

Teacher Preparation Matters: Long-Term Outcomes Outpacing Teacher Retention and Career Trends through a Year-long Teacher Residency Design

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Abstract

The current mixed-methods study investigated retention rates of teachers who participated in a year-long residency preparation program 9 to 17 years earlier on a single campus with a population reflecting 94% low-socioeconomic and 88% minority students. In 1995, the Holmes Group recommended a year-long teacher residency in a professional development school (PDS) setting based upon the medical model of preparing physicians through internships. Quantitative data showed a statistical difference in teacher 5-year retention rates between teachers completing a bachelor's program in Texas and those completing a year-long residency in a PDS. Qualitative data explaining the difference showed five themes related to day-one teacher preparation: efficacy in classroom management, effective models, support, experiential learning, and sense of self-efficacy. Findings from surveys and interviews with high-achieving residents showed that a year-long residency prepares teachers to be day-one ready and supports longevity in the career.

Keywords: first-day ready, self-efficacy in first year, teacher preparation program, teacher retention, year-long residency.

According to Ingersoll et al. (2018), 44.6% of new teachers leave the profession within the first 5 years of teaching, with a higher percentage of those leaving from high-needs schools. Of those who left, nearly 45% reported leaving due to job dissatisfaction. Up to 68% of Texas teachers have seriously considered leaving the job in recent years (Charles Butt Foundation, 2021; Texas AFT, 2022). In addition, 20% of teachers who certified through undergraduate teacher preparation programs in Texas in 2020-21 did not enter the profession (Texas Education Agency, n.d.). Ineffective and outdated training models exacerbate the issue by placing unprepared teachers in the classroom, particularly in schools serving students from low-income backgrounds (Charles Butt Foundation, 2021; Guha et al., 2017b).

A perfect storm occurred over the last few years as the field of teaching has seen a decrease in the number of those

choosing to enter the field. At the same time a greater number of first year teachers are entering the field with little or no preparation. Together, this has been detrimental to student success leading to concerns regarding student equity within the field, particularly for marginalized students (Charles Butt Foundation, 2021). Therefore, there is increasing urgency for the education profession to embrace the need for a teacher to be ready for the first day on the job, reducing inequities in the classroom (Clark & Andreasen, 2021; Mohamed et al., 2016). Every student, every year, deserves a teacher who is first-day ready to teach. It is unacceptable to introduce ill-prepared teachers into our schools who build their practice at the expense of the education of children, thereby contributing to inequities in the education system (Charles Butt Foundation, 2021). The present study reinforces current initiatives with findings using long-term data supporting the full-year residency model as an effective means of developing and

retaining first-day ready teachers, specifically those teaching in schools serving students from low-income backgrounds.

Literature Review

The literature suggests a negative relationship between teacher retention and teachers who entered the profession through fast-paced, abbreviated, alternative preparation routes (Goldhaber & Cowan, 2014; Templeton et al., 2020; Van Overschelde & Wiggins, 2020; Zhang & Zeller, 2016). Alternative preparation carries various definitions across the nation. For the studies reviewed, it is defined as a pathway to teacher certification for persons who hold a bachelor's degree and enroll in preparation courses in parallel with a teaching position (U. S. Department of Education, 2004). In a study of Texas teachers trained in alternative versus university-based preparation routes, Van Overschelde and Wiggins (2020) found teachers trained through university-based routes “were 66% less likely to leave the profession” (p. 318). Data from previous findings reveal a statistical association between teacher preparation and retention in the profession (Zhang & Zeller, 2016). As part of their study, interview data with alternatively certified teachers indicated they entered the profession with the intent of making it their career, but lack of practical preparation for the demands of the job quickly overwhelmed their resolve. While teachers who prepared in university-based programs tend to fare better in retention rates, the profession still loses far too many teachers (Texas Education Agency, n.d.). The year-long residency model shows promise as a training model to improve teacher retention and achievement.

Year-Long Residency Model

The current trend for many university-based teacher preparation programs is the year-long residency model where a teacher candidate spends an entire year side-by-side in practice with a mentor teacher (Dennis, 2016; Guha et al., 2017a; National Education Association, 2021). The purpose of the residency is to apply theory from coursework to practice in an authentic setting over time (Guha et al., 2017b). The model is built around the medical residency model in terms of mentoring, authentic practice, and a reasonable amount of time to absorb the nuances of a full cycle of the work (Guha et al., 2016; National Education Association, 2021). Like the medical model

residency, the partnership between the university and the district is of utmost importance to create the most impactful learning environment (Ray, 2013).

