about graduate programs based on a purposeful sample. Content analysis of program materials was used to evaluate the selected programs, reviewing the college's and EPS program's goals against descriptions of formal and informal examples of

carrying out each goal. Consistent with grounded theory approach, several markers or variables were used for evaluation; and, using the constant comparison analysis method, new variables were revealed, and data were re-evaluated until each program was thoroughly reviewed (Glaser, 1967; Krippendorff, 2013). Content analysis of each program was performed to assess descriptive data on how graduates were prepared. After reviewing the program data, a single EPS program emerged as unique in its approach to training EPS students and was therefore selected for an in-depth interview.

Research Questions

To identify how EPS doctoral programs describe training where students and scholars engage in the policymaking process, the following broad categories were explored:

1. Graduate schools of education and doctoral preparation programs in Education Policy Studies
2. Faculty, faculty research, and faculty research centers
3. Curriculum and environment

Each of these categories works collectively to provide training and preparation to graduate students. Preparation of graduate students is not limited to the variables listed above, but the categories served as a guiding point for exploring the research questions.

Using data collected from colleges and programs, this study sought to answer the following research questions:

1. What does each selected Education Policy Studies program assert, per promotional materials, as its aim or goal in preparing doctoral students?

- a. What formal and informal examples does the program provide for meeting each aim or goal?
2. What types of careers do Education Policy Studies programs claim to prepare students for per promotional materials?
 - a. What formal and informal examples does the program provide for preparing graduates for such careers?
3. How do colleges and/or Education Policy Studies programs present per promotional materials, the engagement of students in policy, or the policymaking process as part of their doctoral programs?
 - a. What formal and informal examples does the program provide for the engagement of students in policy or the policymaking process?
4. What do colleges of education assert, per promotional materials, as their aim or goal in preparing doctoral graduates?
 - a. What formal and informal examples does the college provide for meeting each aim or goal?

Significance of the Study

This study aimed to provide fresh insight into how EPS programs describe, per promotional materials, the preparation of doctoral students. Although the literature has featured extensive discussion regarding the preparation of doctorates in the field of education, it has focused mainly on distinguishing the EdD and the PhD degrees or on the complicated nature of training educators to become researchers (Clifford & Guthrie, 1988; Labaree, 2004; Levine, 2007). To date, no condensed or comparative review of

EPS programs or its graduates as a subfield of education has been conducted. The availability of such information will illuminate not only the similarities among programs, but also the differences, thereby adding to the discussion regarding the future of EPS as a field of inquiry. It will simultaneously provide insight into program selection for potential students who seek to engage with policy in addition to studying policy. Providing an independent and objective review of EPS programs' promotional materials also contributes to literature that seeks to identify the ways in which programs communicate methods of doctoral preparation and the student experience of selecting a program of study. Additionally, results from this study may contribute to the broad discourse regarding the ways in which scholars seek to influence education policy and the training of new scholars that may elevate skills to include a more interactive role with policymaking.

Discussion of knowledge brokering—also referred to as research utilization, knowledge utilization, knowledge transfer, knowledge mobilization, or research translation (Benneworth & Jongbloed, 2010; Hemsley-Brown, 2004; Lavis et al., 2003; Nutley et al., 2008; Phipps & Morton, 2013; Sa, 2011; Wilensky, 2001)—has gained considerable interest internationally. In both Canada and Scotland, documented collaborations have formed between institutions and policymaking communities in recent years with the explicit goal of enlisting the translation of research knowledge to form effective policy (Knight & Lightowler, 2010; Phipps & Morton, 2013). Such efforts have not yet occurred in the United States, though the new waves of federal grant funding and literature in several social science areas indicate increasing interest. Gaining insight into how EPS scholars are prepared, as well as learning more about career paths of EPS

scholars and their affiliation with knowledge brokers, may provide significant benefit to the research-policy gap discussion.

Students interested in learning about how to effect policy, engage with policy, or study policy in a program that emphasizes engagement may appreciate this study's findings, as it highlights aspects of all three areas. Though this study includes results from only 11 select programs, higher education institutions may be interested in seeing how their programs compare to others against similar standards. Institutions or program evaluators may also recognize the benefits of understanding how such programs may contribute to the research-policy discussion, especially as it relates to alternate career paths, as such data may provide insight into their own programs and/or students' experiences. International organizations may be interested in learning how doctoral preparation programs in the United States are preparing EPS scholars for diverse and challenging research careers in this highly contested topic area. Institutions considering improving upon, initiating, or evolving their own EPS programs may also profit from the outcomes of this study. Finally, anyone interested in looking to higher education and academic scholars as key components of bridging the research-policy gap may be interested in learning more about this group of specialized experts and their graduate preparation experience.

CHAPTER 2

REVIEW OF LITERATURE

Universities and graduate schools of education in the United States have been awarding doctorates for more than 100 years (Shulman, 2006). The degree has taken many shapes and endured much criticism over the years. This literature review focuses on various aspects of the doctoral degree in education, incorporating three main topics: (a) the history, discipline, and preparation of the doctoral degree in education; (b) the history and challenges of Education Policy Studies; and (c) the current status of doctoral assessment. Graduate schools of education are currently at a crossroads; the next 100 of preparing education scholars could see the resurgence of the field or the disappearance of doctoral degrees in education altogether.

The History, Discipline and Preparation of Doctoral Degrees in Education

Somewhat unique in their history and certainly in their stature, graduate schools of education exist on the fringe of universities (see, for example, Clifford, 1986; Clifford & Guthrie, 1988; Judge, 1982; Labaree, 2004; Wong, 1998). Many scholars have discussed the problematic composition of education schools, most notably Harry Judge (1982) in his book *American Graduate Schools of Education: A View from Abroad*. His analysis of graduate schools of education details the many challenges of school identity and programming, research focus, and student composition. Though written nearly three decades ago, his review of education schools remains one of the most comprehensive.

His analysis begins with one of the greatest challenges facing schools of education, both historically and today: the blind expectation that society's ills will be

remedied through the public school system. The following quotation summarizes Judge's (1982) perspective on the complex responsibilities placed on schools of education:

There is no country in the world in which education occupies a more important place than it does in the United States. The newspapers are full of it, and not only of comment or information of a pessimistic or woeful kind (although there is no shortage of that). It is, arguably, the largest national industry. Education, organized as a schooling activity is expected to resolve, or at least to ameliorate, a bewildering range of social and economic problems. (p. 4)

Schools of education are charged with complicated and, arguably, insurmountable tasks: to train teachers, study education, and solve problems both inside and outside of the classroom—without the proper respect and/or funding necessary to carry out such formidable tasks (Clifford & Guthrie, 1988; Golde & Walker, 2006; Judge, 1982; Labaree, 2004; Lagemann, 1997; 1988; Levine, 2007).

The History of Schools of Education. Schools of education have existed at the university level in various forms for more than 300 years. The first schools of education were created with the express purpose of training teachers (at the undergraduate level) and were often referred to as “normal schools.” However, graduate schools of education (GSE), which came to be in the mid 1800s in the United States, had a much different task. Used as a tool to differentiate between the professional degree in teaching and the PhD in education, GSEs marked the home for theoretically based research in education. According to Clifford (1986), the standard for GSEs in the U.S. dawned between 1900 and 1940, with five universities as the leaders: Chicago, Columbia's Teachers College, Harvard, Stanford, and the University of California, Berkeley. These five campuses strategically created the professoriate in education through the formation of graduate schools of education at research-focused universities. In doing so, they pointedly

distanced themselves from teacher education and emphasized research in pedagogy and graduate training (Clifford, 1986). This new identity was signaled by the shift in naming conventions for colleges, which went from Normal School or Teachers College to variations of Department of Pedagogy, Department of History and Art of Education, and Department of Education (Clifford & Guthrie, 1988).

More than half of colleges and universities today house a school of education (Levine, 2007). In fact, as one of the most prolific units in the academy, schools of education award “one out of every twelve bachelor’s diplomas, a quarter of all master’s degrees and sixteen percent of all doctorates” (Golde & Walker, 2006). Though not all universities have a graduate school of education, the 200 institutions in the U.S. that do awarded nearly 7,000 doctorates in 2006 (Golde & Walker, 2006). However, despite such productivity, these schools are not always well respected on their campuses. This problematic reputation has a long history and can be attributed to various factors, including the GSE’s awkward contributions to the field of social science research (D. Ball & Forzani, 2007), its incorporation of studies that are the province of other disciplines on campus (Clifford & Guthrie, 1988; Richardson, 2006), and its partial identity as a professional school. However, according to most, the low prestige of the teaching profession gives schools of education diminished stature within the academy (Clifford, 1986; Judge, 1982; Labaree, 2004; Lagemann, 2000). In his inquiry, Judge (1982) provided insight into the precarious status of GSEs as they struggle to claim both professional and research identities; he explained:

[G]raduate schools of education display alarming symptoms of insecurity and self-doubt. They know that their position within the world of higher education, and often within their parent universities, is always ambiguous and often resented.

Their leading members are not sure whether they are - or wish to be - part of a graduate school of arts and sciences or of a professional school. (p. 6)

Judge's analysis touched on a subject that often goes ignored in GSEs: that despite high-quality work, groundbreaking research, and influential faculty worldwide, graduate schools of education habitually struggle to maintain a strong identity. GSEs are often a mixture of professional schools for preparing elementary, secondary, and postsecondary teachers, and training grounds for educationists and scholars in various fields, ranging from psychology to policy. Therefore, GSEs have a constant and inherent struggle to define themselves in three distinct spheres: (a) as professional schools, (b) as graduate schools of arts and sciences that specializes in education, and (c) as training grounds for scholars in education (Clifford, 1986; Clifford & Guthrie, 1988; Labaree, 2004; Lagemann, 2000). The results of this struggle have been manifested in GSEs across the nation as they have collapsed and/or become reorganized into other colleges on university campuses (see, for example, Yale, Duke, University of Chicago, and Arizona State University).

Education in the Research University. The dominant model for today's GSE is based in research, and four of the five universities responsible for establishing the current standard are still among the top 10 nationally (U.S. News & World Report, 2013). Interestingly, the University of Chicago, after eliminating the teacher-training program in the 1970s, struggled to realign its priorities in the social sciences (Lagemann, 2000) and closed its doors in 1997. Understanding the history of GSEs, their unrelenting need to establish themselves within their universities as competent contributors, and the charge to provide practical solutions to educational problems divides faculty and, subsequently, the

very nature of scholarly preparation. In the literature, this divide recognizes two categories of education scholars: teacher educator-researchers and education researchers. Though aspects of the two categories are similar, they differ significantly in the audience they serve for job placement. Education researchers are presumably trained to create knowledge in a research university where they will contribute to the field and train others to do the same (Lagemann, 1997, 2000; Wang, 2011; Wilson, 2006; Young, 2008). Teacher educator-researchers have a similar charge, though potentially in either a research or non-research university, with the added duty of training teachers (Golde & Walker, 2006). Education researchers are not assumed to have background or training in teacher preparation or intimate familiarity with K–12 classrooms. Instead, the expectation of education researchers is in familiarity with research, methodology, and theoretical foundations. Upon graduation, teacher educator-researchers frequently find employment in school districts or nonprofit organizations that service the education industry, or they maintain employment in their current workplace. Education researchers are almost exclusively trained to work in research organizations, generally as professors in universities. Though little is known about the specific demographics of education researchers, as a combined group, doctoral students in education are older and generally have experience as teachers or administrators in the K–12 system. It is not surprising, then, that the average age upon receipt of the doctorate is 44 years old (Golde & Walker, 2006).

Currently, GSEs offer two doctoral degrees: the doctor of education (EdD) and the doctor of philosophy in education (PhD) degrees. Curricular and programmatic distinctions between the degrees are minimal and are often only apparent in research

training and methods courses (Anderson, 1983; Boote & Beile, 2005; Carpenter, 1987; Dill & Morrison, 1985; Shulman, 2006). While there is a perception that the EdD is intended for K–12 teachers seeking additional training for advancement in their current or similar roles (Dill & Morrison, 1985), the literature shows no empirical evidence that a significant distinction can be made between the two groups. Recently, universities have made efforts to redesign their programs to reflect a clear distinction between the degrees (see, for example, University of Southern California in Shulman, 2006). A review of the preparation of education scholars indicates that it is more the *type* of role the student seeks upon graduation than the *degree* he or she chooses that allows for a distinction to be made.

The struggle to maintain an identity consistent with that of a research university has been a challenge for GSEs since their inception. Although the need to better understand pedagogical strategies, international competitiveness through curriculum, and social mobility continue to be scientific drivers, graduate schools of education will forever be associated with a profession of low prestige: teaching (D. Ball & Forzani, 2007; Clifford, 1986; Judge, 1982). Often compared to other types of professional schools, such as law and medicine, education schools habitually suffer from criticism, spanning from lack of rigor in coursework (Labaree, 2004) to “useless” research (Lyon, 2002). Commenting on the challenges GSEs face within their own institution, Labaree (2004) wrote:

Because of their location in the university and their identification with the primary and secondary schools, ed schools have had no real choice over the years but to keep working along the border, but this has meant that they have continued to draw unrelenting fire from both sides . . . on the one side, ed school research is seen as too soft, too applied, and totally lacking in academic rigor; but on the

other side, it is seen as serving only a university agenda and being largely useless to the schools. (p. 205)

This challenge has existed since the inception of GSEs (see, for example, Clifford, 1986; Clifford & Guthrie, 1988) and endures as one of the key components preventing GSEs from earning an elevated status among other units on campus.

GSEs have not always offered multiple doctoral degrees. In an effort to strike a balance between professional preparation and academic goals, several schools established the doctor of education (EdD) degree as a separate professional degree (Deering, 1998), first introduced in 1920 at Harvard (Dill & Morrison, 1985). The hierarchy of graduate degrees in universities leaves education schools in an interesting position, as GSEs have historically created minimal distinction between their research doctorate (PhD) and the professional degree (EdD). The Doctorate of Education (EdD) ranks equally with the Doctorate of Medicine (MD) and the Doctor of Jurisprudence (JD) (Clifford & Guthrie, 1988; Dill & Morrison, 1985). However, neither the EdD nor the other professional degrees referred to above are “hierarchically the equivalent of the Ph.D.” in the research university system (Clifford & Guthrie, 1988, p. 335). The PhD degree in education, introduced in the U.S. in 1893 by Teachers College, Columbia University (Clifford & Guthrie, 1988;), is specifically oriented toward research and is viewed as the “property of the university . . . jealously guarded by the graduate college” (p. 335).

According to Clifford and Guthrie (1988), there was a perception of “less distrust” (p. 148) from universities for training administrators through the EdD degree, as opposed to the PhD degree. Though an additional doctoral degree in education created tension among those who sought for a distinction between a professional degree and the

research degree (Deering, 1998), the EdD prevailed and maintains its position in graduate schools of education. The literature, however, is filled with recommendations to either terminate one degree and/or revamp the degrees entirely (Anderson, 1983; Brown, 1966, 1990; Clifford & Guthrie, 1988; Deering, 1998; Dill & Morrison, 1985; Levine, 2007; Osguthorpe & Wong, 1993). Historically, control of the curricular aspects of the PhD degree was generally left to the arts and sciences and not within the department of education (Clifford & Guthrie, 1988; Dill & Morrison, 1985). This minimal control was often disputed, as was the case at the University of Minnesota by the Dean of the College of Education. Dean Melvin Haggerty in 1926 petitioned the university president to grant the same autonomy it did to other professional schools, such as law and medicine. Though Dean Haggerty lost the battle for autonomy, other colleges were able to gain traction in adding field service (UC Berkeley) and similar changes to the EdD degree, thus enhancing the applied research doctoral training in education. However, the research and scientific orientation of the PhD degree in education continues to mimic the research university model despite its roots in GSEs. The scientific orientation of the PhD degree fuels the current perception of the EdD as “Ph.D.-lite” (Deering, 1998; Shulman, 2006). One of the frequently recognized differences between the EdD and the PhD is the dissertation requirement. The PhD generally requires original research, whereas the EdD is most often characterized by applied research (Deering, 1998; Dill & Morrison, 1985). This distinction poses an obvious challenge for GSEs working to establish themselves within the research university, as applied research is rarely given respect among theoretically driven disciplines.

Women and minorities hold an interesting place in the history of GSEs, both in student body composition and in positions of faculty. The practice of teaching has always been and continues to be occupied overwhelmingly by women, and by creating a curricular distinction that moved away from teaching and toward research, GSEs created a space for men to dominate in the academy and in elevated educational administration positions (Clifford, 1986; Golde & Walker, 2006; Clifford & Guthrie, 1988). In the early years, schools of education tended to mirror the discrimination against women that was present in all professions at the time. The American Association of University Professors reported in 1921 that nine of the 190 faculty holding full professor positions in education were women (Clifford & Guthrie, 1988). In recent years, however, the gender and racial composition of doctoral graduates appears similar to the teachers the school prepares. In 2003, nearly two-thirds of education doctorates were awarded to women (Golde & Walker, 2006), and nearly 15 percent of the entire faculty were minorities (Labaree, 2004).

Students in GSEs are often different from those in other doctoral programs, a characteristic that has been present since the degree's inception. Individualization was, and continues to be, honored as part of a student's contribution to the degree. Clifford and Guthrie (1988) made note that "designing a program of studies that accepted each student's *prior* preparation (itself highly varied, unlike that of medical or engineering school graduates, for example), professional experience, and personal ambition" is a unique quality of doctoral degrees in education (p. 152). This is not always the case, however, as GSEs that strive to compete in the large research institutions struggle to integrate practice-oriented graduate students into education doctorate programs.

Research, Applied Research, and Education Research. Ostensibly, one of the greatest challenges GSEs face is the type of research they conduct. The complex nature of education as a subject of study and the need to effect outcomes in education through direct applied science make the research conducted in education, for lack of a better word, *special*. It is special—as many public policy issues are *special*, such as health policy or environmental policy—because it requires a researcher knowledgeable enough to understand its complexities to properly identify problems while understanding complex methods well enough to conduct them and produce research that is sufficiently helpful to translate findings into actionable outcomes. The natural sciences, or “hard” sciences, traditionally claim jurisdiction in utilizing scientific methodologies, procedures, and verification rules that allow for the replication of findings (Labaree, 2004). The rhetoric surrounding hard science research falls squarely into the reward system of research universities. Clearly presented data built on specifically established standards for the field and providing typically generalizable findings make for a good fit in research universities when defining a field or discipline. Research in the “soft” sciences—what is often produced by the humanities and social sciences—is more pliable, and the validity of findings is often susceptible to criticism. Soft science research generally deals with human behavior and therefore confronts the problem of replication and generalizability (Becher & Trowler, 2001). However, over time, soft science research knowledge has gained considerable respect among peers and is therefore accepted into the research university, much like its hard science colleagues.

Due to the applied nature of education research, education scholars are required to develop an impressive methodological sophistication and a great appreciation for the

context of educational issues (Labaree, 2004; Lagemann, 2000; Richardson, 2006).

Applied research, as compared to pure research like that found in the “hard” sciences, generally provides solutions to practical and specific problems in lieu of establishing general patterns (Labaree, 2004) and has traditionally been less favored on research campuses, which pass it over for theoretical or pure research (Clifford, 1986).

Understanding this distinction is necessary to appreciating the myriad challenges that educational researchers face, as the field battles not only one opponent with its research, but many; however, veteran education researchers jump to the defense of GSEs (see, for example, Berliner, 2002; Clifford, 1986; Clifford & Guthrie, 1988; Henig, 2008; Labaree, 2004; Lagemann, 1997, 2000; Wong, 1998). Berliner (2002) commented that “hard” and “soft” are misnomers in this dichotomous argument around education research and its stature among scientists. In fact, he indicated that educational research is the “hardest science of all,” for “we do our science under conditions that physical scientists find intolerable. We face particular problems and must deal with local conditions that limit generalizations and theory building problems that are different from those faced by the easier-to-do sciences” (p. 18). “Easier,” in this case, refers to the physical sciences where, for example, research data are isolated and replicable.

Educational research is often characterized as unique, even as it borrows from several disciplines for theory (Apple, 2004 & 2010; Clifford, 1986; Lagemann, 1997). Some educational researchers regard this unique feature to be an advantage in that it affords a borrowing or mixing of theoretical concepts. The liberty to conduct research free of theoretical boundaries may, in fact, be an asset. Labaree (2004) commented on this quality, noting, “Education researchers are free to be as eclectic as they wish in the

way they choose to intermingle disciplinary perspectives or methodological orthodoxies” (p. 79). Despite this advantage, education researchers confront drawbacks that the comingling of theory brings—the lack of a defined discipline and of the rewards that being part of a discipline afford on a research campus, namely merit pay, promotion in rank, and professional recognition (Labaree, 2004).

Additionally, for a school with a commitment to the professional development of teachers, applied research serves a practical purpose. Indeed, the applied knowledge of education researchers is often the exact product government agencies and the public demand of the field. Yet this demand frequently goes unmet by education researchers, whose professional directive is to be seen as accomplished within a research university. Addressing the issue of applied research in education, Labaree (2003 & 2004) compared education to fields like medicine and engineering, which often find applied research necessary but encounter few negative academic consequences. In contrast, education—along with a few other “people-changing” professional fields such as social work and counseling—is unusually hampered in being both highly soft and highly applied, thus having robust control neither over its methods nor over its subject and producing findings that are neither very clear nor very convincing.

Carving Out Space as a Discipline. From their early roots, GSEs began to deviate from the practical application of knowledge to the theoretical construction of knowledge. Clifford (1986) attributed this phase of growth in GSEs to the top five research universities of the time: Chicago, Harvard, Berkeley, Stanford, and Columbia’s Teachers College. Clifford (1986) wrote:

The professionalization of education through the route of theory was, in fact, fragmenting the field . . . Unlike the situation in the old normal schools, it was widely argued in the proliferating professional schools of the modern university that theory is the most practical of all knowledge. “What we demand then is, not rules, but principles; not mere tricks of art and sleight of hand, but science; science which explains and authenticates art; which makes men masters in their work, and not mere imitators and operatives.” (William Folwell, [1869], Qtd. in Clifford, 1986 [p. 434])

The move away from practice-based curriculum to theoretical and research-based doctoral preparation continues to be a contested space for GSEs today. Aside from the theory of pedagogy, so the argument goes, education schools are attempting to borrow or co-opt epistemologies from already established units on campus. Borrowing, comingling and co-opting do not create a discipline (Clifford & Guthrie, 1988).

