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Examining the Adolescent Student and Middle Level Teacher Preparation Programs: Perspectives of Novice Middle Level Educators and Higher Education Instructors

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Abstract

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Examining the Adolescent Student and Middle Level Teacher Preparation Programs:

Perspectives of Novice Middle Level Educators and Higher Education Instructors

By

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Supervised by

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Dedication

This dissertation is dedicated to all who have supported me throughout my educational journey. First, thanks be to God, the author and finisher of my faith. To my devoted husband, Robert. Thank you for your unwavering patience and love. To my magnificent children Joseph, Latoya, Malcolm, Akeem, and Jode' who understood their educational assignment. To the men of valor who spoke this moment into existence, Mr. R. T. Shipman, Dr. James Evans, and Mr. David Shakes. To the "good and perfect gift sent from above," Mr. James Smith, Jr., thank you for your guidance through the years. To the strong women in my life whose love and guidance has kept me grounded and humble: my mother, Ms. Mary Shipman, Apostle Orpah Ruth Francis, Ms. Cynthia Solomon, and Dr. Gaya Shakes.

To my remarkable committee, thank you, Dr. Marie Cianca and Dr. Gina Ditullio, for your knowledge and guidance throughout the Ed.D. program. I extend my deepest gratitude to each of you for your patience, support and coaching as you pushed me to the limit to become a better writer and researcher.

I would like to thank my cohort, Super 17, and my team, Full Court Press, for sharing their love and knowledge, and keeping me inspired. I will always treasure the laughs and memories we created.

Lastly, I extend my heartfelt thanks to my middle school students. Your presence motivates me to continually grow and learn, ensuring I can provide everything necessary for your success.

Biographical Sketch

Deborah D. Washington is currently the Principal at Abelard Reynolds School #42. Mrs. Washington has been employed for over 25 years in the very district she attended as a child and from which she successfully graduated. Mrs. Washington attended SUNY Brockport and graduated with a Bachelor of Science degree in 1993. She attended Nazareth College and graduated with a Master of Science degree in 1999. She came to St. John Fisher University in the summer of 2022 and began doctoral studies in the Ed.D. Program in Executive Leadership. Mrs. Washington pursued her research in Examining the Adolescent Student and Middle Level Teacher Preparation Programs: Perspectives of Novice Middle Level Educators and Higher Education Instructors under the direction of Dr. Marie Cianca and Dr. Gina Ditullio and received the Ed.D. degree in 2024.

For the past 25 years, the researcher has worked with young adolescent students as both a teacher and an administrator, providing support tailored to their developmental stage. Throughout this work, the researcher has consistently emphasized the importance of investing in middle schools to ensure that adolescent students are well-prepared for success in high school and beyond.

Abstract

The purpose of this qualitative study was to examine teacher preparation programs and the extent to which teachers and higher education instructors perceived teachers' readiness to teach middle school students. Additionally, the study investigated how much teachers are learning about adolescent development in their preparation programs. The study focused on middle level teachers and higher education instructors in the Western New York region. This examination of teacher preparation for middle level students used the Framework for Effective Middle Level Practices as the theoretical focus. The findings highlighted a lack of specialized middle level teacher preparation programs, leading to underprepared teachers. Additionally, participants expressed feelings of inadequacy in understanding effective structures for middle-level schools and classrooms, noting that they acquire most of their practical knowledge on the job. The study recommends continuous learning opportunities for teachers, allocation of funds by school districts for professional development, and the establishment of specialized middle level programs in teacher preparation courses. This research sets the stage for future studies on middle level certification courses and suggests exploring teacher preparation in other states for a broader understanding.

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Chapter 1: Introduction

As far back as the late 1800s, adolescents have been a topic of discussion in the middle school movement (Valentine, 2000). Practitioners and researchers spoke with a common voice about the shortcomings of middle level education in the United States. Foundations and states with a focus on educational reform initiatives began to recognize that middle grades might be worth exploring and may be vital to more students succeeding in and graduating from high school (Valentine, 2000). Although there is a wealth of empirical and historical literature regarding middle school philosophy or middle school concepts, many middle schools across the nation have not been successful in implementing these recommendations (Anfara & Mertens, 2012). The Association for Middle Level Education (AMLE) for example, has identified 16 characteristics of successful middle level practices (Anfara & Mertens, 2012) that have the potential to benefit educational experiences for young adolescent students. Additionally, Howell et al. (2018) emphasized how middle school proponents such as AMLE, formerly the National Middle School Association (NMSA) acknowledged the unique developmental period of adolescence as a time of significant growth and believe developmental changes can have a profound impact on the learning experiences of adolescent students (Howell et al., 2018).

At the turn of the century, the middle school movement focused on developing a blueprint for exemplary middle schools (Valentine, 2000). High achieving middle schools, the needs of special populations, and groups of students were examined, and new legislation such as the No Child Left Behind Act (NCLB) was passed to hold schools accountable for teaching and learning (Valentine, 2000). NCLB was passed in 2002 and put in place measures that shed light

on achievement gaps among marginalized and underserved students. It prompted a national dialogue on education improvement (United States Department of Education [USDOE], n.d.). Since the inception of middle schools, middle level researchers have advocated for specialized middle level programs that develop leaders who support both adolescent developmental needs such as cognitive, physical, social and emotional, and additionally engage adolescent students in meaningful, challenging, and exploratory learning experiences (DiCicco et al., 2016).

Continuous restructuring of middle schools has occurred through the years (Valentine, 2000). Debates between scholars and practitioners about the best grade configurations for young adolescents have played a key role in the various structural and name changes related to middle schools. In the 1950s, educators looked at new configurations and proposed that middle grades include sixth through eighth (Valentine, 2000). In 1963, William M. Alexander, often referred to as "the father of the middle school movement," proposed that the name be changed from junior high schools to middle schools (Schaefer et al., 2016) and recommended the establishment of Grades 5 through 8 middle schools featuring special learning centers for students (Valentine, 2000). In 1966, Donald Eichhorn promoted the creation of Grades 6 through 8 middle schools. By 1965, 67% of schools for young adolescents in the United States were still configured as Grades 7-9 junior high schools and only 5% were either Grades 6-8 or 5-8 middle schools (Valentine, 2000). These percentages reversed by the year 2000 as the number of middle schools Grades 5-8 or Grades 6-8 in the US rapidly grew to 69% (9,750). While the number of middle schools grew, scholars in the field reported limited progress. According to William Alexander, in 1978, most of these schools had made limited headway toward the purpose of the middle school model (Alexander, 1978). John Lounsbury noted in 1991 that junior high and middle schools had remarkably similar practices and the only differences were in the name and grades they served

(Lounsbury, 1991). During the late 1980s, as practitioners and researchers examined and shared information about the continued shortcomings of middle schools in the United States, middle level reform began receiving national attention. The attention led to various states producing reports that called for middle school reform (Valentine, 2000). This in turn led to various foundations such as the Carnegie Corporation of New York and the W. K. Kellogg Foundation advocating and funding middle school reform initiatives (Valentine, 2000). By the year 2000, the total number of public middle schools increased from 1,500 to 11,500 (Hesson, 2016).

At the beginning of the 21st century, the middle school movement concentrated on creating a blueprint for exemplary middle schools, shifting from a structural focus to instructional approaches and best practices. The AMLE's (2010) This We Believe, and the Framework for Effective Middle Level Practices (FEMLP) have advocated for rigorous, engaging, academic environments as well as problem solving and critical thinking activities (Cook et al., 2016). Both reports were in direct contrast with NCLB which promoted teacher accountability through standardized testing (Hesson, 2016).

In 2015, NCLB was replaced when former President Barack Obama signed the Every Student Succeeds Act (ESSA) to help ensure success for all students and schools. States developed plans to close achievement gaps, increase equity, improve the quality of instruction, and increase outcomes for all students (USDOE, n.d.). Improving the quality of instruction within ESSA aligned with the AMLE's (2010) This We Believe essential attributes and characteristics regarding curriculum, instruction, and assessment. AMLE advocated for educators who value and possess a deep understanding of young adolescents and have been prepared to engage them in active, purposeful learning through a curriculum that is challenging, exploratory, integrative, and relevant.

Various approaches and practices to engage the adolescent brain have been explored by schools. These approaches focus on individuals constructing knowledge by interacting with their environments (Wurdinger et al., 2007). Project-based learning (PBL) was one such approach that aligns with the needs of middle level students. PBL engages middle school students in investigations of various topics, allowing for social interactions with peers, exploration, experimentation, and data analysis. A qualitative study involving middle level students and teachers by Wurdinger et al. (2007) assessed the effectiveness of implementing PBL by looking at teacher acceptance of the practice and student engagement. The results of this yearlong study revealed that teacher acceptance of PBL resulted in high levels of engagement by middle level students (Wurdinger et al., 2007).

PBL dates back to the early 1900s and has followed the concept of "learning by doing." It is reflected in the works of Dewey, Piaget, and Vygotsky which focus on individuals constructing knowledge by interacting with their environments (Grant, 2002). Additionally, Pritchard and Woollard (2010) reported that thinking skills develop in youth as they interact and engage with those around them. Utilizing the PBL framework, students have the opportunity to collaborate and work together to problem-solve and create artifacts that showcase their learning.

Various researchers have examined the emergence of middle schools and adolescent development, highlighting the urgency in considering the developmental stage of adolescence when designing educational preparation programs (Cook et al., 2016). Even today, middle school reform is still a challenge. One enduring problem that has continued to plague middle schools is a lack of teacher education programs with a focus on the middle school level (Valentine, 2000). In particular, there has been little effort to include more information about adolescent development and the uniqueness of middle school students (Cook et al., 2016).

In 2016, the Middle Grades Collaborative was formed in response to a Los Angeles Unified School District board resolution. The goal of the collaborative was to establish "a framework for collective action on reimagining the middle grades" (Middle Grades Collaborative, 2016). One of several recommendations made by the Middle Grades Collaborative was to consider "providing middle grades teachers with pathways to specialized certification in middle grades education, both within districts and credentialing programs designed to train educators" (Middle Grades Collaborative, 2016, p. 28). With the specialized certification, teachers had a better understanding of this stage of adolescent development and of best practices and approaches for working with middle level students. Additionally, Preston (2017) noted that coursework in educational psychology and adolescent development is likely needed to improve teacher effectiveness, while Cook et al. (2016) remarked that knowledge of the adolescent brain and developmental stages can be beneficial when designing educational programs. Advancements with neuroimaging provided a clearer understanding about changes in the adolescent brain and how adolescent students learn best. Throughout adolescence, the teenage brain continues to develop. The experiences that adolescents encounter during this time will have a major impact on their adult lives (Armstrong, 2016).

