How Do Selected Novice Middle School Teachers from Various Certification Pathways Perceive the Effectiveness of Their Teacher Preparation?

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Abstract

This study compared the three most common pathways of traditional preparation for novice middle level teachers (elementary, middle level, and secondary) and attempted to answer the central question of which group felt best prepared for middle level teaching. Selected novice teachers from each of the three pathways were interviewed and asked to reflect on their preparation program. All participants were graduates of the same large, urban, public university. The state has recently redesigned its certification structure and teacher education institutions have redesigned their programs to reflect these changes. This study sought to discover if the restructuring resulted in greater feelings of preparedness among novice teachers. This study was exploratory, but initial findings indicate that there was very little difference in feelings of preparedness among the three pathways for teaching at the middle level with respect to program components and understanding of the needs of middle level adolescents. There was limited difference among the three pathways with respect to content preparation. This poses an interesting policy question: If the state's intent in restructuring the certification tiers was to ensure more prepared teachers for the middle level and this exploratory study shows little difference in feelings of preparation, was the decision to restructure teacher certification a worthwhile endeavor? The study offers possible programmatic changes to increase feelings of preparedness as well as ideas for further research around this topic.

INTRODUCTION

The middle school years represent a tumultuous and dramatic time for children aged 10 to 15. Aside from the first three years of life, middle school aged adolescents undergo more changes than at any other time in their lives (Carnegie Council on Adolescent Development, 1989; Gootman, 2007). These changes are "physical, hormonal, and social" (Guilamo-Ramos, Jaccard, Dittus, Bouris, Holloway, & Casillas, 2007, p. 56), and carry over into academics as well. Most people are aware of the physical changes, but are unaware of the effect on academics.

Middle grades educators agree on the importance of specialized middle level teacher preparation, but middle grades teachers across the nation are not prepared in a consistent manner. The great majority are trained in either generalized elementary programs or subject-

specialized secondary programs that certify teachers to teach a wide range of grades. While teachers from both secondary and elementary pathways have strong pedagogical strategies, they often lack understanding of the cognitive and emotional development of the middle grades student and are not equipped to provide quality instruction for the expanding mind of a middle grades student. Specialized middle level certification is viewed as important to produce high quality teachers that understand the unique characteristics of middle grades students, but teachers with specialized middle grades training are few in number (Conklin, 2007, 2009; Jeanpierre, 2007; Killion & Hirsh, 1998; McEwin, Smith, & Dickinson, 2003; National Forum to Accelerate Middle-Grades Reform, 2003; Scales, 1993; Virtue, 2007).

Policy Changes

Although there have been policy recommendations supported by research, institutes of teacher education have not adjusted their programs to address the issue of underprepared middle school teachers. This not only negatively affects middle grades students, but also has adverse consequences on higher education. Preservice middle grades teachers are more likely to consider their teacher preparation program as comprehensive and favorable if there are a greater number of courses devoted to middle school (McEwin et al., 2003). Teachers with a middle level specific certification rate their programs higher than teachers with either a secondary or elementary certification (Scales, 1993). However, there is no incentive for colleges of education and teacher education programs to modify their curriculum. Universities do not create specialized programs unless they are required by state licensing agencies because specialized programs cost too much money to implement and sustain (Caskey, 2006). Although 90% of states (45) currently offer a middle level specific licensure, less than half of all states (42% or 18 states) require a middle level specific certification; usually an elementary or secondary certification suffices (Caskey, 2006; Howell, Faulkner, Cook, Miller, & Thompson, 2016; Neild, Farley-Ripple, & Byrnes, 2009).

Teachers who understand the many intricacies of the middle level student are needed to promote academic achievement during this crucial developmental time. In the state of Pennsylvania, the middle grade add-on endorsement was phased out in 2013. As the endorsement was phased out, a middle level specific certification was introduced (Pennsylvania Department of Education, 2014). This restructure in certification required institutes of higher education to redesign their teacher education programs. Some colleges and universities chose to create a specialized middle level certification program while others did not. Parliament University (PU - pseudonym), a large, public institution in Pennsylvania,

developed both an undergraduate and graduate level middle grade degree. Both degrees certify teachers for dual subject areas in grades 4 through 8. The first cohort of students with a middle grades specific certification graduated in the spring of 2013.