Although GSEs have earned some institutional acceptance as professional schools, those attempting to claim a research domain in education at large research institutions have often rejected the practitioner-oriented focus of graduate education programs that centered on teacher preparation. This move is exemplified in a quotation from Charles Judd, the then-director of the University of Chicago Department of Education, whose remarks Clifford captured in 1986:

Among the many manifestations of a lessening direct concern with teaching and with the chasm of mutual indifference growing between the different workers in the education profession was the gradual downplaying of professional experience in the selection of faculty and in the admission of students seeking advanced degrees and specialists' certificates. Although Chicago aspired to prepare administrative leaders and teachers of teachers (or, better put, professors of education), Judd considered the 10 years of teaching and administrative experience of his average M.A. recipient as evidence of a “retardation” of career, a “handicap rather than an asset.”(p. 433)

Despite relentless efforts—like those of Chicago—to distance education doctorates from the applied nature of education research, acceptance as a discipline has been generally

deficient. When not focused on being a school of pedagogy, as many teachers colleges are, GSEs struggle to create a credible identity among their social science counterparts. Part of this struggle is due to the interdisciplinary nature of education research. The diverse disciplinary orientation to research among faculty triggers multiple opportunities for contention within both GSEs and dominant disciplines on campus. Historically, these struggles have been demonstrated as “paradigm wars” (Page, 2001), manifesting as missed opportunities for institutional rewards (i.e., promotion, tenure, and salary increases) (Labaree, 2004) and receiving limited resources to carry out programs and initiatives (Clifford, 1986; Levine, 2007).

As this diversity relates to the preparation of education scholars, Capraro and Thompson (2008) noted, “Faculties make curriculum decisions in an environment of fierce competition for intellectual space, and therefore the curricula reflect difficult choices in operationalizing educational researchers' views of scholarship” (p. 248). This position is also evident in criticism that education scholars have “lost touch” with their parent disciplines. Clifford and Guthrie (1988) commented on the environment in schools of education, remarking that

schools of education—particularly those located on the campuses of prestigious research universities—have become ensnared improvidently in the academic and political cultures of their institutions and have neglected their professional allegiances . . . and . . . have seldom succeeded in satisfying the scholarly norms of their campus letters and science colleagues, and they are simultaneously estranged from their practicing professional peers. (p. 3)

Shilling (Qtd. in Ball & Shilling, 1994) has described the dilemma of being distanced from parent disciplines in the context of education policy studies, stating that “for a variety of reasons, sociologists of education had for several years failed to keep

pace with developments in social theory (Ball & Shilling, 1994, p. 1). Ball and Shilling (1994) continued this critique by describing one of the most commonly cited challenges in education policy research—the information-policy gap—stating:

Much of the research of both kinds [applied and theoretical] is focused on implementation, takes “policy” itself for granted and ends up providing us with a highly partial and incomplete view of “what” has happened, rather than helping us to understand *why* the content and organisation of education has become such a target of Government reform. (p. 2)

Similar criticism by Keller (1985) described a “preoccupation with methods” and a “neglect of larger policy issues” (p. 7), and by Terenzini (1996), who has asserted the need to rediscover the roots of parent disciplines. As such, it appears that education policy studies, much like the education field as a whole, frequently straddle the border between the charge to produce descriptive scholarly research and the need to generate relevant work within the community.

Preparing the Education Researcher and Doctoral Assessment. Insofar as research relates to the preparation of education scholars, GSEs are once again in a quandary. As a student body, education scholars are unique for various reasons in that they tend to be older, attend programs part-time with varying work and family demands, and seek employment in professional domains instead of scholarly ones (Dill & Morrison, 1985; Golde & Walker, 2006; Labaree, 2003, 2004; Lagemann, 2000; Levine, 2007). The vast majority of doctoral students in education are generally former teachers in the K–12 system, and their predoctoral preparation does not frequently include much exposure to—or mastery of—theoretical frameworks and research methodology (Labaree, 1997, 2004; Lagemann, 2000). In fact, most students are trained in pedagogy rather than the process of knowledge construction (Clifford & Guthrie, 1988; Labaree,

2004; Lagemann, 2000; Wang, 2011). For many education scholars, including research in their doctoral curriculum is daunting and, ultimately, of limited use, especially for those who will not seek academic positions upon graduation. This additional factor represents a divide for many faculty members who frequently have limited direct experience in the K–12 system and for whom “research is usually an integral part of their professional identity” (Golde & Walker, 2006, p. 247).

Training education doctoral students in research is a sensitive subject for most GSEs. Although they struggle to capture the respect of their research-driven campuses through a research-intensive agenda, they often fail to integrate sufficient applied and/or professional preparation for those preparing for educational administration (Clifford & Guthrie, 1988). The dual-degree programs of the EdD and PhD remain a source of confusion both within and outside of the field (Deering, 1998). Frequently, requirements for the programs differ only slightly (Boote & Beile, 2005; Shulman, 2006), which results in inadequately serving both groups of students—those seeking a professional degree in preparation for practice and those seeking a theoretical or research degree for a career in higher education (Boote & Beile, 2005; Carpenter, 1987; Dill & Morrison, 1985; Golde & Walker, 2006; Shulman, 2006).

The socialization of education scholars is an integral part of doctoral preparation. Though education consists of several communities of practice (Berliner, 2006; Pallas, 2001), socialization into the appropriate community has yet to be perfected by many doctoral programs. Socialization, though not part of the curriculum, is commonly assumed to occur through mentor-student interactions or interactions among others in the field, generally through attendance at conferences. Most programs require students to

present at conferences (Capraro & Thompsom, 2008; Richardson, 2006), while relatively few programs require participation in roundtable groups or proseminars (Metz, 2001; Page, 2001), which would facilitate socialization into a community. A segment of the literature focuses on ways to improve scholarly preparation, and generally, most recommendations include reacquainting students to the school setting, classroom, and/or school administration (Berliner, 2006; Clifford & Guthrie, 1988; Labaree, 2004; Levine, 2007), placing a stronger emphasis on theoretical perspectives and research methods (Labaree, 2004; Lagemann, 2000; Levine, 2007) and learning the practical application of research (Clifford & Guthrie, 1988). Interestingly, these suggestions found within the literature have not changed over the last three decades.

Curriculum and Preparation of Education Scholars. Historically, as GSEs aim to garner prestige through the inclusion of the social sciences in their faculty and graduate programs, students have migrated to other disciplines; consequently, subject matter for students frequently varies even today. As such, when GSEs struggle to demonstrate rigor on their university campus, they often exhibit insecurity in coursework and require students to take courses outside of the department (Clifford & Guthrie, 1988). The curricular focus toward preparing education scholars is much different than that of programs in other disciplines (Clifford & Guthrie, 1988) which leads students into several directions, resulting in students who specialize in particular subject areas and rarely share a common core curriculum (Richardson, 2006). For example, a student in education policy will not study a core curriculum that includes methods for reading instruction, whereas the educational psychology curriculum will not include economics or organizational sociology (Clifford & Guthrie, 1988). Some departments, such as

Stanford's, once went so far as to require an additional master's degree in another field or a minor outside the school; others, such as the University of Michigan's School of Education, required up to 20 units in another department (Clifford & Guthrie, 1988).

Generally, preparation of education scholars includes courses that provide theoretical frameworks prevalent in education studies, methodology, and specialization focus, while the remainder of the curriculum mirrors that of other students in the social sciences. Students are first presented with a core curriculum—though there is no standard for the field (Brown, 1990; Carpenter, 1987; Deering, 1998; Lagemann, 2000; Page, 2001; Pallas, 2001; Richardson, 2006), and upon completion of this, they turn their focus to specialization areas such as early childhood education or education policy. Upon completion of all coursework, students take a comprehensive exam and will ultimately prepare and defend a dissertation.

The literature discusses the type of curriculum that education scholars should receive, and there is minimal deviation among suggestions. In fact, very few new concepts in preparing education scholars have emerged since the subject was touched on in the early literature. The ideal for the preparation of education scholars, as described by Richardson (2006), is to have programs prepare graduates who can “provide normative as well as epistemic theory, research and analysis in ways that place discussions about the enterprise in frameworks that are both analytical and morally defensible” (p. 252). The Carnegie Foundation for the Advancement of Teaching—a significant contributor to funding and literature on the subject of doctoral preparation—created a list of qualities for education scholars as those who generate new knowledge, understand the intellectual history of the field, use best practices, and are stewards of the field (Richardson, 2006).

Even as each department may approach training research methodology differently, a general expectation is that education scholars have expertise in at least one methodological perspective—though the nature of education research requires understanding two or more (Berliner, 2001; Golde & Walker, 2006; Richardson, 2006). The literature is the site of considerable debate regarding the types of methods that should be taught and what constitutes the dominant epistemology for the field; however, recent literature appears to surmise that more exposure to methods will yield a better scholar (Boote & Beile, 2005). Far less consensus exists regarding the type of epistemological training education doctorates should receive.

Since the method for training education researchers has no leading framework, there is no signature pedagogy for socializing or training scholars into the field of education (Golde, 2007). Indeed, as Golde and Walker (2006) highlighted in their work on doctoral preparation, significant preparation of education scholars occurs outside of the traditional curricular context and communication. Understanding the context of the broad field of education is a requirement of all education scholars and can be considered a defining feature of the field; in fact, this should be what distinguishes an education scholar from a scholar in another discipline *who studies* education (D. Ball & Forzani, 2004; Whitty, 1997). The ability to communicate effectively to diverse audiences is another distinguishing feature of education scholars. Richardson (2006) argued for strong communication skills in order to “lead policymakers to define educational problems and focus on solutions in certain ways” (p. 255). These qualities are not shared in engineering or physics programs; however, research training in the preparation of education scholars draws the most attention in the literature. Since 1960, the literature has presented an

overwhelmingly critical message concerning schools of education as well as the preparation scholars receive.

Challenges in Preparing Education Scholars

The uncertain purpose and duplicative doctoral programs underpin the field's fundamental challenges. The result of this challenge is represented in a recent study by Levine (2007), in which he reported that deans and faculty, even at the highest-ranking schools of education, persistently complained that their doctoral curricula did not equip students sufficiently for the dissertation. Almost half (47%) of education school doctoral recipients thought their curriculum lacked rigor, and over a third (35%) believed that educational schools do not adequately prepare their graduates academically (p. 34–35).

Among the various critical discussion topics regarding the preparation of education scholars is methodological training, or lack thereof. The complexities surrounding this criticism are ample and chiefly associated with the challenges of an unbalanced mastery of quantitative/qualitative methods (Capraro & Thompson, 2008; Dill & Morrison, 1985), too much emphasis on quantitative methods (Paul & Marfo, 2001), and a lack of scholarly discipline (Labaree, 2004; Richardson, 2006). In a review of education research and doctoral preparation, Boote and Beile (2005) asserted that there is emerging consensus among critics that the “perceived lack of quality in education research stems from problems with doctoral preparation and that improving doctoral education is key to improving education research” (p. 4). The literature supports this perception with volumes of analysis and suggested solutions. The criticism also identifies causes—aside from methodological training—that largely fall into three categories: (a) the lack of an academic discipline and, consequently, weak interdisciplinary preparation

and prevalence of conflicting research paradigms (Capraro & Thompson, 2008; Labaree, 2004; Levine, 2007; Page, 2001; Ravitch, 1998; Richardson, 2006); (b) the uncertain purposes of GSEs and duplication of graduate degrees offered, characterized by the struggle to simultaneously exist as a professional school (EdD) and a research enterprise (PhD) (Clifford & Guthrie, 1988; Golde & Walker, 2006; Labaree, 2004; Lagemann, 1997, 2000; Levine, 2007; Shulman, 2006); and (c) a truncated preparation in methodological foundations, manifesting in poor quality research and uninspiring publications (Ball & Schilling, 1994; Capraro & Thompson, 2008; Labaree, 2004).

The literature includes considerable discussion regarding the training of education researchers. A portion of that discussion includes the research assistant role as primary to developing research skills. It is interesting to note, then, that frequently, education students attend doctoral programs part-time and are unable to accept positions as research assistants. This state of affairs reveals a shortcoming in the preparation of education scholars, and indeed, scholars have noted that coursework alone does not adequately prepare education scholars to engage in original research (Boote & Beile, 2005; Dorr, 2008; Eisenhart & DeHaan, 2005).

Is an Education Scholar an EdD, A PhD, or Both? GSEs have always struggled to create an identity on a university campus. When the purpose of the GSE was to offer a doctoral of education degree (EdD)—a professional degree much like the JD and the MD—there seemed to be limited strife among campus leaders; however, the introduction of the PhD in education immediately presented a source of tension. As Clifford and Guthrie (1988) addressed at length in *Ed School*, the attempt to create an academic study of education and simultaneously depart from teacher preparation or

interest in the issues of mass public education create a divide with GSEs. From the early 1900s, the formation of the PhD in education was for the specific purpose of creating an academic base for the study of pedagogy (Clifford, 1986; Deering, 1998). To create an academic presence on campus, GSEs felt compelled to distance their scholarly pursuits from the professional preparation aspects of the school. However, in this distancing from the early mission of education schools, they received considerable criticism from public schools, community members, and teachers (Clifford & Guthrie, 1988), and this stigma has never been surmounted. The context of education, as mentioned earlier, places scholarly practice in an awkward position, as it will answer to many masters. Those most interested in accolades from the academy will respond to and therefore produce only what is rewarded within that system: research. Clifford (1986) summarized the shift in audience for the education scholar, stating that “professors of education, like professors in general, experienced success in becoming ‘professionalized’ in the sense that Jencks and Riesman employ: in being more colleague oriented than client oriented, more concerned with the opinion of one's fellow practitioners than with approval by laypeople” (p. 443).

As the push and pull continues in GSEs, with the EdD’s emphasis on schools and the PhD’s emphasis on research, neither gains the appropriate training or respect it deserves (Deering, 1998; Labaree, 2004; Shulman et al., 2006). The field of education has yet to make a formal determination as to whether a difference *should* exist between the two degrees, and, with limited evidence to demonstrate otherwise, the field is forced to accept the fact that education scholars can be an EdD or a PhD.

How Can the Preparation of Scholars Be Improved? The discussion regarding the future of education schools on the university campus often does not recognize the influence of internal politics and funding. Both Judge (1982) and Clifford and Guthrie (1988) touched on the tangled relationship between the preparation of undergraduates in education and students in graduate schools of education. Federal interest in education, the community's need for teachers, the relatively low cost to provide such training, and the type of students enrolling in undergraduate courses all play a pivotal role in maintaining schools of education on a university campus. The need to train a workforce of teachers for the nation's young citizenry is generally accomplished through large universities (Labaree, 2004), and training teachers is, therefore, a considerable financial enterprise on most campuses. Education programs tend to outnumber other professional preparatory programs on campuses and exist at about 80% of all four-year institutions (Clifford & Guthrie, 1988). As previously reported, 1 in 12 bachelor's degrees is granted in education. With such a large market, it is not surprising to see so many undergraduate programs at universities nationwide, especially considering the cost-benefit ratio for running such programs. As Clifford and Guthrie (1988) noted, "Schools of education are money makers on many campuses; they bring in more tuition or state funding than they generate in costs" (p. 40).

GSEs have an indisputable connection to undergraduate programs, not only in the faculty required to teach, but also in the part they play in college rankings. Rankings, such as the U.S. News & World Report, have a remarkable effect on college recruitment and are almost solely based on successes at the graduate level. While debate continues regarding the methods used for the U.S. News & World Report ranking system

(Meredith, 2004; Pike, 2004), the publication has undeniably set a standard which both insiders and outsiders use to assess the field. Therefore, once again, the tension between the functional application of research in education and the scholarly production of research becomes problematic. Whereas preparation for K–12 teachers requires real-world application and classroom experience, education scholars in higher education are forced to produce publications and research to garner academic accolades that will be recognized in the rankings. It is no surprise that GSEs struggle to find an identity amid such competing missions.

The literature is rife with short-term solutions regarding curriculum and programming, such as implementing more rigorous methods courses and restructuring the EdD. However, only two sets of solutions found in the literature inspire new thought in the preparation of education scholars. One recommends a complete change in schools of education; the other identifies an opportunity to change from within the current GSE paradigm. Clifford and Guthrie (1988), prominent leaders in education, suggested four solutions to improve the troubled state of schools of education after evaluating the struggles and triumphs of education schools. First and foremost, they called for advocacy of a national professional standard for preparing K–12 teachers. Second, they suggested abandoning the undergraduate major in education, which would allow schools of education to focus on the art of pedagogy instead of delivering undergraduate courses from other disciplines inadequately. Third, schools of education should assist in the effort to reform undergraduate liberal education in order to strengthen the overall preparation of undergraduates in general subject matter. Finally, and most pertinent to GSEs, they suggested rejecting the doctor of philosophy as a graduate degree in education. Clifford

and Guthrie are not alone in suggesting the dissolution of the PhD in education; many deans and university presidents before them have echoed the same sentiment. Their rationale is that most students in doctoral programs identify more closely as applied scientists and would be best served with a professional degree like the EdD. For those seeking to conduct theoretical research in education, the veteran scholars argued, proper training would only be appropriately accomplished in the “disciplinary cognate.” In fact, for those seeking to conduct research that spans multiple academic and professional fields, they suggested enrollment in the relevant disciplinary department *in addition to* the EdD.

However, not all scholars believe that completely dismantling GSEs is necessary. D. Ball and Forzani (2007) argued that a distinction exists between educational research and research in the phenomena of education. Addressing the convoluted issue of education research and its connection to a discipline of education, they cited a need for educational researchers to claim the space that is exclusively *educational*. Moreover, they argued that although education is a field with many skeptics (see, for example, Brown, 1990; Judge, 1982; Labaree, 2004), education researchers are uniquely capable of identifying, analyzing, and improving education through research in ways that those outside of the field often do not recognize. D. Ball and Forzani (2007) have also drawn a distinction between *research in education* and inquiry into phenomena *related to* education, noting:

Until education researchers turn their attention to problems that exist primarily inside education and until they develop systematically a body of specialized knowledge, other scholars who study questions that bear on educational problems will propose solutions. Because such solutions typically are not based on

explanatory analyses of the dynamics of education, the education problems that confront society are likely to remain unsolved. (p. 530)

While D. Ball and Forzani (2007) presented the first fresh idea to address the inherent challenges with education scholars, if Clifford and Guthrie (1988) were to engage with them in debate on the viability of schools of education within this newly conceptualized paradigm, they would have reason to pause. Education is a special subject matter because of not only its audience but also the importance that American society believes hinges on its success or failure. In addition, studying the complexities of education remains a point of contention in the field, and in staging their argument for education as a discipline, D.

Ball and Forzani (2007) noted:

Despite persistent problems of quality, equity, and scale, many Americans seem to believe that work in education requires common sense more than it does the sort of disciplined knowledge and skill that enable work in other fields. Few people would think they could treat a cancer patient, design a safer automobile, or repair a bridge, for these obviously require special skill and expertise . . . Because schooling is a common experience, familiarity masks its complexity. (p. 529)

Of great importance in the debate regarding education's status as a discipline is the continued perception that education can be studied without considering its broader context. As scholars from other fields examine aspects of education without understanding it as a space of overlapping and competing interests, they often fail to provide the solutions necessary to advance learning. D. Ball and Fornazi (2007) provided an example, explaining:

[K]nowing that the number of books in a child's home and the educational level of the child's parents are major factors in predicting school success does not explain how these factors influence learning. Nor does such knowledge help in the design of interventions for particular students. (p. 530)

This example highlights the inherent value of understanding various sociological influences in student success—knowledge that only contributes to education, however, without solving problems *within* education.

D. Ball and Forzani (2007) claimed with reasonable sensibility that other disciplines borrow from education in their approach to researching social problems. Their position posits that education researchers have an opportunity to rightfully claim epistemology—for lack of a better word—in research that uses methods and analysis that are teacher/student-, classroom-, and/or education-context focused. They asserted an obligation, then, for education researchers to claim the territory that is rightfully theirs. Schools of education have the opportunity to change perceptions in the academy and take ownership of the specialized knowledge, techniques, and expertise that have accumulated over the past 100 years (Ball & Forzani, 2007). In doing so, they can create greater emphasis on preparing scholars, solving education problems, and gaining much-needed support from institutions and the public (Ball & Forzani, 2007; Labaree, 2004).

Trends in Doctoral Assessment

Recently, a handful of efforts have been made to study education doctoral preparation (EDP). Most notable among these is the Carnegie Initiative on the Doctorate (CID), a five-year (2001–2006) “action and research project that worked with doctoral-granting departments committed to restructuring their programs to better prepare graduates. Six disciplines were included: chemistry, education, English, history, mathematics and neuroscience” (Carnegie Foundation, 2013). The initiative stimulated reports, articles, and books, all examining the way in which scholars were being prepared as well as how well their preparation matched up with career goals. The Carnegie Project

on the Education Doctorate (CPED), which is also national in scope and aims to strengthen and redesign the EdD, is currently underway. According to its website, “[t]he intent of the project is to redesign and transform doctoral education for the advanced preparation of school practitioners and clinical faculty, academic leaders and professional staff for the nation's schools and colleges and the organizations that support them.”

Though this project does not appear to be collecting data as part of its overall goal, participating schools may record the process and document findings in published articles.

Also national in scope is the 2008 grant from the National Science Foundation (NSF) to the American Educational Research Association (AERA) and the National Academy of Education (NAEd) to conduct a comprehensive project that assesses the characteristics and quality of education research doctorate programs, which is currently underway.

There is great promise that the NSF project will produce the much-needed data for the evaluation of education Ph.D. degrees.

Much of the discussion surrounding the assessment of doctoral preparation focuses on student persistence, time-to-degree parameters, and career readiness; however, a movement that has been underfoot for the past decade is undertaking a new and systematic review of doctoral assessment. In their 2006 book, Maki and Borkowski discuss emerging criteria and new models for examining doctoral preparation and improving outcomes. Although institutions and governments have historically reviewed demographic data and graduation rates among doctorates across disciplines, more in-depth data did not begin to inform the conversation in new ways until Golde and Dore’s 1999 PhD Survey project. The PhD Survey was originally conducted in 1999 and drew data from 4,000 students across the nation in 11 art and science disciplines. As a result,

several important publications were developed that highlight the challenges of the future generations of scholars.

Though most of the discussion regarding doctoral preparation excludes the doctorate(s) in education, much still remains to be learned from those studying other disciplines. For example, the work of Jody Nyquist and the *Reinvisioning the Ph.D. Project* highlights concerns facing doctoral preparation in the 21st century. Her cross-sectional study drew input from universities, government agencies, K–12 education, doctoral students, business, industry, foundations, disciplinary societies, and educational associations (Nyquist & Woodford, 2000). The project revealed several concerns regarding doctoral preparation, and the following were identified by the *Reinvisioning the Ph.D. Project* report: the oversupply of doctorates for available employment, the need to prepare students for a wider variety of professional options, and the need to increase interdisciplinary expertise into doctoral training. It also addressed the following issues: a curriculum that doesn't match the needed outcomes for the degree, inadequate advising and external partnerships for graduates, graduates who are inadequately trained in clinical and applied sciences, training that needs to be more relevant to where graduates will be working, and students and faculty who need to spend more time outside of academia in order to contribute more effectively. These concerns are echoed in the work of several scholars over the past decade (for example see Golde, Dore, Wulff, Austin, Walker, Shulman, Maki and Nerad). It is important to note that each of these larger-scale studies have reviewed multiple disciplines and consequently identify similar concerns in doctoral preparation, regardless of degree and/or discipline.

