School-University Partnerships:

The Professional Development Schools Model, Self-Efficacy, Teacher Efficacy, and Its Impact on Beginning Teachers

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ABSTRACT: The purpose of this study was to investigate the elements of the professional development schools (PDS) model used at ABC University to consider its effect on beginning teacher persistence/retention. A mixed methods design was utilized to explore the perceptions of graduates of the program who have remained in the teaching profession and graduates who have left or never entered the profession. Survey, focus group, and interview data were analyzed to consider if graduates of the program attributed the elements of the PDS model to increases in self-efficacy, teacher efficacy, and eventually persistence in the teaching profession. It was found that graduates of the specific teacher preparation program have high levels of self-efficacy and teacher efficacy and attribute the PDS model with increases in self-efficacy and teacher efficacy. Graduates connect their self-efficacy and teacher efficacy to their persistence. However, these increases do not predict or guarantee persistence/retention in the teaching profession.

NAPDS Essential(s) Addressed: #2/A school-university culture committed to the preparation of future educators that embraces their active engagement in the school community; #4/A shared commitment to innovative and reflective practice by all participants; #8/Work by college/university and P-12 faculty in formal roles across institutional settings

Introduction

Teacher attrition in the beginning years of teaching has become a costly problem in the field of education. Every year, school districts experience the undying numbers of beginning teachers who give up on the teaching profession within a few years of entering the field of education. Numerous, well-trained educators seem to lose faith in a profession that is in desperate need of skilled innovators. The young and vibrant educators just entering the profession are more likely to leave the profession than their more experienced peers (Luekens, Lyter, & Fox, 2004). Research has shown that up to 50% of teachers leave the profession within their first five years of teaching, and 11% leave within their first year (Henke, Chen, & Geis, 2000; Ingersoll, 2002)

Many researchers consider the Professional Development Schools (PDS) model of teacher preparation an avenue to reforming our schools and a way to comprehensively prepare future educators (Abdal-Haqq, 1998; Darling-Hammond, 1994; Goodlad, 1994; The Holmes Group, 1990; Teitel, 2003). The PDS model has been touted as being a particularly effective model that has the potential to alleviate the highly prevalent problem of beginning teacher attrition (Darling-Hammond, 2007; Levine, 2006). Due to the field of education's inability to retain new and often innovative educators, schools are plagued by constant turnover.

Classrooms often have revolving doors that new teachers walk through at least once a year. The effects on the education of students, district budgets, and the advancement of the teacher work force are immense. More must be done to analyze the role that the PDS model can play in spearheading these issues.

The intent of this paper is to present research that explores the perspectives of graduates of a teacher preparation program that utilizes a PDS model. In particular, the research examines the elements of the PDS model at ABC University and the effects each element has on the graduates' self-efficacy and teacher efficacy, and in turn on their ability and willingness to persist in the profession.

Relevant Literature

The Relationship Between Self-Efficacy, Teacher Efficacy, and Teacher Persistence

Certainly, beginning teachers will be faced with obstacles and challenges as they enter the profession and continue through their first few years of teaching. Their ability to persist will be strongly influenced by their level of self-efficacy. Self-efficacy, or what people think, believe, and feel about themselves, strongly influences their actions (Bandura, 1986). Research suggests that beginning teachers who have strong, positive beliefs about their

capabilities are likely to persist in the teaching profession and those who are highly capable but do not believe they are capable are likely to leave the profession even though they are quite competent.

Yost (2006) looked specifically at the elements of a teacher preparation program and their effect on teacher retention. Yost (2006) concluded that there is a vital link between teacher preparation and self-efficacy and that the likelihood that novice teachers will persist in the profession is strongly related to teacher efficacy (Yost, 2006). Teacher efficacy can be defined as "teachers' evaluations of their abilities to bring about positive student change," (Gibson & Gembo, 1984, p. 570). Often, new teachers who demonstrate the most self-efficacy and teacher efficacy are the ones who are retained (Chesnut & Burley, 2015; Pajares, 1996; Yost, 2006).

Therefore, new teachers who have not developed a strong sense of self-efficacy or teacher efficacy will likely not persist in the profession even if they have a vast knowledge base and are highly skilled. Yost (2006) points out that self-efficacy in young teachers that has been established early on in teacher training will lead to the successful retention of beginning teachers.

The Professional Development Schools Model and Self-Efficacy/Teacher Efficacy

Participation in the Professional Development Schools Model has been found to contribute to increases in self-efficacy in preservice teachers and has helped pre-service teachers to remain in the teaching profession beyond the beginning years of teaching (Darling-Hammond, 1994, 2002; Capraro, Capraro, & Helfeldt, 2010; Larson & Goebel, 2008; Latham & Vogt 2007). Linda Darling-Hammond (1994, 2002) argues that the PDS Model provides pre-service teachers the assistance and support needed to help them to become more successful through their teaching practice, providing a pathway for them to feel more prepared, therefore increasing the self-efficacy of novice teachers and increasing their commitment to the teaching profession. In a PDS model, university faculty as well as mentor teachers in the PDSs support pre-service teachers. The pre-service teachers become a part of the PDS community early on in their program and therefore become familiar with the norms of teaching in a PDS and become comfortable with the staff in the PDS setting. Therefore, pre-service teachers often feel surrounded by support and feel a connection between their coursework and their work in the PDS (Larson & Goebel, 2008; Swars & Dooley, 2010; Taymans et al., 2012).

