A National Descriptive Survey of Teacher Residency Programs

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ABSTRACT: Teacher Residencies have been highly touted as the next generation in teacher preparation, because they are applied programs that are predicated on strong partnerships and in-the-field mentoring. However, very little is known about this model as a whole. The goal of the current study is to report on the scope of teacher residencies, and compare data collected to both the federal definition and to standards identified in the professional literature. An Internet search uncovered the existence of 37 programs in 15 states and the District of Columbia. Data gleaned from publicly-available materials was triangulated with results from a telephone check. Findings indicated that although most residencies met the federal definition, post-residency induction and linking course- and fieldwork may be an area of concern in some programs. Programs varied in structure and supports offered. Implications include the need for a standardized definition and terminology, more research on the connection between course- and fieldwork, and more publicly available information and data.

Introduction

Traditional, university-based teacher preparation has been criticized for decades. Because of these concerns, diverse alternatives to licensure have grown rapidly (Walsh & Jacobs, 2007). However, much debate and inconclusive evidence has resulted in dissatisfaction with these routes as well. Now, a third alternative has developed in an effort to address issues with both traditional and alternative teacher preparation, in the form of a Teacher Residency (Solomon, 2009). These programs share common elements such as strong partnerships and mentoring, and have been supported by philanthropic organizations and the federal government. Although highly touted, research is just beginning to examine these programs. The purpose of this study was to locate these programs and determine the extent to which they meet the federal definition and basic quality indicators.

The preparation of teachers has been under scrutiny for some time in the United States. In 1983, A Nation at Risk critiqued teacher preparation for focusing on pedagogy at the expense of content, concluding that "teacher preparation programs need substantial improvement" (United States, 1983). This report also deplored the teaching profession's low standards for entry, spawning the creation of a wave of "alternative routes" to teaching, designed to attract high-ability individuals with strong content backgrounds into teaching.

No Child Left Behind (NCLB) ushered in a new wave of interest in alternative routes to licensure with its focus on teacher quality and a strong content background for teachers. In brief, its "Highly Qualified Teacher" (HQT) provision required that 100% of teachers teaching core academic subjects have a content background and demonstrate competency in the subject matter they are teaching (No Child Left Behind [NCLB], 2002). Although the intent was to increase focus of teacher preparation on content, many believe that the measure was insufficient at increasing teachers' subject-matter knowledge, due to its focus on inputs over outcomes (USDOE 2008).

Now commonplace, alternative routes to teaching vary widely. In general, traditional and alternative routes are differentiated from each other in timing, in that traditional routes involve candidates in preparing for teaching concurrent with (primarily undergraduate) studies, whereas alternative routes prepare during their first year of teaching (Lincove, Osborn, Mills, & Bellows, 2015). Alternative routes exist in every state and the District of Columbia. As of 2007, one in five newly certified teachers entered the field through an "alternative" program, although it is important to note that for some time, it has been clear that the boundaries between "traditional" and "alternative" are no longer as distinct as originally intended (Walsh & Jacobs, 2007).

Even though they were created to address these long-standing issues in teacher preparation, alternative routes to teaching have generated much controversy as well. In general, critiques include inadequate coursework, low standards, and a failure to demonstrate improved student outcomes (Papay, West, Fullerton, & Kane, 2011; Zeichner, 2010). Critics continue to claim that traditional preparation, a four-year undergraduate education degree from an accredited preparation institution, does little to prepare teachers for the challenges they will face in the classroom. These issues include low standards for entry and exit; lack of connection between theory and practice; and insufficient time in the field (Zeichner, 2010). Another widespread belief is that teacher educators (education professors) do not believe that their practice needs to change in accordance with changing practices in the field (Farkas & Duffett, 2010).

Today, whether traditional or alternative, influential individuals (e.g. former president of Teachers College Art Levine, U. S. Secretary of Education Arne Duncan) and national groups (e.g. the American Association of Colleges for Teacher Education (AACTE), the National Education Association (NEA), and the National Council on Teacher Quality (NCTQ)) agree that teacher preparation needs increased entrance and exit

requirements, close ties between course- and fieldwork, deep partnerships between K-12 and teacher preparation, and significant time in the field combined with a strong mentorship (NCATE, 2010). Professional accreditation in teacher preparation has taken up this call to innovation as well. The latest round of professional standards requires teacher education programs to participate in innovation through strong partnerships and demonstrated impact on P-12 learners (Council for the Accreditation of Educator Preparation, 2013).

Other movements in the broader education community have added to this pressure to innovate in the field of teacher education. These relatively recent trends include pay-forperformance and Race to the Top, which tied teacher preparation outcomes to P-12 achievement (Imig, Wiseman, & Imig, 2011). Additional groups weighing in on this issue include the Fordham Foundation, which is known for highlighting the gap between traditional teacher preparation and P-12 reform; and the National Council on Teacher Quality, which publishes controversial rankings of each education school in the United States (Imig et al., 2011; Rabe, 2012; Wiseman, 2012). In sum, the basic pillars of effective teacher preparation and calls for reform are strikingly consistent among the various reports and groups concentrating on teacher quality (Cochran-Smith & Zeichner, 2005; Wilson, Floden, & Ferrini-Mundy, 2001; Zeichner, 2010).