Guha et al. (2016) reported a compilation of research results from various programs. Findings show that students who were placed in a year-long residency program stayed in the profession at rates that significantly exceeded university-prepared teachers. Representative results of a Boston teacher residency, for example, show that 80% of the candidates were still on the job after 3 years, while only 63% of university-prepared candidates continued working. At the 5-year mark 75% of the residency graduates remained, versus 51% of students participating in university-based student teaching. Another study reported that 95% of residents compared to 41% of university-prepared student teachers from a Memphis teacher preparation program remained in the field after 3 years.

Professional Development School Model

A precursor to the residency design is the year-long medical-model professional development school (PDS) recommended by the Holmes Group (1995). There are similarities and differences between the residency and PDS models (National Education Association, 2021; Ray, 2013). The intent of the PDS design was to infuse an entire campus in the training and development of teacher candidates who were enrolled in a partnership with a university-based program. Current residency models invest in a more portable model focused on the candidate and the mentor (Holmes Group, 1995; National Education Association, 2021).

In 2013, I conducted a study of the PDS to explore teacher efficacy in the induction year of teaching. Participants included 18 teachers who trained in a university-based student teaching semester and experienced their first year of teaching during the same years as 25 former PDS residents. In a modification of the *Teachers' Sense of Efficacy Scale*, teachers reflected on their first year of teaching rather than projecting forward (Tschannen-Moran & Hoy, 2001). I sought to determine differences in teacher efficacy for classroom management, instructional strategies, student engagement, and the aggregate of those three constructs between teachers who trained in the two models. A statistical analysis of the three aggregate indicators, total efficacy, classroom management, and

student engagement produced an effect size indicating 38.3% of the variance could be explained by the training program showing preference for an in-depth residency experience like the PDS or current year-long residency models (Ray, 2013).

Comparison Between Year-Long Residency and Professional Development Models

A significant difference between current residency models and the PDS design is the focus on campuswide support, which can be difficult to sustain (Ray, 2013). Current residency models focus on the teacher candidate-mentor teacher relationship rather than the development of a campus as a critical component of the residency. However, the PDS model, in terms of the teacher candidate activities and experiences, considerably mirrors the current year-long residency programs (Dennis, 2016; Guha et al., 2017a; National Education Association, 2021).

The PDS model reflects the current year-long residency models in several relevant ways (Dennis, 2016; Guha et al., 2017a; National Education Association, 2021; Ray, 2013). First, the residents participate in authentic practice for a full academic year and observe a full cycle of the school year. Residents observe how the mentor teacher establishes expectations and procedures and how they build relationships with students. They are privy to recordkeeping, professional meetings, lesson planning, and are part of the school culture. Second, the residents are partnered with a master teacher who is identified as a highly effective teacher able to articulate the nuances of managing a classroom. Third, residents can connect theory to practice through ongoing university coursework using authentic artifacts and data from the residency experience. Because of the commonalities, there is value for current teacher preparation trends in exploring the long-term retention and career outcomes of teachers who trained in a PDS design.

Theoretical Framework

The theoretical framework for the study includes constructivist learning theory and social cognitive theory (Bandura, 2001; Piaget, 1977). Piaget's theory of constructivism proposes that people use a series of nested experiences to create new learning, making learning active (Narayan et al., 2013). Bandura's social cognitive theory

posits that people learn through observation in the context of social settings. Self-efficacy is a component of social cognitive theory which suggests that what people believe about their ability to perform impacts their ability and motivation to perform (Bandura, 1977, 1997; Paciotti, 2013).

Constructivist learning, as an active process, supports the residency model in which novice teachers connect theory to practice in an authentic setting over time. The current study suggests that teachers who express a high sense of self-efficacy may be motivated to stay in the profession if they believe they are effective and can make a difference. From the lens of constructivist and social cognitive theories, a framework supports an explanation as to how residents are prepared in the year-long residency providing them the confidence, or self-efficacy, that enables them to highly achieve throughout their career (Davis et al., 2019; Ray, 2013; Reeves, 2018; Silva et al., 2015; Zhang & Zeller, 2016).

Methods

The study explored the careers of the former PDS residents now that they are experienced educators. The setting and design of the PDS is provided as a backdrop for the study. Therefore, a closer look at the campus is necessary to provide context for the study.