When planning learning experiences for adolescent students, middle level educators may benefit from having a strong understanding of the developmental needs of adolescents (Cook et al., 2016). The AMLE believes that middle level educators must be "committed to and knowledgeable about this age group, educational research and best practices" (Cook et al., 2016, p. 3). Jansen and Kiefer (2020) reported that adolescence is an ideal time for educators to explicitly teach learning strategies and utilize activities that engage students in the learning that supports self-regulating learning skills. The examination of several educational journals did not

yield research about the types of lessons being taught in middle school classrooms. This has never been more evident than when students and teachers returned to school after the COVID-19 pandemic.

In response to the COVID-19 pandemic, governments across the world ordered schools to make changes to their regular school day. As educators around the world shifted their practice from in-person instruction to remote instruction, teachers faced challenges in deciding the best approaches for delivering instruction online. Many were not prepared for distance learning and the challenges faced when they worked with middle level students. Bishop (2021) reported that middle level teachers not only had to deal with the cognitive and social-emotional development of middle level students, but also the additional stressors caused by the COVID-19 pandemic. Many students and families reported students' mental health being adversely affected, including fear of infection, boredom, lack of personal space at home, and lack of socialization at school with peers and teachers, which can be disruptive to their social and emotional development when isolated or confined to their homes (Bishop, 2021). These pandemic-induced isolations layered on additional challenges for middle level teachers and adolescent students (Bishop, 2021). For example, remote instruction made it difficult for teachers to scaffold lessons and align learning tasks with developmental readiness (Bishop, 2021).

Additional challenges caused by the COVID-19 pandemic had a considerable impact on those students served in the low-income communities with high percentages of low achievement and high drop-out rates among Black and brown students. De Silva et al. (2018) shared that the significant impact on students was due to a lack of resources and poorly trained teachers. Additionally, in examining the subject of instruction, de Silva highlighted Ladson-Billings' s argument that current instructional approaches presumed that African American students were

deficient and that instructional practices typically involved some aspect of remediation and often, the students, not the methods, were found to be lacking (de Silva et al., 2018; Ladson-Billings, 2014). Ladson-Billings (2014) believed researchers are obligated to reeducate teacher candidates toward a broader view of pedagogy. The reeducation of teacher candidates is especially critical for middle level educators who can benefit from knowing about the changing conditions of the adolescent brain and cultural components of their students.

During the past 20 years, advancements with neuroimaging have provided a more precise picture of how the adolescent brain emerges (Armstrong, 2016). These new discoveries have enhanced an understanding about how adolescent students learn best and shed light on implications for middle level teachers. One of the key concepts shared by Deering et al. (2015) was the examination of educational practices and how relevant they are to the success of adolescent students.

As the middle school movement has continued, it is important to note that while there has been a heavy focus on the middle school structure, there has been a lack of research focused on middle level teacher development (Brown et al., 2002). One consistent problem that has troubled middle schools is the lack of teacher education programs designed specifically for the development of middle level teachers (Valentine, 2000). The lack of information on what changes or upgrades have occurred in preparing teachers for middle grade adolescent students is evident in the findings of Howell et al. (2016). Howell et al. (2016) study revealed that although 45 states have clear mandates for middle level certification or licensure, nearly half of colleges preparing candidates for the middle grades do not offer courses or experiences specific to middle level education or adolescent students. Faulkner et al. (2013) reported that individual state and institutional requirements have often made it difficult to meet this challenge and may result in

inconsistent implementation of expectations. In looking at teacher preparation programs, Faulkner et al. found that some have prepared candidates through a general elementary program, others through a specialized middle grades program and some through a secondary subject-specific program. Although each of these program routes have led to certification at the middle grades level and allowed candidates to teach in middle schools, many acknowledge that this approach has not been as effective as a specialized middle grades teacher preparation program (Faulkner et al., 2013). Furthermore, Faulkner et al. (2013) stated that, as licensure requirements have changed across states, preparation programs have worked to ensure mandates are met and candidates are prepared for licensure to teach at the middle school level. However, these mandates many times lead to inconsistencies in the quality and content across programs (Faulkner et al., 2013).

Problem Statement

There is a gap in the literature regarding how to best train teachers to meet the needs of adolescent students. Middle school reform has continued to be a challenge, particularly with the alignment of teacher education programs and the uniqueness of middle school students (Cook et al., 2016). There is also a gap in the literature regarding how well aligned middle level teacher preparation programs have been to the developmental stages of middle level students. There has been limited research regarding teacher preparation and how qualified teachers are to teach at the middle school level. For over 60 years, the experimental literature has documented the importance of the need for professional teacher preparation and educators who are knowledgeable about adolescent students and their developmental characteristics (Howell et al., 2016).

Adolescence is a unique stage of life that serves as the turning point from childhood to adulthood (Benner, 2018). Young adolescents, ages 10-15 years old, experience rapid growth and significant developmental changes (Caskey & Anfara, 2014), including physical, biological, cognitive, and social changes (Benner, 2018). Researchers have examined the emergence of middle schools and adolescent development, highlighting the urgency in considering the developmental stage of adolescence when designing educational programs (Cook et al., 2016). With this sense of urgency, teacher education programs have become a focal point in understanding and discussing how best to prepare teacher candidates for providing a quality education for all students, especially students in urban areas (Eckert, 2013). It is not clear how middle school teachers have addressed changes associated with the adolescent brain nor how prepared they have become to effectively engage middle level students in quality lessons or activities that are aligned to their developmental needs. There is a need to research this topic due to the of the lack of information on how teacher preparation programs prepare preservice teachers to align their educational practices to the neurological changes taking place in the adolescent brain, ensuring that lessons are highly engaging and developmentally appropriate.

Theoretical Rationale

The educational and developmental needs of adolescent students, and how teacher preparation programs have prepared teachers for middle level education has been examined through the lens of the FEMLP (see Figure 1.1). The core constructs of the FEMLP provided an important lens for considering the developmental stage of adolescents when preparing candidates to teach in the middle grades. The FEMLP has advocated for rigorous instruction and, like Cook et al. (2016), suggested when planning learning experiences for adolescent students, middle level

educators should have a strong understanding of the developmental needs of adolescents to support them in their cognitive and social growth.

Over the last few decades, advancements with neuroimaging have continued to provide a clearer picture of the adolescent brain (Armstrong, 2016). These new images of the brain have helped researchers and educators understand how adolescent students learn best and have shed light on implications for middle level teachers (Armstrong, 2016). Knowing that middle level students undergo rapid development, cognitively, socially, physically, and emotionally, the FEMLP has developed constructs to support the developmental needs of students. The FEMLP has recognized the importance of the teacher's practices being tailored to and grounded in the developmental needs of middle level students. The FEMLP has also emphasized having high-quality teachers who are specifically trained to educate middle level students so that they experience effective learning opportunities.

As shown in Figure 1.1, the FEMLP highlights eight middle level constructs that Cook et al. (2016) believed, when systematically implemented, enhance the prospect of effective learning experiences for all students. The eight constructs include developmental spectrum, teacher dispositions and professional behaviors, organizational structures, relationships, content knowledge, classroom management, assessment, and curriculum and instruction.

The developmental spectrum has focused on practices that align to the social, emotional, physical, intellectual, and cultural developmental needs of adolescence. Teacher dispositions and professional behaviors speak of the personal and professional attitudes of teachers in relation to middle level students, which play an important part in students' success or failure. The organizational structures construct includes various systems that are designed to allow teachers and students to meet the unique and varying needs of adolescent students. These systems consist

of advisory programs, health programs, common planning time, extracurricular activities, and cross-curricular teaming (Cook et al., 2016). Figure 1.1 shows the intersection of the developmental spectrum, organizational structures and teacher dispositional and professional behaviors creating a climate that allows for relationships to develop and flourish.

Figure 1.1 Framework for effective middle level practices. © Information Age Publishing
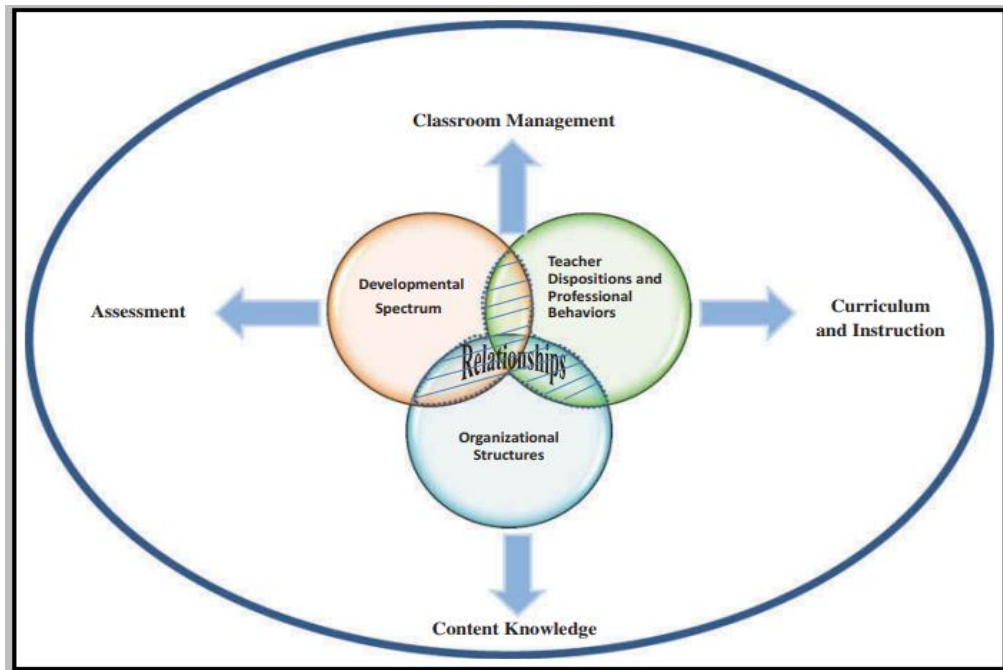
From Embracing a common focus: A framework for middle level teacher preparation by S. Faulkner, P. Howell, & C. Cook, 2013. Current Issues in Middle Level Education, 18(2), p.4. Copyright 2013 by Information Age Publishing.