Research Questions

The purpose of this exploratory case study was to compare the various pathways of preparation for novice middle level teachers. Most of the studies about feelings of preparedness have concentrated on preservice teachers. There is little research on the preparation of practicing school teachers at any level, but particularly at the middle level. This study focused on novice teachers in the classroom, thereby filling in a gap in the literature. Studying teachers' perceptions of their preparedness provided vital insight on the topics that they felt readied them for teaching at the middle grades level, or topics for which they felt unprepared. Ensuring novice teachers feel prepared is a key place to build on middle level research.

As the middle level certification is a new license in Pennsylvania, this study sought to examine whether this new certification has caused middle level teachers to feel more prepared for teaching at the middle level. Specifically, this study attempted to answer the following central question: Do selected novice middle level teachers feel more prepared when they hold an elementary certification, a secondary certification, or middle level certification? Several sub-questions were answered as part of this study as well.

- 1. How do novice middle level teachers describe their teacher preparation program and which program elements or components do novice teachers perceive best prepared them for the middle level?
- 2. How do novice middle level teachers perceive their understanding of the developmental and intellectual needs of middle level students and the

instructional techniques considered best practices for middle level students?

3. How well do novice middle level teachers feel prepared for grade level specific content areas?

Methods

Participants. In order to qualify for the study, potential participants had to meet three requirements. They had to be recent graduates of a Parliament University (pseudonym) teacher certification program (within four years), teaching at the middle level (as defined by the state - grades 4 through 8), and live relatively close to my area for interview purposes. I wanted to be able to interview participants in person as opposed to over the phone in order to pick up on nonverbal cues during our conversations. PU was unable to provide a list of graduating seniors and former program graduates. Thus, alternative methods were employed to find participants, including an email blast to the College of Education's honor society, mutual contacts, unsolicited emails to local principals, and announcements/messages via social media (primarily LinkedIn). Over 100 individuals were contacted over a six-month period. Thirteen PU graduates eventually agreed to participate. However, six were disqualified or withdrew before completing any component of the study. Seven participants completed the first interview and some journal entries. Four of the seven participants completed both interviews. Although three participants withdrew midway through the study, they are still included in the statistics provided.

While the sample population was not as large as initially desired, it was still fairly representative of PU's College of Education graduates. Two of the seven participants (28.6%) were male and five are female (71.4%). Four participants were White (57.1%), two were Black (28.6%), and one was Hispanic (14.3%). Three held specific degrees in middle grades education – two with bachelor's degrees and one with a master's degree. One held a bachelor's degree in elementary education to grade four. Two earned bachelor's degrees in secondary education, each in a different subject area. The mean amount of full time teaching experience prior to participation in the study was 0.93 years. The mode was zero years of experience, meaning three participants (42.9%) were first year teachers. Six out of seven participants (85.7%) had less than two years of full time teaching experience. Purely by chance, all the participants worked in urban schools.

For the purposes of this study, the two participants with K-12 certifications were grouped with the secondary certified participant. Both participants with the K-12 certification identified themselves as being secondary certified during the initial recruitment process and during interviews both revealed that their programs were more strongly focused on teaching at the high school level. Therefore, there were three participants classified as secondary certified (secondary/K-12), three participants with a middle grades certification, and just one participant held an elementary certification. Throughout the results, participants will be identified by their pseudonym followed by a set of parentheses indicating their certification – E for elementary certification, M for middle level certification, and S for secondary certification.

Research design. Data collection for this study occurred in three ways. The primary data collection method was in-depth interviews with each of the teachers individually. Using a predetermined set of semi-structured or openended questions allowed the teachers to discuss their feelings in a candid manner. Questions regarding feelings of middle school preparedness were based on the surveys done in studies of previous researchers (e.g., Hilary Conklin). The questions were used as more as a guide than a formula. The conversations built on themselves organically and follow up questions were inserted as necessary. I interviewed the participants on two separate occasions. First interviews took place toward the beginning of the school year and second interviews took place toward the end of the first semester. I developed

question prompts for the second interviews based off information discovered through the first interviews and the journal entries. I asked all participants a core set of questions, but also asked participants to clarify information from their personal data or first interviews. I reached out to participants as necessary for clarification after both interviews had been conducted.