Context for Current Study

In 2004, a school district and university in northeast Texas collaborated to develop a year-long medical-model PDS. The demographic makeup of the elementary campus as of 2012-13 was 94% low socio-economic, 82% African American, 9.4% White, and 6% Hispanic (Ray, 2013). Over 9 years, from the 2004-05 to the 2012-13 school year, the PDS trained 90 teacher residents. While in the PDS, residents were referred to as interns; however, the term *intern* is currently used to identify persons seeking Texas certification, while a 'resident' is one who is in practicum. Therefore, the term *resident* will be used to refer to the study participants (Dooley, 2022; 19 Tex. Admin. Code, 2020). Each year, 10 new teacher residents went through a formal and competitive hiring process; two grade-level residents were placed with one master teacher for one full year during their senior year of teacher preparation studies at the university. With district financing, residents received

the equivalent of paraprofessional pay and benefits, such as insurance and retirement, yet were credited with a year toward teacher step pay. A university liaison had an office at the campus and taught the senior level courses on the campus after school (Ray, 2013).

The district showed its commitment to the program by renovating the mid-century campus to accommodate the design of the PDS. Each grade level had three interconnected classrooms that allowed one master teacher to easily maneuver between two resident classrooms and their own classroom. Residents were placed in grades Kindergarten through 4th, two residents per grade level, according to the needs determined by the master teacher and the principal (Hargus et al., 2010; Ray, 2013). Regardless of how the master teacher started the year, it ended with the residents having half of the 40 PDS-assigned students in their own room for the full day with the master teacher spending half the day with each resident. Each grade level had a traditional classroom in addition to the PDS option for parents who chose to opt out of the program (Ray, 2013).

Research Design and Questions

There is support for follow-up studies to determine long term effects of teacher residency. Hill et al. (2016) suggest examining the effects of “later life outcomes” establishing program strengths and weaknesses (p. 806). Hill et al. provide examples, recommendations, and lessons learned regarding the follow-up of a study supporting the effectiveness of an intervention. The lack of research findings supporting long term effectiveness of teacher preparation prompted the need to further investigate the impact of year-long residencies on teacher retention and career longevity of high achieving educators.

Examining the impact of constructivist learning along with the development of self-efficacy formed the foundation of the study. The study used a sequential explanatory mixed-methods design to examine the careers of educators who trained in a year-long residency, 9 to 17 years into their careers. The questions that guided the study are as follows:

RQ1: What is the difference in the 5-year teacher retention rate of those who trained in a year-long medical-model professional development school and the Texas population

of teachers who trained in a university-based undergraduate model during the 2004-05 to 2012-13 school years?

RQ2: What is the effect of the difference?

RQ3: What is the career experience of high-achieving educators who participated in a year-long residency?

Positionality

Working from an etic perspective, I was aware of the possibility of bias. I served as principal of the PDS campus through the implementation phase and for the first 8 years of operation. I conducted a quantitative study of the graduates in 2013, completing the study while serving as the Director of Elementary Education for the district. I currently serve as an assistant professor of education leadership with an interest in principal education and, by extension, teacher education. The history of my relationship with the participants is that of a supervisor. I have maintained contact with many former residents through social media, through my work at the university, and my work with local districts. I managed the potential for bias by developing an interview protocol a priori. I conducted member checking by returning the transcript to the participants for verification. Bias was also managed by comparing survey data to state data through statistical analysis. Lastly, I used multiple theories to ground the work.

Participant Selection

Teacher residents who trained in the PDS between 2004-05 and 2012-13 formed the participant pool. For the quantitative portion of the study, non-random convenience sampling was used. Eighty one of 90 former residents with known email addresses received a survey, returning a response rate of 87.7% (71) representing 78.9% of former residents. I used purposive sampling for the qualitative portion of the study to select eight participants from survey responses for a semi-structured interview. To guarantee responses throughout the timeline of the study, I selected one participant from each academic school year from 2004-05 to 2011-12. Further, interview participants met criteria based on position (e.g., principal or superintendent) and/or holding an advanced degree or certification. While many high-quality and high-achieving educators were identified, the criteria developed narrowed the interview pool to allow an investigation from an asset-based approach.

Data Sources and Collection

I collected data in two phases. I collected quantitative data through a survey of all former residents for whom an email address was available ($n = 81$). I collected qualitative data through semi-structured interviews ($n = 8$).