Golde, Jones, Conklin Beuschel, and Walker (2006) highlighted the four main strategies for doctoral assessment as national rankings, assessment of students (achievements and experiences), quantitative measures (graduation rates, attrition rates), and external review committees. They also identified some challenges in doctoral program assessment, mainly associated with self-assessment. Though their research found that most departments were interested in having an assessment of their doctoral programs, enthusiasm dissipated after learning that frequent *internal* reviews of established program goals were the most effective assessment tool available.

One of the latest and most influential trends in doctoral assessment is the inclusion of the student perspective. Prior attempts to evaluate doctoral programs have rarely included the student voice (Campbell, 2005). However, the recent decision by researchers to include student perspective data has provided considerable insight into doctoral assessment and a bounty of information that can only be gained directly from students themselves. A key example is the Nerad, Aanerud and Cerny project, titled *Ph.D.'s Ten Years Later* (2004). The results of their analysis on the “feasibility of assessing doctoral programs based on the graduate’s career outcomes” demonstrate that insight into the career paths of graduates and retrospective data from students themselves provides a rich, untapped resource into understanding doctoral student preparation (p. 138). The literature presented various methods of capturing student perspectives, whether through focus groups, interviews, or surveys, each providing an acceptable means of gathering a much-needed perspective in doctoral assessment.

The History and Challenges Facing Education Policy Studies

Education Policy Studies (EPS) is a relatively young academic field that often struggles to maintain an identity amid competing priorities (Henig, 2008). Situated in the school of education, which itself struggles to fulfill a dual mission of being both a research enterprise and a professional school (D. Ball & Fornazi, 2007; Carpenter, 1987; Clifford, 1986; Judge, 1982; Labaree, 2004), EPS has yet to carve out adequate space in the scholarly landscape to be considered more than a subfield of education. As education policy scholars navigate between the worlds of academia and politics, various tensions emerge while struggles concerning theoretical orientation and the missing link between research and policy crowd an already full scholarly agenda.

EPS is influenced by various fields and draws mostly on the disciplines of economics and sociology for theoretical frameworks in identifying and solving policy problems in education. Even as other disciplines make an appearance in EPS, economic and sociological paradigms tend to dominate the literature. Theories applied in EPS exhibit an interdisciplinary approach, which is praised by some (Labaree, 2004) and criticized by others (Clifford & Guthrie, 1988; Levine, 2007).

One of the greatest challenges for EPS regards the function of research and its subsequent influence on policy. Education policy research in the U.S. is frequently discussed in terms of specific topic areas (Hardy, 2009) or program outcomes. Although it is important to understanding the influence of policy, this endeavor is criticized for neglecting the wider social context of education (Ball, 1995; Ball & Shilling, 1994; Townsend & Robinson, 1994). In addition to debates concerning conceptualizations in the literature, frequent discussions are occurring regarding the use of EPS research in the

policymaking process. Somewhat unique among other scholars in the academy, EPS scholars navigate—among other priorities—two distinct worlds in their academic careers, one in research and another in policymaking. The literature demonstrates that this struggle begins first with EPS’s location in schools of education, as previously noted, where a focus on practice *and* research creates an irreconcilable identity crisis on research campuses.

Education Policy Studies and the Search for a Discipline. A discipline has been defined as possessing each of three notable qualities: (a) to provide training and socialization to scholars; (b) to produce or implement academic research; and (c) to create a unique structure of knowledge (Beyer & Lodahl, 1976; Pietig, 1984). At present, EPS as a field can claim two of the three qualities; the third, however, remains to be seen. The first quality describes the way in which scholars acclimate to their role as faculty members in universities. The training and socialization of education policy scholars has occurred consistently in the U.S. since the 1980s —though not without some critique (S. Ball, 1994, 1995; Clifford & Guthrie, 1988; Judge, 1982; Levine, 2007; Marfo, 2001; Shulman, 2006; Wong, 1998). The second quality addresses one of the main outputs of EPS: research, the production of which is prolific in EPS, as evidenced by considerable grant funding, diverse journals dedicated to the field, and the many careers flourishing in its wake. The various approaches to research in EPS include small- and large-scale studies, topic-specific studies (such as language or special education), and purely theoretical studies, all of which reflect the diverse interests and training of EPS scholars worldwide.

The last recognized quality, a unique structure of knowledge, is more difficult to assess, a problem that is not exclusive to EPS; in fact, the entire field of education battles to establish itself as a discipline since its inception (Clifford & Guthrie, 1988; Golde & Walker, 2006; Labaree, 2004; Lagemann & Shulman, 1999; Pietig, 1984). Though abundant in EPS, research is often the source of considerable tension among scholars who differ in approach. Conflict in methods of research and problem solving in education is often fueled by disciplinary rivalries in the context of large research universities. Such clashes are unlikely to diminish in the near future, as the current standard for graduate schools of education follows the research university model, which rewards philosophical over applied research. The distinction between the two types of research becomes clearer when reviewing the history of graduate schools of education and the battle to establish a professional school on research campuses.

The Diverse Faculties of Education and the Birth of Education Policy

Studies. Born out of a call to ensure that programs receiving Title I funds (federal funding intended for schools in low-income neighborhoods) were meeting their intended goals under the Elementary and Secondary Education Act, EPS began to appear on research university campuses as a new wave of evaluation scholarship in both government and nongovernment programs (Weiss, 2008). Lagemann (1997) described the history of education research as cyclical and subjective to many confluent factors. Among these factors is the movement toward science-based models of inquiry established during the Nixon administration in the 1970s and based on the need for evaluation into social programs implemented in the 1960s. Although these trends still exist as strong driving forces in policy discussions today, it is worth noting one of the

more interesting revelations from Lagemann's (1997) historical synthesis is the shift away from educationist-focused research (concentration on education theory) to topic-focused research (for example,; class size, curriculum, assessment). This adjustment to the focus of education policy turned out to be the impetus that created the subfield today known as EPS.

The shift described by Lagemann (1997) denotes when and how the field of EPS began to include scholars from the social science disciplines, which has markedly shaped the trajectory of the field. Rather than focus on the theoretical aspects of education, EPS emerged as a way to examine—from a scientific perspective—how policies are implemented and the consequences of such policies on teachers, classrooms, and society at large. Prior to becoming a subfield in education, EPS was primarily studied in the interests and perspectives of economics and sociology, which remain the two dominant disciplines that serve as foundational pillars in the field. However, with the invitation to evaluate federal programs affecting education, scholars from across the academy soon became the new experts in the research/policy/implementation nexus, and schools of education became their new scholarly home. This multidisciplinary approach is credited for the diversity within faculty composition of graduate schools of education (See, for example, D. Ball, & Fornazi, 2007; Clifford, 1986; Judge, 1982) and EPS programs. Although the call to evaluate programs sparked topic-focused research from scholars, the way in which such scholars interact with education policy—and not topic studies alone—truly defines the field.

Economics and Education Policy. Studies in economics have frequently contributed to the education policy discussion, specifically the inclusion of economic

principles and theoretical frameworks arguably being some of the most influential in the education policymaking process. In fact, according to Blaug (1985), as education policy implementation began to rely heavily on economic measures for forecasting in the 1970s, “no self-respecting Minister of Education would have dreamed of making educational decisions without an economist sitting at his right hand” (p. 17). The literature has demonstrated that the relationship between education and economics formed in the 1960s (Blaug, 1985). Studies of the economics of education occur in both the schools of economics and education. During the 1960s and 1970s, the frameworks generated from economics of education scholars gained considerable momentum as the human capital theory movement began to develop new insights into labor economics (Blaug, 1985; Hanushek & Welch, 2006; Hanushek, 1986). The human capital theory movement (evaluating the economic effects of education), in turn, gave rise to what many refer to as the “social-approach,” the “manpower-requirements approach,” and “rate-of-return analysis,” which are still used to evaluate education policy today (Blaug, 1985; Psacharopoulos, 2008).

Coinciding with the evaluation movement of the 1960s and 1970s, the use of economics to evaluate education gave policymakers rational equations on which to base policy decisions. Klees (1986) characterized the infusion of economics into the policy discussion as the “rationalization” of education. He goes on to critically evaluate the contributions of economics in education policy discussions, noting that:

In my reading of the economics literature on educational planning and policy analysis, I have been struck by two things: how little the predominant discussions and debates have changed in the last 20 years or so; and how narrow a sample of relevant economics perspectives are featured in these discussions. (p. 574)

Although Klees's critique of economic contributions dates from 25 years ago, his observations remain pertinent today. The trend toward evaluation-based decision-making still dominates and, in fact, gained considerable attention in the literature with the passage of the No Child Left Behind Act of 2001.

The use of economic frameworks to evaluate education policy issues incorporates a wide range of topics—from the benefits of preschool to quality indicators based on expenditure input (Psacharopoulos, 2008) – and in spite of these, few gain considerable momentum in both academic and nonacademic circles (one example of such a framework being the privatization movement). Often connected to the economics of education frameworks in EPS, the privatization of education and the capitalist movement in the delivery of education have appeared and reappeared throughout the history of education (Whitty, 1997). One principal criticism of the economic frameworks for education policy is the overgeneralization of labor market formulas. Often, the complexities of education, as a public good, are beyond the scope of formulas and econometrics (Blaug, 1985). In such complexities, the sociology of education policy offers a fresh—but no less complicated—contribution to the EPS field.

Sociology and Education Policy. Similar to the influence of economics in education, the sociology of education policy has had many contributors, both domestically and internationally. The sociological approach, in general, tends to include analysis of structural policies or implied policies that affect educational outcomes or lack thereof. An impactful shift in sociologically driven frameworks in EPS took place around the Second World War. In England, the inclusion of sociologist Karl Mannheim as faculty in the Institute of Education in 1943 (University of London, UK—which until this

time had strong roots in the London School of Economics) generated the following remarks from Sir Fred Clark, then Director of the Institute of Education:

The case for a professorship to work in terms of the sociological approach may be related to the uneasy awareness, now so widespread and yet so ill-defined, that great changes in the social order and the inter-play of social forces are already in progress – and that educational theory and educational policy that take no account of these will be not only blind but positively harmful (Qtd. in Whitty, 1997, p.151).

The inclusion of a sociologist into the school of education—especially one in which economics played a dominant role—changed the landscape for EPS, integrating one of the most influential and foundational frameworks present in the field today. Indeed, this transformation demonstrated a commitment by one of the leading institutions in the world to including the wider social context in the analysis of EPS. Even today, this context is certainly one of the more contested spaces for academics and policymakers alike.

Criticism of economic frameworks in education policy research, which is often answered by the sociological approach, suggests that it frequently misses the elements and significance of social class, race, gender, and hegemonic forces. Referencing the tension caused by disregarding societal factors in educational problems, Whitty (1997) detailed on the contributions of Karl Manheim which exposed the failure of economic research to address the wider social and cultural constructions as well as the political and economic interests at play. However, sociological frameworks in EPS are not presently being met with widespread acceptance (Klees, 2008), and in fact, recent history has demonstrated that these paradigm shifts take place over a considerable amount of time. Hardy (2009) noted that many education reforms in the UK grew out of attacks on the sociological approach prevalent during the Education Reform Era in England in the

1980s. A similar trend was seen in the United States based in the Civil Rights movement of the 1960s and 1970s, and the current movement toward more neoliberal policies can be interpreted as a shift away from social policies.

The Dilemma in Influencing Policy. The lack of balance and competing priorities for education policy scholars (Henig, 2008; Townsend & Robinson, 1994; Wong, 1998) speak directly to the tenuous relationship between education policy scholars who wish to directly influence the policy process and those who desire to stay on the peripheral. An example of this distinction from the early development of the field is between the sociologically focused educationalist and the education policy scholar. Remarking on the history of the sociology of education, Floud (1959, as cited in Whitty 1997) considered this very topic when referring to the career path of Karl Mannheim, noting that over time Mannheim had shifted his focus as a scholar: “The detached critical observer had 'grown into the political and social strategist who tries to understand so that others may be able to act' ” (qtd. in Whitty, 1997, p. 153). For an academic to be named a “political and social strategist” is unorthodox, as scholars are trained specifically in the art of objective observation and analysis. Tension between analyzing policy and wanting to influence the process appears to have preceded the formation of the EPS subfield. Over the years, discussion of the scholars’ role in education policy has grown in the literature. Scholars who specialize in research utilization and policy note that policymakers often need relevant and feasible policy recommendations (Henig 2008; Schwartz & Kardos, 2009; Sundquist, 1979; Weiss, 1979). The tension, therefore, between educationists who must remain true to the study of the wider social audience and those who seek to provide tangible solutions to current policy problems has only increased in recent years. This

conflict intensifies as claims that the majority of education policy research remains decontextualized, and, though the ability to provide answers exists, it remains locked within the academy (Ball & Schilling, 1994; Whitty, 1997).

All the while, outside of the academy, interest groups have symbolically chartered the rights to recommendation-oriented research and the swift dissemination of such research to policymakers and the public, leaving academics little space for influencing policy through the slower traditional channels (Cibulka, 2001; Haas, 2004; Henig, 2008; Hess, 2008). This conundrum sets EPS apart from many of education's shared subfields with the constant pull of contributing to scholarly research while also seeking to directly influence education policy. The production of education policy research, regardless of the disciplinary focus, has been a central challenge for scholars within the academy. Current conceptualizations of education policy have shifted considerably over the past 60 years yet have become no less contested in nature. Even as economic and sociological frameworks and analyses dominate the subfield of education policy studies, the focus on evaluative outcomes has sparked an infusion of scientifically based approaches to policy research.

Summary

This literature review incorporates three topic areas pertinent to the study of EPS programs and graduate students: the history of education as a field of study, the assessment of doctoral preparation, and the history and state of EPS today. These topic areas provide the backdrop for understanding how EPS students are prepared as scholars, where they fit within the academy as scholars, and what challenges they face upon

graduation. A thorough understanding of each area is imperative for examining this special subset of doctoral students, for they face many challenges.

In 1990, Brown wrote, “The field of education may be closer than it has ever been to having a knowledge base adequate to support and defend education as a discipline” (p. 22). The need to establish a core set of problems and/or methodological approaches has once again presented itself as paramount in the need for GSEs to claim a space that is uniquely theirs. Since Brown made that declaration, two decades of exemplary education research has graced countless journals currently in publication. How much, then, can we assume that the perception of education schools has changed in universities nationwide? The answer is more elusive than it should be. Apart from the work of D. Ball and Forzani (2007), no significant discussion in education journals exists as it pertains to the current need to claim education as a discipline. In the 1980s–1990s, the struggle for education to secure its own domain in research institutions was well documented and well studied. Perhaps with the return of budgetary shortfalls, reductions in state funding, and the threat of closure/restructuring, GSEs will once again recognize the need to stand tall, not only within the institution, but also in the face of critics from outside the institution.

Undeniably, the literature regarding graduate preparation tends to be filled with recommendations for improvement, tools for development—such as rubrics and matrices—and anecdotal suggestions based on experience. The literature is rife with discussion concerning improvement as it relates to two important areas: training for both the education practitioner and the education researcher. Much of the analysis in the literature is based on observation and synthesis of other studies, some of which are

national in scope and others that are small in scale but large in recommendations.

Because many of the recommendations over the years have not changed, a new approach to identifying both problems and solutions in EDP is likely necessary.

A number of areas deserve attention in the evaluation of doctoral preparation in education. Curriculum, along with dissertation requirements, is already a common area of study, though revised processes or standards would certainly improve the doctoral endeavor. However, conducting more in-depth research about the purpose driving PhDs in education is beneficial, especially as it relates to specialization areas such as education policy or educational psychology, and much remains to be learned about the mentoring and socialization process of doctoral students. Additionally, though touched on in some of the existing literature, discovering more about ethnic culture, gender, and social class as they relate to opportunity in and the socialization into academic culture would be valuable in better preparing future scholars.

GSEs are standing at the edge of a great opportunity, and for scholars interested in seeking solutions to a well-documented crisis in doctoral education, now more than ever is a opportune time to look closely and critically at the ways in which graduate schools of education are preparing scholars. The Carnegie Foundation has mounted a well-documented and well-supported effort to create a distinction between the EdD and PhD degree in education, and with this effort as an impetus, the PhD degree in education should make similar efforts to evaluate graduate preparation and create effective and appropriate programs. The AERA/NAEd study may provide answers that more specifically address PhD education, though surely the field's objective should include more than one study to examine this process.

Additionally, much is to be learned from our graduate students themselves, especially those in EPS. Scholars have provided a rich backdrop of literature to examine the preparation of EPS doctoral students; however, little is known about them as a group within the field of education. To progress from the strong evaluative history in education and EPS, this study fulfills a need generated by a void in the literature by examining EPS programs and students. The approach of combining the study with program content analysis and student data is strategic as it will provide the only opportunity, to date, to examine not only how programs aim to prepare EPS scholars, but also how the students themselves experience their preparation.

CHAPTER 3

METHODS

The objective of this study was to gain a better understanding of how Education Policy Studies (EPS) programs' promotional materials describe the preparation of doctoral students to engage with policy and the policymaking process. To accomplish this objective, I collected data from a handful of EPS programs across the country—selected deliberately due to their ranking in the 2013 issue of U.S. News & World Report. The past 10 years have seen renewed interest in how doctoral training prepares graduates for careers both inside and outside the academy; however, academic research that focuses on the ways in which graduate programs train students for a career in policymaking *and* the scholarly enterprise remains scarce. In addition to gaining a better understanding of how graduate programs in education policy describe their methods of training, I wanted to potentially contribute to the literature by learning how such programs prepare graduates for careers that will likely involve policy, and, most importantly, I hoped to create a meaningful impact on education policy in the process.

This chapter details the methodological overview of the study and is organized into distinct sections that address the qualitative research design, data collection and their sources, and delimitations and content analysis of all EPS program materials. Additionally, based on findings from the content analysis, I further examined one unique EPS program by interviewing its program leadership. Lastly, the final section of this chapter addresses the limitations of the study and the strategies used to overcome any potential obstacles.

Research Design

To study how GSEs promote the preparation of Education Policy Studies (EPS) doctoral students to engage with education policy and policymaking, I explored graduate programs, specifically examining how the EPS programs describe their graduate students' experiences. As such, I conducted a content analysis (Krippendorff, 2004) of promotional materials and websites for 11 EPS programs, selected based on their rankings in the U.S. News & World Report. Several data points were used to examine the preparation of graduate students including curriculum, programs of study, faculty research activity, and program mission statements. I further implemented the Constant Comparative Method (Glaser, 1965), which requires a constant review of data, to formulate a rich description of how students engage in policy and policymaking during their graduate studies.

The Use of Content Analysis. Content analysis is a qualitative approach to examining data. The first dictionary reference to the term *content analysis* appeared roughly 70 years ago; however, according to Krippendorff (2004), a foremost expert in the technique, the concept has been part of human history for substantially longer. Defined as an “empirically grounded method, exploratory in process and predictive or inferential in intent” (Krippendorff, 2004, p. xvii), content analysis entails a “systematic reading of a body of texts,” in order to conduct analysis that is both replicable and valid (Berelson, 1952). As Stemler (2001) emphasized, content analysis allows inferences to be made, which can then be corroborated using other methods of data collection. It is precisely the quality of the analysis obtained from comparing and corroborating with other data that enabled strong inference in the present study. The comparison of program

data—collected by qualitative method—provided unique insight into EPS doctoral preparation, as previous investigation into this area has not been documented to date. Specifically, the purpose of this comparison was to explore the possibilities for confirmation, disconfirmation, cross-validation or corroboration (Green, Caracelli, & Graham, 1989; Morgan, 1998; Steckler, McLeroy, Goodman, Bird, & McCormick, 1992, in Creswell, 2009). Utilizing a qualitative methodological approach afforded a deeper understanding of programs than could be offered by examining quantitative data alone, thereby serving the greater overall purpose in answering the research question.

The Use of Constant Comparative Method. Constant Comparative Method (CCM) is a fundamental qualitative approach to gathering and interpreting data. Glaser and Straus (1967) first addressed CCM in the 1960s as a way to qualitatively research social science problems while combining the basic tenets and duplicability of quantitative research. In a 1965 article discussing the functionality of the CCM, Glaser noted that the purpose of CCM and joint coding and analysis is to “generate theory more systematically than is allowed [...] using [only] the explicit coding and analytic procedures” (p. 437). Qualitative experts generally propose four stages of CCM: (a) comparing incidents applicable to each category; (b) integrating categories and their properties; (c) delimiting the theory; and (d) writing the theory (Glaser, 1965). Constantly comparing data during data collection is considered a verifiable strength of the method. In a detailed description of CCM, Boeije (2002) discussed this method as a purposeful approach to political research, explaining that utilizing comparison enables the researcher to develop theory more or less inductively by way of categorizing, coding, delineating, and connecting data. The continual appraisal of data allows themes and potential theories to emerge through

analysis, thereby revealing novel details that might otherwise be lost by simply counting incidents. Most importantly, constant reflection allows the researcher to review data multiple times while reflecting upon and analyzing previous data, thereby continuing to question codes, assumptions, and interpretation of the phenomena being explored (Boeije, 2002). This study's blend of CCM and content analysis allowed for a diverse and thorough examination of the EPS programs.

Procedure

The first step of this research design was to purposefully select the sample. The second step involved collecting data on each program (see Data Sources below for detail) and reviewing the data using the Constant Comparative Method (CCM) of qualitative research as defined by Glaser (1965). Using CCM, analysis of data took place on a continuous basis until the subject had been exhausted. The final step integrated the various data points on program features and environment and interpreted how the merged results answered the following research question: How do education policy programs describe the preparation of students to engage with policy and the policymaking process?

I collected publicly available information using standardized procedures for each institution and program selected. The process for collecting the data was qualitative in nature though deliberate and followed an established protocol to ensure that I captured similar and comparable data on each program. To gather as much data as possible, I frequently had to review and re-review data, thereby altering the protocol for the process as I learned more about each program. This review and re-review procedure is part of the CCM process and ensures that the maximum amount of data is captured. Using this method required me to regularly document the data collection process in order to ensure

objectivity and duplicability for further studies. Because tabulation and categorical organization was needed for much of the data generated, I used Microsoft Excel as the main software program and created tables in Word to color code and better visualize themes as they emerged for the analysis.

In order to review programs, I started at the university level on each website. I then systematically examined each website, moving from the college level to the division and then the program levels. Though not every program had a separate division for EPS, some did, and these required a few extra steps to find the correct program. In fact, some divisions had multiple programs that contained the title word “policy” and required me to read descriptions thoroughly in order to distinguish the appropriate program in which to study. Once I found the appropriate program’s website, I began collecting data as it pertained to the research questions. I would then subsequently copy the data and paste them into the database with the most appropriate category. Using the CCM method caused me to periodically encounter a topic or piece of data that provided insight into the research question, and resulted in having to go back through each program previously reviewed in order to search for similar data and ensure that all data had been captured.