Amidst all this debate, a third teacher preparation model has developed. Zeichner (2010) describes this "third space" in teacher education as one that "brings together school and university-based teacher educators and practitioner and academic knowledge in new ways to enhance the learning of prospective teachers" (p. 92). The term "third space" is used in multiple fields, including the closely-related fields of cultural studies and critical literacy. In this context, the "third space" in teacher preparation combines the strengths of K-12 and higher education in preparing teachers, by redefining roles of teachers and faculty, creating and sustaining new types of partnerships, and rethinking the knowledge base for teacher education (Klein, Taylor, Onore, Strom, & Abrams, 2013).

An example of this type of program, a "Teacher Residency" is modeled after the medical residency. It is defined by a yearlong mentorship program in which the prospective teacher teaches alongside a master teacher. This internship is combined with licensure and Master's coursework offered by a partnering institution or institutions of higher education. Prospective teachers then make a commitment to remain in the host school or district for a specified period of time (Beck, 2016; Papay et al., 2011). The "third space" concept has been applied liberally to the residency model in the professional literature (Beck, 2016). This model is intended to address a host of issues with traditional preparation, including difficulty recruiting highability students and students of color; difficulty creating and maintaining strong partnerships; ameliorating teacher shortages in high-need areas; issues with sustaining induction programs; and lack of accountability for program graduates. In brief, the teacher residency addresses these issues by relying on strong partnerships as a foundation. The program begins by creating partnerships between high-need districts and other entities, such as an institution of higher education or private foundation. Partners then determine how to recruit quality candidates, set high admission standards, provide for strong support for current and past residents, and plan for data collection as a team (Berry, Montgomery, & Snyder, 2008).

As the Teacher Residency model is grounded in strong school partnerships, the National Association for Professional Development Schools' (NAPDS) Nine Essentials are crucial to its success. For example, teacher and faculty roles are blurred, resulting in a shared culture of education. An articulation agreement is a necessity, and the mission of both entities must encompass collaboration and mutual professional development. In fact, commitment to preparation of future educators through constant engagement in the school community is the model's bedrock (Berry, Montgomery, & Snyder, 2008; Klein et al., 2013; National Association for Professional Development Schools, 2008).

Some believe that the residency model has the potential to professionalize teaching in the same way the medical residency transformed the medical profession (Thorpe, 2014). In fact, Ronald Thorpe, President and CEO of the National Board for Professional Teaching Standards (NBPTS) believes that the research model has the potential to (1) strengthen curriculum, instruction, and standards in teacher preparation; (2) tighten the match between teaching supply and demand; (3) reduce novice teacher attrition; and (4) improve public confidence in teacher preparation (2014). However, teacher residencies have a relatively brief history, beginning with the first three programs, initiated in Boston, Chicago, and Denver between 2002 and 2004. Early research indicated that candidates from these programs showed increased knowledge and skills in important areas of content knowledge, pedagogy, classroom management, and reflective practice (Boggess, 2010).

Since that time, the model has grown relatively quickly in scope and prominence. Programs have been funded by private foundations and by the federal government, which has provided over \$143 million to initiate or support the expansion of 26 of such programs (Papay et al., 2011; Sawchuk, 2011). Urban Teacher Residency United, organized in 2007, has now identified 17 programs that meet its quality standards referred to above (Gatti & Catalano, 2015). In general, these residencies share three common elements, all of which are predicated on strong partnerships: a year-long, paid internship with concurrent Masters coursework; participation in a cohort; and intensive induction supports (Gatti & Catalano, 2015).

Many teacher residencies are located in urban areas; as such, the professional literature often does not distinguish a "teacher residency" from an "urban teacher residency." Many of these programs focus on social justice and culturally responsive pedagogy (Tindle, Fruend, Melknap, Green, & Shotel, 2011). The federal government does not make this distinction either, and the definition it offers is not place-dependent. It defines a

teacher residency as "a school-based teacher preparation program in which a prospective teacher-

- For one academic year, teaches alongside a mentor teacher, who is the teacher of record;
- Receives concurrent instruction, which may be taught by district or residency program faculty, in the teaching of the content area in which the teacher will be certified or licensed to teach;
- Acquires knowledge of planning, content, pedagogy, student learning, and assessment, management of the classroom environment, and professional responsibilities, including interaction with families and colleagues;
- Earns a master's degree and attains licensure prior to the completion of the program; and
- Receives ongoing mentoring support in a structured induction program for not less than the first two years as teacher of record" (S 1574 IS).

These residencies differ in several ways from the traditional "student teaching" experiences offered by the vast majority of colleges and universities, which is typically characterized by:

- 1. a semester-long teaching experience;
- 2. five or fewer visits by a supervisor who may or may not be connected with the preparation provider;
- loose partnerships, resulting in little control of the preparation provider over the choice of cooperating teachers; and
- 4. little if any mentorship after the student teacher becomes teacher of record (Greenberg, Pomerance, & Walsh, 2011; Zeichner, 2010).