Educator Career Survey: Quantitative Data Collection and Analysis

Participants in the study, $n = 71$, completed a Google Form (see <https://tinyurl.com/mm4a4fa5>). The survey was designed to collect demographic information, descriptive statistics, and Likert-type items to rate their perception of the PDS experience on their career. Former PDS administrators, university colleagues who were part of the collaborative program, and education leadership professors previewed the survey.

Upon receiving approval to conduct the study by the Institutional Review Board, the survey opened December 31, 2021, and closed January 30, 2022. Findings from the survey were compared to Texas retention rates during the same years of PDS operation; the data were publicly available on the state website (Texas Education Agency, n.d.). Descriptive statistics were used to compare university undergraduate programs to the data collected from the professional development school. Statistical measures were used to determine if there was a significant difference in teacher retention between the two training programs at the end of 5 years of service. A Chi-square Test of Independence was used since data were nominal. PDS data from the Texas total were removed allowing the assumption of independence of observations for the Chi-square Test of Independence to be met (Corty, 2016). The other two assumptions for the statistical test are that “samples should be random samples from their populations...[and] all cells must have expected frequencies of at least 5” (p. 583). Neither of these assumptions were violated.

Quantitative data were analyzed using Microsoft Excel and SPSS (version 28). Information related to the average age of the educators, continuing education, and first year employment was gathered from the survey. Descriptive statistics were used to calculate the mean retention rate, which is defined as ≥ 5 years in service from the induction year for the PDS and for Texas.

Educator Career Interviews: Qualitative Data Collection and Analysis

The interview protocol consisted of nine open-ended questions. Participants received the questions in advance to allow time to reflect on their years of experience and careers. Former PDS administrators and education leadership faculty reviewed the questions prior to their use.

Each recorded virtual interview lasted approximately one hour. In addition, Otter.ai software allowed me to have a transcript of each interview for participants to review for member checking. During the interview, participants described memorable experiences, greatest challenges, and readiness as a first-year teacher from their year at the PDS. They also discussed how the experience impacted their careers regarding advancement, continued education, and retention in the profession. A final question asked participants to discuss foundational experiences from the PDS that may have supported their growth as an education leader.

I used thematic analysis to identify and develop asset-based themes. I read each interview at least three times and listened to the Otter.ai recording. I used NVivo software to create codes and then moved to a paper-based system of color-coded highlighting of similar and repeated phrases (Saldaña, 2021).

Quantitative Results

Overall, the PDS trained 90 teacher residents over 9 years. Data show that, of the total PDS population of 90 residents, 81.11% (73) are still serving in education or served until retirement. From the study, 88.7% (63) of 71 survey respondents are still in service in education and have been for between 9 and 17 years.

Research Question 1 Results

The first research question asks: What is the difference in the 5-year teacher retention rate of those who trained in a year-long medical model professional development school and the Texas population of teachers who trained in a university-based undergraduate model during the 2004-05 to 2012-13 school years? Data show there were 60,531 teachers who entered teacher service through undergraduate programs between the academic years of 2005-06 and

2013-14 (Texas Education Agency, n.d.). Of that number, 90 were former PDS residents.

A Chi-square Test of Independence (with Yates Correction) indicated a statistically significant association between the

teacher training program and teacher retention, $\chi^2(1, n = 60531) = 8.70, p = .003, phi = .01$. The null hypothesis was rejected. Therefore, Table 1 shows there is a statistically significant difference in 5-year teacher retention based on training

Table 1

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	9.622 ^a	1	.002		
Continuity Correction ^b	8.697	1	.003		
Likelihood Ratio	13.123	1	<.001		
Fisher's Exact Test				.002	.002
Linear-by-Linear Association	9.622	1	.002		
N of Valid Cases	60531				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.15.

b. Computed only for a 2x2 table

Table 2 shows the observed and expected counts of teachers who stayed in the profession for at least 5 years and those who left before completing 5 years. The PDS leaver, those leaving the field, observed count was three (3) teachers, while the expected count was 13.1 teachers. For the Texas university prepared teachers, the observed leaver count was 11,205 teachers, while the expected count was 11,195. At the end of 5 years, 95.8% of PDS-trained teachers were still in service as compared to Texas university prepared teachers at 81.5%. Overall, a larger percentage (14.31%) of PDS residents stayed in the profession for at least the first 5 years of their career than did the university-prepared teachers (Texas Education Agency, n.d.).