Sample Selection

To select programs for review, I used the well-established and culturally accepted ranking system found within U.S. News & World Report (Ehrenberg, 2005; Farrell & Van der Werf, 2007; Meredith, 2004). By utilizing their annual publication, I identified the schools with the top 10 graduate programs in Education Policy. In addition to the top 10 schools, my own degree-granting institution was examined (ranked 15th). Within the rankings report, I selected graduate programs in the United States that were identified in

the Education Policy specialization category. The selection criteria for the general classification of ranking graduate colleges include several categories that are weighted and collectively used to rank colleges across the nation. For 2013, the U.S. News & World Report website indicated that 278 graduate education programs were surveyed, 239 responded, and 235 provided data needed to calculate the rankings (Flannigan & Morse, 2013). Within each graduate college ranked, specialties were included if they received at least seven nominations (Flannigan & Morse, 2013). Graduate programs that received fewer than seven nominations were listed as “Rank Not Published” or “Unranked.” The webpage for Education Policy described the specialty as follows: “Education policy programs examine educational theory, research, and leadership principles in K–12 schools as well as colleges and universities” (Flannigan & Morse, 2013). Though education schools were ranked using several categories collectively—including test scores, faculty research earnings, and student ratios—the rankings for specialties, like that of Education Policy, were based on nominations alone. As described on the website, specialties were ranked “solely on nominations by education school deans of graduate studies from the list of schools surveyed” (Flannigan & Morse, 2013).

Data Sources

Using the results from the ranking report, I undertook a thorough review of websites, program brochures, and promotional materials to ascertain features of each program. A priori assumptions about emergent coding procedures and alterations in the categories were used based on selected categories that I established in preliminary analysis from earlier studies (Krippendorff, 2013; Stemler, 2001). The qualities, features,

and environment of the programs were labeled and coded as a first step in reviewing the data. The following variables were used to measure the preparation of EPS programs:

- University name
- College/school name
- College ranking
- Program ranking
- Program title
- Division name
- Degree type
- Specialization/concentration name
- College mission/about us detail
- Division mission/about us detail
- Program mission/about us detail
- Specialization emphasis
- Program of study
- Course offerings
- Job/career detail
- Named faculty
- Other instructors
- Centers/institutes
- Projects/initiatives
- Interdisciplinary focus

- Carnegie classification
- Public/private institution

Additional variables that became apparent during the review process were added to the matrix and included in the project for comparison. The collection of program features served to determine formal examples of programs carrying out the proclaimed or established goals in each category, thereby determining the ways in which programs were preparing their graduates.

A review of the literature confirmed that the U.S. News & World Report survey respondents select programs based on their perception of each program and the program's valued characteristics (Meredith, 2004; Whitaker Lamb, 2010). Following the same logic, a wide range of input determined "program characteristics" for review in this study. A 2010 study conducted by Whitaker Lamb revealed that several factors influence Specialty Program nominations including curriculum, faculty research, and alumni visibility. Such factors were examined as part of my content analysis of the promotional materials as well as other characteristics that emerged as defining qualities of EPS programs. The collection of program descriptions data, however, was not intended for use in comparing how programs came to be nominated or how they compared in terms of quality or status among other programs within the rankings. The use of rankings data simply provided an opportunity to review a purposefully selected sample, thereby narrowing the timeline for data collection and review. By reviewing the descriptions of programs, I established a baseline definition to analyze how EPS programs describe their goals, how similar or different they are in their descriptions, and how they describe the preparation of students to engage with policy as a group.

Program Materials. To provide information about academic programs, colleges and universities utilize various forms of advertising. The target audience for such advertising is diverse and includes potential students, donors and parents, competing colleges/institutions, the general public, and research funders (Will & Callison, 2006). Materials exist in various forms, including brochures, booklets, websites, social media outlets, billboards, television and radio advertisements, and events. For purposes of this study, the only program materials I examined were websites and digital materials found on each website. Consultation of websites allowed more uniform data collection, duplicability, and ease of access, and limited the need for additional resources to conduct the study. Websites are currently used by all universities identified in this sample and are an accepted form of communication among institutions and their various public audiences (Kang & Norton, 2006; Will & Callison, 2006).

Curriculum and Environment. To understand EPS programs, I focused on the curriculum by reviewing programs of study, course titles, and course descriptions, which helped me gain an idea of programs from an objective and level platform and identify ways that students are engaging with policymaking, therefore serving as an important feature of the study. Every attempt was made to obtain course titles, course descriptions, instructors, and syllabi. Interestingly, course titles and descriptions were frequently available for each programs; however, almost no programs offered easily accessible syllabi and therefore were not used as a category for review. Optional curriculum, internships, practicum, and externships were included as well as coursework required for degree completion.

Faculty Details. Whitaker Lamb (2010) described graduate college ranking and academic program measuring success as complex. Among the inputs frequently identified as influential is faculty research (Whitaker Lamb, 2010), which this study consequently included as an input variable for reviewing program characteristics. These data were gathered by reviewing program websites to determine a list of the faculty that are part of the program as well as their research interests and, when available, collecting data on research funding. Interestingly, while reviewing program descriptive data, I noted references to specific faculty and their research successes as a frequently used tool to attract prospective students; therefore, the use of faculty specializations and funded projects or initiatives as part of program characteristics data became quite important in examining student training. To acquire a deeper understanding of the graduate student experience in exploring how students engage with education policy and the policymaking process, an analysis of coursework outside of class time, such as internships and practicums, was also reviewed. In addition to my examination of course requirements for students, content analysis revealed instances that students undertook additional training outside of the classrooms, such as on research projects or in research centers affiliated with program faculty, thus highlighting the importance of faculty data variables.

Interview. After a thorough review of data from each program, I identified one program that stood apart from the rest. Looking for unique qualities among the sample, I decided to probe more within a single unique program to gain additional insight into how students engage with policy as part of their graduate training. The program at Teachers College, Columbia University (Teachers College) offered a unique curriculum for engaging students with policy as well as an overall emphasis on policy and policymaking

that appeared much different from the programs at other schools. Therefore, after careful consideration and review of the data from each program, I decided to conduct an interview with the person listed as the program contact at Teachers College to gain additional insight into how the program prepares students, what may have motivated the recent change in the program, and if that change included any discussion of students engaging with policy. This semi-structured interview lasted about 30 minutes and solicited the interviewee's view of the school's Education Policy program, the ways their graduate students engaged in policy, and the motivation for recently revamping their program. The program at Teachers College offered a distinct curriculum that engaged students with education policy at various levels as well as placing an overall emphasis on policy and policymaking that distinguished itself from other programs. Furthermore, based on its website homepage, the Teachers College program had undergone structural changes in 2011. Based on these factors, I assessed that further exploration into why the Teachers College program decided to change and how it developed the curriculum with policy would be beneficial to answering the research question. I used the contact information from the website to identify a member of the program leadership and conducted an interview to learn first-hand about the program at Teachers College.

Once Institutional Review Board (IRB) approval was obtained (See appendix A), a telephone interview was scheduled with the appropriate program personnel at Teachers College. A semi-structured interview consisting of five questions was administered in roughly 30 minutes and was audio-recorded with the participant's permission. Field notes were taken during the interview and the audiotape recording was transcribed and reviewed against the field notes during analysis to ensure that the maximum amount of

data was captured. Interview questions were formulated to probe for additional information regarding the ways in which students at Teachers College engaged with the policymaking process as well as to learn more about the reasons the college restructured its program. The interview prompts/questions were as follows:

1. Please describe your Education Policy program.
2. What types of opportunities do your graduate students have to engage with policy?
3. How do you think your program differs from other Education Policy graduate programs?
4. What was the motivation behind the recent change in your program? What are some specific aspects of the program that were changed? Why?
5. Is there anyone else I should speak to regarding your program to gain additional insight?

Interpretation and Analysis

The EPS program characteristic data were summarized and interpreted through content analysis. The interpretation of data demonstrated how well, if at all, the programs cultivated or prepared students to engage with policy and the policymaking process. As anticipated, the content analysis data were rife with information that was not readily available by reviewing the categorical data alone (by way of descriptive statistics, etc.), particularly regarding the way graduate students are prepared as well as their academic and policymaking experience while under a mentor's guidance. Content analysis was particularly helpful for examining the graduate student experience in order to explore their engagement with policy and the policymaking process more effectively. The use of

aggregate data alone would not have provided nearly as much explanation for understanding doctoral preparation with internships, practicum, and research training.

To conduct the content analysis, I first reviewed the data collected from program materials for completeness. Once I was sure that the data were complete for each program, I began by reviewing each program individually to interpret how they were organized. Gaining an understanding of program organization and affiliation within the college helped establish where the training was taking place (i.e., the college level, the program level, or both). Once a common structure emerged, programs were reviewed within each category (for example, do all programs require a practicum? Or, what are common core courses offered in each program?). Predictably, not all data emerged for each category from within each predetermined section. In some cases, “Program Aims” were revealed from within the “Program of Study” section, in place of the “About Us” or “Mission Statement” sections. In such cases, the data were captured in secondary analysis and placed into the thematic category instead of the raw data category in order to provide a more in-depth analysis. As anticipated, the thorough review of content from each program took a significant amount of time, with regular reviewing and re-reviewing of content as themes emerged and theories were tested. In the end, the programs demonstrated that a great deal could be gleaned from their websites’ promotional materials, and a clear picture of how the programs prepared doctoral students became apparent among the emergent themes.

By thoroughly reviewing the website content and later interviewing one program director, I gained a fresh perspective and added further data to each data point or category (Creswell, 2009). As anticipated, the comparative process provided greater detail and

allowed more comprehensive information on features within colleges or programs (Creswell & Plano Clark, 2011). Once data were gathered and analyzed, I used descriptive statistical techniques—such as frequencies—to review the data as a whole and to draw further conclusions regarding programs. Integrating the interview data also provided the opportunity to corroborate data collected via promotional materials (Stemler, 2001). By interviewing a professor from within Teachers College program, I was able to not only corroborate the data for the specific school, but also interpret how the Teachers College program was responding to current needs for both students and policymakers. The integration of the program content analysis data and the interview data generated two sources of information for better analyzing the research question. Interpretation and analysis were at the crux of understanding not only how EPS programs prepare students, but also how graduate students acquire training in their respective programs. I had to take particular care to review the EPS program characteristics data as objectively as possible while reviewing the content and tone of each website. Notes and procedures were constantly reassessed to ensure that terms, phrases, and content were interpreted and analyzed appropriately and consistently.

Delimitations

A tremendous amount of data was collected for this project, and as such it was important to draw a distinction between data that applied to the research question and that which did not. Firstly, as described previously, this project aimed to learn more about how EPS programs describe student training, specifically as it related to skills that prepared students to effectively engage with policy and the policymaking process. In this case, engagement with *policymaking* is distinguished from engagement with policy

research, as most academic programs develop skills regarding the latter (Aanerud, Homer, Nerad & Cerny, 2006; Golde & Dore, 2004; Nyquist & Woodford, 2000). This project instead looked for descriptions in the promotional materials of EPS programs that identified ways in which students were trained to engage with education policy and policymaking as well as where their connection with policy moved beyond the creation of research and included interaction with policymakers.

Additionally, while this project includes an examination of graduate programs, it pertains only to doctoral preparation and not training at the master's level. It is important to note, however, that program aims did not always distinguish between preparation between the degrees, and often programs required the student to pursue the master's level degree prior to moving into the doctoral program. Similarly, this study focuses on EPS program level data and not on college level data, and as described in Chapter 4, the college level data regarding program aims mimicked program level data and was therefore combined in the thematically displayed results.

Advantages and Limitations to the Study

This study used content analysis of program materials to explore and analyze how EPS doctoral students were being trained to engage with policy in the top 10 ranked schools as well as my own institution of study. Although this examination is believed to have been thorough, some limitations to the model are noted. One limitation may be in the sampling criteria used to select the EPS programs. Despite the inherent subjectivity of a nomination-based ranking system, this source served as an ideal starting point for examining EPS programs, as it narrowed the programs down to a small but manageable sample. Furthermore, these programs had been identified as the top 10 programs in the

U.S., indicating that their preparation of doctoral students in Educational Policy was worthy of examination. However, a small sample of 11 cannot necessarily provide a platform for strong generalizations regarding all EPS programs in the United States.

Based on feasibility and a pilot project I conducted in 2010 regarding EPS programs, I concluded that access to data regarding program characteristics was readily and publicly available. Of note, however, is that websites are not exhaustive in providing details about a program. To overcome this potential limitation, I decided to include a second set of data in the form of a personal interview to gather additional insight into programs. Therefore, after concluding that one particular program demonstrated unique and remarkable characteristics specific to engaging students with policy, I interviewed a member of the program leadership to learn more about the program. This interview was insightful, and future studies might benefit from interviews with EPS program personnel as this second set of data increased the depth of the analysis. The content analysis data of the Teachers College program, however, provided a unique opportunity to study student training in a newly reorganized program, and, based on website content, other programs did not match this program's distinct characteristics.

Though it provides rich information and context, content analysis requires additional time and resources to carry out. The data collection took place over a specific period of time, totaling three months—between October, 2013 and January, 2014. To accommodate for limited resources, I used a small, but purposefully selected, sample of EPS programs. Although it limits the generalizability of findings, a small sample nonetheless provides a baseline interpretation of programs and a novel starting point for discussion in the literature.

CHAPTER 4

FINDINGS

The unique capability of education researchers to understand issues of research in education make graduate schools of education (GSE) and the programs that prepare education policy scholars the ideal location to study the link between education research and policy (Ball & Forzani, 2007). The aim of this exploratory study was to gain a better understanding of how Education Policy Studies (EPS) program materials describe the ways in which they prepare graduates to engage with policy and the policymaking process. Learning more about EPS program goals and how students are prepared provides valuable feedback, not only to students seeking training to engage with policymaking, but also for the subfield of EPS to get a sense of the future of EPS scholarship and its ability to influence education policy. Using the qualitative content analysis method, this study explored program goals in preparing graduate students, program curriculum, programs of study, faculty, research funding, and alumni careers upon graduation. In the following section, I describe the findings from the study that were captured throughout an approximate three-month period of time using program websites. In order to collect this information, programs were purposefully selected based on their ranking in the U.S. News & World Report for 2013. The rankings for Education Policy – a Specialty Rankings category discussed previously in Chapter 3 – was used to select the top ten programs in addition to my own graduate program for a total sample size of 11.

In this chapter, I present the data resulting from this sample of EPS programs nationwide. The findings are presented in three sections specific to each research question. Within each section and presented in sequential order, I grouped findings into

thematic categories based on the analysis of data. The sections address the following topics respectively: program characteristics, career outcomes of programs, and findings with regard to student engagement with policy. Depending on the question, anywhere from three to four major themes emerged out of the data resulting from three of the four research questions. The fourth research question regarding college aims revealed nearly identical results to the question on program aims; therefore, data from these results have been merged into the Program Aims section.

Research Questions

To identify how graduate schools of education prepare students and scholars to engage in the policymaking process, the following broad categories were explored:

1. Graduate schools of education and doctoral preparation programs in Education Policy Studies
2. Faculty, faculty research, and faculty research centers
3. Curriculum and environment

Each of these categories works collectively to provide training and preparation to graduate students. Preparation of graduate students is not limited to the variables listed above, but also the categories served as a guiding point for exploring the research questions. Using data collected from colleges and programs, this study sought to answer the following research questions:

1. What does each selected Education Policy Studies program assert, per promotional materials, as its aim or goal in preparing doctoral students?
 - a. What formal and informal examples does the program provide for meeting each aim or goal?

2. What types of careers do Education Policy Studies programs claim to prepare students for per promotional materials?
 - a. What formal and informal examples does the program provide for preparing graduates for such careers?
3. How do colleges and/or Education Policy Studies programs present, per promotional materials, the engagement of students in policy or the policymaking process as part of their doctoral programs?
 - a. What formal and informal examples does the program provide for the engagement of students in policy or the policymaking process?
4. What do colleges of education assert, per promotional materials, as their aim in preparing doctoral graduates?
 - a. What formal and informal examples does the college provide for meeting each aim or goal?

Program Characteristics

Specialty rankings. Programs were purposefully selected based on their U.S. News & World Report ranking for 2013, and the top 10 programs ranked for Education Policy were reviewed. In addition to the top 10 schools, my university was also selected for review, totaling 11 schools. Since Education Policy falls under the ranking category of “Specialty Rankings,” programs were ranked based entirely on the voluntarily nominations most often completed by the Dean of the college or chair of the department (Flannigan & Morse, 2013; Whitaker Lamb, 2010). The ranking methodology espoused by the U.S. News & World report does not include a fact checking process with which to verify whether a program listed in the Specialty Rankings actually offers the program or

degree being ranked. This was evidenced in the findings, as one of the programs ranked does not in fact offer an Education Policy Studies doctoral degree, at least in title; however, after careful consideration, I decided to include the data from the program in question because it did claim to train students to inform education policy. Further discussion regarding the subfield of EPS – the way it is conceptualized and tensions from within the subfield – are discussed in more detail in Chapter 2 (Literature Review) and Chapter 5 (Discussion).

Program Demographics. The purposefully selected sample represents a national snapshot of programs from various types of universities. For this study, the sample was fairly evenly distributed throughout the United States with only one additional program on the west coast, and the remaining were fairly evenly split between the south, mid-west and east coast (see Table 1). EPS programs across the nation can be found in both public and private universities, a demographic reflected in this the top ten as well. Roughly 55% (see Table 1) of the programs reviewed were housed in public institutions, while 45% are in private colleges or universities. All programs are part of an Education college or department, many of which were established long ago and some with a history greater than 100 years. The EPS programs, however, are not nearly as mature, as was discussed previously in Chapter 2 (Literature Review). Each program grants a PhD as the doctoral degree, though this is the result of a recent change in one of the programs that previously awarded only the EdD for education but are now offering their first PhD cohort this year (Harvard University). Programs tended to anticipate the same amount of time to completion based on the analysis of each program of study, which was determined to be

about 4-5 years provided the program of study was completed as planned, though this study does not include an analysis of time to completion or student profiles.

Table 1

Schools by Geographic Region

College	West		Mid-	East
	Coast	South	West	Coast
Stanford	x			
Harvard				x
Vanderbilt		x		
Wisconsin			x	
Teachers College				x
Michigan			x	
UCB	x			
Penn			x	
UCLA	x			
Virginia		x		
Arizona State	x			

36% 18% 27% 18%

Education Policy Approach & Focus. As previously mentioned, this study reviewed EPS programs located within graduate schools of education (GSE). Though each program within the GSE has a similar focus, not all have the same title for the degree. Of the programs reviewed, 8 out of 11 (73%) named their programs and degrees

Education Policy or Education Policy Studies, while 2 of the 11 offered a degree in Education with a specialization option in Education Policy. The program at UCLA that did not offer an Education Policy (Studies) program offered instead a focus in advanced statistics with an optional focus in education policy as a content area for research, though it is housed in the Graduate School of Education and Information Studies.

The types of courses offered and the overall program of study for each program were very similar, with each offering a core set of courses in methods (both quantitative and qualitative) and foundational studies (history, economics, social sciences). A wide variety of elective courses appeared in each program where educational studies topics were brought into the context of policy, and most programs placed considerable value in allowing students to design their own course list under the guidance of their mentor in order to build a diverse portfolio of expertise in education. The diversity of topic areas in training education policy scholars speaks volumes to the collective understanding that education policy involves not only methodological prowess, but also vast knowledge in several educational areas.

High Research Activity Among Colleges. All EPS programs include a strong research focus encompassing a variety of educational issues. Based on the Carnegie Foundation’s classification system retrieved from their website in 2013, almost every college reviewed is classified as “RU/VH: Research Universities (very high research activity),” with one exception that is classified as a “RU/H: Research Universities (high research activity).” This classification is a trademarked system that creates a framework for comparing colleges in various categories. According to the Carnegie website, the Carnegie Classification™ was developed over forty years ago “to support its program of

research and policy analysis” (“Carnegie Classification,” n.d.). The “Basic Classification,” which was used in this study to categorize the level of research-intensive focus of each university, provides an opportunity to better understand the environment where each EPS program is housed. With a classification of “high” and “very high” research activity, I was able to confirm that programs are indeed training in research activities consistent with their stated goals (see Table 2).

Table 2

Carnegie Classification by School

Program	Public	Private	Carnegie Classification
Stanford		x	RU/VH
Harvard		x	RU/VH
Vanderbilt		x	RU/VH
Wisconsin	x		RU/VH
Teachers College		x	RU/H
Michigan	x		RU/VH
UCB	x		RU/VH
Penn		x	RU/VH
UCLA	x		RU/VH
Virginia	x		RU/VH
Arizona State	x		RU/VH
	55%	45%	

Program Aims

The first research question was posed in an attempt to uncover the aims of each EPS program in the study. All program websites contained a section dedicated to their program goals, and by gathering and interpreting each program's goals regarding the preparation of doctoral students, I was able to assess how these programs, as a group and individually, prepare students. Interestingly, the data revealed that most programs aim to train future EPS scholars in very similar ways. Without fail, each program provided a set of goals in either the "About Us" or "Mission Statement" section of their website and, in some cases, in the detail of the "Program of Study" section as well. The goals that emerged from the collection of 11 programs was classified into three main categories (see Figure 2): programs claim to 1) produce or conduct research on educational issues by way of examining, analyzing, investigating, and evaluating education policy, 2) improve, influence, or shape the nature of educational organizations and/or policy and 3) equip students with the skills necessary to use an interdisciplinary approach in conducting education research.

Research Preparation of Students. A review of program aims, or the stated goals of each program, revealed three major themes. Overwhelmingly, 100% of the programs stated a desire to train students to have the ability to produce or conduct research on educational issues (see Figure 2 and Table 3). Though expressed in various forms, the goals for most programs and colleges frequently contained statements that involved training in the production of research, the engagement in evaluation, and investigation of examination of educational problems. For example, the University of Pennsylvania noted on its website:

Students learn to examine education problems through multiple lenses, including economics, history, public policy, philosophy, and sociology. The Ed Policy degree programs equip graduates with the knowledge and methodological tools to use, understand, and conduct research on the pressing educational issues of the day (“Overview,” 2013).