During the first interview, participants were asked to rank possible influences on their ideas about teaching middle school. They were provided with six index cards that named the following influences: personal experiences as a middle grades student, prior experiences working with middle grades students, college classes on child and adolescent development, education and/or methods classes, field experience, other influences (another teacher, professional subscriptions, etc.). Participants were handed the cards in random order and given time to rank them from most influential to least influential. Half of the possible influences were directly related to programmatic components (college classes on child and adolescent development, education and/or methods classes, and field experience).

Participant journal entries were a second data source. Participants were instructed to make journal entries at least once every two weeks over a period of three months (approximately twelve weeks) for a total of at least six journal entries. An email reminder was sent to all participants every two weeks. The prompt was repeated: Describe a difficult situation that happened in your class this week. Did you feel your preparation program prepared you to handle this (or similar) situations? Why or why not? All responding participants chose to submit journals electronically. A total of 15 journal entries were collected from four participants. I read and coded journals using themes from the first set of interviews.

Course syllabi were collected from courses in the programs mentioned by participants in journals or interviews. A document analysis of these syllabi served as a third data source for this study. Looking at the syllabi from required courses in conjunction with teacher interview responses provided patterns about course components and requirements. Furthermore, formal written documents served to substantiate or refute information uncovered through the interviews or journals (Kolb, 2012). Course syllabi were coded after all interviews were completed and all journals were collected. I was able to secure 12 syllabi of the 16 that I requested. I was unable to access syllabi from classes outside of the College of Education. I used the available syllabi to clarify and reinforce information gleaned from participants during their interviews or through their journal entries.

Using the constant comparative method, I analyzed the data as it was collected. Once transcribed, the first round of interviews was open coded to create a number of categories based on themes of the teachers' perceptions of their preparedness. I analyzed the data by hand, color coding the interview transcriptions and journal entries using the highlighting and text color tools in Microsoft Word. Selections from the multiple transcriptions and journal entries were collected into single documents based on their color coding. Initial journal entries were also analyzed using the same method. Using the constant comparison method, some categories were collapsed or expanded as I more closely examined the data and axial codes emerged. I edited the documents to reflect the axial codes. Once the categories were fully developed, the transcriptions of the second interviews underwent selective coding.

Conceptual framework. This research was mainly grounded in the social-cognitive theory of learning. The social-cognitive theory was used to structure the collection of data in this study and was later used to analyze the findings of this study. Based in psychology, social-cognitive theory recognizes that learning depends greatly on the background of the student as well as the context where the learning takes place. It states that where and how learning happens, what is taught, who is learning, and when learning occurs all have an effect on preservice teacher learning and development (Feiman-Nemser & Remillard, 1995; Pintrich, 1990). There are two main parts to the social-cognitive theory. The cognitive portion of the theory deals with formal knowledge. Formal knowledge includes subject specific content knowledge as well as pedagogical knowledge (Richardson, 1996). It also includes problem-solving skills and how teachers think about formal knowledge (metacognition) (Pintrich). The social portion of the theory contends that context matters. Context may include many things. The individual's background and personal experience are key components. There are some personal characteristics in every human being that cannot be denied: race, gender, religion, socioeconomic status, hometown, personal world/societal view. All of these factors affect how a person thinks about teaching and learning (Pintrich; Richardson). Context also includes relationships with others and self. The preservice teacher's receptiveness to learning during their program, prior beliefs and knowledge, self-motivation, and personal learning style all affect the learning process (Feiman-Nemser & Remillard; Pintrich). Social interactions, both those between other students and those with the professor, are important to the learning process as well (Feiman-Nemser & Remillard). Teaching is dialectical in that interactions with students. parents, and colleagues can cause teachers to rethink their understanding and reconstruct their knowledge base about teaching (Calderhead, 1996). Knowledge about teaching and learning depends on the interaction of these contexts - the school and classroom environment, the time and place learning occurs, and the type of activity (Calderhead; Feiman-Nemser & Remillard). Because novice teachers develop, change, and grow over time, this is an appropriate way to examine teacher development (Kurfiss, 1983; Pintrich). This study proved teachers' feelings and reflections on their preparation programs. This was a psychological process. These perspectives were explicitly outlined in the Conklin studies (2007, 2008, 2009, 2010, 2012, 2012 - with Daigle),

but were also evident in other teacher preparation studies.