Within the content knowledge construct, both the specific contents, such as math, science, social studies, and language arts, and the pedagogical content, such as content necessary to provide students with meaningful and engaging learning opportunities, are addressed. It emphasizes the importance of the teacher having a deep understanding of the content they are teaching. The classroom management construct embraces both the school community and individual classroom and includes classroom expectations, school policies, and cultural practices. Assessment comprises the use of ongoing and varied methods to monitor students' progress and

plan for instructional options. Lastly, the curriculum and instruction construct encompass a curriculum that is relevant, rigorous, meaningful, and challenging with engaging instructional strategies. It emphasizes curriculum being interdisciplinary and connecting with the lives of students (Faulkner et al., 2013).

The core, or center of the FEMLP places emphasis on: the developmental spectrum, teacher dispositions and professional behaviors, organizational structures, and relationships. These intersect and uphold the belief that effective middle level teaching practices must be grounded in the developmental needs of adolescent students, endorsed by middle level professionals who build meaningful relationships, and supported by organizational structures that are developmentally and culturally responsive to the needs of students and professionally responsive to teachers (Cook et al., 2016). The four core constructs of the FEMLP make up the theoretical and structural foundation that is necessary for effective middle school practices to be successful. When the four core constructs are executed well, they influence four outlying constructs: content knowledge, assessment, classroom management, and curriculum and instruction, which, in turn, generate effective teaching practices. Additionally, utilizing the Framework for this study is beneficial for maintaining focus and preserving the core values on which the middle school model was designed. The Framework also provides a structured approach and serves as a guide in helping to ensure that the critical components of effective middle level practices are addressed.

Statement of Purpose

The purpose of the study was to examine teacher preparation programs and the level to which they prepare middle school teacher candidates to meet the unique developmental and educational needs of adolescent students. This study used the FEMLP core constructs as the

theoretical focus. The study also examined teachers' and higher education instructors' perspectives on teacher readiness to teach middle level students in relation to the constructs of FEMLP.

Research Questions

This study investigated the extent to which teacher preparation programs prepare novice and preservice teachers for the developmental needs of adolescent students. The study addressed two research questions:

1. From the perspectives of novice middle school teachers and higher education instructors, in what ways are teacher preparation courses designed to address the unique needs of adolescent learners?

2. From the perspectives of novice middle school teachers and higher education instructors, what is the readiness level of middle school teachers to instruct middle school students?

Potential Significance of the Study

In the past 20 years there has been an increase in research on the adolescent brain. Advancements with neuroimaging have provided a more precise picture of how the adolescent brain learns best. Research shows the importance of educators having a clear understanding of middle level students to address the changes the adolescent brain is undergoing. When reflecting on teacher preparedness, the significance of this study may be beneficial to the faculty of higher education programs who prepare teacher candidates. The study may help to examine the level of preparedness of middle level teachers. In addition, it may inform school districts and college faculty on how best to prepare teacher candidates for providing a quality education for all students.

The New York State Department of Education (NYSED) understands the personal transformations that middle level students undergo and has identified seven essential elements of standards-focused middle-level schools and programs. However, none of these standards address teacher preparation programs. The study may be beneficial to teachers and educational leaders by sharing data relating to the level of commitment, knowledge, and skills necessary to successfully educate adolescent students.

Definitions of Terms

Various terms presented in this study are associated with adolescent development and teacher preparation programs.

Limbic System: A complex set of brain structures under the cerebrum that helps to regulate emotion, behavior, motivation, memory, and olfaction (smell). *Also called the emotional brain* (Armstrong, 2016).

Middle Level Educators: Educators who teach students in Grades 5 through 8 (New York State Department of Education, n.d.).

Novice Teacher: A teacher who is a recent graduate of a university and is in their initial years of teaching (Hesson, 2016). For the purpose of this study, a novice teacher is a teacher with 5 or fewer years of teaching experience.

Prefrontal Cortex: The gray matter that covers the front part of the frontal lobes (behind the forehead) plays an important role in the regulation of complex cognitive, emotional, and social behaviors and other executive functions (Armstrong, 2016).

Young adolescent students: Students between the ages of 10-15 years old in Grades 5 through 9. During this developmental period students undergo various neurological and physical changes that have a direct impact on the way they best learn (Armstrong, 2016).

Chapter Summary

The lack of knowledge about teacher education programs with a specific focus on middle school level preparation for the adolescent student contributes to the lack of focus in middle schools (Valentine, 2000). Middle level educators may benefit from knowing more about adolescent development and the uniqueness of middle school students as it relates to learning (Cook et al., 2016). One of several recommendations made by the Middle Grades Collaborative (2016) was to consider "providing middle grades teachers with pathways to specialized certification in middle grades education, both within districts and credentialing programs designed to train educators" (p. 28). Teacher preparation programs providing training must ensure candidates are well prepared to meet the developmental needs of adolescent students. If teachers know more about the developmental changes happening within the adolescent student, they may be able to better prepare them for their future.

This study used the core constructs of the FEMLP to examine teacher preparation programs. Researchers of middle school programs have discussed the purpose of middle schools, stressed the social, emotional, and cognitive needs of adolescent students, and emphasized the importance of considering the developmental stage of adolescents when designing educational programs (Cook et al., 2016). Chapter 2 includes a comprehensive review of the literature regarding the adolescent brain and teacher preparation programs. Chapter 2 includes a review of studies that examined the prevalence of courses offered to middle school teachers and if the neurological, physical, and social changes associated with adolescent development are taken into consideration. Chapter 3 will examine the research methodology. Chapter 4 will share the results of the study. Chapter 5 will discuss the implications of the findings and provide recommendations for future studies.

Chapter 2: Review of the Literature

Introduction and Purpose

There is a need to research how prepared middle school teachers are to effectively engage their students in lessons and activities that are aligned to their developmental needs. There is a lack of information on how teacher preparation programs prepare preservice teachers to align their educational practices to the neurological changes taking place in the adolescent brain, ensuring that lessons are highly engaging and developmentally appropriate.

This chapter examined the literature regarding teacher preparation programs and the prevalence of courses offered to prepare middle school teachers for the unique needs of adolescent students. First, the chapter describes Middle School Framework studies that use the FEMLP (Cook et al., 2016) and the AMLE This We Believe framework (AMLE, 2010) and how the frameworks support adolescent students. Effective middle level practices and research regarding neuroscience and adolescent development will also be discussed in the first section. Second, the chapter examines teacher preparation programs in general, in addition to middle level preparation programs, the needs of middle level programs and teachers' perspectives on middle level teaching. Finally, the chapter discusses the educational needs of middle level students.

Research Questions

This study investigated the extent to which teacher preparation programs prepare novice, preservice teachers for the developmental needs of adolescent students. These two research questions were examined:

1. From the perspectives of novice middle school teachers and higher education instructors, in what ways are teacher preparation courses designed to address the unique needs of adolescent learners?

2. From the perspectives of novice middle school teachers and higher education instructors, what is the readiness level of middle school teachers to instruct middle school students?

Middle School Frameworks

This study examined the educational and developmental needs of adolescent students, as well as how teacher preparation programs prepare teachers for middle level education using the core constructs of the FEMLP (Cook et al., 2016). The FEMLP core constructs provide a critical lens for considering the developmental stage of adolescents when preparing candidates to teach in the middle grades. The FEMLP advocates for rigorous instruction and, like Cook et al., it suggests that when planning learning experiences for adolescent students, middle level educators should have a strong understanding of the developmental needs of adolescents to support the learner in their cognitive and social growth. The core of the FEMLP consists of the following constructs: developmental spectrum, teacher dispositions and professional behaviors, organizational structures, and relationships. These constructs are documented in middle level literature (AMLE, 2010), considered effective practices unique to middle level education, and address the developmental stages of early adolescent students (Faulkner et al., 2013). Figure 2.1 highlights the four core constructs that Faulkner et al. believe can enhance students' learning experiences when systematically implemented.

Utilizing case study methodology, Cook et al., (2016) explored how Nagel Middle School (NMS) utilized the core constructs of the FEMLP. NMS is located in the suburbs of

Figure 2.1 The core of effective middle level practices. © Information Age Publishing.
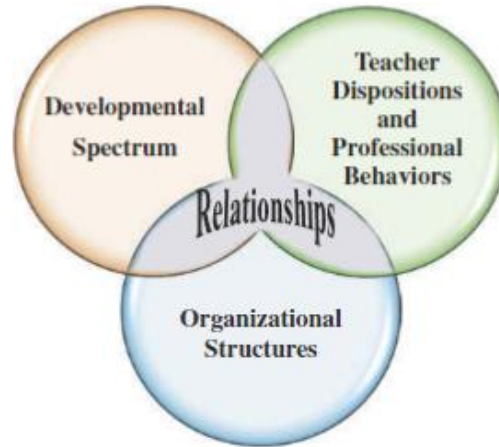
Cincinnati, Ohio and was named both a national and state school to watch. The classrooms of 50 teachers were observed, the three members of the leadership team were interviewed, and 20 teachers and 25 students participated in semi-structured focus group interviews. Additionally, a thorough tour of the school campus was conducted. Data from the interviews and observations were coded utilizing the core constructs of the FEMLP. The results of this study revealed that NMS exemplified the construct of teacher dispositions and professional behaviors by placing considerable emphasis on embracing character development, creating a caring environment with a focus on the developmental needs of students, and utilizing collaborative teams. At NMS, findings showed that teachers and staff had a clear understanding of the developmental needs of adolescent students and allowed opportunities for students to help in establishing a positive school culture (Cook et al., 2016). Results from Cook et al. regarding organizational structures revealed that NMS used a traditional advisory program that ensured an adult advisor for every student and embraced student-led programs. Additionally, countless opportunities allowed students, staff, teachers, and administrators to interact with each other and develop caring

relationships (Cook et al., 2016). Cook et al. concluded that the core constructs of the FEMLP were firmly embedded in NMS. The core constructs proved to be effective practices for middle level learners as shown by their success at NMS.

The FEMLP was used in a case study to examine the perspectives of central Alberta, Canada middle school administrators on effective middle level education (Rheaume, 2018). The FEMLP was used as a basis for this study because it most closely aligned with the Alberta Education Teacher Quality Standards in comparison to other frameworks related to effective teaching and includes developmental responsiveness and organizational structures that are particular to middle level education (Rheaume, 2018).