Similarly, Harvard University’s website proclaimed, “Students in the EPPE [Education Policy and Program Evaluation] concentration will produce research on the conceptualization, implementation, and evaluation of educational and other public policies relevant to the domains of early childhood, K-12, and postsecondary education, in the U.S. and internationally (“Program Concentrations,” 2013)

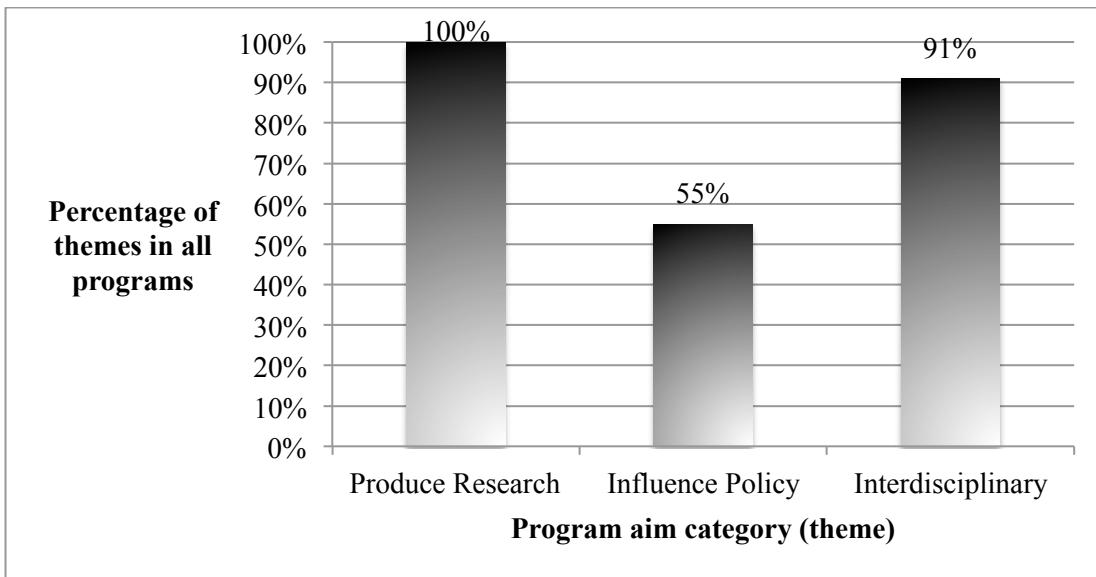


Figure 2. Program aims percentages by category.

None of the programs highlighted a specific topic area within education or a perspective from which to review problems; in fact, most named several areas of education to examine. Programs tended to note training in a broad assortment of education problems, with an emphasis on methodological preparation in conducting research, over and above identifying a particular problem area in education itself. While several programs claim the goal of training students in conducting and producing research, many also

acknowledged the aspiration to examine, investigate and analyze educational problems. Most program materials stated the importance of examining educational problems and that the analysis of such problems serves as a fundamental goal in improving educational outcomes. The University of Michigan-Ann Arbor noted in their program description that students would focus on a diverse range of issues, even naming a few as follows:

Faculty and students in this program examine processes that occur at many levels of the education system—from the statehouse to the schoolhouse, and from Congress to the classroom—including examinations of the systems and structures of school finance, governance, organization, and management. Students will also study ways that the actions of school leaders and staff, and the politics and resources of national, regional, and local communities can be harnessed to promote better instruction in classrooms, higher student achievement, and social justice in schools (“Educational Administration and Policy,” 2013).

Similarly, the University of California at Berkeley noted on their website that students need to understand a wide range of educational issues, as follows:

Students develop insight into the complex processes that shape what policy gets made and how that policy plays out in practice. Students also deepen their understanding of how wider contextual forces from the values inherent in an economic system, to the political culture surrounding schools, to the preferences expressed by parents and other stakeholders buffet educational policy as it responds to the needs of our multi-class, multi-racial, multilingual society (“Policy & Organizations Research,” 2013)

Train Students to Influence Policy. The second theme to emerge from reviewing program aims concerned the desire to improve, influence or shape the nature of educational organizations and policy. Just over half of all programs (55%, see Table 3) expressed the goal of influencing policy in some form to result in positive change within educational organizations. For example, Stanford University proclaimed that their program

aims to produce leaders who will influence the nature of educational organizations. It prepares scholars, administrators, and policy analysts for these roles by developing the characteristics of educational leaders the knowledge base

to understand the societal and economic forces affecting complex organizations; the ability to question, analyze, and develop creative solutions to policy and operating problems; and the determination to make decisions in the face of conflict and ambiguity (“SHIPS,” 2013).

Similarly, the University of California at Berkeley includes the following in their program goals:

We view policy as a lever for change and a powerful context that shapes educators' work at multiple levels of the system. We introduce students to the art and science of policy analysis, providing them with the capacities to analyze contemporary policy initiatives critically and to inform policy makers about innovative directions. Students develop insight into the complex processes that shape what policy gets made and how that policy plays out in practice (“POME,” 2013).

Arizona State University asserts a similar goal for their graduates, stating, “[T]he Doctor of Philosophy in Educational Policy and Evaluation prepares scholars who teach and conduct rigorous, high-impact research on education policy that advances our collective understanding of K-20 education” (“Educational Policy and Evaluation,” 2013).

The focus of where the change would take place (i.e. within local, state, or federal policy) differed among the programs; however, an interest in making positive change was cited as part of programmatic goals for all programs. The goal of influencing policy was also mentioned in some programs as a function or outcome of training in statistical analysis. For instance, the University of California, Los Angeles program described its statistical course of study as an opportunity to influence policy:

The doctoral program in Advanced Quantitative Methods in Education Research or AQM is intended for students who want to become expert methodologists who are well trained in substantive education areas and educational policy issues. AQM Program fellows will become the next generation of education scientists able to conduct rigorous educational research that advances knowledge in the field and provides useful information about important educational issues to practitioners and policymakers (“Program Goals,” 2013).

Table 3

Program Aims by College

Program Location	Produce research	Influence policy	Train students using multiple disciplines
Stanford	x	x	x
Harvard	x		x
Vanderbilt	x	x	x
Wisconsin	x		x
Teachers College	x	x	x
Michigan	x	x	x
UCB	x	x	x
Penn	x	x	x
UCLA	x		x
Virginia	x		x
Arizona State	x		
	100%	55%	91%

Train Students Using an Interdisciplinary Approach. The third theme to emerge from the Program Aims data concerned an interdisciplinary approach to training doctoral students in EPS. Most programs (91%, see Table 3) referenced a goal in providing an approach that included training in more than one academic discipline. Of the programs that address the importance of an interdisciplinary approach, most named a variety of “lenses” or theoretical foundations that are rooted in well-established academic

disciplines. For example, the program at Teachers College, Columbia University described their focus on an interdisciplinary approach as:

The Program is housed in the Department of Education Policy and Social Analysis at Teachers College, Columbia University and is intended for persons who want to acquire advanced training in the theory, methods, and practices of education policy. The program will develop students' skills by drawing on interdisciplinary approaches to policy analysis, including those employed within economics, law, politics, and sociology ("Degree Programs," 2013).

Indeed, several programs go so far as to either encourage and/or require coursework in other colleges, in some cases requiring a master's degree outside of the education college.

The University of Wisconsin-Madison, for example, requires a minor concentration external to the GSE and similarly notes in their mission statement and program description as follows:

The department's faculty and students examine educational policies, movements, outcomes, dilemmas, and controversies as well as the forces shaping them using modes of inquiry associated with an array of scholarly fields and disciplines. These include history, sociology, anthropology, political economy, philosophy, policy analysis, and international comparative education ("Mission Statement," 2013).

As part of this Graduate School 32 credit minimum requirement, doctoral students must have an external minor, meeting the requirements of both the Department of Educational Policy Studies and (with the exception of the Distributed Minor) a second department in which the student minors. Minors will usually be specified as part of the student's Concentration... As per the regulations of the UW Graduate School, all doctoral students must fulfill an External Minor. Minimum course-taking requirements to fulfill the External Minor are established by the external department but typically mandate 10-12 credits ("Education Policy Studies," 2013).

The program at Stanford uses a framework where students must either obtain a master's degree from another college or obtain a PhD minor, described as follows on their website:

Students who have not earned, and do not plan to pursue, a relevant discipline-based master's degree from outside the field of Education are required to earn a doctoral minor outside of the GSE. The PhD minor must be in an acceptable field

relevant to the student's degree program. The only exceptions to this requirement are when students enter the GSE with an earned master's or doctorate degree from a cognate discipline that fulfills the purpose of this requirement, or when a student pursues a Stanford master's degree outside of the GSE concurrently with her or his PhD program at the School of Education. Many Education doctoral students decide to earn a Stanford master's degree concurrently (outside of Education) instead of opting for the PhD minor. This may provide additional grounding in the relevant discipline ("Doctoral Handbook," 2013).

Career Preparation

The second research question was posed in an attempt to understand the career preparation of students in the 11 EPS programs. Specifically, programs claimed that upon completion students would be well prepared to become university professors, scientists, or school or government officials.

University Faculty. EPS graduate programs offer a variety of training in methodological approaches, with the goal of preparing students for numerous career paths. Overwhelmingly, though not surprising, all programs indicate that they train students to work as university faculty or university scholars. For example, the Peabody College of Education and Human Development at Vanderbilt promotes its program as having the singular purpose of preparing students for research and scholarly careers:

The college has designed its Ph.D. programs for the sole purpose of preparing the next generation of researchers and scholars studying education and human development. We take as our goal preparing and placing graduates in faculty positions at research universities, in prestigious postdoctoral positions, and in research analytic capacities with public policy think-tanks and non-governmental organizations. The Ph.D. program is designed for those who intend to build an academic career focused on the study of education and policy, as researchers, professors, and policy analysts. It is a full-time, four to five year program that equips its graduates with the knowledge and methodological tools to conduct cutting-edge research on the pressing educational issues of the day ("LPO Doctoral Level Concentrations," 2013).

All programs (100%, see Table 4) also provided information regarding alumni who hold tenured or tenure track positions at universities. Although not all programs provided

specific detail regarding alumni positions, when alumni were not mentioned, detail regarding coursework or apprenticeships in university teaching was cited as part of the curriculum, indicating that students were prepared for or exposed to teaching in a university setting.

Table 4

Careers by Program

Program	University	Researcher policy analyst	School/government official or administrator
Stanford	x	x	x
Harvard	x	x	x
Vanderbilt	x	x	x
Wisconsin	x	x	x
Teachers College	x	x	x
Michigan	x	x	x
UCB	x	x	x
Penn	x	x	x
UCLA	x	x	
Virginia	x	x	
Arizona State	x	x	x
	100%	100%	82%

Scientists, Researchers, Policy Analysts, or Policy Advisors. All programs (100%, see Table 4) also promoted the fact that students would be trained to become

scientists in some aspect of policy under the following categories: education researchers, policy analysts, and policy advisors. For instance, the University of Wisconsin-Madison described that training would provide students with various careers as follows: “Students who successfully complete this Concentration should be well- prepared for careers as researchers, policy analysts, and advocates in academic, governmental, or non-governmental settings” (“Social Sciences and Education,” 2013). Similarly, the University of Michigan-Ann Arbor highlighted several careers options for its graduates, stating:

The Doctoral Program in Educational Administration and Policy prepares individuals for careers as researchers, policy leaders, or university professors in the field of education. Graduates of the Educational Administration and Policy program can be found at all levels of the public and private education sector. Current alumni are school principals and superintendents, university professors of educational administration, and researchers and policy analysts at educational research organizations, foundations, and government agencies. (“Educational Administration and Policy,” 2013)

This category was supported by each of those programs naming roles or positions that alumni held at non-profit, for-profit and/or government organizations. Second only to faculty preparation as the most cited profession that each program named as a career destination for graduates, this category was also the most diverse in title and location.

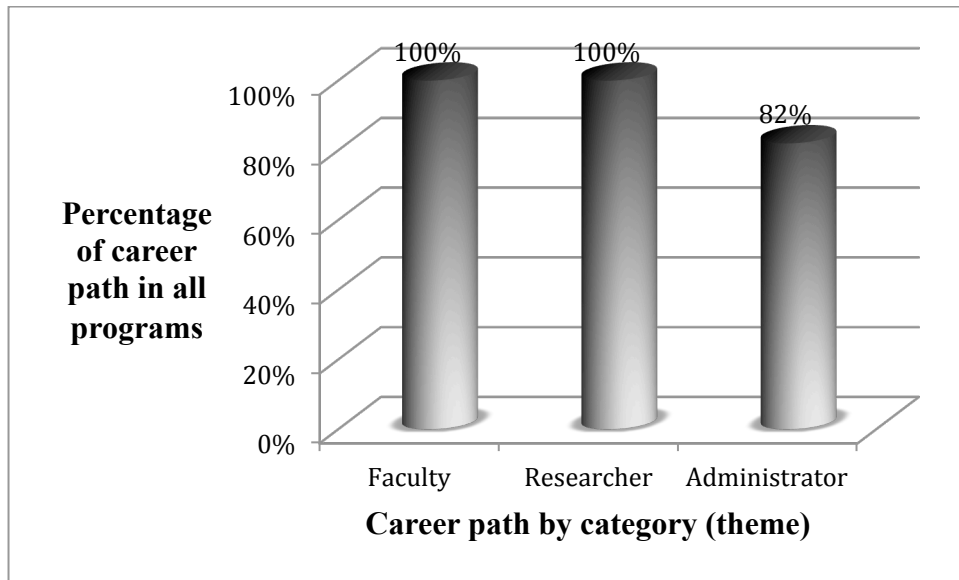


Figure 3. Career path percentages by category.

School/Government Administrator. The third theme to emerge from the review of data for Career Preparation was a role in school administration or government administration or policy. Roughly 82% (see Table 4 and Figure 2) of programs named a role that included working within the government either as part of their program’s goal in career preparation or by way of listing alumni with a role in a government agency. The categories of school and government roles were combined since both focus on the administration level policy and were frequently cited as requiring a similar skill set when preparing graduates. For example, the University of Pennsylvania website described the training as follows: “The Education Policy program offers coursework and research training in the study of education, reform, and policy for individuals interested in careers in academic, governmental, and non-governmental research settings,” (“Overview,” 2013) while Harvard University named an alumnus who held the position of the United States Assistant Secretary of Education in Washington, D.C. as an example of potential careers for graduates. In some cases this role was reflected as a school administrator who

focuses on school level policy, and in others it was proposed as an official employed within the government setting where policy implementation occurs at all levels from local to federal.

Engagement with Policy

To understand if the EPS programs under review prepared graduates to engage with policy, I reviewed program websites and found varying levels of policy engagement through coursework, faculty interest, apprenticeships, or symposia.

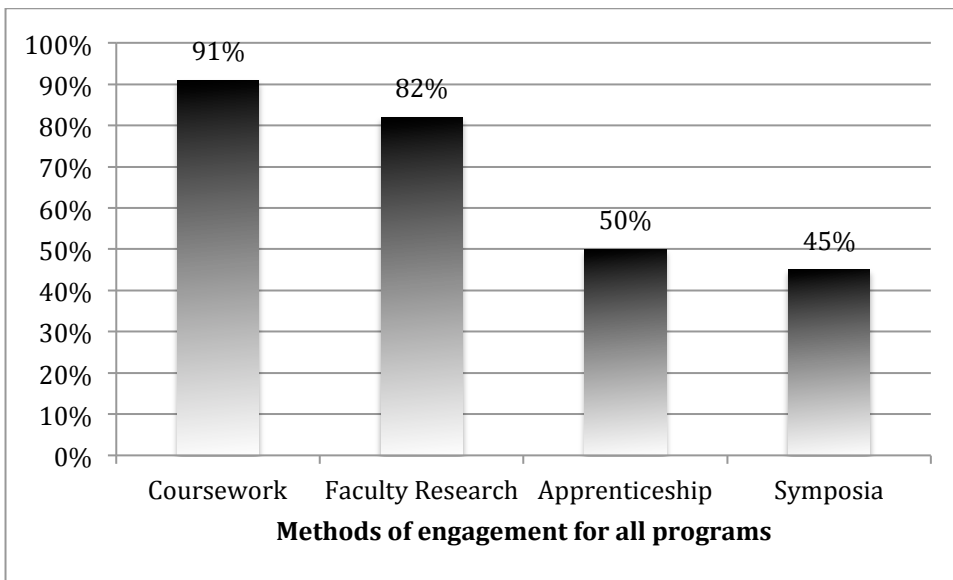


Figure 4. Method of engagement with students by program.

Coursework and classes. Nearly all programs (91%, see Table 5 and Figure 4), with the exception of one, provide several courses that focus on education policy, policy processes, and the evaluation of policy implementation. While not every program provided detail in their course descriptions or syllabi, each program did at least provide either a simple or detailed list with course titles describing the various types of policy focus. For example, several programs offered courses with the following or similar titles:

issues of the day and are studying some of the most contested and complex educational issues of our times: charter schooling, pay for performance, access and equity for immigrant and at-risk students, resource allocation, teacher quality, principal instructional leadership, data-driven decision making, and the social context of education.

They are members of editorial boards, school and education policy forums at the national, state and local levels, and consultants to governments both in the United States and internationally. The department faculty are currently leading two national education research centers funded by the U.S. Department of Education both of which are located on the Peabody College campus (“K-12 Leadership and Policy,” 2013).

Similarly, the University of California at Berkeley highlighted that their policy centers offer students the opportunity for mentored research experience, noting:

Other Research Apprenticeship Opportunities: Mentored research experience equips POME students to pursue their own independent research. Students develop research experience by serving as Graduate Research Assistants (GSRs) in several venues that include our policy research center (Policy Analysis for California Education, or PACE), the Berkeley Evaluation and Research Center (BEAR), and various faculty research projects (“POME, Our Approach,” 2013).

At times, this was identified as a program requirement, while in other instances it was included as a feature of the program. With roughly 82% (see Table 5 and Figure 3) of programs citing faculty mentorship as an important quality, it emerged as the strongest theme in the review, aside from required coursework.

Table 5

Methods of Student Engagement by College

Program	Course			
Location	work	Faculty	Apprenticeship	Symposia
Stanford	x	x	x	
Harvard	x			
Vanderbilt	x	x	x	

Wisconsin	x			x
Teachers College	x	x		x
Michigan	x	x		
UCB	x	x	x	
Penn	x	x	x	x
UCLA		x	x	
Virginia	x	x	x	x
Arizona State	x	x		x
	91%	82%	50%	45%

Apprenticeships. Several programs mention the requirement of a practicum, internship, and/or research apprenticeship experience in their Programs of Study, and half of the programs include a required research apprenticeship. For the purposes of this study, the research apprenticeship was used as a single category as it focuses on academic skills within the university setting and is most frequently cited among the programs reviewed. For example, at the University of Virginia, Curry School of Education, students are matched with faculty based on research interests:

While coursework is important to student preparation, a close mentoring relationship with faculty is crucial to the design of the program. Students work closely with faculty on research projects to examine the impact of a variety of educational policies on student outcomes (“Degrees,” 2013).

The University of California, Berkeley also comments on the apprenticeship on their website, writing:

We seek students who, like us, dedicate themselves to the theoretical breadth and depth required to investigate and assess which policies and practices are truly effective. Policy students take courses across the three thematic areas of POME. Standards of evidence coupled with the tools of qualitative and quantitative research prepare students to investigate the problems at hand and find empirical

evidence on which to base action. Additional opportunities to hone these skills can be found in research groups and apprenticeship (i.e., mentored research) experiences. Resources within the Graduate School of Education and across UC Berkeley expand the opportunities for students to develop an independent research focus. (“Policy, Organization, Measurement, and Evaluation (POME),” 2013).

Similarly, Vanderbilt University’s, Peabody College promotes the apprenticeship model in their EPS program:

At the heart of the program is the mentor-apprentice model, where students work on research projects alongside a collection of esteemed faculty. As a doctoral student, you will be matched with an LPO faculty member whose research interests align with your own and you will design an individualized program of study that reflects your specific interests and background. Through your research you will learn to present papers at scholarly conferences and submit journal articles for publication (“K-12 Leadership and Policy,” 2013).

These apprenticeships are part of 50% of programs (see Table 4) and most often take place with the student’s designated faculty mentor. In some cases this model is used as a promotional feature of the program to recruit students (for example, see University of Pennsylvania):

Students in the Education Policy Ph.D. degree program pursue an individualized program of study that reflects their specific interests in education policy on the local, state, national, or international levels. At the heart of the Ph.D. program is the research apprenticeship, where students work on projects alongside faculty members whose research interests align with their own (“PhD in Education Policy,” 2013).

In each case where the apprenticeship model is promoted, the emphasis for training is on the ability for students to interact with research and their faculty mentor in a more independent setting. When developing skills as EPS scientists, such an apprenticeship is obviously beneficial. While not all of those included in this category require an apprenticeship, most programs include the option and emphasize it as an important and beneficial feature within the program.

Symposia or Colloquia. The final theme to emerge from the program data regarded symposia or colloquia for students and faculty. Almost half (45%, see Table 4 and Figure 3) of the programs listed a well-established symposium, conference or colloquium series, specifically designed to connect students and faculty with policy issues. Most frequently this included diverse topic areas ranging anywhere from nutrition policy to elementary classroom topics. For example, Arizona State University offers a regular symposium titled Inside the Academy, where external speakers are brought in to discuss the educational issues, career influences and more. The website describes the series as follows:

Inside the Academy provides members of the National Academy of Education and other distinguished educational researchers and practitioners an opportunity to share their passion for education. Inspired by the Emmy award winning Inside the Actors Studio, Inside the Academy honors the personal and professional achievements of exemplary scholars in the field of education. We at Mary Lou Fulton Teachers College at Arizona State University invite you to share the personal and professional journey of each honoree by exploring Inside the Academy (“Inside the Academy,” 2013).

Programs that included this feature as part of the student training experience discussed the use of such symposia, colloquia and conferences as an opportunity for students to engage with policy issues in ways that differ from the classroom experience. Frequently the events were intended to bring in speakers and leaders from outside the academic setting. At the University of Virginia, Curry for example, the Symposium on Education Policy is used to connect research with policymakers. Their website provided the following detail:

The 2010 Symposium provided an opportunity for researchers and policymakers share ideas about how to engage around the development of evidence to inform education policy. John Easton, the Director of the Institute of Education Sciences at the U.S. Department of Education, shared his vision and the role that IES is playing to encourage more informed policy. Professors Sarah Turner and Tom

Dee shared their approaches to developing research that informs policy. Dr. Patricia Wright, Virginia Superintendent of Public Instruction, State Senator Edd Houck and Dr. Thomas Ward, Associate Dean of the School of Education at William and Mary provided their perspectives on how Virginia is responding to the challenges of educating its students and the role that collaboration between policymakers and researchers can play. (“Conferences,” 2013)

Summary of Findings

Training Research Scholars. Data from the examination of program materials revealed that EPS programs are similar in many ways, with only a few programs that stand apart as being unique, one of which indicated having recently undergone significant structural changes in the past few years (Teachers College, Columbia University). Programs tended to have a similar goal in hoping to improve educational outcomes across the nation and in local communities. Overall, programs focused on providing research and methodological training for students with an emphasis on careers in academia and policy analysis. Training in research methods, which played a large role in both academic and policy analysis work, was similar in most programs where the program of study included a core set of methods courses, both quantitative and qualitatively focused. Additionally, while a core set of methods were required in programs, many programs also encouraged students to acquire an expertise in a particular type of research method that best serves their topic area or interest in research, and in doing so, they also provided increased flexibility in designing individual programs of study based on the methods training of choice.

Most programs referenced an interdisciplinary approach to training scholars. While an increase in interdisciplinary, transdisciplinary or multidisciplinary collaboration has been observed in recent years among several academic fields (Klein, 1990), it

remains a novel and somewhat complicated approach in graduate student preparation (Becher & Trowler, 2001). EPS programs appear to have embraced the interdisciplinary trend and offer a wide variety of disciplinary approaches in graduate student training (see Table 2). A few noteworthy programs even included a combined degree from another college or specialization as part of the EPS program.