In further development of the residency model, six "Quality Standards" were written by Urban Teacher Residency United (UTRU), a national non-profit network of urban teacher residencies. These standards have come to define quality within the teacher residency model (Howey, 2007; Solomon, 2009). The standards indicate a need for (1) a unified mission and vision for teaching that is common across partners; (2) strong partnerships and commitment to evaluation; (3) "rigorous and competitive" selection of candidates; (4) rigorous and competitive select and comprehensive training of mentors; (5) a yearlong residency with wraparound coursework and "intensive classroom apprenticeship;" and (6) intensive post-residency support, including careful placement of graduates. Each of these standards is followed by several quality indicators.

Surprisingly little research has been conducted on the teacher residency model (Garza & Werner, 2014), including basic comparisons to traditional programs (Beck, 2016; Hammerness, Williamson, & Kosnick, 2016). Some data have been published on the Boston Teacher Residency (BTR) (Solomon, 2009). For example, a recent analysis found that retention rates of BTR graduates exceeded a matched sample of other new hires, and that these teachers were more racially and ethnically diverse than their counterparts. Further, using value-

added measures, the researchers found that first-year BTR graduates were no more effective than their peers (in fact, their students' math performance was significantly below that of their peers); however, fourth and fifth year BTR grads outperformed not only other teachers at the same level of experience, but also veteran teachers in the district by as much as 7% of a standard deviation" (Papay et al., 2011, p. 3). Other early studies found a 90-95% retention rate among residency graduates of programs in Chicago and Boston (Berry et al., 2008). Garza and Werner (2014) identified supporting and impeding factors in developing a residency to provide guidance in implementation. The authors emphasized the importance and process of curricular alignment to tighten the link between course- and field-work when building a residency.

In conclusion, teacher residencies are considered to be a "promising practice" in teacher education. Influential groups such as the newly formed Council for the Accreditation of Educator Preparation (CAEP), as well as AACTE and NEA have endorsed guidelines for teacher preparation featuring similar elements, such as enhanced clinical experiences and a seamless connection between course- and fieldwork, supported by strong partnerships. The growth of residencies has been rapid, and they have benefited from strong public and private financial support. However, almost no research exists on these programs. This study represents a first attempt to locate these programs, and to determine whether or to what extent the programs meet the federal definition and adopted standards.

Method

This study relied on qualitative triangulation of data to achieve results (Patton, 1990). Two types of triangulation were used: data triangulation, the use of different types of data to investigate the same phenomenon; and investigator triangulation, the use of multiple researchers to ensure (in this case) an exhaustive search (Denzin, 1978). First, the study located 37 teacher residency programs through an Internet search. Second, information regarding each program was collected through an Internet search. Third, information obtained was verified through the use of follow-up telephone calls. The data search was guided by the five elements of the federal definition, and the six standards developed by UTRU.

First, three researchers conducted separate Internet searches in order to identify programs. They searched for programs meeting the following requirements:

- 1. The name of the program included the words "teacher residency" or "teaching residency"; or
- 2. The program was included in another site's listing of teacher / teaching residencies.

Researchers recorded the name of each residency, the city/area covered by the residency, and the website of each program. No distinction was made between the "teacher residency" and the "urban teacher residency" for the following reasons:

Table 1. Data Collected, Aligned to Federal Definition

Definition	Data Collected	Data Format
Prospective teacher, for one academic year, teaches alongside a mentor teacher, who is the teacher of record	Length of program Mentor assignment	Number of months Yes/no
Prospective teacher receives concurrent instruction, which may	Who teaches courses	Affiliation of instructors
be taught by district or residency program faculty, in the teaching of the content area in which the teacher will be certified or licensed to teach	Content area(s) of certification	Certification area(s) offered
Prospective teacher acquires knowledge of planning, content, pedagogy, student learning, and assessment, management of the classroom environment, and professional responsibilities, including interaction with families and colleagues	Types of knowledge acquired	Number of credit hours Name of courses
Prospective teacher earns a master's degree and attains full	Masters degree	Yes/no
state certification or licensure to teach prior to the completion of the program	Licensure	Yes/no
Prospective teacher receives ongoing mentoring support in a structured induction program for not less than the first two years as teacher of record	Ongoing support	Number of years

- 1. not all residencies located in urban areas include the word "urban" in their titles;
- the federal definition of a teacher residency does not address location of the residency; and
- 3. UTRU's information does not define "urban," simply specifying partnership with a "high-need district."