Rheaume (2018) examined the perspectives of 43 Alberta middle school administrators on effective middle level education through case study methodology using multiple data sources. Rheaume used homogenous sampling of middle level administrators from 3 school divisions and 10 middle schools in central Alberta. Data were collected using a questionnaire and focus groups. The design of the questionnaire was drawn from the FEMLP, Alberta Education Teaching Quality Standards, and AMLE This We Believe.

Rheaume's (2018) findings regarding the middle school concept revealed that teaming and developmentally responsive practices are essential to middle level education while curriculum integration and advising are less important. Additionally, findings regarding the construct of effective teaching revealed that novice middle level teachers should develop professional knowledge and skills to create a learning-centered, inclusive learning environment, as well as possess a disposition that promotes positive, productive relationships (Rheaume, 2018). Findings from the Rheaume study have had implications for this study regarding the effectiveness of FEMLP and its alignment to the middle school concept.

Effective Middle Level Practices

Because of the uniqueness of the adolescent child, the education of adolescent students

has been a complex and challenging issue for schools to navigate. There are ongoing debates

regarding how to best educate young adolescents (Alverson et al., 2019).

Alverson et al. (2019) examined middle school practices in the southeastern region of the United

States to understand the alignment regarding the importance and implementation of these

practices. Based on the foundational knowledge of the junior high model shared by Briggs in

1920 and expanded by Gruhn and Douglas in 1947, as well as the current middle school model

introduced by Alexander in 1968, this study was grounded in the importance of providing

developmentally responsive educational experiences for young adolescents (Alverson et al.,

2019). Various middle school philosophies such as This We Believe (National Middle School

Association (NMSA), 1982, 2010), Turning Points (Carnegie Council on Adolescent

Development, 1989), Turning Points 2000 (Jackson & Davis, 2000) and the Middle Level

Preparation Standards (AMLE, 2012) which advocate for educational practices aligned to the

evolving needs of middle level students, were examined (Alverson et al., 2019). Alverson et al.

examined the perceived importance and implementation of these middle level philosophies

through a simple random sampling of 25% (561) from the total number of schools (2,712) that

met the criteria for middle school grades configurations. Using Qualtrics, anonymous online

survey links were sent to 2,990 viable emails, and 373 participants completed at least a portion of

the survey. Participants included both teachers and administrators. The results of this study

revealed that although it is believed that middle level teacher preparation is important, there has

been a lag in the implementation. Additionally, the study revealed that respondents reported

traditional organizational structures such as interdisciplinary teaming, advising, and common

20

planning time at their schools. These structures were not being implemented to the same degree as their reported importance. The study also revealed that instructional practices such as engaging in active learning, multiple teaching approaches, and relevant, challenging curriculum were important, but were occasionally, rarely, or never implemented (Alverson et al., 2019).

The Alverson et al. (2019) study gave insights into challenges faced by middle school educators attempting the implementation of middle level practices. Although data showed that middle level philosophies are important, the results showed there were some gaps in the perceived importance and implementation of these practices. The Alverson et al. study supports the current study as it relates to understanding novice teachers' perspective of their readiness to teach middle level students and knowing what courses new teachers may need, in order to be better prepared to implement effective middle level practices. Although the middle level practices have been proven effective, not all teachers and administrators have the knowledge base or the necessary skill set to bring them to life in the classroom.

Neuroscience and Adolescent Development

Adolescence is a distinctive stage of life that serves as the crossroads from childhood to adulthood (Benner, 2018). Young adolescents, ages 10-15 years old, experience rapid growth and significant physical, biological, and cognitive developmental changes (Caskey & Anfara, 2014). The most important shift that has come from neuroimaging studies discloses that white matter and gray matter in the adolescent brain undergo substantial changes during the adolescent years (Armstrong, 2016). White matter increases in the adolescent brain in areas associated with cognition and behavior. The process involves the creation of myelin, the fatty protective coating around axons. Once an axon becomes myelinated, it can work up to 100 times faster to conduct electrical impulses than an unmyelinated axon (Armstrong, 2016). Myelination involves the fine-

tuning for neurons to arrive at the same time and is the basis for thought, consciousness, and meaning that occurs in the brain (Armstrong, 2016).

As white matter increases, gray matter decreases. Gray matter refers to the cell bodies of the neurons and the axons and dendrites that project from them (Armstrong, 2016). At the end of axons and dendrites are synapses which allow for chemical transmission of information from one neuron to the next (Armstrong, 2016). During certain developmental periods, the brain undergoes a process called pruning, which removes synapses that are not used or stimulated by the environment (Armstrong, 2016). Most pruning during adolescence takes place in the brain's frontal lobe, particularly in the prefrontal cortex (see Figure 2.2). The prefrontal cortex is responsible for executive functions such as planning, decision-making, setting priorities, strategizing, and preventing impulses and improper behaviors. Pruning and myelination is a slow back to front process, and with the prefrontal cortex positioned behind the forehead, it is the last part of the brain to be pruned and myelinated. In other words, the areas of the brain responsible for decision-making and other important skills for effective performance do not reach their peak efficacy until well after middle school years (Armstrong, 2016).

Figure 2.2 Limbic System and Prefrontal Cortex
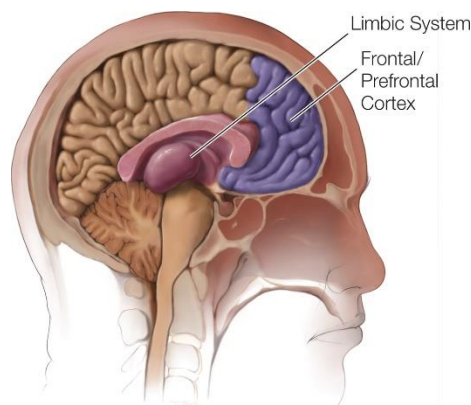
Note. From Macmillan Higher Ed. (https://www.macmillanhighered.com/ BrainHoney/Resource/22292/digital_first_content/trunk/test/greenberg1e/asset/img_ch2/ch2_fig_2.html). Copyright 2022 by Macmillan Learning.

Additionally, it is important to note that the limbic system, or emotional brain, finishes developing around puberty or early adolescence and is associated with emotions, feelings, and memory (Armstrong, 2016). As the cognition of young adolescents extends to include abstract reasoning and critical thinking skills adolescents can think as maturely as an adult by age 15 or16 in situations where no emotions are involved (Armstrong, 2016). However, when it comes to the limbic system, the thinking patterns of young adolescents are a bit more complicated. Research has shown that the decision making of adolescent youth does not function as optimal as the thought processes of adults, which is why adolescents tend to be more emotionally reactive and less rational in situations involving strong feelings (Armstrong, 2016). During this developmental stage, youth can think through topics, form opinions, argue positions and challenge adult directives (Caskey & Anfara, 2014). Additionally, they appreciate their individuality and are more interested in real-life experiences that allow them the opportunity to explore various environments (Caskey & Anfara, 2014). Researchers have found that the capacity for these two systems to function smoothly does not mature until late adolescence, between the ages of 16-20 (Armstrong, 2016).

Teacher Preparation Programs

As novice teachers complete their teacher preparation programs, it is assumed by many that they have acquired the necessary education training needed to teach in schools. However, teacher preparation programs have received a lot of attention in the past decade and have been criticized for inadequately preparing teachers for the classroom (Greenberg et al., 2013). The National Council on Teacher Quality (NCTQ) conducted a review of college and university-based teacher preparation programs to see how these schools operate. This review provided data

on more than 2,400 credentialing programs in 1,130 institutions of higher education that prepare 99% of the nation's traditionally certified teachers (Greenberg et al., 2013). About half of the institutions were accredited by the National Council for Accreditation of Teacher Education (NCATE). Institutions were rated based on 18 standards which aligned to one of four overarching premises: selection, content preparation, professional skills, and outcomes (Greenberg et al., 2013). Results of this review concluded that many of these programs underprepared our nation's future teachers and produced teachers with inadequate classroom management and content knowledge that is needed to thrive in classrooms (Greenberg et al., 2013). This study implied that additional research is needed regarding how prepared teachers are to instruct middle level students. An additional implication for this study, based on the results of Greenberg et al., is understanding how novice teachers perceive their preparedness for classroom instruction and behavior management. Banks (2015) quoted former Secretary of Education Arne Duncan, who noted that two thirds, or about 62% of new teachers, reported feeling unprepared to teach.

The perspective of novice teachers was shared in a study by Nunley (2020) who explored novice teachers' perspective of being effectively and adequately prepared by their teacher preparation program for their first teaching assignment. The study participants consisted of eight elementary teachers from Plankton Independent School District (pseudonym) who were first-year novice teachers and had completed a traditional teacher preparation program. Data were collected via one-on-one interviews, questionnaires, and the Teachers' Sense of Teacher Efficacy Scale (Nunley, 2020). Questionnaires were used to gather demographic information about the participants and open-ended questions were used during the interviews to obtain in-depth knowledge and information from the respondents. The Teacher's Sense of Teacher Efficacy

Scale was used to measure the respondents' evaluations of their likely success in teaching. Data were analyzed using a data coding process to identify common themes (Nunley, 2020). Results of this study concluded that most novice teachers were prepared to a certain extent for teaching, but felt they were not exposed to realistic classroom situations (Nunley, 2020). Additionally, the study revealed that although teachers entered their first year of teaching enthused and excited to teach and take on classroom challenges, they struggled with handling discipline problems and pedagogy practices (Nunley, 2020). Moreover, an additional challenge shared by Greenberg et al. (2013) discussed that first-year teachers instruct approximately 1.5 million students every year and both students taught by first-year teachers and the teachers themselves suffer when teachers are inadequately prepared (Greenberg et al., 2013). Studies by Greenberg (2013) and Nunley (2020) have implications for this study regarding examining the courses offered by teacher preparation programs that could better prepare teachers for handling discipline problems and improve pedagogy practices.