Additionally, pre-service teachers often feel supported by other pre-service teachers within the PDS setting and mentors from the PDS (Teitel, 1992). This kind of environment may lead pre- service teachers to feel better prepared for teaching and to maintain a high level of self-efficacy (Darling-Hammond, 1994, 2002; Larson & Goebel, 2008; Swars & Dooley, 2010).

The Professional Development Schools Model and Beginning Teacher Persistence

Some of the current research compares traditional models of teacher preparation and alternative route programs to the PDS model of teacher preparation. Much of the research has found that the PDS Model contributes to higher retention rates of beginning teachers than traditional or alternative route programs. Capraro, Capraro, and Helfeldt (2010) found that new teachers who had been trained in a PDS setting felt more prepared for teaching than those who had been trained in a traditional setting. Fleener and Dahm (2007) found that attrition rates for new elementary school teachers who had been trained in traditional teacher preparation programs were significantly higher than those who had been trained through a PDS model of teacher preparation. Latham and Vogt (2007) had similar findings. They found that new teachers who were prepared through a PDS model were more likely to enter the field and remain in the field than their non-PDS trained peers even though they had similar skills.

The reasons that the PDS model contributes to greater retention of beginning teachers are related to greater levels of support, a sense of community, self-efficacy, and connections made between theory and practice. Ismat Abdal-Haqq (1998) concludes that new teachers who had been trained in a PDS were more confident in their ability to teach and also experienced less "culture shock" as they begin teaching than their counterparts who were not trained in a PDS. The high levels of confidence and preparedness in new teachers who had been trained in a PDS, Abdal-Haqq (1998) concludes, leads to a higher retention rate of beginning, PDS trained teachers when compared to beginning, non-PDS trained teachers.

Description of the PDS at ABC University

The elementary education program at ABCU has adopted a PDS model that includes partnerships between the education department at ABCU and six local elementary schools. This model has been in place at ABCU since 1995, beginning with a partnership with just one school and eventually expanding to partnerships with six elementary schools.

There are five major components of the ABCU PDS Program related to preparing pre-service teachers; the clinical professor, embedded methods courses, Friday "rounds" workshops, pre-practicum fieldwork, and a student teaching seminar. The first component, the clinical professor position, is filled by a classroom teacher from one of the PDSs. This teacher takes a sabbatical of sorts from their classroom teaching position to fulfill the duties of the clinical professor. This person has many responsibilities including acting as a liaison between the ABCU education department and the various PDSs, monitoring the pre-practicum placements of students at the PDSs, supervising student teachers at the PDSs, conducting a student teaching

seminar once a week, and organizing Friday "rounds" workshops.

Embedded methods courses are an additional component of the PDS program at ABCU. There are currently three courses within the elementary education program at ABCU that are held exclusively or in part at one of the PDSs. An example is an elementary science methods course that is held in the library of one of the PDSs. Students enrolled in this course receive instruction about the various methods used to teach science concepts, and soon after the instruction, the students implement lessons in the elementary classrooms in the PDS in order to practice the techniques to which they were just introduced.

The third component of the ABCU PDS program includes Friday "rounds" workshops for student teachers. During their teaching practicum, student teachers within the PDSs participate in weekly workshops. These professional development workshops are based on the medical model of "Rounds." During these half-day programs, students are engaged in pre-rounds instruction, demonstrations, and discussion around distinct topics such as, classroom management, assessment, or integrating technology. These workshops are sponsored by and presented at the various PDSs. After the presentation and discussion, the student teachers visit classrooms within the PDS and regroup to discuss what they saw and reflect upon what they have learned.

Another component of the program involves a student teaching seminar that accompanies the student teaching experience for students in the elementary education program. This seminar is a three-credit course offered through ABCU. The seminar offers opportunities for student teachers to voice concerns, problems, and triumphs during their student teaching and to support one another through the student teaching experience. The clinical professor manages the seminar and offers presentations about a number of topics during the weekly seminar.

The fifth component of the PDS program at ABCU involves the completion of pre- practicum fieldwork. All students in the elementary education program must complete 85 pre-practicum hours in an elementary school. Most students in the elementary education program complete all or most of their pre-practicum hours at PDSs.