Similar Programs of Study. The review of EPS program materials also revealed that most programs have a similar program of study, where students take a core set of courses in the first year and begin to specialize in subsequent years. According to their promotional materials, most programs allowed for a great deal of flexibility in topic area specialization, with an emphasis on collaborating with a mentor to gain expertise. Programs also tended to recommend the same length of time for completion of the program, where 2-3 years are needed to complete coursework with additional time to complete a dissertation or final project, generally totaling 4-5 years in all. It should be noted however that I did not review data regarding the length of time students take in completing the degree, often referred to as “time to completion,” as it was not a focus of this study nor uniformly reported across programs.

Course names and descriptions often followed a similar pattern among programs as well (see Figure 4). Though a more thorough rhetorical analysis would be required to confirm the findings, my word-count content analysis review revealed that most programs on average had roughly 9 courses that include the words “policy” or “politics” in the title, with a lower limit of 2 and an upper limit of 20 (see Table 6). One school did not have any courses with the words “policy” or “politics” in the title, and was therefore removed from the average calculation. Over half of programs (64%), though not all, also

provided courses with the words “law,” “federal,” or “state” in the title or course description. Overall, course titles and descriptions were similar across all programs, with the exception of one, as noted in the following section.

Noteworthy Programs. Three types of programs, found at four different universities, stood out among the rest as particularly unique in their described approach to training EPS students: Teacher’s College, Columbia University; University of California at Los Angeles; Stanford University; and University of Wisconsin-Madison. I highlight them here in detail, as I believe they offer possible insight into the future of EPS programs and the ways in which programs can tailor an experience for students who wish to engage more with education policy. The Teacher’s College, Columbia University offered significant opportunities for students to interact with policymakers, whereas the other programs focused on traditional academic training. The UCLA doctoral program had an entire focus on statistics and methods as their approach to training EPS doctorates, whereas other programs offered only select core courses in statistics. Finally, Stanford University and the University of Wisconsin-Madison similarly required substantial breadth in their training for EPS students. The impact and analysis of these unique programs is discussed further in Chapter Five, and details of each program are provided here.

Opportunities to Interact with Policy and Policymakers. Teachers College, Columbia University (Teachers Collge) offers a program that approaches EPS student training with a particular focus on education policy in an applied setting, as well as in an academic setting. It is the applied setting that stands apart as unique among the EPS programs reviewed. A new division in the Teachers College program was launched in

2011 to specifically address the need to combine scholarly training with the practice of policy and policymaking. According to their welcome message, the EPS programs have a mission to provide students with training that will link scholarly research and practical implementation:

In addition to training students to conduct the highest quality research, we encourage students to study and reflect on the processes by which research becomes linked to policy and practice. Good research informs policy and practice, revealing when professional premises are ill-founded and putting causal inferences to a more rigorous test. Courses, workshops, and research projects housed within the department, and available to students in all of the programs, make translation of research to policy practice an explicit object of study and discussion, with the goal of training scholars, researchers, and policy leaders who can draw the links between theoretical models and important practical considerations that more abstract analyses sometimes miss. (“Welcome to EPSA,” 2013).

The training in connecting policy and practice is noted in course descriptions as well. In addition to the curricular focus, the program also offers what they call their Federal Policy Institute, where students spend a week or more in Washington D.C. with policymakers. The Institute is then followed by regular seminar sessions where students are able to combine scholarly academic training with the practical skills utilized in the policymaking process as observed in Washington D.C.

Advanced Quantitative Methods. The UCLA Graduate School of Education and Informatics has a doctoral program named Advanced Quantitative Methods (AQM) that focuses entirely on creating “expert methodologists well trained in substantive education areas and educational policy issues,” where advanced mathematics are at the core of all courses. While all doctoral programs require a common level of expertise in statistical analysis and study design, the UCLA program advertises opportunities beyond the common training to forge a path toward “rigorous educational research.” The program of

study for the degree does not include any course descriptions for education policy courses and instead focuses on modeling, analysis, assessment, and surveys. The website for the AQM program indicated that it is supported by the Institute of Education Sciences (IES) and the U.S. Department of Education. An affiliation with such large federal granting agencies is also quite unique among the EPS programs reviewed. An additional feature to note in the AQM program is that doctoral students in other PhD programs are allowed to join the AQM program once their course work is completed in their home department in order to gain additional statistical expertise. According to the website, the programs, which are considered complimentary to the two-year AQM education doctoral program, are: Biostatistics, Statistics, Social Welfare, Public Policy, Sociology, Education, Economics, and Psychology. While the AQM program is not aligned with the remaining EPS programs reviewed, it can be inferred that the program received a Specialty Ranking nomination in the U.S. News & World Report ranking in Education Policy based on its placement in the graduate college of education, and the program aims to influence education policy through statistics and the faculty affiliated within it.

Training Outside the College of Education. As noted previously, most programs describe an interdisciplinary approach to training EPS students (91%, see Table 3). However, two programs are highlighted in the findings, as they *require* students to fulfill an expertise in a discipline other than education before a doctoral degree in EPS will be awarded. At Stanford, for example, students must obtain a PhD minor that includes substantial coursework outside of the program. The website for the program describes the requirement as follows:

Students who have not earned, and do not plan to pursue, a relevant discipline-based master's degree from outside the field of Education are required to earn a doctoral minor outside of the GSE. The PhD minor must be in an acceptable field relevant to the student's degree program. The only exceptions to this requirement are when students enter the GSE with an earned master's or doctorate degree from a cognate discipline that fulfills the purpose of this requirement, or when a student pursues a Stanford master's degree outside of the GSE concurrently with her or his PhD program at the School of Education. Many Education doctoral students decide to earn a Stanford master's degree concurrently (outside of Education) instead of opting for the PhD minor ("SHIPS," 2013).

In addition to the option of a PhD minor, students can obtain a joint degree in Quantitative Education Policy Analysis. The program is funded by a five-year training grant from IES and the U.S. Department of Education, similar to that found at ULCA and other institutions. As noted on the program website, students are offered a wide range of opportunities to diversify their traditional PhD degree in Education Policy:

PhD students in the program participate in an interdisciplinary core curriculum consisting of coursework in education policy, discipline based theory, and applied quantitative research methods, including a 1 year course in methods of applied quantitative policy analysis, and an ongoing interdisciplinary workshop in quantitative education policy analysis. Students receive additional training through research apprenticeships with core faculty in the training program, a series of annual summer advanced training workshops, participation in the Methods of Analysis Program in the Social Sciences (MAPSS), an ongoing education policy analysis speaker series, and a series of annual conferences on education policy analysis ("CEPA," 2013).

The University of Wisconsin-Madison similarly requires an external minor in addition to the required coursework within the GSE. The program lists the minor as a "concentration" within the PhD program and demonstrated competency in the minor area is tested during the preliminary or comprehensive exams required before the student embarks on dissertation work. According to the program website, students work with their advisory committee to design a program of study that meets the needs of their education policy studies interest, along with disciplinary breadth that is found outside the

GSE. This level of commitment to disciplinary breadth is an interesting finding when reviewing EPS programs, as most programs boast a commitment to interdisciplinary focus; however, only 2 programs demonstrate that commitment with a requirement that students obtain a portion of coursework outside the GSE.

Teachers College, Columbia University. After a thorough review of data from each program, it became apparent that one program stood apart from the rest. The program at Teachers College, Columbia University demonstrated a unique curriculum for engaging students with policy, as well as an overall emphasis on policy and policymaking that appeared much different than the other schools. Not only was the desire to train students to engage with policy more explicit in their promotional materials, but also the integration of education policy issues was found more consistently throughout the program. From internships to course offerings, the program at Teachers College appeared to have a specific focus on providing students with opportunities to engage with policy in a variety of ways. By conducting a content analysis of course offerings, I reviewed course titles and descriptions and counted the number of courses that included the words “policy,” “politics,” or “policies.” The average number of courses offered among all schools was 8 (see Table 6). While most programs offer courses that, based on course titles and descriptions, focus on education policy issues, the Teachers College program offered nearly 54% more courses than the next largest offering (see Table 6). Therefore, to further investigate how EPS programs promoted the preparation of graduate students to engage with policy and the policymaking process, I conducted an interview with the program contact in the program at Teachers College. This semi-structured interview lasted about 30 minutes and solicited the program contact’s view of the college’s

Education Policy program, the way their graduate students engage in policy, and the motivation for recently revamping their program.

Table 6

Course Titles with “Policy, Politics, Policies” by College

Program Location	Number of Courses with Title of Policy/Politics/Policies
Stanford	8
Harvard	13
Vanderbilt	2
Wisconsin	11
Teachers College	20
Michigan	11
UC Berkeley	7
Penn	10
UCLA	0
Virginia	12
Arizona State	3

From the website, I learned that the Teachers College EPS program is housed within a larger academic department named Education Policy and Social Analysis (EPSA). Within EPSA, there are four programs that have both masters and doctoral degree programs. The department recently separated their graduate degrees to remove duplication and provide clear focus for each (Interview, 2014). EPSA currently offers the

following four degrees: 1) Economics and Education, 2) Education Policy, 3) Politics and Education, and 4) Sociology and Education. For the purposes of this study, the Education Policy program was the obvious choice for review.

Overall, the interview data pointed to findings from the website and content analysis data as it related to the program description and the influential presence of research centers within the college. In addition, the interview data supported a few of the content analysis themes related to doctoral preparation in EPS and training students to engage with policy. Related to faculty in EPS programs, interview data pointed to findings that the professional interests, previous training, and current experience of the EPS faculty could have an important impact on *if* and *how* students are trained to engage with policy. Additionally, the interview data pointed to the idea that research centers, especially when they are involved in research dissemination, could provide students with unique opportunities to interact with policy issues. The interview data reflected that students, as consumers of the EPS graduate degree, could serve as influential instruments in measuring and improving program goals. An example of this considered student satisfaction as it related to engaging with policy and the applied nature of the Teachers College program. The program contact remarked at the beginning of our interview, when I described the study and requested a more detailed picture of how students in the Teachers College program engage with policy:

It's interesting that you're asking this because it's actually something that we're working on right now, and to make that even more explicit. And it is as a result from many of our students because our students continually tell us that they knew this program was going to be applied. But they've been more pleasantly surprised to learn how much it really is applied because it is the application of that knowledge that is really making what they are learning more concrete for them, making it a tool that they feel they actually can activate rather than just some

abstract knowledge that they have to bank. (Teachers College, personal communication, March 13, 2014)

Student interest in engaging more with policy and requesting more opportunity to apply their knowledge in diverse settings led me to probe deeper about the motivations behind the restructuring of the Teachers College program in 2011.

The interview with the program contact at Teachers College also provided additional insight into how their EPS program incorporated the application of knowledge into the preparation of scholars through their Program of Study. When describing the program, the interviewee commented:

One of the principle aims, obviously, is to first train students in understanding research and the theory that informs research and then how to actually apply that to contemporary policy problems. So the training there is still grounded in a very similar training that you're going to get in almost any program. But I think that one of our most important objectives is that students are well versed in how to actually apply that knowledge. In other words, taking it from the abstract of what research actually becomes or is, and understanding how you use evidence to mobilize arguments or to mobilize policy briefs or whatever it is that may draw recommendations on how to move forward with, or change, or reform existing school policies. (Teachers College, personal communication, March 13, 2014)

The aim of this project was to gain a better understanding of how EPS programs prepare graduates to engage with policy and the policymaking process. Based on research questions that probed EPS programs, the curriculum and environment for doctoral preparation as well as faculty influence, the findings suggest that students do have the opportunity to engage with policy and the policymaking process. Unfortunately, however, most EPS programs have not documented in their promotional materials the full potential for students to engage with policy, noting only 1 exception among the 11 programs reviewed. In chapter 5 of this dissertation, I discuss in further detail the ways in which programs have successfully integrated the training of doctoral students in the

engagement of policy and the policymaking process. The following chapter also includes discussion regarding the unique factor faculty research plays in fulfilling program goals and furthering doctoral preparation in EPS.

CHAPTER 5

DISCUSSION

The primary objective of this project was to explore Education Policy Studies (EPS) doctoral program promotional materials in order to better understand how these programs describe their training of scholars to engage with education policy and the policymaking process. I selected the top 10 EPS programs in the nation along with my own institution of study (Arizona State University). By reviewing websites, I found that programs promote their training to students in similar ways for similar careers and uphold similar goals in the subfield of EPS. Ultimately, the program materials revealed that while these programs advertise formalized training in research methods and scholarly pursuits, opportunities to actively engage with policymaking were missing from the materials. Instead, it is more likely that *informal* opportunities, such as apprenticeships and working at research centers, provide students with the chance to engage with policy. Without formalized mechanisms for students to engage with the policymaking process, it is difficult to discern how students receive training to impact education policy.

This chapter includes a detailed discussion of the formalized mechanisms described in EPS program materials to provide training opportunities to students. The content analysis data provide valuable information on the types of careers that programs tend to prepare students for and the important role that faculty interests play in the student training experience related to student engagement with policy. A couple of programs stood out as particularly unique in both their described approach to EPS training and the opportunities they provide for students as a whole. Further research into

those programs and the potential impact of their formalized approach may provide insight into doctoral preparation for future and current EPS programs.

Formal and Informal Training

After reviewing the website content and conducting an interview with a professor and program leader at a college that clearly advertised the training of students to activate their knowledge through policy engagement, it appears that faculty interests and research centers may be the key to providing advanced training to students within the current academic paradigm. The formal ways that programs prepare doctorates is interpreted in this study as the descriptive content that is included on their websites. Examples of formalized training can be found in a program's curriculum, program of study, courses and course descriptions, apprenticeships, program descriptions, and promotional materials that include discussion of doctoral preparation. In contrast, informal training is the doctoral preparation that takes place in programs but is not a formalized, documented, or official part of the student's training. For example, at Teachers College, Columbia University (Teachers College), students are given the opportunity to engage with policy and policymaking through work in research centers, though it is not openly promoted on their website as a key feature to student training. It is possible that other programs in the sample might provide similar options to student but have not yet formalized the opportunity as an explicit part of their program of study or curriculum. Similarly, the type of research that faculty conduct and the ways in which they interact with education policy could be described as formal opportunities for students to engage with policy. The formal aspect of such training to date has been interpreted as "mentoring" in academic literature; however, a more thoughtful approach might include formalizing those

opportunities in order to capitalize on the student experience. This study found that student engagement with policy tended to fall into the “informal” category, and the website materials made scant mention of engaging students with policy under formalized conditions. Website materials did, however, address the desire to influence policy and provide students with skills in conducting and producing valuable research.

Training Students to Influence Policy

Just over half of the programs expressed an interest in a theme that emerged from the program aims data: the desire to influence or shape organizations and education policy. It is interesting to note that this programmatic goal is tied directly with the third research question regarding the engagement of students with policy and the interdisciplinary training focus of programs. Indeed, it is not coincidental that each of the programs that asserted a goal of influencing or shaping policy also included an interdisciplinary approach to training EPS students and also demonstrated some level of opportunity for student engagement with policy, as the goal and the approach to scholarship go hand in hand. Overall, and consistent with the review of education policy issues in the literature (Henig 2008; Schwartz & Kardos, 2009; Sundquist, 1979; Weiss, 1977, 1979), the EPS programs provided statements acknowledging that problems in education are complex and that advanced analytic skills are required in order to provide creative and beneficial solutions to policymakers. When promoting the goal of influencing policy, Stanford University discussed training students for a variety of careers and that each career would promote leaders who make an impact in both organizations and in policy outcomes. Similarly, the University of California, Berkeley promoted a desire to impact education policy through both theoretical training and empirical

research. The desire to impact policy through research was present in most all website materials for each program.

To train students to “impact,” “influence,” and “shape” policy are all fairly lofty goals for an EPS graduate program. Such goals, if well executed, could create a stunning transformation in the policymaking process for education. However, based on their promotional materials, very few programs demonstrate formal opportunities for their students to engage in such a way that would facilitate the ability to successfully carry out the goal of impacting, influencing, or shaping policy. In fact, only one program demonstrated several ways in which their students formally engage with policy as part of their program of study. If programs intend to impact, influence, and shape policy, as is reflected in nearly half of the programs’ promotional materials, I am left to question how they do so without including a curriculum that more explicitly differs from any standard doctoral program where students simply take courses, complete exams, and write a dissertation. In some cases, the apprenticeship-mentor model might serve as a space for training students to engage with policy, but again this was not made explicit in their promotional materials and would depend greatly on the type, level, and influence of the faculty mentor.

Training Students to Conduct Research

The first and strongest theme that emerged from the review of programs was the goal of producing or conducting research on educational issues. Programs asserted this goal using variations on the following terms: *examine, analyze, investigate, and evaluate*. While this goal emerged clearly from each program, it is not surprising for EPS programs; however, what was interesting to note is how programs formally demonstrated

the means of carrying out the goal of training students to produce or conduct research. Most programs (8 out of 11) provided evidence of training students to produce research in very similar ways, which included a core curriculum with various methods courses, a research apprenticeship, and an assigned faculty mentor. However, a few programs differed in their approach to how they strive to reach the same goals.

The most distinct program among the 11 belongs to UCLA. The main reason that this program is so easily differentiated is because it does not offer an EPS program. Though I used purposeful sampling techniques to select EPS programs based on their ranking in the top ten for the U.S. News & World Report, this ranking system was solely based on nomination. UCLA received sufficient nominations to be in the top ten rankings, which is indeed well above the tenth ranking despite not having a program titled “Education Policy.” The decision to keep the UCLA program in the study came with careful consideration, and fortunately, the addition contributes interesting data to the overall findings. Mainly, with the inclusion of this program, I learned that despite the missing similarities in their approach to training scholars, the UCLA program also seeks to produce or conduct research to inform education policy; however, its method is from an entirely statistical perspective. As the title suggests, the UCLA’s Advanced Quantitative Methods in Education Research (AQM) program is mainly focused on training students to become experts in advanced statistical methods. Additionally, the program goals include declarations that are directly related to education policy and assert the goal of using “rigorous research” that provides useful information to practitioners and policymakers (“AQM Program Goals,” 2013). The focus on statistical methods with a limited concentration on broad educational issues is a feature that distinguishes this

program from the rest. An emphasis on quantitative statistics in education policy is not new, and it aligns in many ways with the current movement toward standardized testing and evaluation that currently dominates many education policy discussions at the local and national levels.

The increased focus on the use of quantitative measures in research could explain the existence and popularity of the doctoral program at UCLA as well as its connection to EPS. It is worth noting as well that the AQM initiative receives funding from the U.S. Department of Education through their Institute for Education Sciences. Nonetheless, if the program does not provide additional training related to policymaking, then one criticism could be that strong statistical acumen alone may not provide sufficient opportunity for students to *engage with* policy and the policymaking process. In fact, it is often a criticism among scholars that statistics alone cannot provide sufficient information to make policy decisions (Blaug, 1985; Berliner, 2002; Labaree, 2004). While the AQM approach to training EPS scholars is unique among the sample, the program itself does not score highly in the findings as formally engaging students with policy based on website materials.

Interdisciplinary Training

Most programs (91%) indicated the importance of interdisciplinary training for EPS students. This theme is interpreted as a formal display of a program using multiple disciplines to train students and supports the idea that the subfield of education is frequently left to borrow or comingle epistemology from other established disciplines in order to examine and evaluate education policy issues (see Chapter 2; Clifford & Guthrie, 1988). The descriptions of interdisciplinary programs include providing students with

“[i]nterdisciplinary methods for field-based education research” (University of Pennsylvania) and requiring advanced courses for students to examine policy and politics “through the disciplines of political science, economics, and political economy, with the understanding that educational policies spring from and then influence the distribution of resources, power, and opportunities in society” (University of California, Berkeley).

The use of multiple disciplines to examine education problems has historically been deemed as problematic. In the past, the academy has historically produced scholars who are trained in a single discipline and who are seen as experts in that particular field, which may, in fact, be seen as a chief goal of the university system. However, when multiple disciplines are used in scholarly work, they may be criticized in what has been referred to as “paradigm wars” for straying from their parent discipline (Page, 2001). Nevertheless, there appears to be a change afoot in practice-oriented programs, such as that of EPS, where future scholars are rarely trained in a “parent discipline” as an area of expertise (Labaree, 2004). Instead, as is demonstrated here, they receive training that dabbles in several disciplines. The variety of “lenses” is seen as an asset in evaluating education policy issues (Labaree, 2004). Though all of the programs asserted some form of using an interdisciplinary approach, two programs in particular *required* that their graduates achieve demonstrated breadth in their coursework through a minor degree from another college within their university. The program at Stanford uses a framework where students must either obtain a master’s degree from another college or obtain a PhD minor. Similarly, the program at the Wisconsin-Madison requires an external minor degree as part of the PhD program. Training in a doctoral program that includes academic breadth is not a new concept; however, the history of education and EPS programs

(Clifford & Guthrie, 1988; Shulman, 2006) as well as criticisms regarding rigor (Levine, 2007; Ball, 1995; Ball & Shilling, 1994; Townsend & Robinson, 1994) make the inclusion of several disciplines in the training of education doctorates a difficult approach to balance. While the literature supports the idea that education problems cannot be solved through a single approach, using an interdisciplinary approach to training scholars leaves graduates in a middle ground without a strong foundation in an established discipline (Hess, 2008; Labaree, 2004; Ball & Forzani, 2007).

One way to strengthen the disciplinary training of students would be to require substantial breadth in another discipline as is seen in the findings from the programs at Stanford and Wisconsin-Madison. These programs require an external minor in which students are required to “demonstrate competence” in both the degree and external minor fields and are more likely to receive training this way from different disciplinary approaches. Such programs could be seen as a practical middle-ground for the solution suggested by Clifford and Guthrie in their 1988 book, *The Trouble with Ed Schools*, where they advocated that only the EdD degree be offered at the doctoral level in education and a secondary doctorate be earned in the “disciplinary cognate” for education research that involved training outside of pedagogical theories alone. While the dissolution of the PhD in education is unlikely, requiring academic breadth does provide students with the possibility of a stronger foundation in an interdisciplinary approach to EPS. For example, a degree minor in a school of public policy or political science might provide students with additional opportunities to engage with policy in new and different ways than is possible in graduate schools of education alone. In fact, a few of the schools

offered joint degrees and course offerings in schools of public policy and law, though none made it a requirement for the EPS degree.

Career Preparation

Career preparation is an important aspect of all graduate programs. Literature regarding doctoral preparation has increased in the past decade as university jobs become scarce and the needs of the workforce are changing rapidly (Golde, 2006; Nyquist & Woodford, 2000). It is no longer the expectation nor the reality that doctoral degrees prepare graduates for jobs only as university professors. However, while the training of EPS scholars appears to offer a few options to graduates, based on data from this study, the training of scholars has not formally adapted to prepare graduates for alternative careers. In fact, much of academia has yet to evolve in the way doctorates are prepared for careers outside of the university setting (Golde, 2006; Nyquist & Woodford, 2000).