Results

Program components. Regardless of pathway, field experiences were ranked as a highly influential program component on participants' ideas about teaching at the middle level. For this study, field experiences included any experience in a K-12 classroom, including student teaching. Participants ranked field experiences as the most influential because they were able to "see things in action" and "get excited" about their future career (Rich (S), personal communication, August 13, 2014). Liam (M) noted that student teaching was influential because "until you're actually in the classroom doing it yourself you don't really know what it's like to be a teacher" (personal communication, August 10, 2014). Amanda (M) echoed those sentiments by stating she "didn't realize how much [she] really liked being in the classroom and actually being a teacher until [she] was actually in the classroom" (personal communication, August 20, 2014). For Jennifer (E), field experiences helped her "understand exactly what it was all about" because she saw "the real struggles of middle school" and was able to see the differences between middle school and the lower elementary grades (personal communication, September 14, 2014).

Although most participants regarded their field experiences as highly influential experiences, several believed that field experiences and student teaching should be remodeled to provide more realistic experiences. Amanda (M) lamented having a cooperating teacher or peer to "lean on all the time" and wanted "more field experience with me, by myself, having the whole classroom" (personal communication, December 30, 2014). Tiffany (S) thought "that student teaching [was] not a long enough experience" and believed it "[gave] students a false sense of what teaching [was]" because there was always a cooperating teacher not "willing enough to let go of the reigns" (personal communication, August 20, 2014). Liam agreed and suggested that

student teaching be organized in such a way so preservice teachers get "almost, like, your own class where the mentor teacher isn't supposed to interact at all" (personal communication, September 10, 2014). Dionne (M) noted that "there's nothing that could really prepare you for being on your own in the classroom aside from doing it" (personal communication, September 19, 2014). About half of the participants wanted a more "authentic, full throttle experience" (Tiffany (S), personal communication, August 20, 2014).

Other program components (professors, coursework, personal experiences as a middle schools student, prior experiences working with middle levels students) did not show any pattern of distinction among the three pathways. Aside from field experiences, coursework and professors were the most commonly mentioned program components in interviews and journal entries. Regardless of pathway, participants spoke most highly about coursework and professors that provided them with concrete tools they could utilize in their classrooms. Participants appreciated courses that involved practice advice or experience that could be put to use in a classroom. As Rich (S) put it, "any of the classes that gave a real visual component or tangible component" were most beneficial (personal communication, August 13, 2014).

There was one key difference in how coursework influenced participants' ideas about teaching at the middle level. Participants in the elementary and secondary pathways did not believe their respective pathways gave enough focus to the middle level. Although Jennifer (E) found her education and methods courses influential, she noted that it was "really hard to say" how coursework influenced her teaching at the middle level because "a lot of [her] courses were focused on younger than fourth grade" (personal communication, September 14, 2014). Isabel (S) and Tiffany (S) each thought many of the courses were focused on the high school level. Rich (S) also believed that his coursework was much more heavily focused on strategies for ninth through twelfth grades. Participants from

the middle grades specific pathways spoke most positively about the impact of their coursework on their ideas about teaching at the middle level. Past literature (e. g., Conklin) indicated that this was to be expected. Secondary programs often focus on strategies/content at the high school level. Similarly, elementary programs usually focus on strategies and content in the lower grades. The middle grades are typically neglected or superficially lumped in. According to participants in this small sample, PU's programs are representative of past research.

To summarize, there was little, if any, difference across pathways with regards to various program components. For nearly all participants, regardless of preparation pathway, field experiences were the most influential factor in participants' thinking about teaching middle school. This is likely due to the confidence instilled in participants by the field experiences. Several participants agreed that the field experiences should be reworked in order to provide more realistic practice teaching a classroom of students. There was no difference between the three pathways in this regard. Other program components did not show a discernable pattern among the three certification pathways. Overall, there was no notable difference between the three certification pathways with regards to program components. Participants generally agreed on which component (field experiences) best prepared them for teaching at the middle level.