Methods

This article presents parts of a larger study that was conducted as a mixed methods outcome evaluation of the PDS model at ABC University (Bebas, 2012). This article, although offering some quantitative data, is mainly focused on the qualitative methods related to the perspectives of the participants of the study with the intention of presenting the voices of the participants and their point of view about how the PDS model at ABCU has affected their self- efficacy and teacher efficacy and contributed to their ability to persist in the teaching profession.

Quantitative Data Collection

A 38-question survey was developed that asked participants to consider the elements of the ABCU elementary education program and the extent to which they had an effect on their teacher efficacy, self-efficacy, and persistence in the teaching profession. A well-known teacher efficacy scale, developed by Woolfolk and Hoy (1990), was also included in the survey as well as the "New General Self-Efficacy Scale" (NGSE scale) to measure general self-efficacy (Chen, Gully, & Eden, 2001). The final section of the survey asked general questions of participants regarding their teaching experience. These questions were intended to gather information about the participants' years of experience as well as their reasons for either persisting in or leaving the teaching profession. The survey was sent electronically via the online survey tool, Survey Monkey, to approximately 120 graduates of the ABCU elementary education program. There were 40 respondents to the survey.

Qualitative Data Collection

The focus group and interview portion of this study built on what was learned through the survey data. Respondents of the survey were invited to participate in focus groups or individual interview sessions. Focus group and interview sessions were guided by the researcher with the hopes of gaining rich understandings of participants' thoughts, experiences, and beliefs (Morgan, 1998). There were two focus group sessions, one group with four participants and one group with three participants, and four individual interview sessions during which the conversations were recorded using audio recording technology. The recordings were then transcribed in order to prepare the data for analysis.

The focus groups and interview participants were asked the same 10 interview questions. The focus group/interview questions were sorted into five categories based on Richard A. Krueger's (1998) categories of questions for focus group interviews. The five categories are opening questions, introductory questions, transitioning questions, key questions, and ending questions. The opening and introductory questions asked very general questions about the participants' experience with the elementary education program at ABCU. The transition questions gave participants the opportunity to make a connection between their experience and the topic at hand. Therefore, participants were asked what they perceived as the strengths and weaknesses of the program. The key questions were focused on the core inquiries of the study. The researcher asked the participants to consider how the elementary education program at ABCU affected their self-efficacy, teacher efficacy, and persistence/retention in the teaching profession. The final key question tied these constructs together and asked the participants to explain how they felt their self-efficacy and teacher efficacy contributed to their persistence or lack of persistence in the profession. One of the ending questions asked participants to choose specific aspects of the elementary

education program that had the most impact on their ability to persist in the teaching profession. This gave the researcher an idea of what elements of the program were perceived as most valuable. The last ending question asked for suggestions from the groups for how the ABCU elementary education program could improve.

Site and Participants

This study was conducted with graduates from ABC University, a small public university in of approximately 5,500 students. The target population for this study was participants of the undergraduate program in elementary education at ABCU who graduated from the program between 2003 and 2008. This range of years was chosen because although the PDS model has been in place at ABCU since 1995, the current PDSs were not all included in the program until 2003. Therefore, in order to get the most accurate picture of the PDS model at ABCU, as it functions today, graduates after the year 2003 were used. Also, 2008 was chosen as the last year in the range so that the participants could be identified as either graduates who have persisted beyond three years or graduates who have not.

During the first portion of data collection, surveys were sent out to all the graduates of the ABC undergraduate elementary education program from 2003-2008, a total of approximately 120 students, and 40 of these former students answered the survey. Approximately 65% of the respondents were still teaching after at least three years, and 35% had left the profession or had never entered the profession at all. As a follow-up, those who participated in the survey portion of the study were invited to partake in focus groups or interviews.

The focus groups were devised based on the survey data. There were two focus groups made up of graduates of the ABCU program who entered and had remained in the teaching profession, one group of four participants and one group of three participants. Of the seven persisters, four of them were teaching in an urban school district, including two participants who were teaching in one of ABCU's PDSs. (Participants who have persisted in the profession will be referred to as "persisters," and participants who have either left the teaching profession or never entered it will be referred to as "non-persisters" for the remainder of this report). Only one of the non-persisters had taught in a school, and in her case, it was an alternative school for students with social and emotional needs. According to this participant, she had left the teaching profession before the end of her first year teaching due to struggles with classroom management and feeling as though the morale amongst teachers was quite low. The other three participants in this group had never entered the teaching profession. Two of these participants had been unable to find classroom teaching jobs and the other had been prevented from getting his elementary teaching license because he had not passed one section of the Massachusetts Test of Educator Licensure (MTEL).

Data Analysis

Quantitative data analysis. As part of the quantitative portion of this study, various types of analyses were conducted. First, descriptive statistics were collected that provided a general portrayal of the perceptions of all of the participants. Measures of central tendency and measures of dispersion were used to analyze the trends of persisters and non-persisters.