The findings for this study demonstrate that the 11 EPS programs advertise the goal to train students for careers in three main areas: university faculty, research scientists/policy analysts, and school/government officials. As expected, all programs (100%) stated that career preparation for EPS graduates included training to become university faculty members. The programs of study for all the EPS programs followed a pathway consistent with the training of future faculty members, utilizing a core set of coursework, teaching responsibilities, and a mentoring model for student socialization and research training. The mentoring model is the most commonly used model for preparation of future faculty and, in fact, is the main model used regardless of the career path of the student (Nyquist & Woodford, 2000). The third most commonly cited career path is that of a school or government official. Some EPS programs included this career

as an option; however, there did not appear to be a differentiation in how students were trained for such a career. In some cases, the career path became evident only by including it in the list of alumni. Overall, there was limited information on the program websites to ascertain how the pathway toward a career in the school system or government promoted engagement with policy.

Since all programs asserted the goal of producing or conducting education research, it is not surprising that the findings show that all programs also seek to train students for professional roles in research. Research scientist, researcher, policy analyst, and policy advisor all emerged as possible career paths for EPS graduates. In preparing students for such professional roles, many programs offer multiple methods courses as well as coursework with titles such as *Policy Analysis in Education*, *The Practice of Education Policy Analysis*, *Program Evaluation*, *Introduction to the Development and Implementation of Education Policy*, *Data analysis for Policy and Decision Making*, and others like them. A common feature for programs is a required internship or apprenticeship conducting research. Most programs reference the need to work under the mentorship of a faculty member with a similar research interest as the students.

It is clear from the literature that the preparation of education scholars is marred with criticism (Levine, 2007; Capraro & Thompson, 2008; Dill & Morrison; Paul & Marfo, 2001; Boote & Beile, 2005). The greatest criticism in the preparation of education scholars is the methodological training, or lack thereof. The criticisms name differences in research methodology regarding quantitative and qualitative approaches as well as a lack of rigor in either methodology. Though such criticisms have not yet surfaced in the literature specific to EPS graduates, rigor in methodology training would logically be

prevalent if the career goal of an EPS program is to train graduates to be “research scientists.” Although the level of rigor cannot be assessed in a content analysis of program promotional materials, it is still worth noting that all programs displayed the requirements of several methods courses and nearly all required some sort of research internship or apprenticeship. Course requirements and additional coursework in methods may not assuage the critics of doctoral preparation in education PhDs; however, it appears that programs may be responding to criticisms by including additional methods coursework and requirements to the programs of study.

Engagement with Policy

At the crux of this project is the desire to learn more about how EPS programs describe the training of students to engage with education policy and the policymaking process. By reviewing program materials, I was able to assess the formal ways that programs provide opportunities for students to engage with policy. The findings reveal that students in these EPS programs advertise that students receive training to engage with policy through the following ways: 1) coursework and classes involving discussions of education policy issues, 2) faculty exposure using their own research work, 3) colloquia and symposiums, and finally, 4) internships and apprenticeships where students have the opportunity to interact with policy and policymaking, depending on the mentor’s experience and involvement.

Coursework and Classes. One of the most prevalent ways that programs promoted student engagement with policy was through coursework and classes. Courses contained a variety of topics, approaches, and concentrations. The level of engagement with policy through coursework and classes is minimal. While students will have the

opportunity to read about policy and the process, that level of exposure is arguably insufficient to train students to be experts in the policymaking process. However, coursework and classroom time is the traditional academic setting in which to provide doctoral education. It is also most likely the way that those teaching the courses received their training as well. A strength that emerged from the review of programs regarding coursework is the flexibility that several programs displayed in the programs of study. For example, many programs promoted the feature of permitting students to create an individualized program of study once core coursework was complete. Allowing such freedom to select courses, along with close guidance from a mentor, could provide for a unique and fulfilling experience for students. It also lends to the interdisciplinary approach seen in several of the programs. As discussed, there are both perceived benefits and criticisms in using an interdisciplinary approach in doctoral preparation. Programs frequently cited the benefit of working in a single topic area, creating a “specialization” in an individualized program of study. Under the close direction of a faculty mentor, such training could be quite beneficial. Coursework and classroom time is the most traditional approach to exposing students to education policy (Golde & Walker, 2006), and unfortunately it is the only way in which some programs document formal ways of providing training to students regarding education policy on their websites. As a singular approach to exposing students to education policy, however, it is perhaps inadequate.

Symposia or Colloquia. Nearly half of the programs’ websites included detail of well-established symposia, conferences, or colloquia series, specifically designed to connect students and faculty with policy issues. Symposium events potentially provide students with exposure to highly accomplished scholars that they may not otherwise

connect with (for example, see Arizona State University). Conferences allow for collaboration with diverse stakeholders, policymakers, and community members (for example, see University of Virginia, Curry). “Brown bag seminars,” where students and mentors meet to discuss various topics, also provide an opportunity for students to interact with policy issues in creative ways that differ from classroom teachings. Each of these modes of interaction provides another way for programs to expose students to policy and policymakers; however, it too has a limited impact in providing engagement for students. While students may be able to ask questions or touch on subject matter in the group setting, they are not afforded the opportunity to interact with policy issues or apply original research during the limited interaction of a colloquium or conference. Moreover, without group activities such as a symposium being integrated into the overall curriculum, other limited interactivity does not provide sufficient opportunity for students to practice or activate their learning.

Apprenticeships & Faculty Mentoring. Classroom time and symposia provide exposure to policy but with very limited levels of interaction with policy and the policymaking process. The second theme to emerge from the review of data goes beyond exposure and offers a higher level of engagement. Some programs highlight an affiliation with faculty research centers, institutes, and funded research projects where students have an opportunity to interact with policy research through specific faculty projects. For example, at the University of Virginia, Curry School of Education, students are matched with faculty based on research interests.

Though not all faculty research will involve engagement with policy, many programs still promote the feature of faculty research as part of their curriculum. This is

likely because most programs do not draw a strong distinction between research on policy issues and engagement with policy. However, the difference becomes more apparent when thinking in terms of doctoral preparation. For example, training a student to conduct research on a topic within education, such as defining an optimal class size for a high school classroom, will look quite different than training a student to engage in the policymaking process where they use their research as a tool of influence through writing policy briefs or meeting with policymakers in order to change the policy regarding class size. In the first scenario, the student learns to conduct research, and in the second, the student learns to engage in the policymaking process using their research. While some programs are including the second scenario as part of their doctoral student preparation, most have not yet promoted this type of training as part of a formalized curriculum on their website.

Similar to faculty mentoring, apprenticeships and internships also provide more than just exposure, and in some cases, they can also provide opportunities engagement. Half of the programs (50%) in this study promote the inclusion of an apprenticeship model, where a portion of their program, or at least a single class, requires an apprenticeship with an assigned mentor. In some cases, this model is used as a promotional feature of the program to recruit students (for example, see University of Pennsylvania). In each case where the apprenticeship model is promoted, the emphasis for training is on the ability for students to interact with research and their faculty mentor in a more independent setting. When developing skills as EPS scientists, such an apprenticeship is obviously beneficial.

The apprenticeship model has long been held as the standard in doctoral preparation for connecting students with research in ways to go beyond classroom training. In fact, the work of Golde and Walker concluded that the apprenticeship model is the signature pedagogy for doctoral preparation (Golde & Walker, 2006; Walker, Golde, Jones, Bueschel, & Hutchings, 2007). For the purposes of this exploratory study, the apprenticeship model serves as one of the few ways where students may have the opportunity to engage with policy. In fact, aside from the program at Teachers College, none of the programs promoted the use of apprenticeships to engage with policy in addition to research on their websites.

The Case of Teachers College, Columbia University. Based on the content analysis of program materials, Teachers College, Columbia University (Teachers College) provides the most unique opportunities for students to formally engage with education policy and policymaking. Additionally, Teachers College reported a recent restructuring of EPS graduate programs with a revived and more formalized focus on the translation of research in education policy. Therefore, after careful consideration I decided to conduct an interview with Teachers College program leadership to gain additional insight into how the program prepares students, what may have motivated the recent change in the program, and if that change included any discussion of students engaging with policy. The interview with Teachers College points to several findings from the content analysis data. More importantly, however, it added depth and context to the potential importance of research centers while also uncovering the prospective significance of faculty training and prior experience.

When reviewing the Teachers College webpages, it became evident that the department was committed to education policy in a way that is promoted differently from most of the programs reviewed for this study. The welcome message discussed the diversity and complexity of education issues in a way similar to most of the other programs; however, the topic of *research translation* was incorporated directly into the welcome statement and was connected with student training. Research translation, or the transfer of knowledge to broader audiences, such as the general public, along with policymakers is frequently cited as a solution to the research-policy gap (Knight & Lightowler, 2010; Phipps & Morton, 2013; Sa, 2011, Sundquist, 1978; Weiss, 1977, 1979; Whitchurch, 2009). An excerpt from the welcome statement indicates that a goal of the department is to train students to use research to impact policy, where the training includes making research translation “an explicit object of study and discussion, with the goal of training scholars, researchers, and policy leaders who can draw the links between theoretical models and important practical considerations that more abstract analyses sometimes miss” (“Welcome to EPSA,” 2013). This level of commitment in training students to translate research is seen throughout the website for the department and the EPS program. A prime example of this is the Federal Policy Institute (FPI), which is a week long training experience in Washington D.C. where students work with real-world scenarios that are then later linked to their curriculum through a follow-up session upon returning to campus (EPSA Courses, 2013). The FPI is an example of student engagement with policy and the policymaking process. In my review of programs, the Teachers College program was the only one that promoted a training feature which took students outside of the classroom and connected them with policymakers and policy

issues in such a way that allowed for engagement. The commitment to training students in how to apply their knowledge is one of the greatest standouts from the program at Teachers College. It incorporates the application of knowledge and research throughout the curriculum, and it also requires a certain level of commitment, expertise, and support from the faculty.

During the interview, I probed further into the topic of faculty contributions to training students in the art of research translation. The themes of faculty interests, professional experience, and prior training emerged as topics related to formal program development in doctoral preparation, especially as it connected to training students to apply research. While academic training has a signature pedagogy with coursework and apprenticeships (Walker, Golde, Jones, Bueschel, & Hutchings, 2007), the faculty contributions can serve as an influential factor when designing programs for graduate students. When considering EPS programs and doctoral preparation, faculty can have a critical impact on *if* and *how* students are trained to engage with policy. If, for example, the faculty designing or implementing an EPS doctoral program received their training in an environment that focused on the application of research knowledge, they may be more likely to create a corresponding focus for their students. Similarly, if faculty are involved in translating their own research for policymakers or if their research focus encompasses the frequent application of knowledge in non-academic settings, the likelihood that they will incorporate the need for application into the training of their students is higher than otherwise might be present. In the case of Teachers College, as noted by the program leadership, the restructuring of their programs “could have been a result of our own experiences, and of our own applied policy program at the doctoral level that informed

how we created this program” (Teachers College, personal communication, March 13, 2014).

Aside from coursework, symposia, and apprenticeships, a review of the program websites revealed that students could also access the opportunity to engage with policy through research centers and institutes. During the interview, the program leadership at Teachers College discussed that doctoral students have “quite a few opportunities to work at the many research centers we have on campus, we have at least four centers that do policy related work” (Teachers College, personal communication, March 13, 2014). In fact, students may find that their skills in disseminating research are best practiced in the setting of a research center, especially when the function of the center is to conduct work in education policy. While student experiences working within the research center are not an explicit part of the curriculum at Teachers College, it becomes an implicit part of the training for students (Teachers College, personal communication, March 13, 2014). Three other programs mention research centers on their websites as a beneficial part of their program, though none of them list centers as a formal part of doctoral training. If student participation in research centers is an effective tool in doctoral preparation where students are able to activate knowledge and engage in the policymaking process, why is such participation not a more explicit part of the training? It is possible that the role of research centers in doctoral preparation has been underestimated as something that should be formalized into the curriculum.

Centers and Institutes

Many colleges have a separate location on their website where centers and/or institutes are listed. Generally, a link and possibly a logo for the center will be displayed

on a program's webpage that leads the consumer to where the center's research and mission are promoted. Some program websites also mention centers and the work of their faculty within those centers as an important aspect of their programs. When students have a chance to work within the centers on policy related projects, an opportunity for engagement begins (Carcasson, 2010).

The purpose and function of centers and institutes is multifold and not without controversy (Boardman & Bozeman, 2007; Carcasson, 2010; Mallon, 2004; Stahler & Tash, 1994; McCarthy, 1990). Centers are frequently funded externally through grants or large gifts, and some have been given the explicit purpose to disseminate research or foster collaboration among various constituencies. The data gathered in this study demonstrated that centers in the same college where EPS programs are housed encompass a wide range of educational issues. While not all centers interact with the policymaking process, it is not uncommon that some will, especially in EPS programs where the college mission includes the desire to influence policy. According to Carcasson (2010) and McCarthy (1990), centers have the potential to become influential components in both university campuses and communities at large in ways that many have yet to activate. With the unique location and often neutral funding mechanism, as Carcasson (2010) points out, "centers can serve as critical 'hubs' of democracy that provide the necessary impartial resources and process expertise to connect experts, institutional decision makers, and the public in ways that democracy currently sorely lacks, but clearly requires to function well" (p. 51-52). Centers and institutes serve not only to fulfill their own missions, but also potentially as an embedded training ground for budding scholars. While training is not often an explicit goal in these centers, the

opportunity for students to engage with policy in EPS programs where a center or institute is also located is promising. Only a few of the programs reviewed in this sample made mention of the use of centers and institutes as a place of growth for students. Instead, it is likely that when students work on projects at a university center or institute, their training takes place informally. The interview with Teachers College revealed that informal training takes place in their program in a similar way:

[O]ur centers are quite involved in these broader debates. So, and as a result, our students get to participate in that exposure. And I think for our doc students, if those centers didn't exist, they would still get some of that level of training in the process of disseminating work, etcetera, with individual work with faculty, but not at the same scale (Teachers College, personal communication, March 13, 2014).

The use of centers in doctoral preparation is not new. Carcasson (2010) discussed the role of campus-based centers in facilitating democracy and enabling solutions in the community. Though the goal of EPS centers may not be to explicitly facilitate democracy, much of Carcasson's observations apply to education policy problem solving as well. He discussed the involvement of students in centers and the potential for centers to serve as a training ground for practical experience. For example, some, though not all centers on campus utilize students to create a win-win scenario, where the student benefits from a practical "real world" experience and the center gains helpful resources to carry out their mission. Distinguishing between what is formal and informal in doctoral preparation may be vital in understanding how EPS students are trained to engage with policy.

Questions for Future Research

What is the Role of Research Centers in Preparing Graduate Students to Engage with Policy? In this study, programs that promoted the existence of research

centers or institutes also asserted the goal of influencing, shaping, or impacting policy. The interview data and the literature also reflect a connection between centers or institutes and the opportunity for students to gain considerable “hands-on” training (Carcasson, 2010). Nearly all of the programs reviewed in this sample have at least one, if not several research centers or institutes within their college or GSE. Aside from a small handful of programs, the mention of centers as part of the curriculum was not apparent. While this does not necessarily indicate that centers are not used in the programs as part of doctoral preparation, it does leave to question why the centers are not more overtly promoted to potential students as a formalized training resource for students, especially for programs that aim to influence policy. This is largely true for centers that have a mission to disseminate research or serve as an intermediary between research and policymaking.

How Can Potential Students Learn About EPS Program Training and Engagement Opportunities? There is currently a gap in the literature in education policy studies regarding doctoral preparation. There is considerable discussion regarding the preparation of education researchers; however, missing from this discussion is how to improve doctoral preparation for future EPS scholars who aim to more directly or more interactively influence education policy with their research. Several scholars have observed and documented the gap between research and policy (Backer, 1991; Ball, 1998; Firestone, 1989; Hood, 2002; Kirst & Mosher, 1969; Knight & Lightowler, 2010; Lagemann, 1997; Marshall, 1988; McDonnell, 1988; Pauly, 1978; Snow, 1959; Weiss, 1977, 1979; Whitchurch, 2009); however, there has yet to be much discussion in EPS regarding the ways in which scholars may need to evolve in order to bridge the gap. It

appears that of the EPS programs reviewed in this sample, just over half (55%) promote a goal of influencing policy; unfortunately, the description of training appears to stop there, as only 1 program promotes formal ways of training students that will more actively facilitate that goal or program aim. This exploratory evidence indicates the need to expand the conversation in EPS to include more discussion of policy engagement in doctoral preparation, reevaluate EPS program aims in preparing students, or promote more formalized opportunities for students to engage with policy. Doing so will provide potential students with sufficient information to select a program that will more effectively meet their career needs. Based on the literature, the goal of influencing policy is on par with what is needed to advance the field and improve educational outcomes in our communities. Therefore the next logical step is not to abandon the goal of influencing policy, but instead to reevaluate the way we promote the preparation of scholars in order to formalize training that gives them the proper tools to shape policies, an initiative that will ultimately improve educational outcomes. Noteworthy programs in this study include an apprenticeship-mentor model, which gives students the opportunity to engage in the policy process. Should all programs do the same if they aim to train students to influence, impact, and shape the policy landscape?

Moreover, if training students to engage in policy and policymaking is the future evolution in EPS, who should do the training? When faculty mentors themselves engage in the policy process, either through their research or through activism, is the opportunity ripe for students to engage as well? Historically, the traditional approach to doctoral education does not include training outside of conducting research and publishing in academic journals (Aanerud, Homer, Nerad & Cerny, 2006; Golde & Dore, 2004;

Nyquist & Woodford, 2000). Yet, the program goal of influencing or shaping policy goes beyond the traditional approach and incorporates a more active role. Without faculty who has explicit experience in reaching beyond the traditional academic role, how would students learn such skills within the curriculum of their EPS doctoral program?

Advantages and Limitations to the Study

This study used content analysis of program materials to explore and analyze how EPS doctoral students were being trained to engage with policy in the top 10 ranked schools as well as Arizona State University. Although this examination was thorough, the model had some limitations. One limitation may be in the sampling criteria used to select the EPS programs. Despite the inherent subjectivity of a nomination-based ranking system, this source served as an ideal starting point for examining EPS programs, as it narrowed the programs down to a small but manageable sample. However, a small sample of 11 cannot necessarily provide a platform for strong generalizations regarding all EPS programs in the United States.

Based on feasibility as well as a pilot project I conducted in 2010 regarding EPS programs, I concluded that access to data regarding program characteristics was readily and publicly available. Of note, however, is that websites are not exhaustive in providing details about a program. To overcome this potential limitation, I decided to include a second set of data in the form of a personal interview to gather additional insight into programs. Therefore, after concluding that one particular program demonstrated unique and remarkable characteristics specific to engaging students with policy, I interviewed the program contact to learn more about the program. This interview was insightful, and future studies might benefit from interviews with EPS program personnel.

Implications

The exploratory nature of this study provides a starting point for those who are interested in EPS doctoral preparation, those who seek to learn more about the scholarly training of knowledge brokers, and possible future directions for connecting students with the training in the practical application of research in policymaking. Students wanting to obtain a PhD with the purpose of influencing policy through their work may benefit from this research when deciding where to seek their doctoral training and selecting a program. By exploring how programs train students, I was able to discern important qualities that programs can promote, especially as it relates to both formal and informal training opportunities.

Institutions may benefit from this research as they look toward evolving their programs to examine the formal and informal environment they provide in preparing their doctorates. Making the implicit more explicit may provide opportunity to improve programs so they can attract external funding, especially where organizational missions align, as well as entice more motivated students who seek to create change beyond the academy. EPS program leadership may also benefit from examining the environment for doctoral preparation. For programs that aim to influence policy, it may benefit both the program and the college to examine all aspects in how students are prepared, especially as it relates to formal and informal training. By providing more opportunities for students to engage in the policymaking process, they are not only building capacity in future EPS scholars, they may be changing how education research affects policy.

Students interested in learning about how to effect, engage, or study policy in a program that emphasizes engagement may appreciate this study's findings, as it

highlights aspects of all three of these areas. Though this study includes results from only 11 select programs, higher education institutions may be interested in seeing how their programs compare to others against similar standards. Institutions or program evaluators may also recognize the benefits of understanding how such programs may contribute to the research-policy discussion, especially as it relates to alternate career paths, as such data may provide insight into their own programs and/or students' experiences.

International organizations may be interested in learning the ways doctoral preparation programs in the United States are preparing EPS scholars for diverse and challenging research careers in this highly contested topic area. Finally, anyone interested in looking to higher education and academic scholars as key components of bridging the research-policy gap may be interested in learning more about this group of specialized experts and their graduate preparation experience.

REFERENCES

- Aanerud, R., Homer, L., Nerad, M., & Cerny, J. (2006). Paths and perceptions: Assessing doctoral education using career path analysis. In P. L. Maki, & N. A. Borkowski (Eds.), *The assessment of doctoral education* (pp. 109-140). Sterling: Stylus Publishing, LLC.
- Anderson, D. (1983). Differentiation of the Ed.D. and Ph.D. in education. *Journal of Teacher Education*, 34(3), 55-58.
- Apple, M. (2010). Putting “critical” back into education research. *Educational Researcher*, 39(2), 152-155.
- Austin, A. E., & Wulff, D. H. (2004). *Paths to the professoriate: Strategies for enriching the preparation of future faculty* (1st ed.). San Francisco: Jossey-Bass.
- Backer, T. (1991). Knowledge utilization : The third wave. *Science Communication*, 12(3), 225-240. doi:10.1177/107554709101200303
- Ball, D., & Forzani, F. (2007). 2007 Wallace Foundation distinguished lecture-What makes education "research educational"? *Educational Researcher*, 36(9), 529-540.
- Ball, S. (1995). Intellectuals or technicians? The urgent role of theory in educational studies. *British Journal of Educational Studies*, 43(3), 255-271.
- Ball, S. (1998). Big policies/small world: An introduction to international perspectives in education policy. *Comparative Education*, 34(2), 119-130.
- Ball, S., & Shilling, C. (1994). Guest editorial: At the cross-roads, education policy studies. *British Journal of Educational Studies*, 42(1), 1-5.
- Bass, H. (2006). Developing scholars and professionals: The case of mathematics. In C. M. Golde, & G. E. Walker (Eds.), *Envisioning the future of doctoral preparation* (pp. 101-119). San Francisco: Jossey-Bass.
- Becher, T., & Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines*. London, England: The Society for Research into Higher Education & Open University Press.
- Benneworth, P., & Jongbloed, B. (2010). Who matters to universities? A stakeholder perspective on humanities, arts and social sciences valorisation. *Higher Education*, 59(5), 567-588.
- Berelson, B. (1952). *Content analysis in communications research*. New York: The Free Press.