Table 2*Retention and Training Program Observed and Expected Counts*

			Retention		Total
			<5Years	5Years	
Training Program	TXUG	Count	11205	49255	60460
		Expected Count	11194.9	49265.1	60460.0
		% within Training Program	18.5%	81.5%	100.0%
		% within Retention	100.0%	99.9%	99.9%
	PDS	Count	3	68	71
		Expected Count	13.1	57.9	71.0
		% within Training Program	4.2%	95.8%	100.0%
		% within Retention	0.0%	0.1%	0.1%
Total		Count	11208	49323	60531
		Expected Count	11208.0	49323.0	60531.0
		% within Training Program	18.5%	81.5%	100.0%
		% within Retention	100.0%	100.0%	100.0%

Note. TXUG indicates Texas Undergraduate Training Program.

Research Question 2 Results

The second research question asked: What is the effect of the difference? The Cramer's V statistical test was used to determine the effect size. The effect size of .013 is small, due to the comparison between a small ($n = 71$) and a much larger ($n = 60,460$) group and indicates that only 1.3% of the five-year retention rate can be explained by the training program.

Qualitative Findings

The statistically significant results from the Chi-square Test of Independence combined with the small effect size are inadequate to understand the experiences in the PDS training model alone, even though there is statistical promise. Collecting qualitative data helped explain the career experiences of educators who trained in the year-long model. Descriptive and interview data provided an opportunity to examine participant career experiences.

Research Question 3 Findings

The third research question asked: What is the career experience of educators who participated in a year-long residency? The survey asked questions of former residents to get a sense of the progression of their careers. Descriptive statistics, shown in Table 3, identify the number of master's degrees, current age range, principal certifications, campus team leader, campus teacher of the year, and those who were recruited by principals in the PDS district. Data indicated that district principals recruited for employment 64.8% of PDS residents who completed the program. Additionally, 59.2% are identified by their current campuses as leaders. These data help explain the statistical difference related to training showing confidence, or self-efficacy, towards their role as an educator.

Table 3*Descriptive Statistics for the PDS Residents*

Indicator	Number	Percent	Significance
Master's Degree	27	39.4%	Indicates residents value educational pursuit
Under 40 Years Old	40	56.3%	Indicates years left to serve
Principal Certificate	11	15.5%	Indicates leadership initiative
Team Leader	42	59.2%	Indicates leadership skill identified by campus
Teacher of the Year	19	35.8%	Indicates teachers are valued by peers
Successfully recruited by PDS District Principals	46	64.8%	Indicates teachers were valued by district principals

Note. Descriptive data were taken from the survey. The template is available at <https://drive.google.com/file/d/1gswu2RMPAJEMqceSChrESjr4bwS5M5Xj/view?usp=sharing> .

Likert-type scores related to the residents' perception of the impact of the PDS experience on their careers are included in Table 4. A total of 67 former residents reported, by providing a score of 4 or 5, that their participation in PDS has positively impacted their career (95.3%) and career advancement (78.9%). Further, residents responding with a score of 4 or 5, perceived their experiences with their mentor (86%) and university professor (92.9%) as positively impacting their career as a teacher. Therefore, perception data provide an explanation for the PDS model's positive impact on their career and advancement.

Table 4*PDS Perception Survey Score of Impact on Career*

PDS Experience	1	2	3	4	5
	Little Impact				Great Impact
How do you feel your experience as a teacher intern [resident] in the PDS positively impacted your career as a teacher?	1 1.4%	1 1.4%	2 2.8%	7 9.9%	60 85.4%
Did your experience as a teacher intern [resident] in the PDS positively impact your career advancement?	4 5.6%	3 4.2%	8 11.3%	10 14.1%	46 64.8%
How did your experience with your mentor teacher in the PDS positively impact your career as a teacher?	2 2.8%	4 5.6%	4 5.6%	7 9.9%	54 76.1%
How did your opportunity to work with the university professor impact your career as a teacher?	0	0	5 7%	14 19.7%	52 73.2%

Note. The full survey template is available at

<https://drive.google.com/file/d/1gswu2RMPAJEMqceSChrESjr4bwS5M5Xj/view?usp=sharing>

The former residents selected to participate in the interviews are shown in Table 5 below. A gender-neutral pseudonym assigned to each participant protected anonymity. At the time of the study, the positions for interview participants include the following: assistant professor of education, assistant superintendent, district coordinator, two principals, instructional coach with principal certification, and two teachers who recently completed principal certification.