Three researchers conducted an independent web search to locate current teacher residencies operating in the United States. After the search, the three researchers had uncovered 37, 38, and 42 programs, respectively. Next, in order to achieve triangulation, a master list of 48 programs was created by comparing the programs and their respective websites identified by each of the researchers. Twenty-five programs were noted in all three lists. Eleven of the programs from the master list were eliminated after further analysis. Three programs did not qualify as a residency, in that they called themselves a residency but were in fact short-term study institutes for already-licensed teachers (e.g. a week-long institute introducing teachers to the architecture of Frank Lloyd Wright). One program was not included because it was still in the planning phase, two programs had lost funding and were no longer operating, and five programs were found to be identical to another program on the list, but under a different name (e.g. New York City Teaching Residency and New York City Teaching Residency for School Turnaround). After making these adjustments, the final list utilized in this research study encompassed 37 teacher residency programs. These programs were located in 15 states plus the District of Columbia, and represented 20 metropolitan or geographic areas. Two residencies appeared to be targeted toward rural areas.

After programs were identified, data were obtained by searching each program's website. Information collected was aligned to the definition and principles of teacher residencies (see Tables 1 and 2). Data were triangulated by phoning each residency using the primary number listed on each website. The

researcher then described the nature of the research study and asked to speak with an individual working within the residency who would best be able to answer questions about the residency's structure. Once located, participants were asked to confirm the basic information that aligned with the federal definition of Teacher Residency (Table 1). This data included the length of time for which the prospective teacher is required to teach alongside the master / practicing teacher, the number of credit hours included in their program, the length of time to become licensed or certified, and the amount of time that formal mentoring continues beyond the residency. Because of the importance of funding to teacher residencies, additional data collected included any funding sources and salaries of residents.

Results

Based on data collected through the Internet search and the follow-up phone check, the average length of time residents spent teaching alongside a master teacher was 12 months, with a range of nine to 14 months (n=29). All programs assigned a mentor teacher to each resident. Only one program's length was listed as less than 12 months. Although a college or university partner was listed in 27 of the 30 websites that identified partners (90%), websites did not list affiliations of course instructors. Certification areas offered by the residency were not listed on the majority of websites.

The number of credit hours required for each residency varied widely, sometimes within one residency (e.g. mathematics education versus special education). The range of credit hours required varied from 32 to 52, but averaged 39.8 (n = 13). There was little information on the number or types of courses on websites, and virtually no information on course content.

All of the programs' websites indicated that residents would receive full licensure after the conclusion of the one-year residency. All of the programs with the exception of three

Principle	Data Collected	Format
Tightly weave education theory and classroom practice	Length of program	Number of months
together	Classes taken	Number of credit hours
Focus on learning alongside an experienced, effective	Mentor selection	Criteria for selection
mentor	Mentor preparation	Description of preparation
	Release time	Number of hours per week
Group teacher candidates in cohorts	Size of cohort	Number of candidates in cohort
Build constructive partnerships with districts, schools, communities, universities and unions	Partners	Names of partnering organizations
Serve school districts	Leadership for veteran teachers	Description of leadership opportunities
	Include district curriculum and standards	Description of inclusion of curriculum and standards
	Selection criteria	Listing of selection criteria for candidates
Support the residents once they are hired as a teacher of record	Length of support	Number of years support beyond mentorship
Establish and support differentiated career roles for veteran teachers	Roles for veteran teachers	Description of roles

offered Master's degrees to residents (n = 29); the others indicated that their credits could be applied toward a Master's degree after the conclusion of the residency. This means that for the remainder of the programs, residents would continue to take coursework beyond the residency year to apply toward their Master's degree. The length of time in which residents became certified averaged 12.9 months (n = 27), ranging from nine to 24 months. For programs indicating the existence of mentoring or induction after the residency (n = 26), length beyond the residency averaged 2.1 years, with a range of one to four years. Four of the 26 programs (15%) identified the length of mentoring as less than two years. Three (12%) indicated that formal mentoring was "ongoing" and five (19%) indicated that mentoring was "informal."

Additional data aligned with UTRU principals varied more widely in terms of availability on program websites. The mean salary for residents was \$20,320 (n = 29), and ranged considerably, from \$4,000 to over \$46,000. Some websites reported the number of district partners (mean = 2, n = 12) and number of schools involved (mean = 12, n = 10). The number of years commitment required beyond the residency averaged 3.3 (n = 26), with a range of two to four. Finally, the average cohort size was 35 residents (n = 20), with a range of five to 70. Thirty websites reported names of partnering groups, institutions, or agencies. As mentioned above, 90% included university partners. Four (13%) listed more than one college or university partner. Other common partners included not-for-profit agencies, charter schools, and AmeriCorps.

Twenty-nine residencies listed admission requirements. Of these, all listed a Bachelor's degree and the majority mentioned citizenship. Other common requirements included minimum GPA's (59%), which ranged from 2.5 to 3.0; passing either content or non-content (e.g. Praxis I, GRE) tests (52%), and a required number of credits in a specified content area, typically aligned with the content area in which the resident would be

teaching (45%). Twenty-four percent of the residencies placed limits on education coursework and/or required no prior teaching certification. Other than requiring content coursework and/or placing limits on education coursework, no other specifications appeared to be made on previous coursework at any level. Twenty-one percent required prior admittance to another program, such as a pre-existing university Master's program.