The quantitative analysis of this study involved comparing graduates of the ABC University elementary program who persisted in the teaching profession to those who left the profession or never entered the profession in order to realize if there were differences in their levels of teacher efficacy, self-efficacy, and in their beliefs about whether the ABCU PDS program contributed to their sense of teacher efficacy. Individual survey items were compared using a Fisher Exact Test to test for significant differences across the persister and non-persister teacher populations. The analysis of this quantitative data then lead to a qualitative analysis that allowed the researcher to dive deeper into the perceptions of the participants.

Qualitative data analysis. The goal of the qualitative analysis of this study was to gain deeper understanding of the results of the quantitative portion of the study and to allow the participants to further explain their perceptions of the ABCU PDS program and what parts of the program affected their teacher efficacy, self-efficacy, and persistence and retention in the teaching profession.

Ongoing review of the data. The first step in the qualitative analysis of this study involved the ongoing, general review and contemplation of the data that was collected. During this continuous initial stage of analysis, the researcher listened to audio recordings of the focus group and interview sessions and read and organized any notes taken during these sessions. The researcher wrote memos to develop ideas and categories about the data and consider possible relationships.

Coding. In order to analyze the qualitative data collected through interviews and focus groups, a number of coding strategies were used. A series of coding sessions occurred employing the use of descriptive codes, evaluation codes, magnitude codes, and in-vivo codes to capture the language of focus group and interview participants (Saldana, 2009). After transcribing each audio recording of the interviews and focus groups and after each stage of analysis, the researcher wrote memos expressing thoughts, comparisons, and general ideas related to the data (Miles & Huberman, 1994; Maxwell, 2005).

Findings

The findings of this study represent the perspectives of graduates of the ABCU elementary education program and their views about the relationship between the PDS model of teacher preparation used at ABCU, self-efficacy/teacher efficacy, and beginning teacher persistence. The perspectives of both persisters and non-persisters were equally valuable and resulted in the following findings.

The PDS Model's Relationship to Self-Efficacy and Teacher Efficacy

After analyzing the results of both of the Woolfolk and Hoy (1990) teacher efficacy scale and the New General Efficacy Scale (Chen, Gully, & Eden, 2001) for both the persisters and the non-persisters who were surveyed, it was determined that both groups have a positive sense of teacher efficacy and self-efficacy. This means graduates of the ABCU elementary program who were surveyed have confidence in their abilities as teachers and believe they can accomplish their personal goals.

Comparisons between persisters and non-persisters were made on items on the Woolfolk and Hoy (1990) Teacher Efficacy Scale, the General Self-Efficacy Scale (Chen, Gully, & Eden, 2001), and survey items related to the effect ABCU program elements have on teacher efficacy. After comparing the two groups by using a one-tailed Fisher Exact Test for each item, it was found that there was no significant difference between the two groups on any of the items (p < 0.05). This noteworthy lack of a statistical difference between the two groups indicates that both groups possess a similar, positive sense of self-efficacy and teacher efficacy and that both groups attribute elements of the ABCU elementary education program to their positive sense of teacher efficacy.

Both persisters and non-persisters, indicated that the elements of the PDS program at ABCU had a positive effect on their teacher efficacy. According to the survey data, 65% of participants felt that working with the PDSs during their time at ABCU increased their teacher efficacy somewhat or significantly. More specifically, at least 91% of all survey respondents seemed to think that fieldwork completed during their training, mostly in a PDS, the embedded methods courses at the PDS, and student teaching (82% of the respondents completed student teaching at a PDS) were elements of the program that increased their teacher efficacy.

So, what do graduates of the ABCU program say about how the elements of the PDS program affected their teacher efficacy or self-efficacy? During interviews and focus groups, it was clear that graduates of the ABCU elementary education program attribute elements of the PDS program at ABCU to their high levels of teacher efficacy and self-efficacy. Many of the participants, both persisters and non-persisters, discussed how the PDS program helped increase their teacher efficacy through numerous practical experiences, collaborative opportunities, and learning experiences.

The participants clearly expressed their belief that they gained much confidence in their teaching ability throughout the program. This was clear when a non-persister made comments such as, "I thought that toward the end, I felt much more confident with my abilities to teach," or a persister said, "I learned so much that I was comfortable when I started teaching." The participants also indicated that not only did their teacher efficacy increase, but their self-efficacy did as well. For example, one of the graduates stated that while enrolled in

the ABCU elementary education program she grew "not only as an educator but as a person as well."

It is evident that the ABCU elementary education program produces graduates with high levels of teacher efficacy and self-efficacy, but does the PDS program and its various elements contribute to those high levels? Graduates who participated in interviews and focus groups say, "yes." There were four major themes that emerged from the focus group and interview sessions that are relevant to how the PDS program at ABCU influences graduates' self-efficacy and teacher efficacy. These themes are:

- The advantage of being familiar and comfortable with the PDS
- 2. The value of feeling supported
- 3. The importance of collaboration
- The importance of being valued as a teacher within the PDS

A frequent theme during interviews and focus groups, from both persisters and non-persisters, was that learning to become a teacher in a familiar and comfortable PDS helped participants to gain confidence. The participants of this study associate their familiarity and comfort with the PDS to increased levels of self-efficacy and teacher efficacy throughout the ABCU program. The participants' familiarity with the PDS helped them to feel confident as they started their student teaching experiences. They did not need to take time to become familiar with the school environment.