Needs of middle level students. There were three main results with regards to the perception of understanding of the intellectual and developmental needs of middle level students and the instructional techniques considered best practices for the middle level. First, no participants – even those with a middle level specific certificate – had an initial desire to teach at the middle level. Defaulting into teaching at the middle level was a common experience for all participants. However, there was a distinction between the middle level certified participants and other participants. The elementary and secondary certified participants defaulted into the middle level after graduating from their programs. Having completed the elementary or secondary certification program, they found job placements in the middle level and accepted those jobs when more aspirational placements were not available. Rich (S) and Isabel (S) described themselves as "apprehensive" and "hesitant" (respectively) about taking jobs in a middle school. Rich (S) stated, "Fortunately or unfortunately, all that was open was middle school" (personal communication, August 13, 2014). Isabel (S) "got an offer for middle school and although [she] was, like, hesitant, it was something definite instead of subbing somewhere else" (personal communication, September 3, 2014). On the other hand, the middle level certified participants defaulted into the middle level much sooner. Amanda (M) started out as a secondary education major in mathematics, but "moved down to middle" (personal communication, August 20, 2014) because she found herself struggling with the higher level physics courses that accompanied the secondary math degree. Dionne (M) described a similar experience when asked why she chose the middle level master's program. She explained that if she had chosen the secondary math certification, she would have had to "take all of those math classes and prerequisites" and she "didn't really want do that" (Dionne, personal communication, September 19, 2014). All the middle level participants defaulted to that certification after being enrolled in a secondary program or prior to enrolling in any program at all. Participants could have chosen other majors or programs, but aspired to be teachers and the middle level certification program seemed to be their only option.

Second, all participants believed middle level adolescents were difficult to teach because of classroom management difficulties related to puberty. The elementary certified participant thought middle level students were going through a lot with their transition into puberty, but were generally capable of performing difficult academic tasks. Jennifer (E) attested that the middle level was "a very difficult age to

teach" because of "what kids are going through, and, and, their attitudes." She felt that it was "harder to engage students" in middle school because "sometimes in middle school, kids just get so caught up in what's going on around them and what's like going on in, in, inside of them, they kind of can lose sight of, like, loving to learn" (Jennifer (E), personal communication, September 14, 2014). The secondary certified participants believed middle level students were experiencing a rough transition into puberty and that this transition prevented them from performing more difficult academic tasks. Isabel (S) thought seventh and eighth grades were the most difficult to teach because in those grades, "the students are figuring out, like, who they are and going through all kinds of changes" (personal communication, September 3, 2014). According to Tiffany (S), middle school adolescents were "like little adults trapped in, like, little people bodies" and described them as an "interesting adolescent melting pot" (personal communication, August 20, 2014). Rich (S) stated that kids were "going through so much" and "starting to deal with their own emerging emotions" (personal communication, August 13, 2014). Those participants with a middle grades specific certification understood the transition into puberty and believed that middle grades students were capable of critical thinking skills with support. For Dionne (M), middle school was "really difficult to teach" because the students were "so full of energy...and always need[ed] to be entertained or else they're just not there with you." She admitted that "one of [her] biggest struggles working with middle school students [was] just having that energy to be there to match their energy" (Dionne, personal communication, September 19, 2014). Nearly all participants mentioned a struggle with classroom management on some level.

All participants, regardless of pathway, believed that middle level students have unique developmental and intellectual needs and realized a need for specialized teaching strategies and/or instructional techniques while teaching students in the middle grades. Of middle level students, Amanda (M) said, "I think they're difficult, but you just, have to just, be consistent with your rules, expectations, consequences....Once vou get vour classroom just running the right way and you get to know your students, it'll work itself out" (personal communication, August 20, 2014). When asked if middle level students were difficult to teach, Liam (M) agreed with Amanda (M) that "you just have to be more patient. And if you don't have the patience, I could see why they say that. Um, you have to know what you're getting into I think" (personal communication, September 10, 2014). Amanda (M) and Dionne (M) both described an inquiry-based science lesson in detail. All the middle level certified participants had just begun their first year of teaching. It is likely that any specialized techniques or strategies for the middle grades were learned at PU since they had no prior teaching experience.