Table 5*Interview Participants*

Pseudonym / Meaning	Current Position	Education/Certification
Amari (Strength)	Teacher	MEd; Principal
Dara (Wise)	Teacher	Master C&I; MEd; Principal
Justice (Fair)	Instructional Coach	Master C&I; MEd; Principal
Merritt (Excellence)	District Coordinator	Master; 2 nd Master Pending
Merrick (Power)	Assistant Professor	Master; Doctorate; Principal; Superintendent
Nico (Victory)	Principal	Master; Principal
Nolan (Champion)	Assistant Superintendent	2 Master's; Principal
Tait (Happy)	Principal	Master; Doctorate; Principal

Note. The full interview document is available at <https://tinyurl.com/yc82a2zs>.

I reviewed the interview transcripts to identify emerging themes. Former residents described their readiness to be an effective teacher on the first day of school. The notion of being *first-day ready* to teach school after completing the teacher preparation program served as the underpinning for the themes (Dennis, 2016; Guha et al., 2017a; National Education Association, 2021). From a position of experience, they expressed that the skills and knowledge they developed in the PDS contributed to their effectiveness and retention. Emerging themes related to the construct of *first-day ready* were as follows: (a) Efficacy in Classroom Management, (b) Effective Models, (c) Support, (d) Experiential Learning, and (e) Sense of Self-Efficacy. A numerical count of the themes observed in the text are shown in Table 6.

Table 6*First Day-Ready Themes*

First-Day Ready	Total
Efficacy in Classroom Management	19
Effective Models	18
Support	12
Experiential Learning	6
Sense of Self-Efficacy	27

Explanation of Themes

Constructivist learning theory supports an experiential learning model where teacher candidates train in an authentic setting over time. Constructivist learning, paired with a sense of self-efficacy that comes from knowing you have done it and can do it again, serves as the premise for a teacher being *first-day ready* to teach (Dennis, 2016; Guha

et al., 2017a). The five interview themes provided support for the preparation of the former PDS residents as they discussed the skills, practices, and dispositions that made them ready to teach during their first year. Further, studies show prepared teachers are shown to stay in the profession longer (Zhang & Zeller, 2016).

Efficacy in Classroom Management

Efficacy in classroom management was a shared area of strength during the former residents' first year on the job as a new teacher (Ray, 2013; Zhang & Zeller, 2016). Participants were confident in their ability to manage a classroom, set routines and procedures, and manage students from their first day on the job. The skills the residents learned transferred to other grade levels and content areas.

I knew how to put grades in the first day...set up routines... (Amari, Interview).

I learned the importance of having a classroom that has processes... (Dara, Interview).

I do remember very clearly how we started out the first couple of weeks of school. And that was a big impact honestly, because you always hear about those first two weeks of school being so important to drill those routines and norms and procedures... (Merrick, Interview).

I knew how to manage a classroom...how to manage the students...I could probably count on one hand, the number of office referrals, I actually made [during my first year] (Merritt, Interview).

I had some footing in the foundational pieces..like classroom management... I feel like I was really prepared in comparison to someone who went the traditional route, who may not have had all those types of tools... (Tait, Interview).

Effective Models

Experiential learning taught and modeled by mentor teachers provided the conduit through which residents learned instructional skills (Green & Ballard, 2011; Ray, 2013). Having the opportunity to watch a master teacher effectively *model* instructional practice, then implement the practice themselves in the classroom, was an important

point of learning for the former residents. Dara pointed out several times throughout the interview that they developed a framework for how to handle just about anything, and the framework transferred across disciplines and grade levels.

...Because I had observed her do those parent conferences...it was easier because...this was a good way that she (master teacher) handled this situation (Amari, Interview).

I had, again, a framework for how to handle that... I got a framework that I can modify as needed... (Dara, Interview).

Classroom management...you know until you're living it and breathing it, you're not really that prepared for it. But having my master teacher there to guide me in how to effectively manage a classroom, set up the classroom, communicate with parents...I felt a lot more comfortable with that (Justice, Interview).

I never would have done it (routines and procedures) to that level had I not seen it in action at that level (Merrick, Interview).

I was able to adjust when it was my own classroom (Nico, Interview).