Various research studies concerning beginning teachers' preparation for teaching continue to be documented in the literature (Banks, 2015; Hesson, 2016). Research by Doran (2020) examined how new teachers perceived their licensure programs as it related to teaching in high-poverty schools. Two elementary school sites were selected to participate in the study based on their participation in a university partnership program. The partnership focused on new teacher induction and support over the first 3 years of teaching (Doran, 2020). Both school sites had ongoing challenges with student achievement and diverse student populations. Data collection methods for the Doran study consisted of one semi-structured group interview at each school to allow the conversation to go in the direction of points raised by the participants (Doran, 2020). Eight teachers and administrative staff participated in the first group interview and six

teachers participated in the second group interview. One-on-one interviews with teacher mentors were conducted as well to gain background information about the school. Additionally, some teachers participated in individual, semi-structured interviews based on availability. Qualitative analysis of the data utilized a coding system to identify reoccurring themes (Doran, 2020). The findings of this study concluded that teachers felt they were well prepared in areas such as lesson planning, but poorly prepared in data analysis and relationship-building with students and families. Doran recommended that teacher preparation programs listen to the voice of their students regarding what additional training may be needed to ensure teachers are prepared for 21st century students and curriculum. Additional recommendations for teacher preparation programs included improvements in lesson planning as new teachers are often in need of guidance when unpacking a district's curriculum guide, and fieldwork placements to ensure access to experienced mentors and exposure to diverse communities (Doran, 2020). Furthermore, Doran recommended teacher preparation programs provide the opportunity for preservice teachers to engage with data as data analysis is often used in a collaborative effort to guide instruction and set goals. The findings in this research suggest further study and discussion regarding new teachers' perspectives of their preparedness, an underpinning of this study, is needed.

The studies regarding novice teachers' perspectives of their preparation programs provided some insight into the perceived strengths and weaknesses of their teacher preparation programs. As more evidence mounts regarding the importance of quality teachers in student achievement, it is recommended that teacher preparation programs listen to the needs of their students (Doran, 2020) and adjust their programs to better meet the needs of the nation's future students (Banks, 2015).

Middle Level Preparation Programs and Effectiveness

While there has been a heavy focus on the middle school structure, middle level leaders realized the critical role of classroom teachers and pushed for the creation of middle level teaching credentials and specialized teacher preparation programs (Faulkner et al., 2017). Contributing founders of the middle school movement such as Alexander, Williams, Lounsbury, and Eichhorn stressed the importance of specialized middle level teacher preparation (Faulkner et al., 2017). Yet, as noted by Banks (2015) most certified teachers are produced within traditional teacher preparation programs and this model does not necessarily address the issue of teacher shortages and teacher preparedness.

Additionally, professional organizations such as the AMLE have also backed the push for specialized middle level preparation programs (AMLE, 2010). The AMLE's *This We Believe* characteristics state that leaders and teachers should be committed to and knowledgeable of this age group to understand the developmental uniqueness of this population (AMLE, 2010; Faulkner et al., 2017). Additionally, Faulkner et al., (2013) developed the FEMLP in an effort to provide a common focus for middle level teacher preparation and advocate for specialized middle grades teacher programs.

There are gaps in the literature regarding how well aligned middle level teacher preparation programs are to the developmental stages of middle level students and how qualified teachers are to teach at the middle school level. Additionally, there has been a lack of information regarding what changes or improvements have occurred in preparing teachers for middle grade adolescent students, made evident in the findings of Howell et al. (2016). In an effort to better advocate for the education of middle level students, Howell et al. conducted a national review of undergraduate middle level teacher preparation programs involving 1,324

institutions from 50 states and the District of Columbia. Of the 1,324 institutions with teacher preparation programs, 488 were public, 812 were private, and 24 were identified as for-profit. The College Board website (http://www.collegeboard.org) was used to identify schools for the study sample. Four-year institutions with programs leading to teacher certification were considered for this study. Each institution had program or degree requirement documents readily accessible through the institution's website. Program and degree requirements were reviewed, and a closed coding system was used to analyze the data. Howell's study revealed that although 45 states have clear mandates for middle level certification or licensure, nearly half of the colleges preparing candidates for the middle grades do not offer courses or experiences specific to middle level education or adolescent students. This array of offerings included 336 institutions that had a fully implemented specialized middle level degree program, 316 that offered a middle grades course or some elements of a middle level program, and 672 institutions that offered no specialized middle level teacher preparation (Howell et al., 2016). Although middle level advocates have argued for specialized middle level programs, the results of this study showed how some teacher preparation programs in some states continue to lack pathways to middle level licensure (Howell et al., 2016).

Faulkner et al. (2013) reported that individual state and institutional requirements often make it difficult to meet the challenge of federal mandates and may result in inconsistent implementation of expectations. In looking at teacher preparation programs, Faulkner et al., found that some prepared candidates through a general elementary program, while others provided a specialized middle grades program, and some prepared future teachers through a secondary subject-specific program. Although each of these program routes led to certification at the middle grades level and allowed candidates to teach in middle schools, many acknowledged

that this approach is not as effective as a specialized middle grades teacher preparation program (Faulkner et al., 2013). Furthermore, Faulkner et al. (2013) stated that, as licensure requirements change across states, preparation programs have worked to ensure mandates are met and candidates are prepared for licensure to teach at the middle school level. However, these mandates many times lead to inconsistencies in the quality and content across programs (Faulkner et al., 2013). This study has implications in examining the course offerings at teacher preparation programs and how they align to addressing the developmental needs of adolescent students.

With the varying routes of middle level teacher credentialing in the United States, Howell et al. (2018) felt there was a need for clarity regarding the specific requirements of middle level credentialing and conducted a descriptive, pragmatic, qualitative study, that explored the options available for specialized middle level credentialing and how they have been addressed in the United States. Howell et al. examined middle level teacher licensure in all 50 U. S. states and the District of Columbia. Data were collected by accessing the website for each credentialing agency as part of a larger study that examined state licensure documents and middle level teacher preparation degree requirements for each state. Analysis of documents was limited to dates between October 2016 and January 2017. Only traditional route, initial licensure data were reviewed, and a closed coding data system was used to analyze the data (Howell et al., 2018).

The Howell et al. (2018) study revealed that there was a wide variation in credentialing authority, credential names, credential grade bands, extent of overlapping credentials testing requirements, and field experience requirements. The most common structure for credentialing was found in state departments of education. Howell et al. (2018) found that 37 of the 50 states and the District of Columbia had teacher credentialing regulated by a state department of

education. Ten states had a separate standards board that regulated teacher credentialing and three states had a combination of both the state department of education and a separate standards board regulating teacher credentialing. Howell et al. (2018) revealed that the great variation in terminology was another challenge associated with the preparation of middle level teachers. Middle schools, middle level and middle grades were the most commonly used terms. The study found that 35 of the states and the District of Columbia had a range of names for credentialing middle level teachers. Overlapping grade bands were also seen as problematic for middle level teacher credentialing. Although 42 states and the District of Columbia had middle level endorsements or specific teaching licensing, 35 of those states had a middle grades licensure structure that was embedded within an elementary or secondary license (Howell et al., 2018). Data regarding credentialing grade bands revealed that 43 out of the 50 states and the District of Columbia had an option available for middle grade bands. Credentialing could be earned in a variety of grade bands from state to state such as 5-8, 4-8, 5-9, 6-8, 4-9, 7-9, 6-9, and 7-8 (Howell et al., 2018). The research further revealed that some states had not yet recognized middle grades as a unique grade band (Howell et al., 2018). Testing requirements for middle level credentialing varied a great deal across states. The results of this study revealed that middle level content knowledge, or broadly based secondary knowledge was all that most states assessed for middle level credentialing (Howell et al., 2018). Additionally, Howell et al. found that of the eight states that required specialized licensing for middle grades, only five required an exam that addressed middle level-specific pedagogy. Variation in field experience terms and duration were discovered during this study. The most common term found in the documents was "*student teaching*" (Howell et al., 2018). Student teaching requirements ranged from 8 weeks to 13 weeks

depending on each state's requirements, and in many cases a grade level or content area was not specified by states (Howell et al., 2018).

The findings by Howell et al. (2018) shed light on the great variability in the routes leading to a middle level credential from state to state. States are responsible for the preparation and credentialing of teachers and must work within existing laws and regulations to ensure middle level classroom teachers are properly trained and credentialed (Howell et al., 2018) to address the unique needs of adolescent students. The Howell et al. study has been significant in reviewing teacher preparation programs and examining what courses are being offered to address the needs of adolescent students. It has raised the question of how teacher preparation programs assess teachers to determine if they are truly qualified to teach or work with adolescent middle grades students.

Moreover, Preston (2017) examined 15 teacher preparation programs over a 4-year period to examine the relationship between the structural features of middle grades teacher preparation programs to student achievement gains in math and English language arts (ELA). The participants were restricted to teachers in their first years of teaching. The teachers held middle level certification in math or ELA and were teaching middle level math or ELA in a North Carolina public school within the 2007 through 2011 school years. There were a total of 248 math and 175 ELA teachers who participated in this longitudinal study. Individual teachers who taught a subject that was assessed were observed once a year. To examine the relationship between structural features and student achievement gains, Preston primarily used a three-level hierarchical linear model (HLM). An HLM is used for analyzing complex nested relationships and considers the repeated observations of the same individual and the nested structure of the data (Preston, 2017). For this study, the students are nested in the classrooms, and classrooms are

nested in the schools. In looking at structural features of teacher preparation programs, the study found that on average both math and ELA programs required about 10 credit hours of foundation coursework and about 15 credit hours of pedagogy coursework (Preston, 2017). When it comes to coursework specific to teaching adolescent students, about 65% of middle level programs required one course in educational psychology and about 70% required one course in adolescent development. Additionally, the study found that no features of fieldwork were associated with middle grades ELA and math achievement gains. Similar to Boyd et al. (2009), Preston noted that the relationship of structural features to student achievement varied across subject matter. Subject matter revealed a negative relationship to student achievement for mathematics, but no relationship to middle grades ELA achievement. Furthermore, Preston shared that although the structural features may not be directly related to student achievement gains, they could be related to other contributing factors such as teachers' attitudes towards students, teacher observation scores or teacher retention, in addition to the quality of the faculty instructing teacher preparation programs.

The Preston (2017) study has implications regarding how teacher preparation programs have prepared teachers for the unique needs of middle level students. Although the study provided few implications for teacher preparation programs regarding how to effectively prepare new teachers, the data showed that coursework in educational psychology and adolescent development is likely needed in order to improve teacher effectiveness when working with adolescent, middle level students. While some progress has been made with establishing middle level certifications, licensures, or endorsements, there is still a lack of knowledge about whether middle level teacher preparation programs are thriving in the United States (Faulkner et al., 2017).