Elementary and secondary certified participants utilized specialized teaching strategies, but did not necessarily believe it was their responsibility to assist adolescents with issues related to puberty. Jennifer (E) talked about how students were "developing into more of a consistent person and personality" (personal communication, September 14, 2014) and testing the waters of their personality. She was able to describe how she scaffolded her instruction, but she did not completely accept dealing with the inherent difficulties of budding personalities as part of her duty as a teacher. If her certification program focused more on lower elementary grades, it would be expected that Jennifer (E) did not accept dealing with puberty as part of her responsibilities as a middle levels teacher. The secondary certified participants framed the unique developmental and intellectual needs of middle level students negatively. However, the secondary certified participants still realized a need for specialized teaching strategies and instructional techniques, just like the middle level certified and elementary certified participants. Rich (S) and Tiffany (S) both described how they engaged their students and adjusted instruction based on their students' prior knowledge. Tiffany (S)

wanted her class to allow students to "be the constructors of their knowledge" and give students "an opportunity to ... construct their own learning experience" (personal communication, August 20, 2014). Isabel (S) described having to guide middle level students through multiple steps until they can complete tasks on their own. "And then some you kinda have to like keep questioning, like keep pushing so they can, they can get there" (personal communication, September 3, 2014). The elementary and secondary certified participants recognized that specialized teaching strategies and/or instructional techniques were necessary, but all of these participants had been teaching for at least six months prior to beginning this study and it is likely that their confidence in using specialized strategies came from their prior teaching experience and was not learned from PU. These data were not able to differentiate the source of knowledge.

Content preparation. Participants from the secondary and middle level pathways felt more prepared to teach within their content area. When compared to the elementary certified participant, this is an area of commonality between the secondary and middle level participants. However, the participants from the secondary pathway perceived their content preparation as stronger than those participants from the middle level specific pathway.

During interviews, the secondary specific group seemed to be the most confident with respect to content preparation than participants from other pathways. All three secondary certified participants completed programs that focused heavily on content. Tiffany (S) stated, "I think my program focused on content more than anything. If anything, I think they kinda focused too much on content and they could have given me more strategies" (personal communication, January 16, 2015). Rich (S) talked about how he was "passionate" about history and described himself as a "history fanatic before [becoming] a teacher" (personal communications, August 13, 2014 and January 4, 2015). Participants with secondary certifications (Rich, Isabel, and

Tiffany) stated that they felt prepared with regards to their respective content areas, but noted that their programs concentrated on the opposite end of the grade spectrum, focusing on grades 9 through 12. To them, this was a detriment to their programs. When Tiffany (S) took a job teaching at the middle level, she thought she would only "have to tweak it a little bit" but realized that was not accurate once in a middle level classroom (personal communication, August 20, 2014). Isabel (S) revealed that because her program "focus[ed] on secondary ed, high school" she "wasn't really...prepared for, like, younger students" (personal communication, September 3, 2014). Furthermore, Rich (S) revealed that in the majority of his education courses, teacher candidates were allowed to choose the topics they covered when learning how to lesson plan and developing presentations. He lamented that most of his classmates chose history topics, particularly U.S. History topics, with which they were already familiar. In his opinion, PU should expose its teacher candidates to all the content areas they may potentially be responsible for teaching because "body of content [in social studies] is so broad" and "when you get that secondary cert, you could be teaching any of them" (Rich, personal communication, January 4, 2015).

All three participants with a middle grades certification identified themselves as prepared for the content area covered by their certification (mathematics and science in all three cases). However, during interviews they seemed less confident about the content when compared to the secondary certified participants. Amanda (M) said she "definitely had the right background knowledge of everything" but sometimes had to "teach it to [herself]" because it was not "vivid in [her] brain" (Amanda, personal communication, December 30, 2014). Dionne (M) felt more prepared to teach math "because it's, like, more concrete and it's, just, like, straight to the point." While Dionne "really love[d] science," she found herself less prepared to teach it and was reliant on a colleague who had been teaching for a longer period of time

(Dionne, personal communication, September 19, 2014). In our first interview, Liam (M) believed that "Parliament gave [him] the content knowledge so [he was] right above" the level he thought necessary to teach middle school (personal communication, January 19, 2015). After his first semester, he had a different outlook on his level of content preparation. Liam (M) wished that he "had a class that went back and kind of went in depth on the easier things" because he "[didn't] always know how to present [content] in an easy way" so that middle school students could comprehend it (Liam, personal communication, January 19, 2015). The feelings of content unpreparedness among the middle grades certified participants could be due to one of two issues. First, all of the middle level certified participants were first year teachers. Many first year teachers feel uncomfortable with content simply because they have not taught it previously. Self-efficacy beliefs are related to each subject taught (Tschannen-Moran & Woolfolk Hoy, 2007) and self-efficacy rates have been found to be lower in novice teachers (Tschannen-Moran & Woolfolk Hoy, 2007; Woolfolk Hoy & Spero, 2005). Second, while the secondary certified participants were focused on just one content area, the middle level certification requires dual content areas. Additional content areas could contribute to feelings of unpreparedness.