For example, one of the non-persisters, when asked how the PDS program helped with building teacher efficacy, said, "I think the fact that the PDSs are used to you coming and going and actually have a really good relationship with the school [ABCU] as well." Others connected their positive teacher efficacy and self-efficacy to their comfort level within the PDS. One presister explained, "You were learning in these schools already in your methods courses and other things so you had some knowledge of what it was going to be like when you student taught there." Graduates also discussed the fact that feeling familiar with and comfortable in a PDS helped them to feel confident as they entered the workforce. For example, one persister explained, "Because you were so involved at the PDS, when you got your job, you knew what the expectation was." Familiarity and comfort while working with the PDS as preservice teachers clearly helped these graduates to gain confidence.

Another common theme that emerged during focus group and interview sessions was that graduates felt as though they received an abundance of support while they were involved with the PDSs. For example, the graduates claimed to have gained support from the teachers at the PDSs. A non-persister discussed how the support she received from her cooperating teacher at one of the PDSs was connected to her self-efficacy, "I loved the teacher I had [in student teaching] and she helped me through a lot. So, my confidence got boosted."

The participants also gained a lot of support from other students in the ABCU program. The program is designed to offer many opportunities for the students in the program to work together and offer one another support. The participants mostly talked about collaborating with other students as part of the embedded methods courses at the PDSs, in seminar class, and during the Friday workshops at the PDSs. Collaboration, according to the participants, gave pre-service teachers the opportunity to share ideas, to lean on one another for support, and to reflect together about what techniques work and don't work. As one non-persister explained, "Having support from other people even other students that I was with made me feel like, okay, I can mess up but I can still go back and do that now because I got help from other people."

The embedded methods courses, held at one of the PDSs, were frequently discussed as an element of the ABCU program that provided opportunities for pre-service teachers to collaborate. During the methods courses students often worked in groups to design and implement lessons in classrooms within the PDSs. The participants identified this kind of collaboration as a vital part of the program and an element of the program that increased their self-efficacy and teacher efficacy. One of the persisters described this idea,

I think that some of that confidence comes from the methods classes when we were in the schools and working with a group. I remember working with my group in science at [one of the PDSs] and feeling like today was a really off day for me, but I know you have my back, and next week I will be able to do this because I am more confident with this unit and they'll chime in and we can kind of debrief after and talk about what worked and what didn't and what do we need to change so that we all do a better job next time.

The support this participant received from her group members in her methods class allowed her to realize when she was struggling and to talk about it with others. She felt supported by her classmates, which in turn increased her confidence in her teaching.

The seminar class that accompanies student teaching was another element of the ABCU program that the participants identified as one that provided opportunities to collaborate. Many of the participants discussed collaborating during seminar class and valued that part of the program because it helped them to feel supported and as if they were not alone in their struggles. Similar to the methods courses, seminar provides pre-service teachers a chance to discuss their teaching, reflect on it with others, and get suggestions and support from others. This helped the pre-service teachers to feel that it isn't unusual to feel frustrated, stressed, or bewildered during student teaching. One of the persisters explained,

In seminar, we could come in and vent for the first twenty minutes of it. It helps to know that you're not the only one experiencing it, and whatever we were having issues with, we were able to talk it out and get suggestions...I realize that it's not just me that gets frustrated or it's not just me that has the kids who can be a pain sometimes. So, that helps me to push through it to know that others see the same thing.

The participants also explained that they seek out collaboration in their current teaching situations because they learned to teach through the use of collaboration as part of the ABCU program. To these participants, collaboration is a natural part of teaching. One participant explained how collaborating in seminar class has influenced the way she works now,

I think we learned to fall back on each other and during that seminar class that was a great time to collaborate...I think that taught me that you need to meet with teachers and you need to talk to teachers and you need to collaborate to design great lessons and to keep your sanity. When you get a teaching job you sort of seek out those other people on your team and you depend on them, and I think that's a big piece of being confident.

The seminar was touted by the participants of this study as a time for collaboration that helped them to gain confidence in their teaching ability while they were student teaching.

Another part of the ABCU program that provides students with the opportunity to collaborate is the Friday workshops at the PDSs. Student teachers who are placed at the PDSs participate in workshops at the various PDSs on Fridays throughout their semester of student teaching. The workshops are fairly informal and not only serve as a medium for learning about a particular concept, such as classroom management or assessment, but also serve as a meeting place where student teachers can discuss their experiences with each other and practitioners from the PDSs. It is another chance for the student teachers to discuss the topic of the workshop and also other thoughts that they were having about their student teaching experience. One participant discussed the benefit of collaborating at the Friday workshops,

Those Fridays when we used to do the professional development with student teaching...I think those were fun because it gave us a chance to get together with the other student teachers and see their schools but also learn about certain things. I thought that was helpful.