Little to no information was available on mentor selection, preparation or release time; leadership roles for veteran teachers beyond that of a mentor; or the curriculum or standards emphasized to serve school districts. Only eleven websites (30%) listed funding agencies directly. The most common funding source was the U.S. Department of Education Teacher Quality Partnership (TQP) grant (36%). Other funders included AmeriCorps, TEACH grants, and the New York State Department of Education.

Discussion

Findings of this study demonstrate that the characteristics of most residencies identified do meet federal criteria. However, findings were less consistent regarding meeting some of the basic quality indicators as outlined by UTRU in their standards. Some areas that could be problematic for residencies include integration of course- and fieldwork and post-residency support. The diversity of other characteristics of residencies might also pose a problem for the integrity of the model. Further research is needed on the residency model and its impact.

Alignment with Federal Definition

In general, the residencies identified by this search appeared to meet most of the federal guidelines. For example, most residencies did involve residents in teaching alongside a mentor for a period of one year. All of the programs included in the study led to licensure, and the great majority led to a Master's degree. Most appeared to offer some type of ongoing support once residents completed the program.

Although the federal definition states that the prospective teacher should receive support through a "structured induction program" for at least two years, of the programs with available data, over 1/3 either did not offer formal mentoring or offered only one year. An additional three programs were not specific about the length of their induction program. Since long-term induction is one of the most central principles of the teacher residency model (Hammerness & Matsuko; 2012; Berry et al., 2008; UTRU, 2012), those involved in these programs need to work to preserve it, as well as the other central tenants of the model.

Integration of Course- and Fieldwork

Because of the large range in credit hours required and in the types of partners, it is likely that course content also differs among the various programs. Residency websites provided little to no information regarding that content or connections between course- and fieldwork, which is crucial to program quality (UTRU, 2010). This finding is supported by Hammerness and Matsuko's (2012) claim that "few (residencies) have articulated how they prepare teachers or support those teachers for specific settings" (p. 4). Although the lack of information on this topic certainly cannot lead to a firm conclusion in this area, the results of this study would caution that because of the variation in coursework, internship details, what personnel appear to be involved and how they are involved in residencies, integration may be an issue. More in-depth study, particularly with respect to the type and strength of partnerships underlying the residencies, is critical in order to determine whether quality indicators are being met.

Because of the lack of available data, caution should be taken when attempting to compare teacher residencies' Master's programs to traditional Master's programs. However, the residencies included in this study did show some similarities to traditional Master's programs, with the exception of the extensive internship. Entrance requirements (GPAs, certification tests) and number of credit hours required resemble generally that of many traditional Masters programs, which have been shown to have little impact on teacher quality (Boyd, Goldhaber, Lankford, & Wykoff, 2007). For example, the variation in admission policies was concerning. Less than half required a content background in the relevant teaching area, a longstanding issue in teacher preparation. Although some required GPAs of 3.0, which is higher than many typical Master's programs in education (Sawchuk, 2011), over one-fifth simply required admission to a pre-existing, university-based Master's program. Because of these surface-level similarities, residencies need to demonstrate publicly that they are unique in this way. Additionally, the amount of required coursework varied widely, pointing to the potential for large differences in amount of

content required in residencies, and raising speculation as to the nature of the connection between course content and the experience itself.

In sum, the results of this study do not point to a clear innovation in linking course- and fieldwork through unique partnership, even though this feature is considered to be a central tenet of the residency model and an identifying of quality in teacher preparation overall (Zeichner, 2010). High admission standards is one criterion that does show a positive impact on student achievement (Boyd et al., 2007), so residencies need to establish that they are upholding high standards through transparency regarding admission data.

Post-Residency Support

Based on the results of this study, the type and length of induction supports appeared to be quite inconsistent, to the extent that many would not meet UTRU's quality indicators for post-residency support. These indicators include a multitude of activities, including on-site coaching, leadership opportunities, and extended, active engagement with a community of former and current residents. Significant partnerships are required to initiate and sustain these types of activities that extend teacher preparation program beyond the preservice period.

Although the federal definition states that the prospective teacher should receive support through a "structured induction program" for at least two years, as stated above, a significant minority either did not offer formal mentoring or offered only one year. An additional three programs were not specific about the length of their induction program, stating that it was "ongoing." This variability raises serious questions, particularly because some evidence points to a positive link between quality induction and student achievement, as well as to teacher retention (Boe, Cook, & Sutherland, 2008; Fletcher, Strong, & Villar, 2008; Smith & Intersoll, 2004).

Diversity of Characteristics

In addition to the coursework and mentoring, residencies included in this study varied widely on other characteristics, including credit hours, cohort size, number of partnering groups, and salary. Certainly, wide variation among programs is not necessarily negative. Characteristics of school districts, institutions of higher education, and attributes of partnerships, as well as the standard of living certainly vary across the United States. However, number of credit hours required and the optimal size of cohorts is important to consider in all teacher education programs, in terms of the support that institutions can provide based on their resources.