The participant from the elementary pathway felt least prepared to teach all of her content areas when compared to the participants from the secondary and middle level pathways. Jennifer (E) was the one participant who admitted to not feeling "super prepared" in regards to content area preparation. Jennifer (E) stated a preference for teaching literacy over mathematics. This preference was linked to her own educational experiences: "I've never really, um, enjoyed math that much (laughter) so I feel like my teaching of math, um, has kind of played off of that too" (personal communication, September 14, 2014). As a student, Jennifer (E) lacked confidence in learning mathematics and that lack of confidence translated into a lack of confidence for teaching mathematics. Like the

middle level participants, the elementary certified participant was responsible for teaching multiple content areas in grades prekindergarten to four. Responsibility for knowledge in several content areas could contribute to feelings of unpreparedness.

To summarize, the sole elementary certified participate did not feel wholly prepared for the content areas she was teaching. The three middle grades certified participants felt prepared overall, but mentioned needing to refresh on certain materials or get support from colleagues in order to teach effectively. The participants with secondary specific and K-12 certifications most strongly felt they were prepared for the content area they were teaching, but mentioned having to adjust their strategies and curricula for middle level students. Those participants without a middle level certification (elementary, secondary or K-12) felt that their certification program focused on one extreme of the grades level for which they would be certified.

Overall feelings of preparation. Overall, participants perceived their teacher preparation programs as moderately effective. Each program, regardless of specific pathway, had both positive and negative attributes. All participants would recommend their respective programs to others, regardless of flaws. Even though all participants admitted that there were things they wished they had learned while studying at PU, most spoke positively about their experiences with their teacher preparation programs at PU. Participant responses to interview questions and journal entries were quite similar. There seemed to be no difference in feelings of preparation between the three pathways that certify candidates for the middle level among this selected group of novice teachers. This study set out to answer the question of how novice middle school teachers perceive the effectiveness of their teacher preparation programs when they hold an elementary certification, a secondary certification, or a middle level certification. In most areas, there was little, if any, difference

between feelings of preparedness among participants from various pathways.

Discussion

If the state's intent in creating a middle level specific certification was to ensure a highly qualified corps of effective middle level teachers, then the middle level certified participants from this study should have felt more prepared than their elementary and secondary certified counterparts. At the very least, there should have been some more significant differences in feelings of preparedness between the differently certified groups. However, this was far from the reality. All participants felt similarly underprepared for teaching at the middle level. It is important to note, however, that this study only included seven participants and encompassed a small number of viewpoints. Therefore, this study must be considered an exploratory one. More comprehensive research would be needed to determine how closely the findings from this limited sample size represent the wider majority of PU's graduates.

This study was small, but more than half of the participants mentioned wanting to leave teaching at middle level. All three of the middle level certified participants fell into this category. Is this desire to exit the middle level due to social-cognitive reasons (the middle level is a default option) or is it due to poor preparation from the certification programs at PU? Data from this study cannot provide the answer to this question, but prior research reports that preparation matters. Darling-Hammond, Chung, and Frelow (2002) found that poorly prepared teachers are more likely to say they would not choose teaching if they had to do it over and are more likely to say they will leave the profession. Siwatu (2011) wrote that the stress caused by being unprepared to handle the challenges of urban schools may be one reason teachers leave the profession. If the participants' desire to leave middle level teaching is related to their preparation program (as opposed to personal reasons viewing the middle level as a default), then it follows that the certification programs at

PU should take steps to better support participants' feelings of preparedness, specifically those feelings of a lack of preparedness around urban teaching.