The participants seemed to think that the Friday workshops helped them to feel like a cohort of student teachers who were working together and supporting one another. It was another avenue of support for the student teachers and another way to increase self-efficacy.

The ABCU elementary education program provides its preservice teachers with many opportunities to collaborate. The participants of this study feel that through collaboration in the methods courses, in seminar class, and during the Friday workshops they were able to gain the support they needed to increase their sense of self-efficacy and teacher efficacy.

The last theme that emerged during interview and focus group sessions was that graduates indicated that while training to be teachers at the PDSs, they felt valued as teachers. The participants of this study claimed that because they were frequently working within the PDSs, they felt as though they were a part of a community at the PDSs, and this caused the ABCU students to feel valued as teachers. The participants indicated that the administration, staff, and faculty at the PDSs welcomed them into the schools as if they were part of the staff. As one persister said, "They didn't treat you like a student teacher." This level of hospitality allowed the participants to feel as though they were valued early on in their careers as teachers. Feeling valued by others in such a way led them to feel more confident in their abilities to teach. One participant explained how she felt as she began student teaching in a PDS, "I felt like I was a part of the community right off the bat... I think was a huge piece of it, just feeling really valued."

The participants clearly appreciated their interactions with the PDSs. The familiarity between the PDSs and the pre-service teachers from ABCU gave the pre-service teachers an advantage as they trained to be teachers. They felt comfortable in the environment in which they were training and welcomed by the people within that environment. They claimed to have felt valued as educators and not just teachers-in-training. This increased the self-efficacy and teacher efficacy of the participants of this study while they trained to be teachers at ABCU.

Overall, the graduates of the ABCU elementary education program in this study have high levels of teacher efficacy and self-efficacy, even those who have not persisted in the teaching profession. All the participants in this study attribute the various elements of the ABCU program with increased levels of teacher efficacy and self-efficacy. Participants in the focus groups and interview sessions indicated that their high levels of teacher efficacy and self-efficacy were influenced by a PDS program that provided them with support, gave them many opportunities to collaborate with others, and helped them to feel valued as teachers.

The PDS Model's Relationship to Persistence

We've learned that graduates of the ABCU elementary education program possess high levels of self-efficacy and teacher efficacy and attribute elements of the PDS program to these high levels. However, do the graduates believe that their high levels of self-efficacy and teacher efficacy have helped them to remain in the profession? Also, do they attribute the PDS program at ABCU to helping them to persist in the teaching profession?

When asked why they have been able to persist in the teaching profession, persisters who participated in the survey

portion of this study indicate that confidence in their teaching ability, support from their colleagues, a strong sense of self-efficacy, and a strong sense of preparedness were the top reasons that they have been able to persist in the profession. These findings indicate a clear connection between self-efficacy, teacher efficacy, and beginning teacher retention. Also, the survey respondents indicate that teacher preparation is a major factor in one's ability to persist in the teaching profession.

Non-persisters' responses were inconsistent when asked why they left the teaching profession, with only 16.7% of respondents choosing any one answer. Nearly 67% chose "Other" as a response and wrote in their reasons for leaving the profession, but none of these responses was the same. It is noteworthy that none of the respondents indicated that a lack of confidence in their teaching abilities or a lack of preparation were the reasons that they had left the profession. These participants have left the profession, but it is not due to a negative sense of teacher efficacy or because they do not feel like they are prepared to be a teacher. Instead it is due to a number of other reasons. The reasons that some of the graduates have left the profession are related to outlying factors unrelated to teacher efficacy and self- efficacy.

Focus group sessions and interviews led to deeper understandings of graduates' perspectives of the how the PDS model and self-efficacy and teacher efficacy may affect persistence in the teaching profession. Seven of the eleven participants who were interviewed are still teaching after at least three years in the profession and four of the participants were not currently teaching. Only one of those participants who was not teaching had left the profession with no intentions of seeking out a career in elementary education. The other three participants who were not teaching still aspire to teach in an elementary setting. So, 10 out of the 11 participants interviewed for this study either persisted in the profession or will continue to pursue the teaching profession, and all 10 attributed the ABCU elementary education program in some way to their desire to continue to move forward in their careers as teachers.

We learned earlier in this report that graduates of the ABCU program attribute their positive self-efficacy and teacher efficacy to the ABCU program and specifically to elements of the PDS program. So, if graduates claim that the program helps increase their self-efficacy and teacher efficacy, and they also claim that these high levels contribute to persistence, then the program can be attributed with impacting persistence in the teaching profession.