The apparent variation in many of the attributes investigated in this study, including mentoring and induction supports, integration of coursework and fieldwork through partnership, and intensity of supervision during the internship, is important for those involved in residencies to consider, even beyond effective practice. The concern with continuing to use the title

"Teacher Residency" without meeting some basic parts of the federal definition or quality indicators, is that the term will lose its meaning. For example, Berry and colleagues (2008) remind us of the history of the Professional Development School (PDS) model. A PDS is identified as a sustained, planned partnership between an institution of higher education and a school (Grossman, 2010). Berry et al. uses PDS as an example of a partnership model that was neither implemented evenly, nor supported or evaluated with fidelity. Although many institutions claim to have PDSs, they do not abide by either the structure or processes laid forth by the accrediting institution (at the time, NCATE). Thus, "PDSs demonstrate how innovations can take on a life of their own - often changing in character from the original model, yet carrying the same name" (Berry et al., 2008, p. 3). The result of the practice of using the PDS name without implementing its basic characteristics was a loss of integrity and a concomitant loss in ability to draw conclusions about the effectiveness of the model (Berry et al., 2008).

This analogy leads to the question of whether the teacher residency constitutes true innovation in partnership specifically and in teacher preparation more broadly, or whether it is simply a new label with recurrent themes that has not changed practice in a significant way. The results of this study do point to some innovations that differ from the traditional "student teaching" experience as described earlier, including (1) a year-long internship; (2) mentoring that spans preparation and practice in most cases; and (3) a strong partnership / base in K-12 schools. Each of these features has been touted in the professional literature as imperative to strengthening teacher preparation (AACTE, 2010; NCATE, 2010; Zeichner, 2010), and the results of this study do point to consistency in these attributes. However, as stated previously, major attributes of the residency model, such as strong connections between courseand fieldwork, and at least two years of induction support, may be missing from some residencies, and as such may be a cause for concern for those seeking to strengthen the model and differentiate it from traditional college- and university-based preparation.

Implications

The results of this study have several implications for the theory behind and practice of teacher residencies, as well as for future research. First, standardizing the definition would ensure that all programs identifying as residencies meet certain standards. Crucial elements include the year-long, post-baccalaureate internship under a practicing teacher with concurrent, wrap-around coursework; extensive and extended mentoring through structured induction; and an extended commitment to remain in the district in which residents are prepared. Hammerness, Williamson, & Kosick "call for programs to be especially clear about the specific features of the setting [for which they are preparing teachers]" (p. 1155). These changes would eliminate confusion, maintain the model's integrity, and encourage existing residencies to increase transparency, particularly with

respect to personnel involved, and the scope and duration of induction supports. The residency model can be seen as a viable solution to many of the current issues in teacher education, because of its potential to raise the bar for teaching, address the research-to-practice gap in teaching and teacher education through significant and sustained partnership, and create seamless preparation-to-practice support. Therefore, attention to the model's defining elements is vital.

Second, integration between course- and fieldwork is the bedrock of the residency model. Programs' mission and vision of effective teaching must be clear, aligned with all partners, and evident in collaborative practices (NAPDS, 2008; UTRU, 2010). Such alignment may be more difficult if there are multiple partners, or if residents are taking traditional courses with both instructors and students who are working and studying within outside programs. It is important for future research to investigate the effectiveness of these various structures on teaching and learning within the context of the residency model.

Third, attention to structured, continuing induction programs beyond the year of the residency is imperative. Because of their extended internship and extensive partnerships with districts and other education-related groups, residencies are in a unique position to provide high quality induction that continues the work of the internship year (Hammerness & Matsuko, 2012). In fact, the "culture of shared responsibility and support," which can cultivated by residencies through their partnerships, is one factor that is related positively to high-quality induction (Billingsley et al., 2009). Some residencies that have developed a solid ongoing induction structure could serve as models for others seeking to increase their involvement after the one-year residency.

Fourth, teacher residencies need to consider how the model ensures integrity with respect to integration of course- and fieldwork. How does the model differ from a traditional masters degree for initial licensure, in both entry standards and content? Since some residencies appear to be integrated in traditional masters programs, programs need to be explicit about how they are revising or creating content to align with the content and goals / mission of the residency itself.

Additionally, as so much of our information now resides on the Internet, it is important to consider what kind of information is publicly available on teacher residencies, and the accessibility of that information. Little to no information was found in areas that are vital to program quality, to potential candidates, to current and potential partners, and to the general public, many of whom are looking to the residency as a new leading model in teacher education. Although program requirements will change, at very least programs should include:

- Basic facts about the residency, including program length, and content area(s) offered;
- Goals and mission, including an overview, a basic description of the partnership(s) undergirding the program, and/or examples of connections between course- and fieldwork;

- Admissions criteria / selection process for residents and mentors; and
- Any effectiveness data available.

An important indicator of the quality of any teacher education program is student outcome data. Therefore, any data on the impact of the residents on student outcomes should be posted in an accessible format as soon as it is available.