It was the practices and the structures...how I was taught [in PDS] that would have worked in any grade level" (Nolan, Interview).

Support

Residents described feeling the *support* of the master teacher and the administration as a contributing factor. One resident described it as, "having a safety net under you in everything you went to do" (Nico, Interview). Nolan (Interview) represented several participants' comments that the atmosphere was one of family.

...Thinking I have no idea what's about to happen but it's okay because I'm surrounded by people who've done it before (Dara, Interview).

...I learned how to ask for help (Justice, Interview).

...Part of what the PDS program taught me was to get help when you need help, and so I knew to ask... (Merritt, Interview).

...And it wasn't just another teacher. It was someone who had a vested interest in me doing well (Dara, Interview).

I will never forget really feeling personally like I am a part of a family, a team where everybody in the building is invested in me being successful...I just remember always feeling supported and taken care of (Nolan, Interview).

But I felt like I was reasonably well prepared for it because I had watched someone do it. And I had been included in that process (Dara, Interview).

Experiential Learning

Former residents identified the impact of experiential learning through authentic descriptions of the program. The residents lived the experience of a year as a teacher allowing them to emulate the learning in their own classroom. Living the experience developed their confidence. They did not necessarily view their first day as the teacher of record as their first day as a teacher (Nico, Interview).

It was the best thing to prepare me for teaching because I lived it... (Merritt, Interview).

Being able to see those kids as they went through the whole year...seeing them come full circle... (Nico, Interview).

You were there for the first day; you experienced those things... You've already experienced your first day teaching before it was technically your first day of teaching on your own (Nico, Interview).

I didn't really experience that feeling of failure because I'd already succeeded. I knew I could do it because I had already done it (Dara, Interview).

Sense of Self-Efficacy

Finally, a sense of self-efficacy was clear throughout each interview. Repeatedly former residents expressed complete confidence in their skills and abilities during their first day on the job after completing the PDS program. Teacher self-efficacy contributes to retention in the profession (Davis et al., 2019; Reeves, 2018; Silva et al., 2015; Zhang & Zeller, 2016).

*I just went straight over there (to another district), set up my classroom and implemented everything that I had been taught... I knew **exactly** what to do on the first day of school. My confidence level was pretty high to handle that* (Merrick, Interview).

I was able to then use that [new] curriculum to form a lesson plan that helped guide my instruction (Justice, Interview).

They gave us the tools...to take the initiative (Tait, Interview).

*I could de-escalate a situation really quickly. And students wanted to work for me. I was **ready*** (Nolan, Interview).

It was knowing what to expect from students no matter what age they were (Justice, Interview).

I felt like coming in, I was prepared as far as knowing what to do (Nico, Interview).

I could teach anywhere now I think (Merrick, Interview).

Discussion of Results and Findings

The current study investigated the long-term effects from a year-long residency model. Quantitative data showed a statistically significant difference in 5-year teacher retention based on training. Further, data revealed a larger percentage (14.3%) of the former residents (95.8%) stayed in the profession for at least the first 5 years of their career than did the undergraduate university-prepared Texas teachers (81.5%). However, the statistically significant findings combined with the small effect size due to a comparison between a small and large group were inadequate to understand the PDS career outcomes of the former residents. Yet, 88.7% of the former residents surveyed are still in service in education and have been for between 9 and 17 years. Statistical results informed the qualitative portion of the study to understand the career experiences of educators trained in the year-long model.

Survey data showed district principals successfully recruited a majority of PDS residents (64.8%) for employment the following year. Administrators and fellow teachers recognized the former residents as leaders showcasing their confidence and self-efficacy gained

through experiential learning during the residency. These qualitative data points support the statistical difference related to training. In addition, survey data revealed a perception that their experience in the PDS model had a positive impact on their career and advancement. Specifically, former residents reported their positive experiences with their mentor and university professor were a factor in their educator career outcomes. Based on the theoretical framework for the study, survey data supports experiential learning as the mechanism leading to self-efficacy in teacher preparation.

The survey data revealed that the residents were heavily recruited by the principals in the district where the PDS was located (64.8%) indicating both residents and principals were confident in their value in the job market. The interviews suggested that as residents gained skill in their practice, their sense of self-efficacy increased. As they were recruited, their efficacy increased further. They saw the cycle as opening their pathway to leadership.