The participants connected self-efficacy and teacher efficacy to persistence in the teaching profession in two ways. First, they claimed that having positive self-efficacy and teacher efficacy promotes enjoyment in one's job as a teacher. This positive feeling trickles down to students, contributing to positive student performance and therefore confident feelings for the teacher. This cycle causes the teacher to connect positive feelings to their job and therefore is more likely to stay in the profession. The participants explained that they left the ABCU program as confident teachers, and then that confidence bred more confidence. One participant who is currently teaching explained,

I think the confidence that you get through the program here at ABCU is attributed to you staying in the profession because the confidence that you get here you are instilling in your students and when you see that confidence in your students, it makes you want to stay. I mean if you're put into a position where you don't have a lot of confidence in what you're doing, your students aren't going to have a lot of confidence in what they're doing, and then after a while you're going to burn out and want to leave, whereas if you come in with that confidence and instill that confidence, it's different.

Therefore, beginning teachers who finish their teacher preparation programs as confident teachers will likely use that confidence to fuel their self-efficacy, which in turn will influence their ability to persist in the profession.

The second way that self-efficacy and teacher efficacy are related to persistence, according to the participants of this study, is that self-efficacy and teacher efficacy can impact one's ability to overcome obstacles, a vital skill when first entering the teacher workforce. Some of the non-persisters who were interviewed for this study have faced many obstacles while trying to transition into the teacher workforce. A few struggled to pass the commonwealth's teacher test while others struggled to find a job. All of the non-persisters who have struggled in such a way claim to still want to pursue a teaching career. They connect this desire to their teacher efficacy and self-efficacy.

For example, a graduate of the ABCU elementary program has faced many obstacles while trying to obtain his license to teach in Massachusetts. When he graduated from ABCU in 2007, he completed all the requirements for licensure in Massachusetts except he struggled to pass one part of the state mandated teacher's test. After attempting to pass the test many times, he thought he would just quit, but he knew that he really wanted to teach, and he felt that he was good at it. He connected his self-efficacy and teacher efficacy to his desire to continue to pursue the teaching profession. He said,

I definitely think that my confidence level has made me want to continue to try to teach. I think I'm a perfect example of that because it is something that I really want to do. Had I not really cared after the third of fourth fail of the Foundations of Reading test, I might have been like screw all of this.

This graduate may have given up if he was not confident in his ability to teach. He overcame years of obstacles and continues to try to pursue a career in teaching.

Graduates of ABCU also made it clear that the elementary education program is directly linked to their ability to persist in the profession. For example, a graduate who has yet to enter the profession explained that the ABCU program that has made him feel like he still wants to pursue a teaching career. This

graduate has found a lucrative job in another profession but he claims.

What I learned here [at ABCU] has stuck with me and it's totally been a part of what I want to do in the future. . . After the issues with failing the test and then finally passing and deciding I was pissed for a bit, I realized I really did enjoy myself and I really was good at it. Knowing that it is still an option and that it's not too late, getting back into it [teaching] is totally something I want to do.

Other graduates of the program have had similar experiences. A graduate of 2008 who has been unable to find a job said, "I got into a slump this year because I couldn't find anything, but I am still looking and trying my hardest so obviously I had to have learned something here that makes me want to continue." Another graduate summed it up nicely. She said that the program, "Instilled in me to never give up on the field." So, although, the non-persisters in this study have not been successfully retained in the profession, they have not completely given upon it, and they claim that the ABCU program is a reason that they want to continue to pursue a career in education.

Similarly, the persisters, who have been teaching for at least three years, suggest that the program instilled in them a commitment to the profession. Many of these persistent graduates claim that they have been able to persist in the profession due to the passion for the profession that they gained throughout the program. They also claim to often refer back to the program and what they learned in the program when they are in a bind or unsure of how to handle a situation in their classroom. Having this foundation helps them to persist. One of these graduates stated when asked about what has helped her to persist in the profession, "I think it's just the passion I have for teaching. I had it at the beginning...but it grew based on my experience in the education program." Another graduate who is currently teaching discussed how she is able to reduce her stress levels by thinking back to what she learned at ABCU in order to deal with issues that arise in her classroom. She said, "I try to pull back and remember what I've learned about how to deal with it and it helps me to not be stressed all the time." The persisters and non-persisters have similar opinions about the effect the ABCU elementary education program has on persistence. They each claim that certain elements of the program instilled a sense of perseverance and passion.

Graduates of the ABCU elementary program link their ability to persist in the teaching profession to self-efficacy and teacher efficacy and directly to the ABCU elementary education program. Participants who have persisted in the teaching profession claimed that self-efficacy and teacher efficacy contributed to enjoyment in their jobs as teachers, which in turn, made them want to continue on as teachers. Other participants described obstacles they have faced, and claimed that high levels of self-efficacy and teacher efficacy developed

through the PDS program have helped them to face these challenges and therefore helped them to be able to continue teaching or to continue to pursue teaching as a profession. Because the ABCU elementary education program contributes to increased levels of self-efficacy and teacher efficacy, it is likely that it also contributes to a greater ability to persist in its graduates.