Teachers' Perspectives on Middle Level Teaching and Preparedness

Middle school researchers have focused on developing a blueprint for exemplary middle schools through the years, as school configurations of Grades 7 and Grades 8 shifted from elementary grades and intermediate school Grades 7-8 to junior high school Grades 7-9, to junior-senior high school Grades 7-12, and most recently middle school Grades 6-8 (Valentine, 2000). Since the inception of middle schools in the mid-1960s, middle level advocates have emphasized the need for adolescent students, ages 10-15, to have learning experiences aligned to their developmental needs and engage them in relevant, rigorous, and exploratory activities (Armstrong, 2016; DiCicco et al., 2016). However, Schaefer et al., (2016) noted that children between the ages of 10 and 15 were given minor attention in legislation and the shifts focused more on addressing problems of overcrowding, K-8 elementary schools, and increased rates of student dropouts after Grade 8 (Valentine, 2000).

Although middle level advocates understand and agree on the importance of specialized middle level teacher preparation, teachers across the nation are not prepared in a consistent manner (Faulkner et al., 2013; Hesson, 2016,). Despite a lack of large-scale research regarding the perspectives of middle grade teachers on their preparation for teaching middle level students, a few studies were located on this topic.

Hesson (2016) compared middle level certification pathways for novice middle level teachers at the elementary, middle, and secondary level from Parliament University (pseudonym) in Pennsylvania to see which teachers felt best prepared for teaching middle level students. Participants had to meet three requirements: had graduated within the last 4 years from Parliament University, taught at the middle level (Grades 4-8 as defined by the state), and resided close to the researcher. Although over 100 individuals were contacted, only 13 agreed to

participate. Six of the 13 participants were disqualified or withdrew the study started. Of the remaining seven participants, two were male and five were female. Only four of the participants completed both interviews. Three of the seven participants withdrew midway through the study; however, they were still included in the data provided. All participants worked in urban schools.

Data collection occurred in three ways for Hesson's (2016) study: interviews with teachers, participant journal entries, and a document analysis of course syllabi. The research was mainly grounded in the social cognitive theory, which recognized that the background of students and where the learning takes place impacts overall learning (Hesson, 2016). The results of Hesson's study revealed that all participants believed middle level adolescent students were difficult to teach and had unique developmental and intellectual needs. All participants acknowledged a need for specialized middle level teaching strategies and/or instructional approaches. Overall, the participants reported that their teacher preparation programs were moderately effective in preparing them to teach middle level students. The participants ranked field experiences as a highly influential component of their program because there was action attached to it. Additionally, more than half of the participants desired to leave teaching at the middle level, including the middle level certified participants. Due to this being a small study, it could not be determined if the desire to leave teaching at the middle level was due to cognitive-social reasons or poor preparation from certification programs (Hesson, 2016).

Hesson (2016) stated that a large majority of teachers across the nation are trained in either elementary programs or subject-specific secondary programs. These pathways are not developmentally responsive to adolescent students, and teachers often lack an understanding of the social-emotional and cognitive needs of middle level students. Additionally, the results of Hesson's study revealed that there is a need for specialized middle level preparation programs to

address the unique needs of adolescent students and how teacher preparation courses at the college level are designed to address the unique needs of adolescent learners.

Middle level advocates continue to promote specialized middle grades preparation programs (Ochanji et al., 2016). Ochanji et al. conducted a study to see if specialized middle level teacher education really matters. This qualitative study of 20 experienced middle school teachers aimed to find how middle level teachers perceive their readiness to teach adolescent students. Participants received certification from a middle level preparation program, an elementary program, or a secondary program and taught in five California middle schools in five different districts: one urban, three suburban, and one rural. Participants who were thought to be exemplary teachers were selected by school site administrators. Of the 20 participants, eight received middle level preparation, seven elementary preparation, and five secondary level preparation. Ochanji et al. used an interview method informed by the emergent-grounded theory design. This theory required coding data and permitted a theory to emerge through comparing and sorting responses as well as observation of patterns, themes, and categories (Ochanji et al., 2016). The 20 participants were interviewed onsite at middle schools during their teacher preparation period.

Two themes emerged from the Ochanji et al. (2016) study: the need for understanding young adolescent development and building instructional skills for the middle school environment. Results regarding understanding young adolescent development revealed that teachers with middle level specific preparation felt their preparation to teach middle level students was solid. Additionally, those teachers who graduated from elementary preparation programs felt their programs were mainly geared toward elementary instruction and lacked required experiences with students beyond sixth grade (Ochanji et al., 2016). Teachers with

preparation in middle level education identified the importance of their preparation in building necessary instructional skills for the middle school environment. These teachers were also better equipped to learn about the lives of their students beyond the classroom (Ochanji et al., 2016). The overall results of the Ochanji et al. study revealed that teachers prepared in elementary or secondary teacher programs were not as prepared for middle level classrooms as those teachers prepared in specialized middle level preparation programs. Ochanji et al. discussed middle schools as often being a last option for teachers with elementary or secondary credentials, and that these teachers were more likely to leave middle school classrooms within a few years. With adolescence being a critical time of development, middle schools require teachers with a deep understanding of adolescent development, and appropriate curriculum and school structures that align with students' developmental needs (Ochanji et al., 2016). The results of the research conducted by Ochanji et al. (2016) implied that middle level teacher candidates benefit from specialized middle level teacher preparation programs.

In an examination of teacher beliefs about teaching in the middle grades, DiCicco et al. (2016) conducted an exploratory multi-case study to understand current middle level teacher perspectives of their experiences and beliefs about teaching in middle level schools. Participants were selected through a convenience sample of middle grades teachers with at least 4 years of teaching experience (DiCicco et al., 2016). Of the 32 teachers who received invitations, 10 responded. The 10 participants represented eight school districts in two Mid-western states that included three urban, two rural, and five suburban areas. Additionally, eight of the 10 participants completed a traditional undergraduate middle level teacher preparation program and two earned certifications through a middle grades extension program attached to a secondary certification (DiCicco et al., 2016). Data were collected using a demographic online survey and

individual interviews through online video conferencing (DiCicco et al., 2016). Data were analyzed using a coding system.

The purpose of the DiCicco et al. (2016) study was to gain information regarding current middle level teachers' beliefs regarding their primary purpose as a middle level teacher, the current status of middle level teaching, their best and worst instructional lesson, and their perceived barriers to teaching at the middle level. The results of this study revealed that although teachers viewed their primary purpose was to create lifelong learners and well-rounded problem solvers by engaging students in meaningful learning experiences that inspire them to want to learn, other factors such as "teaching to the test" and imposed curriculum programs influence teacher's ability to focus on their primary purpose (DiCicco et al., 2016). In addition, the perspectives of teachers on the current status of teaching revealed that middle level teaching is stressful and continuously changing. The majority of the stress reported was based on an increased emphasis on testing and diminished value on interdisciplinary collaboration (DiCicco et al., 2016). When describing their best lessons, teachers reported the importance of discovery, engagement, and relevance using real-life scenarios and examples. In contrast, teachers described their worst lessons as being less engaging and having no student connections (DiCicco et al., 2016). Results regarding teachers' perspectives on barriers to teaching included: imposed scripted curricula, the lack of and outdated technology, a lack of experience differentiating instruction to ensure all students learn and student attitudes toward learning (DiCicco et al., 2016).

The DiCicco et al. (2016) study shared perspectives of what middle level teachers experience in the classroom. Many of these perspectives align with previous and current studies concerning adolescent students, their unique developmental stages, and the urgency for middle

teachers to have a deep understanding of adolescent development (Ochanji et al., 2016). Additionally, the DiCicco et al. (2016) study found that although each of the participants in the study entered the profession with an understanding of effective middle level practices, the realities of the classroom and the demands of their school district caused them to second-guess the effectiveness of such practices or totally abandon them. The DiCicco et al. (2016) study results revealed the need to examine novice middle grades teachers to gain an understanding of their perspectives of how well-prepared they were to teach at the middle grades level and what courses may need to be offered in teacher preparation programs so that they feel prepared to teach adolescent students utilizing engaging, relevant, and real life examples, without having to abandon effective practices. Furthermore, DiCicco et al. raised the question: Are middle level preparation programs preparing new teachers for schools that no longer exist?

Daniels (2022) also conducted a study regarding teachers' perspectives. Daniels sought to understand how middle school teachers feel about their level of skills and knowledge to support the cognitive, social, and emotional needs of middle level students. Daniels's study included 16 middle school teachers who were recruited through a social media group specifically for middle grades teachers. Eleven of the participants taught at a suburban middle school and five taught at an urban middle school. Participants were either interviewed via Zoom or provided with a questionnaire to complete. Data were analyzed using a coding process. Daniels (2022) noted that stories from the participants provided important insights regarding teachers' feelings of efficacy regarding the work they do in middle school. The teachers' perspectives shed light on possible ways teacher education programs could enhance their program to better prepare teachers to effectively support middle school students (Daniels, 2022). Five themes emerged from the analysis of the data that explained teachers' feelings of efficacy: (a) appreciation of young

adolescents, (b) knowledge of young adolescent development, (c) confidence and growth, (d) behavior and academic strategies for working with young adolescent students, and (e) external stressors (Daniels, 2022). These findings have implications for teachers, teacher education programs, and school districts in creating educational conditions that support adolescent students (Daniels, 2022).

In addition to teachers' perspectives of middle level preparation, Howell et al. (2013) discussed principals' perspectives of the level of preparedness of newly hired teachers. Professional organizations like the AMLE called for school leaders to be knowledgeable of adolescent development, have a deep understanding of adolescent-specific needs and recognize the critical role they play in shaping school culture and transforming student achievement and influencing teacher effectiveness (AMLE, 2010; Howell et al., 2013). Howell et al. (2013) quoted a study by Jackson and Davis (2000) which revealed that the principal was the most important individual for initiating and sustaining middle grades student performance. With leadership tied so closely to school improvement and principals having the responsibility to make curricular, organizational, and staffing decisions, Howell et al. (2013) acknowledged the importance of principals to be knowledgeable of the skills, competence, and dispositions of newly hired teachers.

Howell et al. (2013) utilized survey methodology for their exploratory study to document principals' perspectives of effective teaching practices and the preparedness of teachers hired within the past 5 years in schools across central and northern Kentucky. Kentucky is one of 46 states that require specific preparation and certification of teachers at the middle grade level (Howell et al., 2013). Principals invited to participate were individuals with whom the researchers had previously worked with through middle level teacher education programs.