Finally, future research needs to determine the impact of the residency model on the field of teacher preparation. Are these programs bringing new individuals into the field, or are they taking enrollment away from other programs at the same or regional institutions? This "enrollment shuffling" is commonplace when traditional and alternative programs coexist at the same institution of higher education (Grossman & Loeb, 2008). Also, how do these programs meet state mandates such as accreditation requirements, credit hour minimums, and edTPA? Such research will assist teacher educators as they reshape their programs.

In sum, teacher residencies need to demonstrate that they are innovative and how they are innovative, by providing more publicly-available information on their programs and by publishing student outcomes data. They need to define themselves carefully in a public manner so as to avoid potential concerns regarding the model's integrity. Important information to report includes the content of and connections between course- and fieldwork, ways in which the district is served by the residency, the basic structure of its partnership(s), and most important, any data collected regarding the impact of residents on student achievement. The UTRU standards and quality indicators can serve as a guideline. The next generation of teacher education programs will be judged based on their ability to produce teachers who have a positive impact on student achievement. Institutions that wish to participate in creating and sustaining these programs must demonstrate accountability by collecting and providing this evidence in a public manner that is accessible to all stakeholders.

Limitations and Conclusion

The major limitation of this study is that it is based on publicly-available data reported on the Internet, and a telephone check of this data. Even with the telephone check as triangulation, the data collected cannot provide a complete picture of any residency. Even the most comprehensive program websites were incomplete, in that they did not present some of the data collected in this study. Additionally, this study was based on programs self-identifying as a "teacher residency" or "teaching residency." If programs did not identify as a residency through their website or another website (e.g. URTU), or they did not have an Internet presence, then a search would not have uncovered these programs. Therefore, it is likely that some programs fitting the description of a residency were not included in this study.

Nevertheless, data obtained did form a basic picture of programs calling themselves "teacher residencies," in terms of their requirements and formal structures. Although generally these programs do appear to meet the federal definition of a residency, the duration and intensity of formal support after the residency period may not meet the definition in many of these programs. Large variations in many of the characteristics of the residencies point to the potential for great differences in content and in connections between course- and field work, the quality of which is vital to consider if residencies wish to change the way in which teacher education operates. Entrance requirements and the number of credits included in the programs appear quite similar to the traditional Master's degree in education, which has been shown to be ineffective in improving teacher quality.

Attention to the integrity of the "teacher residency" name with vital elements of the model, such as the year-long internship, intensive and extended mentoring, and the extensive commitment to partnership, is imperative. High quality research must demonstrate and compare program outcomes, not only in terms of the "gold standard" of K-12 student impact, but in terms of clear program differences, e.g. integration of course-and field-work through curricular alignment, structure of mentoring programs, teacher retention, and impact of "competing" preparation programs. If this model is indeed gaining in strength and popularity, publicly-available information and data is necessary to move the field forward through all stages of development, implementation, and evaluation.

References

Beck, J. S. (2016). The complexities of a third-space partnership in an Urban Teacher Residency. *Teacher Education Quarterly*, 43(1), 51-70.
Berry, B., Montgomery, D., Curtis, R. E., Hernandez, M., Wurtzel, J., & Snyder, J. D. (2008). Creating and sustaining urban teacher residencies: A new way to recruit, prepare, and retain effective teachers in high-need districts. *Educational Evaluation and Policy Analysis*, 22(2), 129-145.

Berry, B., Montgomery, D., and Snyder, J. (2008, August). Urban teacher residency models and institutes of higher education: Implications for teacher preparation (Research Report). Retrieved from Center for Teaching Quality from http://www.teachingquality.com

Billingsley, B.S., Griffin, C.C., Smith, S.J., Kamman, M., & Israel, M. (2009). A review of teacher induction in special education: Research, practice, and technology solutions. (NCIPP Doc. No. RS-1ES). Retrieved from University of Florida, National Center to Inform Policy and Practice in Special Education website: http://ncipp.org/reports/rs_1es.pdf

Boe, E. E., Cook, L. H., & Sunderland, R. J. (2008). Teacher qualifications and turnover: Bivariate associations with various aspects of teacher preparation, induction, mentoring, extra support, professional development, and workload factors for early career teachers in special and general education. (Data Analysis Rep. 2008-DAR1). Philadelphia: University of Pennsylvania, Graduate School of Education, Center for Research and Evaluation in Social Policy.