What was most interesting was the fact that only one out of three participants with a middle level specific certification expressed a desire to continue teaching at the middle level for an extended period of time. More than the elementary certified or secondary certified participants, the middle level certified participants should express a desire to continue teaching at the middle level. However, this was not the case. All the middle level certified participants chose their program as a default to avoid additional and/or difficult content coursework and not because they had a strong desire to work with middle level aged adolescents. Due to the small sample size, this study cannot declare that the middle level was a default choice for all graduates of the middle level program. Perhaps other graduates who did not participate in this study actively chose the middle level specific program because they desired to work with adolescents. Further research would be needed to ascertain this fact. This study can state that there is some percentage of middle level specific graduates who chose the program as a default option when others became inviable for a host of reasons. Ideally, a middle level specific program ought to attract candidates who are specifically interested in teaching at the middle level. PU should take steps to recruit greater numbers of teacher candidates who want to teach specifically at the middle level to balance those who land in the program by default.

Participants had suggestions for how to improve their respective programs to better prepare teacher candidates for teaching at the middle level. Using these suggestions, prior research, and my own analysis of the data, I propose several recommendations for PU to consider.

Since field experiences were universally described as the most influential program component on feelings of preparedness, it is important to ensure they are structured in a way to have a positive influence on teacher candidates. In general, field experiences should start earlier and take place over a longer period of time (i.e., require more hours in the classroom). A longer field experience was also correlated with higher feelings of preparedness (Kee, 2012). Participants wanted a more realistic idea of what it would be like to teach on their own. With regard to preparation for the middle level, if a certification overlaps the middle grades, a field experience in the middle level ought to be required. In Pennsylvania, the certification restructuring creates overlap at the middle level (grade 4 with an elementary certification and grades 7 and 8 with the secondary certification). All but one participant in this study completed some field experience at the middle level and those experiences assisted participants in feeling more prepared for teaching adolescents in the middle grades.

In their first three years, novice teachers are heavily reliant on information and experiences from their teacher preparation program. Participants from the secondary and elementary pathways admitted that most coursework tended to overlook the middle level. These participants believed that they would have been more prepared for teaching at the middle level if their programs had placed more of a focus on students at the middle level. Their solutions involved creating tracks for teacher candidates that would give all candidates a basic knowledge during the first years of college and then divide candidates into specialized tracks, similar to medical school. "I feel like maybe students should have to choose a track of early years and late primary years or something. Um, or just have more classes that are on both" (Jennifer (E), personal communication, September 14, 2014). Rich (S) suggested completing core topics in the first two years and then choosing a concentration of elementary, middle, or high school. A similar approach was advocated by Sykes, Bird, and Kennedy (2010). Perhaps it makes sense for preservice teacher candidates to choose a grade level after they have completed some fundamental coursework and experienced

some work in the field. Alternatively, instructors could be more explicit in informing teacher candidates how they might modify particular strategies for the middle level.

Although novice teachers leave their preparation programs with a theoretical knowledge base, they "often need support drawing on this foundational knowledge to plan and implement curriculum within their particular classrooms." (Liston, 2006, p. 353). To assist graduates with the transition to the classroom, PU should explore the possibility of designing a mentoring or induction program. Preservice teacher education that takes place at PU (and elsewhere) cannot exist in a vacuum separate from K-12 schools where graduates will eventually be employed (Hausfather, 1996). Information from this small sample and prior research suggest that novice teachers need more thoughtfully constructed scaffolded experience as they transition into the classroom. A smoother transition to full-time teacher of record could improve graduates' perception of their level of preparedness. Parliament could consider a partnership with the local districts, or select schools within the district, to implement a jointly run induction program for recent PU graduates. Again, a high quality induction program could ease the transition to full-time teacher of record and increase graduates' feelings of preparedness.

This study was an exploratory one and is limited in the overarching claims it can make. However, it can provide a basis for future research on middle level specific teacher education. Other colleges and universities with middle level specific certification programs should consider probing their own graduates about their feelings of preparedness. PU, and other institutions, should modify programs as needed to ensure middle level specific graduates feel highly prepared for teaching at the middle level. Middle level researchers have advocated for specialized teacher preparation for the middle level. If teacher educators and universities do not ensure that middle level certified teachers feel entirely prepared for teaching adolescents, the efforts of advocates will have been for naught. \diamond

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