An online survey, which assured anonymity, was emailed to 71 middle school principals across central and northern Kentucky (Howell et al., 2013). Thirty-six principals (51%) completed the entire survey. Principals answered open-ended questions about their perspective of effective teaching practices at the middle school level and closed-ended questions, using a Likert scale, about their perspective of the level of preparation of their teachers hired within the last 5 years. Principals analyzed teachers using six categories developed from and aligned with the Framework of Effective Teaching Practices at the middle level. Principals' perspectives of newly hired teachers indicated that while teachers demonstrated expertise in their content area, there was a lack of preparation in various key areas associated with effective middle school practices, including classroom management, curriculum and instruction, assessment, relationships, and culturally and developmentally appropriate practices (Howell et al., 2013). This lack of preparation of middle level teachers, based on the principals' perspectives, implied a sense of urgency for teacher preparation programs to offer courses and experiences to teachers that address the needs of middle level adolescent students.

As a result of the study by Howell et al. (2013), the authors offered the FEMLP as a theoretical guide for middle level teacher preparation (Howell et al., 2013). The framework highlights eight middle level constructs that Faulkner et al. (2013) believe when systematically implemented, enhances the prospect of effective learning experiences for all students. The eight constructs include developmental spectrum, teacher dispositions and professional behaviors, organizational structures, relationships, content knowledge, classroom management, assessment, and curriculum and instruction. This study will be grounded in this framework while researching teacher preparation programs and how they are preparing teachers to address the developmental needs of adolescent students.

Needs of Middle Level Teachers

Various research studies have validated the need for specialized middle level teacher preparation programs (Howell et al., 2013). Middle level advocates have stressed the importance of teacher preparation that ensures the development of educators who are knowledgeable of young adolescents and their developmental needs (Howell et al., 2013).

The study by Howell et al. (2013) described in the previous section, focused on exploring principal's perspectives of the level of preparedness of newly hired teachers. The results revealed that appropriate organizational structures were necessary for middle level teachers. Organizational structures such as teaming, flexible block scheduling, and common planning times are critical for middle level teachers (Howell et al., 2013). Additionally, the FEMLP (Howell et al., 2013) emphasizes the significance of teachers understanding the unique physical, cognitive, social, and emotional changes that middle level students undergo. Drawing on the conceptual framework, results discussed the importance of teachers having the ability to enact developmentally responsive pedagogy that has varied instructional strategies and a variety of activities (Howell et al., 2013). Finally, with the growth of racial, linguistic, and cultural diversity in middle school, Howell et al. suggested additional examination of the perspective of principals regarding diversity and cultural responsiveness in relation to effective middle grades teaching. Howell et al. stressed the important needs of middle level teachers and proposed that specialized teacher preparation programs be the norm in all institutions preparing middle level teachers.

Chapter Summary

This review examined the preparation of middle level teachers and how qualified they are to teach middle level students, through the lens of the FEMLP. This framework advocates for

teachers to be knowledgeable of adolescent developmental needs and well-prepared to engage students in relevant, rigorous curriculum (Cook et al., 2016). From the inception of middle schools to the present day, empirical studies have documented the importance of teacher preparation programs supporting teachers for middle level education in ways that coincide with the developmental needs of adolescent students. Although it is unclear how middle level teachers are addressing the unique changes in adolescent students, advocates of specialized teacher preparation programs have felt adolescent students can benefit from teachers who align lessons and learning to meet the needs of these students. For example, Jansen and Kiefer (2020) reported that adolescence is an ideal time for educators to utilize activities that cognitively engage students in learning.

There are gaps in the literature about how well middle level teacher preparation programs align with the developmental stages of middle level students and the qualifications of teachers to teach at this level. Additionally, there is little information on improvements in preparing teachers for middle grade students, as noted by Howell et al. (2016). Additionally, results of a study by Alverson et al. (2019) revealed gaps between middle level philosophies perceived importance and actual implementation.

The literature review included studies that focused on a) adolescent development and the FEMLP, b) novice teachers' perspectives regarding their preparation, c) novice teachers' perspectives of their preparation for middle grades, and d) the effectiveness of middle school teacher preparation programs. The reviewed literature supports the purpose of the research. The literature reinforces the importance of understanding novice middle level teachers' perspectives regarding their preparation and what courses are being offered by teacher preparation programs with a focus on the developmental needs of adolescent learners.

In Chapter 3, the research methodology for this study will be examined. Alongside detailing the research setting and participants, Chapter 3 also delves into the research techniques, instruments, and the approach to collecting and analyzing data.

Chapter 3: Research Design Methodology

Introduction

Young adolescent students characteristically fall between the ages of 10 and 15 years old and are typically enrolled in Grades 5 through 9, although the specific grade range may vary slightly across educational systems and states. Adolescence is a unique stage of life that serves as the turning point from childhood to adulthood (Benner, 2018). As young students transition from childhood to adolescence, they experience rapid growth and significant developmental changes (Caskey & Anfara, 2014), including physical, biological, cognitive, and social changes (Benner, 2018). Their experiences during this stage can have a profound impact on future outcomes (Armstrong, 2016). Understanding the developmental needs of adolescents is crucial for middle level educators when planning learning experiences for their students (Armstrong, 2016). The recommendations made by the Middle Grades Collaborative (2016) emphasized the importance of providing specialized certification and training for middle grades teachers.

Although advocates of specialized teacher preparation programs have felt adolescent students can benefit from teachers who align lessons and learning to meet the needs of these students, there has been a gap in how middle level teachers are addressing the unique changes of adolescent students. This study examined teacher preparation programs in New York State and the level to which they offer courses that prepare middle school teaching candidates for the unique needs of adolescent students. Additionally, this study examined how teacher preparation programs are preparing teacher candidates and if the unique needs of adolescent students are

taken into consideration. The insights gained inform improvements in teacher preparation programs and pedagogical approaches at the middle grades level.

Research Questions

This study adds to the body of research by investigating the extent to which teacher preparation programs prepare novice, preservice teachers for the developmental needs of adolescent students. This study addressed two research questions:

1. From the perspectives of novice middle school teachers and higher education instructors, in what ways are teacher preparation courses designed to address the unique needs of adolescent learners?

2. From the perspectives of novice middle school teachers and higher education instructors, what is the readiness level of middle school teachers to instruct middle school students?

Research Design

A phenomenological design was chosen for this study to provide qualitative data on the lived experiences, knowledge, and skills of those working with adolescent students and those working in teacher preparation programs. Creswell and Poth (2018) stated that a phenomenological study describes the common meaning of experiences for several individuals. Researchers who select a qualitative research approach aim to understand and explore individual lived experiences and personal perspectives (Creswell & Poth, 2018).

The research design was a transcendental phenomenological study with semi-structured interviews of higher education instructors working in teacher preparation programs and with teachers new to middle school. In a transcendental phenomenology approach the researcher sets aside prejudgments, biases, and assumptions regarding the phenomenon being investigated

(Creswell & Poth, 2018). Through interviews, the study captured the unique perspectives of college and university instructors and new middle school teachers. A review of available higher education syllabi or other related program documents in teacher preparation courses was also included.

Research Context

This study examined teacher preparation programs and the level to which they offered courses that prepared middle school candidates for the unique needs of adolescent students. The qualitative research was conducted with novice middle level teachers with less than 5 years of teaching experience in middle schools and higher education instructors in teacher preparation programs in New York State. New York State is located in the northeastern region of the United States and has over 19 million residents (United States Census Bureau, n.d.). In 2021, an estimated 1.1 million adolescents between the ages of 10-14 resided in New York State (New York State Government, 2021). For the 2024 school year, New York was the third largest school system in the United States, serving 2,526,085 students across 4,804 public schools (Public School Review, 2024). Additionally, there were a total of 1,589 public middle schools in New York State (Great Schools, n.d.) serving approximately 560,000 middle level students (NYSED, 2023). Middle level enrollment during the 2022-23 school year made up approximately 23% of New York State public school enrollment. Middle level student demographics in New York State public schools during the 2022-23 school year, based on total enrollment of K-12 students, consisted of African American, 4%, Hispanic, 7%, White, 9%, and other or multiracial, 3% (NYSED, 2023).

As candidates prepare to enter the field of education, there is a plethora of universities and colleges within the state that offer programs. New York State's average college graduation

rate in the academic year 2022-2023 was 60.34% with a student-to-staff ratio of 14:1 (UnivStats, n.d.). To teach middle school in New York State, candidates need the Generalist Certificate in Middle Childhood Education Grades 5-9 (All Education Schools, n.d.). Currently, 97 of the 425 colleges and universities in New York State (NYS) offer teacher certification programs (UnivStats, n.d.).

Research Participants

The criteria for participation in the study included that the participants be novice middle school teachers with 5 years or less teaching in urban or rural public schools in NYS, and instructors who taught adolescence courses in colleges and universities that offered a middle school teaching certificate. When searching for participants, the researcher used purposeful sampling to contact instructors in colleges and universities with NYS certification programs. Purposeful sampling is used in research to deliberately choose specific individuals based on certain characteristics and who can best inform the researcher about the research problem under examination (Creswell & Poth, 2018). Purposeful sampling yielded seven middle school teachers who taught in a large and small district in Western New York to participate in the study. Purposeful sampling was the best approach for this study in selecting teachers based on their experience and in selecting instructors based on their program of instruction. Teachers in an urban teacher mentoring program and teachers in a rural district received an invitation to participate and voluntarily contacted the researcher. Creswell and Poth (2018) stated that the process of finding people to study and places to gain access is an important step in establishing a positive rapport to ensure getting good data from participants.

Data for this study were collected using individual, semi-structured interviews of novice middle school teachers and higher education instructors. Eleven separate interviews were

conducted. Prior to the interviews, all participants received the FEMLP core constructs

(Appendix A) along with a consent form to participate. Participants were informed of their rights

to end participation at any time during the interview.

As shown in Table 3.1, seven of the participants were teachers and four were college

instructors. Four of the seven teachers worked in a rural setting and the other three teachers

worked in an urban district. All four college instructors taught at 4 different institutions in

upstate New York.