- Berliner, D. C. (2006). Toward a future as rich as our past. In C. M. Golde, & G. E. Walker (Eds.), *Envisioning the future of doctoral education* (pp. 268). Jossey-Bass.
- Berliner, D. (2002). Educational research: The hardest science of all. *Educational Researcher*, 31(8), 18-20.
- Berliner, D. C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35(5), 463-482. doi:10.1016/S0883-0355(02)00004-6
- Berliner, D. C., & Biddle, B. J. (1995). *The manufactured crisis :Myths, fraud, and the attack on America's public schools*. Reading, Mass.: Addison-Wesley.
- Beyer, J., & Lodahl, T. (1976). A comparative study of patterns of influence in United States and English universities. *Administrative Science Quarterly*, 21(1), 104-129.
- Blaug, M. (1985). Where are we now in the economics of education? *Economics of Education Review*, 4(1), 17-28.
- Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality & Quantity*, , 391.
- Boote, D., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15.
- Borkowski, N. A. (2006). Changing our thinking about assessment at the doctoral level. In P. L. Maki, & N. A. Borkowski (Eds.), *The assessment of doctoral education: Emerging criteria and new models for improving outcomes* (pp. 11-51). Sterling: Stylus Publishing, LLC.
- Brown, L. D. (1990). *A perspective on the Ph.D.-Ed.D. discussion in schools of education*. Distributed by ERIC Clearinghouse.
- Brown, L. D., & Indiana Univ. Foundation, B. (1966). *Doctoral graduates in education. An inquiry into their motives, aspirations, and perceptions of the program*. Distributed by ERIC Clearinghouse.
- Campbell, S. P. (2005). Looking beyond research in doctoral education. *Frontiers in Ecology and the Environment*, 3(3), 153; 153-160; 160.
- Capraro, R. (2008). The educational researcher defined: What will future researchers be trained to do? *The Journal of Educational Research*, 101(4), 247-253.

- Carcasson, M. (2010). Facilitating democracy: Centers and institutes of public deliberation and collaborative problem solving. *New Directions for Higher Education*, 2010(152), 51-57. doi:10.1002/he.412
- Carnegie initiative on the doctorate (CID). (n.d.). Retrieved July 1, 2013, from <http://www.carnegiefoundation.org/previous-work/professional-graduate-education>
- Carpenter, D. (1987). On-going dialogue: Degrees of difference: The Ph.D. and the Ed.D. *Review of Higher Education*, 10(3), 281-86.
- Cibulka, J. (2001). The changing role of interest groups in education: Nationalization and the new politics of education productivity. *Educational Policy*, 15(1), 12-40.
- Clifford, G., & Guthrie, J. (1988). *Ed school: A brief for professional education*. Chicago, IL: University of Chicago Press.
- Clifford, G. (1986). The formative years of schools of education in America: A five-institution analysis. *American Journal of Education*, 94(4), 427-446.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications, Inc.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, Calif.: SAGE Publications.
- Curry school of education (University of Virginia). (2013). Retrieved October, 2013, from <http://curry.virginia.edu/academics/areas-of-study/education-policy>
- Davies, P. (2000). The relevance of systematic reviews to educational policy and practice. *Oxford Review of Education*, 26(3-4), 365-378.
- Deering, T. (1998). Eliminating the Doctor of Education degree: It's the right thing to do. *The Educational Forum*, 62(3), 243-48.
- Dill, D., & Morrison, J. (1985). EdD and PhD research training in the field of higher education: A survey and a proposal. *Review of Higher Education*, 8(2), 169-86.
- Dorr, A. (2008). Developing the next generation of education researchers: UCLA's experience with the spencer foundation research training grant. *Teachers College Record* (1970), 110(7), 1424-1457.
- Ehrenberg, R. (2005). Method or madness? Inside the U.S. News & World Report college rankings. *Journal of College Admission*, Fall(189), 29.

- Eisenhart, M., & DeHaan, R. (2005). Doctoral preparation of scientifically based education researchers. *Educational Researcher*, 34(4), 3-13.
- Fagen, A., & Suedkamp Wells, K. (2004). The 2000 National Doctoral Program survey: An online study of student's voices. In D. H. Wulff, & A. E. Austin (Eds.), *Paths to the profesoriatae* (pp. 74) Jossey-Bass.
- Farrell, E., & Van der Werf, M. (2007, May 25, 2007). Playing the rankings game. Message posted to <http://chronicle.com/weekly/v53/i38/38a01101.htm>
- Firestone, W., (1989). Educational policy as an ecology of games. *Educational Researcher*, 18(7), 18-24.
- Flannigan, S., & Morse, R. (2013). Methodology: Best education schools rankings. Retrieved April 20, 2013, 2013, from <http://www.usnews.com/education/best-graduate-schools/articles/2013/03/11/methodology-best-education-schools-rankings>
- Glaser, B. (1965). The constant comparative analysis method of qualitative analysis. *Social Problems*, 12(4), 436.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Alpine Publishing.
- Golde, C. M., & Dore, T. M. (2004). The survey of doctoral education and career preparation: The importance of disciplinary contexts. In A. E. Austin, & D. H. Wulff (Eds.), *Paths to the professoriate* (pp. 19). San Francisco, CA: Jossey-Bass.
- Golde, C. M., & Dore, T. M. (n.d.). Survey on doctoral education and career preparation. Retrieved July 7, 2013, from <http://www.phd-survey.org/>
- Golde, C. M., Jones, L., Conklin Beuschel, A., & Walker, G. E. (2006). The challenges of doctoral program assessment: Lessons from the Carnegie initiative on the doctorate. In P. L. Maki, & N. A. Borkowski (Eds.), *The assessment of doctoral education: Emerging criteria and new models for improving outcomes* (pp. 53) Stylus Publishing, LLC.
- Golde, C. (2007). Signature pedagogies in doctoral education: Are they adaptable for the preparation of education researchers? *Educational Researcher*, 36(6), 344-351.
- Golde, C. M., & Dore, T. M. (2001). *At cross purposes: What the experiences of today's doctoral students reveal about doctoral education*. Wisconsin Univ., Madison;: Pew Charitable Trusts.

- Golde, C. M., & Walker, G. E. (2006). *Envisioning the future of doctoral education: Preparing stewards of the discipline, Carnegie essays on the doctorate* (1st ed.). San Francisco, CA: Jossey-Bass.
- Graduate school of education, University of California, Berkeley. (2013). Retrieved October, 2013, from <http://gse.berkeley.edu/policy-organization-measurement-evaluation/policy-and-organizations-research>
- Greene, J., Caracelli, V., & Graham, W. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Education Evaluation and Policy Analysis, 11*(3), 255.
- Haas, P. (2004). When does power listen to truth? A constructivist approach to the policy process. *Journal of European Public Policy, 11*(4), 569-592.
- Hanushek, E., & Welsh, F. (Eds.). (2006). *The handbook of the economics of education* (Vol. 2). Amsterdam, The Netherlands: North-Holland.
- Hanushek, E. (1986). The economics of schooling: Production and efficiency in public schools. *Journal of Economic Literature, 24*(3), 1141-1177.
- Hardy, I. (2009). The politics of educational policy studies: A preliminary analysis of leading educational policy journal publications. *Critical Studies in Education, 50*(2), 173-185.
- Harvard graduate school of education. (2013). Retrieved October, 2013, from <http://www.gse.harvard.edu/academics/doctorate/phd/index.html>
- Hemsley-Brown, J. (2004). Facilitating research utilisation: A cross-sector review of research evidence. *The International Journal of Public Sector Management, 17*(6/7), 534-552.
- Henig, J. (2008). The evolving relationship between researchers and public policy. *Phi Delta Kappan, 89*(5), 357-360.
- Hess, F. (Ed.). (2008). *When research matters: How scholarship influences education policy*. Cambridge, MA: Harvard Education Press.
- Hess, F. (2008). The politics of knowledge. *Phi Delta Kappan, 89*(5), 354-356.
- Hetrick, B., & Van Horn, C. (1988). Educational research information: Meeting the needs of state policymakers. *Theory into Practice, 27*(2), 106-110.

- Hird, J. A. (2005). Policy analysis for what? The effectiveness of nonpartisan policy research organizations. *Policy Studies Journal*, 33(1), 83-105.
- Hood, P. (2002). Perspectives on knowledge utilization in education. *Wested*,
- Howe, K. (2009). Positivist dogmas, rhetoric, and the education science question. *Educational Researcher*, 38(6), 428-440.
- Johnson, R., & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14.
- Judge, H. (1982). *American graduate schools of education: A view from abroad*. New York, NY: Ford Foundation.
- Kang, S., & Norton, H. (2006). Colleges and universities' use of the world wide web: A public relations tool for the digital age. *Public Relations Review*, 32(4), 426. doi:<http://dx.doi.org.ezproxy1.lib.asu.edu/10.1016/j.pubrev.2006.08.003>
- Keller, G. (1985). Trees with no fruit: The problem with research about higher education. *Change*, 17(1), 7.
- Kirst, M. (2000). Bridging education research and education policymaking. *Oxford Review of Education*, 26(3 & 4), 379. doi:10.1080/3054980020001891
- Kirst, M., & Mosher, E. (1969). Politics of education. *Review of Educational Research*, 39(5), 623-640.
- Klees, S. (1986). Planning and policy analysis in education: What can economics tell us? *Comparative Education Review*, 30(4), 574-607.
- Klees, S. (2008). Neoliberalism and education revisited. *Globalisation, Societies and Education*, 6(4), 409-414.
- Knight, C., & Lightowler, C. (2010). Reflections of 'knowledge exchange professionals' in the social sciences: Emerging opportunities and challenges for university-based knowledge brokers. *Evidence & Policy*, 6(4), 543; 543-556; 556.
- Krippendorff, K. (2013). *Content analysis :An introduction to its methodology* (3rd ed.). Thousand Oaks, Calif.; London: Sage Publications.
- Labaree, D. (1997). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal*, 34(1), 39.
- Labaree, D. (2004). *The trouble with ed schools*. Yale University Press.

- Labaree, D. (2003). The peculiar problems of preparing the educational researcher. *Educational Researcher*, 32(4), 13.
- Lagemann, E. (1997). Contested terrain: A history of education research in the United States, 1890-1990. *Educational Researcher*, 26(9), 5-17.
- Lagemann, E. (2000). *An elusive science: The troubling history of education research*. Chicago Distribution Center: University of Chicago Press.
- Lagemann, E., & Shulman, L. (1999). *Issues in education research: Problems and possibilities*. San Francisco, CA: Jossey-Bass.
- Lavis, J., Robertson, D., Woodside, J., McLeod, C., & Abelson, J. (2003). How can research organizations more effectively transfer research knowledge to decision makers? *Milbank Quarterly*, 81(2), 221*248.
- Leonard, J. B. (2006). Doctoral students' perspectives on the dissertation. In P. L. Maki, & N. A. Borkowski (Eds.), *The assessment of doctoral education* (pp. 197) Stylus Publishing, LLC.
- Levine, A. (2007). *Educating researchers*. Princeton, NJ: Educating Schools Project, Woodrow Wilson Foundation.
- Lyon, R. (2002, November). The key to progress in education? Lessons from medicine, welfare, and other fields. *Rigorous Evidence: The Key to Progress in Education*, Washington, DC.
- Maki, P. L. (2006). Introduction. In P. L. Maki, & N. A. Borkowski (Eds.). *The assessment of doctoral education: Emerging criteria and new models for improving outcomes* (pp. 1-9). Sterling: Stylus Publishing, LLC.
- Mallon, W. (2004). Disjointed governance in university centers and institutes. *New Directions for Higher Education*, 127(Autumn (Fall)), 61-74.
- Marfo, K. (2001). Preparation of educational researchers in philosophical foundations of inquiry. *Review of Educational Research*, 71(4), 525-547.
- Marshall, C. (1988). Bridging the chasm between policymakers and educators. *Theory into Practice*, 27(2), 98-105.
- Mary Lou Fulton teachers college. (2013). Retrieved October, 10, 2013, from education.asu.edu/programs

- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 11(3), 7/18/13.
- McCarthy, M. M. (1990). Research news and comment: University-based policy centers: New actors in the education policy arena. *Educational Researcher*, 19(8), 25; 25-29; 29.
- McDonnell, L. (1988). Can education research speak to state policy? *Theory into Practice*, 27(2), 91.
- McDonnell, L. (2009). Repositioning politics in education's circle of knowledge. *Educational Researcher*, 38(6), 417. doi:10.3102/0013189X09342584
- Meredith, M. (2004). Why do universities compete in the ratings game? An empirical analysis of the effects of the U.S. News & World Report college rankings. *Research in Higher Education*, 45(5), 443-461.
- Metz, M. (2001). Intellectual border crossing in graduate education: A report from the field. *Educational Researcher*, 30(5), 1-7.
- Morgan, D. L. (1997). *Focus groups as qualitative research*. (2nd Edition ed.). London: Sage.
- Muir, E. (2000). Social science should be a process, not a bloody shirt. *Political Science and Politics*, 33(2), 225-227.
- Nerad, M., Aanerud, R., & Cerny, J. (2004). "So you want to become a professor!": Lessons from the PhDs - ten years later study. In D. H. Wulff, & A. E. Austin (Eds.), *Paths to the professoriate* (pp. 137-158). San Francisco: Jossey-Bass.
- Nerad, M., & Cerny, J. (1999). From rumors to facts: Career outcomes of English Ph.D.'s: Results from the Ph.D.'s - ten year's later study. *Council of Graduate Schools Communicator*, XXXII(7), 1-11.
- Nichols, S. L., & Berliner, D. C. (2007). *Collateral damage: How high-stakes testing corrupts America's schools*. Cambridge, MA: Harvard Education Press.
- Nutley, S., Walter, I., & Huw, T. O. D. (2008). Using evidence, how research can inform public services. *Public Administration*, 86(2), 617-618.
- Nyquist, J., & Woodford, B. (2000). *Re-envisioning the Ph.D.: What concerns do we have?* (No. 1). The Pew Charitable Trusts.

- Nyquist, J., Woodford, B., & Roger, D. (2004). Re-envisioning the Ph.D.: A challenge for the twenty-first century. In D. H. Wulff, & A. E. Austin (Eds.), *Paths to the professoriate* (pp. 194-216). San Francisco: Jossey-Bass.
- Osguthorpe, R.T, & Wong, M.J. (1993). The Ph.D. versus the Ed.D.: Time for a decision. *Innovative Higher Education*, 18(1), 47-63.
- Page, R. (2001). Reshaping graduate preparation in educational research methods: One school's experience. *Educational Researcher*, 30(5), 19-25.
- Pallas, A. (2001). Preparing education doctoral students for epistemological diversity. *Educational Researcher*, 30(5), 6.
- Paul, J., & Marfo, K. (2001). Preparation in the philosophical foundations of inquiry. *Review of Educational Research*, 71(4), 525.
- Pauly, E. (1978). Does it really matter?- Educational policy research carries on. *Public Administration Review*, 38(6), 598-602.
- Penn graduate school of education (University of Pennsylvania). (2013). Retrieved October, 2013, from http://www.gse.upenn.edu/degrees_programs/by_degree
- Phipps, D., & Morton, S. (2013). Qualities of knowledge brokers: Reflections from practice. *The Policy Press*, 9(2), 255-265.
- Pietig, J. (1984). Is education a discipline? *The Educational Forum (West Lafayette, Ind.)*, 48(3), 365-72.
- Pike, G. (2004). Measuring quality: A comparison of U.S. news rankings and NSSE benchmarks. *Research in Higher Education*, 45(2), 193-208.
- Psacharopoulos, G. (2000). Economics of education. *European Journal of Education*, 35(1), 81-95.
- Psacharopoulos, G. (August 28, 2008). Economics of education: A 50-year anniversary recap. *2nd International Conference on Educational Economics*, Athens, Greece.
- Ravitch, D. (1998). What if research really mattered? *Education Week*, 18(16), 33.
- Richardson, V. (2006). Stewards of a field, stewards of an enterprise: The doctorate in education. In C. M. Golde, & G. E. Walker (Eds.), *Envisioning the future of doctoral education: Preparing stewards of the discipline - Carnegie essays on the doctorate* (pp. 21-267). San Francisco, CA: Jossey-Bass.

- Sa, C. (2011). Faculties of education and institutional strategies for knowledge mobilization: An exploratory study. *Higher Education*, 61, 501-512.
- School of education, University of Michigan. (2013). Retrieved October, 2013, from http://www.soe.umich.edu/academics/doctoral_programs/
- Schwartz, R., & Kardos, S. (2009). Research-based evidence and state policy In J. D. Bransford (Ed.), [The Role of Research in Educational Improvement] () Harvard Education Press.
- Shilling, C. (1993). *The body and social theory*. (1st ed.). London: SAGE Publishing.
- Shulman, L. (2006). Reclaiming education's doctorates: A critique and a proposal. *Educational Researcher*, 35(3), 25-32.
- Snow, C. P. (1959). *The two cultures and the scientific revolution*. New York: Cambridge University Press.
- Stahler, G., & Tash, W. (1994). Centers and institutes in the research university: Issues, problems, and prospects. *The Journal of Higher Education*, 65(5), 540-554.
- Stanford graduate school of education. (2013). Retrieved October, 2013, from <http://ed.stanford.edu/academics/doctoral>
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, 7(17), June 15, 2013.
- Sundquist, J. L. (1978). Knowledge and policy : The uncertain connection. In L. E. Lynn (Ed.), *Assembly of behavioral and social sciences (U.S.). study project on social research and development* (pp. 183). Washington, D.C: National Academy of Sciences.
- Tashakkori, A., & Creswell, J. W. (2007). Differing perspectives on mixed methods research. *Journal of Mixed Methods Research*, 1(3), 303.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research*. Thousand Oaks: SAGE Publications.
- Taylor, C. (2006). Heeding the voices of graduate students and postdocs. In C. M. Golde, & G. E. Walker (Eds.), *Envisioning the future of doctoral preparation* (pp. 46-61). San Francisco: Jossey-Bass.
- Teachers college, Columbia University, education policy and social analysis. (2013). Retrieved October, 2013, from <http://www.tc.columbia.edu/epsa/>

- Terenzini, P. (1996). Rediscovering roots: Public policy and higher education research. *The Review of Higher Education*, 20(1), 5.
- Tillman, L. (2009). The never-ending education science debate: I'm ready to move on. *Educational Researcher*, 38(6), 458-462.
- Townsend, R., & Robinson. (1994). Making the politics of education even more interesting. *Journal of Education Policy*, 9(5), 185-99.
- UCLA graduate school of education & information studies. (2013). Retrieved October, 2013, from <http://gseis.ucla.edu/academic-programs/education/aqm>
- US News & World Report (2013). Best education schools. Retrieved March, 2013, from <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-education-schools/edu-rankings>
- Vanderbilt Peabody College, college of education and human development. (2013). Retrieved October, 2013, from <http://peabody.vanderbilt.edu/departments/lpo/index.php>
- Walker, G. E., Golde, C. M., Jones, L., Conklin Beuschel, A., & Hutchings, P. (2008). *The formation of scholars*. San Francisco: Jossey-Bass.
- Wang, J. (2011). Toward strengthening the preparation of teacher educator-researchers in doctoral programs and beyond. *Journal of Teacher Education*, 62(3), 239-245.
- Weiss, C. (1977). Research for policy's sake: The enlightenment function of social research. *Policy Analysis*, 3(4), 531-545.
- Weiss, C. (1979). The many meanings of research utilization. *Public Administration Review*, 39(5), 426.
- Weiss, C. (1999). The interface between evaluation and public policy. *Evaluation*, 5, 468. doi:10.1177/135638909900500408
- Weiss, C. (2008). The fairy godmother-and her warts. *The American Journal of Evaluation*, 29(1), 29-47.
- Whitaker Lamb, K. (2010). *The role of brand equity in reputational rankings of specialty graduate programs in college of education: Variables considered by college of education deans and associate deans ranking the programs*. (Ph.D., University of North Texas). Proquest,

- Whitchurch, C. (2009). The rise of the "blended professional" in higher education: A comparison between the United Kingdom, Australia and the United States. *Higher Education*, 58(3), 407-418.
- Whitty, G. (1997). Social theory and education policy: The legacy of Karl Mannheim. *British Journal of Sociology of Education*, 18(2), 149-163.
- Wilensky, J. (2001). How research informs policy. *Human Ecology*, , 16-18.
- Will, E., & Callison, C. (2006). Web presence of universities: Is higher education sending the right message online? *Public Relations Review*, 32, 180.
- Wilson, S. (2006). Finding a canon and core. *Journal of Teacher Education*, 57(3), 315-325.
- Wong, K. (2008). Considering the politics in the research policymaking nexus. In F. Hess (Ed.), *When research matters: How scholarship influences education policy* (pp. 219-237). Cambridge: Harvard Education Press.
- Wong, K. (1994). The politics of education: From political science to multidisciplinary inquiry. *Journal of Education Policy*, 9(5), 21-35.
- Wong, K. (1998). Laying the groundwork for a new generation of policy research: Commentary on "knowledge utilization in educational policy and politics". *Educational Administration Quarterly*, 34(1), 141-146.
- Young, L. (2008). Toward a vibrant research community in education: Investing in early-career scholars. *Teachers College Record (1970)*, 110(7), 1360-1378.

APPENDIX A
IRB APPROVAL LETTER



EXEMPTION GRANTED

David Garcia
Division of Educational Leadership and Innovation - Tempe
-
David.Garcia@asu.edu

Dear David Garcia:

On 3/7/2014 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	HOW DOCTORAL STUDENTS LEARN TO ENGAGE WITH EDUCATION POLICY
Investigator:	David Garcia
IRB ID:	STUDY00000778
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none">• Short Consent, Category: Consent Form;• Form HRP-503a, Category: IRB Protocol;• Interview Questions, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);• Recruitment email, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 3/7/2014.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

APPENDIX B
INTERVIEW QUESTIONS

Interview Protocol – Program contact

1. Please describe your Education Policy program.
2. What types of opportunities do your graduate students have to engage with policy?
3. How do you think your program differs from other Education Policy graduate programs?
4. What was the motivation behind the recent change in your program? What are some specific aspects of the program that were changed? Why?
5. Is there anyone else I should speak to regarding your program to gain additional insight?

APPENDIX C
CONSENT FORM

CONSENT FORM

STUDY TITLE: HOW DOCTORAL STUDENTS LEARN TO ENGAGE WITH EDUCATION POLICY

I am a graduate student under the direction of Professor David Garcia in the Mary Lou Fulton's Teachers College at Arizona State University. I am conducting a research study to gain a better understanding of how Education Policy programs prepare doctoral students to engage with policy and the policymaking process.

I am inviting your participation by way of an interview, which will involve 4-5 questions, and should take no more than 30 minutes. You have the right not to answer any question, and to stop participation at any time.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty.

There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. The results of this study may be used in reports, presentations, or publications but your name will not be used. If there is any information you would like to provide off the record, or you would like to have omitted from the reports, presentations or publications, please let me know.

I would like to audio record this interview. The interview will not be recorded without your permission. Please let me know if you do not want the interview to be recorded; you also can change your mind after the interview starts, just let me know.

If you have any questions concerning the research study, please contact the research team at: Stacey.Long@asu.edu or David.Garcia@asu.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

After reading this consent form, you can agree to voluntarily participate verbally before we begin the interview over the phone.