Discussion

Graduates of the ABCU elementary education program attribute elements of the program, specifically those related to the PDSs, to their self-efficacy and teacher efficacy. They also claim that increases in self-efficacy and teacher efficacy, while enrolled in the ABCU program, led to an ability to persist in the profession. The participants of the study linked a number of elements of the program to their self-efficacy and teacher efficacy, and their persistence. Undoubtedly, the element of the PDS program that was perceived as most beneficial by the participants of the study was the embedded methods courses that were held at the PDSs. Other practical elements were also linked to the participants' confidence and persistence. Student teaching at a PDS, the Friday workshops at the PDS, and fieldwork were discussed as major factors contributing to increases in self-efficacy and teacher efficacy and ultimately persistence.

The graduates also identified support from and collaboration with a number of people as a reason for increases in self-efficacy and teacher efficacy while enrolled at ABCU. Specifically, the clinical professor, who is a practicing teacher in one of the PDSs, other students who are training at the PDSs, and the teachers and administrators within the PDSs were mentioned as offering support to ABCU pre-service teachers. The participants of the study also claimed that the familiarity and comfort level they felt while working in a PDS during their fieldwork, in methods classes, for student teaching, or in other circumstances helped them to feel more confident and feel valued as educators. All of these factors related to the PDS model at ABCU were identified by graduates of the program as factors that led to increases in their self-efficacy and teacher efficacy and ultimately an ability to persist in the teaching profession.

Accounting for the Graduates Who Did Not Persist

The findings of this study suggest that ABCU graduates have high levels of self-efficacy and teacher efficacy. One could presume, then, that ABCU graduates persist in the teaching profession at high rates. In fact, ABCU's graduates persist at a rate of approximately 65% after at least three years in the profession. So, what happens to the other 35% of ABCU graduates? Survey data and data from interviews and focus groups suggest that graduates of ABCU who do not persist in the teaching profession have reasons other than a lack of self-efficacy or teacher efficacy to blame. Most of the non-persisters who were interviewed had never entered the profession at all.

They had struggled to find a job or had personal situations that prevented them from entering the profession. Survey results indicate that even non-persisters had very high levels of self-efficacy and teacher efficacy, at times even higher than their persistent peers, indicating that almost all of the ABCU graduates are confident people and confident teachers. Both groups, persisters and non-persisters, identified elements of the PDS program as reasons for their high levels of self-efficacy and teacher efficacy and reasons that they may be able to persist. The reasons that the non-persisters had left the profession were varied and tend to be unrelated to the ABCU program and elements of the PDS program. In fact, almost all the graduates that were surveyed and interviewed claimed the PDS program was highly beneficial and positively influenced their confidence and in turn on their ability to persist in the profession.

Limitations

There were some limitations that should be considered in relation to this study. Maturation, or the possibility that the perceptions of participants of this study were affected by the passage of time, could be a problem for this study because the interactions that the participants had with the elementary education program at ABCU occurred some years ago. Also, external factors, such as funding for the ABCU program or staffing changes at ABCU or in the PDSs could cause the program to be different from year to year therefore causing the experiences of the various participants to be slightly different. This could affect their perceptions of the program. However, triangulating data and using a number of data sources helped address these issues. Member checking was also used during the qualitative portion of this study to increase the credibility of the study.

The greatest limitation of this study is the small number of participants. Only 40 graduates participated in the survey and only 11 graduates participated in focus group or interview sessions. The low number of participants should be noted and the data used accordingly. Because of the limited number of participants for this study and the fact that a criterion sample of participants was utilized in this study, the results of this study are not representative of a larger population. This study was meant to provide information specific to the ABCU elementary education program in order to elicit improvements in the program and for others programs to consider if they utilize a similar model.

Recommendations for Future Research

Given the limitations of this study, there are areas that need to be researched further. First, the experiences of a larger number of ABCU graduates need to be studied and over a longer period of time. The experiences of graduates of the ABCU program, once they enter the profession or choose not to enter the profession, needs to be studied further and in detail to realize whether the PDS program continues to contribute to

self-efficacy and teacher efficacy and if graduates who experiences the PDS program continue to persist. Similar studies of other PDS programs should also be conducted to see if the results are consistent amongst programs using a similar PDS model.

One deficit of the PDS program at ABCU that was highlighted in this study was related to the ability for graduates of the program to secure employment after they graduate. Two of the four non-persisters in the study claimed that finding a job was the reason they weren't in the teaching profession, and only two of the seven persisters were employed in one of the PDSs that partner with ABCU. A job search and employment component of the PDS program at ABCU could be developed and added. Once implemented, employment data for recent graduates could be kept and each graduates' path to employment and experiences as new teachers could be further studied to gain deeper understandings about how the PDS program at ABCU influences new graduates' experiences as they enter the teaching profession.

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