As the residents described their readiness to be an effective teacher on the first day of school, interviews revealed five traits related to the *first-day ready* construct: (a) Efficacy in Classroom Management, (b) Effective Models, (c) Support, (d) Experiential Learning, and (e) Sense of Self-Efficacy. Interview data showed that their trust in the support and experiences, along with effective modeling by mentors and professors, helped them to construct knowledge and skills that led to their sense of self-efficacy and confidence. They felt ready to manage a classroom and be *first-day ready*.

Implications, Limitations and Recommendations

The lessons learned from the professional development school implemented and operated during the early 2000s remain relevant today. The work invested by the district, the university, and the faculty of the elementary school produced a generation of teachers who continue to value advanced education and continuous learning. It produced teachers who were prepared to teach on the first day of school and provided the confidence to tap into leadership roles made available to them in their careers (Green & Ballard, 2011; Ray, 2013).

Implications for Low Socio-economic Populations

Ingersoll et al. (2018) noted that the higher percentages of teachers leaving the profession at the five-year mark come from schools with a large low socio-economic population. This research provided data contrary to those findings. Despite teaching at a school with a 94% low socio-economic population, 88.7% of the teachers trained in that environment are still teaching 9 to 17 years after that experience. The staying power of the former residents suggests that the year-long residency model is effective for high needs populations.

Limitations of Study

The purpose of the study was to examine the career experiences of teachers who prepared in a year-long model. The current study is one professional development school using a year-long residency design in collaboration with a local university. The results and findings of the study are worthy of consideration in the design of education preparation programs, but transferability may be limited due to the size of the study.

Recommendations for Future Research

Recommendations for future research include comparing experiences of participants in year-long residency training programs and university-based preparation programs to explore their perceptions of their readiness to teach on the first day of school. Educator reflections regarding their readiness to teach, after they have gained years of experience, is valuable (Ray, 2013). As self-efficacy and confidence are such important indicators of teacher success, self-efficacy should remain a component of future studies.

Further, the impact of the mentor teacher in the development of teacher candidates should be an area of focus. There is value in knowing the sense of self-efficacy scores of mentor teachers, prior to becoming a mentor in comparison to their sense of self-efficacy after mentor training, and again after the experience of being a mentor.

Recommendations for Future Practice

Based on findings of the current study, grounded in the literature, when a teacher enters the profession from a position of solid clinical training and a strong sense of self-efficacy, the teacher will be much more likely to stay in the

profession and to see it as a rewarding career (Dennis, 2016; Guha et al., 2016; Guha et al., 2017a; National Education Association, 2021). Therefore, teacher preparation programs should work with local districts to implement one-year residencies to provide candidates the support and experience required to prepare teachers who are ready to be effective on the first day. Preparation programs and districts should partner in the selection and training of the mentor teacher to ensure students are placed with a highly effective teacher capable of articulating the skills and processes modeled.

This study demonstrated that the learnings and evidence-based practices from the PDS model produced lasting results and high retention rates in the profession aligning with a theoretical foundation in which experiential learning leads to teacher efficacy. Study practices observed align with the theoretical framework. Applying these findings to current residency models growing throughout the nation provides positive results for both the teachers and the districts that hire them. With the focus on experiential learning leading to teacher efficacy, the cumbersome PDS model is not practical, as current year-long residencies allow a more portable model for training across grade-levels, disciplines, and demographically diverse schools, ensuring all students are served with equity and efficacy (Ingersoll & Strong, 2011).

In addition to the findings, research supports additional strategies that could enhance the year-long residency model, such as paying a salary to teacher candidates (Guha et al., 2016). The PDS residents had the comfort of sustaining their finances during their year of residency (Ray, 2013). It is a support that should be an inherent part of our profession as it allows residents the ability to focus on their development as a teacher. Indeed, no other professional endeavor requires interns or residents to work for a year with no visible means of support.

In conclusion, with nearly half of our new teachers leaving after 5 years, the profession of teacher education is not meeting its objective of retaining teachers in the classroom. Therefore, exploring alternatives to our preparation programs is critical (Hinnant-Crawford, 2020). The current mixed-method study followed up on the careers of educators who participated in a year-long residency 9 to 17 years earlier, based upon the medical model of training physicians. Findings show that clinical practice in a year-long residency aligns with a theoretical framework using experiential learning as a mechanism leading to teacher efficacy. Study outcomes provide decision makers in PK-12 and higher education support for year-long residencies as a model to nurture and prepare teacher candidates for longevity and leadership in the profession.

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