- Boggess, L. (2010). Tailoring new urban teachers for character and activism. American Educational Research Journal, 47, 65-95.
- Boyd, D., Goldhaber, D., Lankford, H., & Wyckoff, J. (2007). The Effect of Certification and Preparation on Teacher Quality. Future of Children, 17(1), 45-68.
- Cochran-Smith, M., & Zeichner, K. (Eds.). (2005). Studying teacher education. Mahwah, NJ: Lawrence Erlbaum.
- Council for the Accreditation of Educator Preparation. (2013). CAEP 2013 standards for the accreditation of educator preparation. Washington, D.C.: CAEP.
- Denzin, N. K. (1978). The research act: A theoretical introduction to sociological methods. New York: McGraw-Hill.
- Farkas, S., & Duffett, A. (2010). Cracks in the ivory tower? The views of education professors circa 2010. FDR Group/Thomas B. Fordham Institute.
- Fletcher, S., Strong, M., & Villar, A. (2008). An investigation of the effects of variations in mentor-based induction on the performance of students in California. *Teachers College Record*, 110, 2271-2289.
- Garza, R., & Werner, P. (2014). Preparing mathematics and science teachers through a residency program: Perceptions and reflection. *Teaching Education*, 25(2), 202-216.
- Gatti, L., & Catalano, T. (2015). The business of learning to teach: A critical metaphor analysis of one teacher's journey. *Teaching and Teacher Education*, 45, 149-160.
- Greenberg, L., Pomerance, J., & Walsh, K. (2011). Student teaching in the United States. Washington, DC: National Council on Teacher Quality.
- Grossman, P. (2010, May). Learning to practice: The design of clinical experience. Washington, DC: American Association of Colleges for Teacher Education & National Education Association.
- Grossman, P. L., & Loeb, S. (2008). Alternative routes to teaching: Mapping the new landscape of teacher education. Cambridge, MA: Harvard Education.
- Hammerness, K., & Matsuko, K. K. (2012). When context has content: A case study of new teacher induction in the University of Chicago's Urban Teacher Education Program. *Urban Education*.
- Hammerness, K., Williamson, P., & Kosnick, C. (2016). Introduction to the special issue on Urban Teacher Residencies: The trouble with 'generic' teacher education. *Urban Education*, *51*, 1155-1169.
- Haycock, K. & Crawford, C. (2008). Closing the teacher quality gap. Educational Leadership, 65(7), 14-19.
- Howey, K. (2007). A review of Urban Teacher Residencies (UTRs) in the context of urban teacher preparation, alternative routes to certification, and a changing teacher workforce. Retrieved from www.ncate.org
- Imig, D., Wiseman, D., & Imig, S. (2011). Teacher education in the United States of America, 2011. Journal of Education for Teaching, 37(4), 399-408.
- Klein, E.J., Taylor, M., & Onore, C., Strom, K., Abrams, L. (2013). Finding a third space in teacher education: Creating an urban teacher residency. *Teaching Education*, 24(1), 27-57.
- Lincove, J. A., Osborne, C., Mills, N., & Bellows, L. (2015). Teacher preparation for profit or prestige: Analysis of a diverse market for

- teacher preparation. Journal of Teacher Education, 66(5), 415-434.
- National Academy of Education. (2008). Teacher quality. Washington, DC: Education Policy White Paper.
- National Association for Professional Development Schools. (2008). 9 Essentials. Retrieved from napds.org
- National Council for Accreditation of Teacher Education. (2010). Transforming teacher education through clinical practice: A national strategy to prepare effective teachers. Washington DC.
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).
- Papay, J. P., West, M. R., Fullerton, J. B., & Kane, T. J. (2011). Does practice-based teacher preparation increase student achievement? Early evidence from the Boston Teacher Residency. Cambridge, MA: National Bureau of Economic Research.
- Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA: Sage.
- Rabe, B. L. (2012). Supporting the development of effective teachers: A case for the formation of collaborative partnerships in the development of a clinical model. *Journal of Education and Practice*, 3(7), 169-175.
- Sawchuk, S. (2011). Teacher residencies make strides, encounter obstacles. *Education Week*, 30 (36), 12-13.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? American Educational Research Journal, 41(3), 681-714.
- Solomon, J. (2009). The Boston Teacher Residency: District-based teacher education. *Journal of Teacher Education*, 60(5), 478-488.
- Thorpe, R. (2014). Residency: Can it transform teaching the way it did medicine? *Phi Delta Kappan*, 96(1), 36-40.
- Tindle, K., Freund, M., Belknap, B., Green, C., & Shotel, J. (2011). The urban teacher residency program: A recursive process to develop professional dispositions, knowledge, and skills of candidates to teach diverse students. *Educational Considerations*, 38, 28–35.
- United States. National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform: A report to the Nation and the Secretary of Education, United States Department of Education. Washington, D.C.: The Commission.
- U.S. Department of Education. (2008). A Nation Accountable: Twenty-five years after A Nation at Risk, Washington, D.C.
- UTRU. (2010). UTRU standards for quality teacher residency programs. Retried from www.utrunited.org
- Walsh, K., & Jacobs, S. (2007). Alternative certification isn't alternative. Retrieved from www.nctq.org
- Wilson, S. M., Floden, R. E., and Ferrini-Mundy, J. (2001). Teacher preparation research: Current knowledge, gaps, and recommendations: A research report prepared for the U.S. Department of Education. Seattle, WA: Center for the Study of Teaching and Policy.
- Wiseman, D. L. (2012). The intersection of policy, reform, and teacher education. *Journal of Teacher Education*, 63(2), 87-91.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college and university-based teacher preparation. *Journal of Teacher Education*, 89, 89-99.