Table 3.1

Demographic Information for Teacher and College Instructor Participants

Name	Teacher	College Instructor	Setting
Barbara King	X		Rural
Bill Jones	X		Urban
Felicia Carter	X		Urban
Flora Rodriguez	X		Urban
Belinda Martin	X		Rural
Richard Clark	X		Rural
George Allen Barns	X		Rural
Alice Nichols		X	NA
Hannah Mitchell		X	NA
Melissa George		X	NA
Walter Charles		X	NA

Note. Participant names are pseudonyms.

Instruments Used in Data Collection

The research design included a phenomenological study that used semi-structured, open-

ended interviews with 11 participants (see Appendix B and C). The researcher developed the

interview questions to address the primary focus of the study, which was to investigate the

perspectives of middle school teachers and higher education instructors on teachers'

preparedness to teach middle school students. The interview questions were aligned to the core

four constructs of the FEMLP (Cook et al., 2016), consisting of: developmental spectrum,

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teacher dispositions and professional behaviors, organizational structures, and relationships. The core constructs are based in the AMLE established principles of effective middle level education (AMLE, 2010).

Second, the researcher composed field notes on the responses provided by the participants as they freely shared their views. Field notes were part of the qualitative data collection that was coded during the data analysis (Saldana, 2021).

Before the interview questions began, the researcher reviewed the FEMLP core constructs (Appendix A) with teachers and instructors. This provided some background and context on adolescent development for the interview participants.

Procedures Used for Data Collection

Creswell and Poth (2018) stated that having a procedure for data collection helps in preparing and conducting interviews. Creswell and Poth (2018) suggested that the procedures for preparing and conducting interviews include determining research questions, identifying interviewees, distinguishing the type of interview, collecting data using adequate recording procedures, designing and using interview protocols, locating a distraction-free space, obtaining consent, and deciding transcription logistics.

After approval from the St. John Fisher University Institutional Review Board (IRB), the researcher contacted the director of a new teacher mentoring program and a school superintendent, who agreed to distribute the information on the study to new middle school teachers. The researcher was provided names of teachers from the director and the superintendent. The researcher sent study information to new teachers in two districts in Western New York and 25 higher education instructors in Western New York. The researcher asked for teacher volunteers to participate in the study. Potential research participants were contacted via

phone or email and invited to participate in semi-structured, face-to-face or Zoom virtual interviews. Participants received a $25 gift card for their time. Criteria information was included in the invitation letter. Consents were obtained prior to the start of the interview. The interviews were planned in a mutually agreed format, location, and time, and 60 minutes were allotted for each interview. The researcher obtained audio recordings of the interviews using a handheld digital voice recording device or via Zoom. Any video files were deleted after the completion of the interviews. The field notes documented during the interview process were used to provide meaning and understanding after the interviews. The researcher conducted a preliminary analysis of the field notes after the interviews.

Finally, the researcher reviewed and analyzed course documents and any documents available on related higher education program websites using a Document Review Guide (Appendix D) to see what coursework was offered to teacher candidates that aligns with the FEMLP and/or if they were designed to address the unique needs of adolescent learners.

The researcher adhered to the following procedures while completing this study:

1. Submitted required documents including memos of support to the St. John Fisher University IRB and obtained approval.

2. Sent letter of interest with study information and criteria to higher education instructors in Western New York and to new teachers in two districts in Western New York.

3. After securing names of interested participants, the researcher contacted potential research participants via phone or email and invited them to schedule a semi-structured, face-to-face or Zoom interview.

4. Sent a follow-up email of scheduled date for interview and documents review.

5. Provided informed consent and FEMLP core constructs.

6. Greeted participants and conducted in-person or virtual interviews with participants using established teacher (Appendix B) and higher education instructor (Appendix C) interview protocols while taking field notes and using recording device.

7. Reviewed course documents and other relevant documents on the higher education websites using a Document Review Guide (Appendix D) based on the core constructs of the FEMLP.

8. Obtained transcripts of the audio recordings from rev.com.

9. Collaborated with a peer to read portions of the transcript text and compare various coding decisions to ensure interrelated reliability.

10. Reviewed field notes.

11. Analyzed transcripts using a priori coding, open coding and pattern coding.

12. Triangulated the data and formulated categories and themes from the coding.

To ensure confidentiality, all participants were assigned pseudonyms. Participants' names and identifying information does not appear on transcripts, analysis, or the final study. All electronic data collected was stored in a computer database with a secure password. All paper transcripts and field notes were stored in a locked file cabinet to ensure confidentiality. The secured data included all notes from the interview questions, all recordings, and notes from the documents review. The data are being stored for 3 years after the conclusion of the study, and then destroyed.

Procedures Used for Data Analysis

Data analysis involved deciding how to represent the data, organizing the data, coding and organizing themes, and forming interpretations (Creswell & Poth, 2018). Data analysis in

qualitative research includes merging the data into themes through a coding process and then representing the data in figures, tables, or a discussion (Cresswell and Poth, 2018).

For this study, Creswell and Poth's (2018) five-step process for coding a phenomenological study was used to discuss how prepared middle level teachers are for the unique needs of adolescent students. Creswell and Poth (2018) recommended using their data analysis spiral to analyze the data. The data analysis spiral consists of managing and organizing the data, reading and memoing emergent ideas, describing and classifying codes into themes, developing and assessing interpretations, and representing and visualizing the data.

A transcendental phenomenological approach was used for data analysis. For a qualitative study, Creswell and Poth (2018) stated that a transcendental phenomenological approach allows the researcher to reduce the information to significant statements or quotes and combine them into themes. This then allows the researcher to develop textual descriptions of what the participant experienced and structural descriptions of how they experienced it in terms of conditions, situations, or context (Creswell & Poth, 2018). Additionally, epoche, the act of temporarily setting aside one's beliefs and judgments about the phenomenon in order to understand it as it is experienced by the participants, was a first step in the data analysis. The combination of the textual and structural descriptions was used to write a statement of what the participants experienced. Interviews were transcribed using Rev.com.

Each interview was listened to multiple times and compared to the field notes taken during the interview to ensure consistency. Transcriptions were used for coding purposes. First, grounded in the theoretical framework of the core constructs of the FEMLP, a priori codes were developed by the researcher to examine the extent to which teachers and higher education instructors perceived the teachers' preparedness to teach middle school students as

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well as the extent to which teachers learned about adolescent development in teacher preparation programs.

Data were coded a second time using the process of open coding as detailed by Saldana (2021). During this open coding process, the researcher enabled the development of major categories of information. A final coding process used pattern coding to develop themes and sub themes. This approach aimed to identify emerging themes that might not have been recognized initially. After the coding was complete, an analysis of the data was conducted to identify themes, as described by Creswell and Poth (2018). A process for member checking was used with participants. The researcher consulted participants during analysis to validate findings, if necessary. Member checking helped to clarify any questions from the transcripts (Creswell & Poth, 2018).

A portion of this study included a review of higher education documents found on the college or university website that pertained to adolescent development. Documents were examined using the four constructs of the FEMLP in order to provide evidence of elements aligned with adolescent development. This information was part of the process of triangulating data from middle school teachers and higher education instructors. A priori coding was used to analyze the documents to enhance the qualitative interview data. Data were analyzed for themes as the researcher examined the extent to which teacher preparation programs incorporated adolescent development into the curriculum. Peer debriefing was used to enhance the accuracy of the qualitative data. A peer was asked to code a portion of the data to ensure interrater reliability. According to Creswell and Poth (2018), the term *reliability* often refers to the constancy of responses of multiple coders in qualitative research. In order to verify the congruence of the resulting themes with the study objectives, once the data collection was completed, a colleague

was invited to collaboratively code the data alongside the researcher to establish interrater reliability. This approach enhanced the credibility of the qualitative study, as highlighted by Creswell and Poth (2018). Finally, a narrative was crafted to elucidate the researcher's understanding of the data analysis in relation to the research inquiries.

Chapter Summary

Research shows that adolescent students have unique educational and developmental needs (Cook et al., 2016). This study utilized a qualitative approach to investigate the extent to which teachers and higher education instructors perceived the teachers' preparedness to teach middle school students. Additionally, the study examined the extent to which teachers are learning about adolescent development in teacher preparation programs.

The interview data was collected via Zoom and/or recording device and transcribed via Rev.com. Teacher interview transcriptions were coded using an a priori coding process and faculty interview transcriptions were coded using an open coding process. The data were analyzed for themes to better understand what core constructs of the FEMLP were being implemented in middle school classrooms of the two identified districts. Higher education documents were reviewed as written evidence along with the qualitative interview data. Data from college faculty were analyzed for themes, as the researcher investigated the extent to which teacher preparation programs incorporated adolescent development into the curriculum. After saturation was achieved, a narrative was produced to describe the researcher's interpretation of the data analysis as it pertained to the research questions.

In addition to data collection and data analysis, this chapter also addressed participants' confidentiality. To ensure confidentiality, all consent was voluntary and research participants were informed of their rights to end participation at any time during the interview. Participant

names and identifying information is confidential and does not appear on transcripts or analysis

of this study.

Chapter 4: Results

Introduction

Adolescence marks a crucial transition from childhood to adulthood. Young adolescents, typically aged 10-15 years, undergo rapid physical, biological, cognitive, and social changes (Caskey & Anfara, 2014), making this period unique and challenging. During this transitional phase, middle level teachers have the chance to profoundly influence student learning and development. Scholars have emphasized the importance of recognizing these developmental shifts when developing educational programs, particularly with the establishment of middle schools (Cook et al., 2016). Given this urgency, teacher education programs became a focal point in understanding and discussing how best to prepare teacher candidates for providing a quality education for all students, especially students in urban areas (Eckert, 2013). However, it remains unclear how middle school teachers address changes associated with the adolescent brain and how prepared they are to engage middle-level students effectively in lessons aligned with their developmental needs. To provide insight into how teacher preparation programs are preparing novice teachers for the neurological changes in the adolescent brain, this study was designed to answer two research questions:

1. From the perspectives of novice middle school teachers and higher education instructors, in what ways are teacher preparation courses designed to address the unique needs of adolescent learners?

2. From the perspectives of novice middle school teachers and higher education instructors, what is the readiness level of middle school teachers to instruct middle school students?

Chapter 4 details the study's data analysis and findings, structured according to the research questions. It outlines themes and sub-themes for each question, followed by a discussion. The chapter closes with a summary of the research findings.

Data Analysis and Findings

The research aimed to answer the two research questions by examining the qualitative data for recurring themes. The first research question aimed to understand in what ways teacher preparation courses are designed to address the unique needs of adolescent learners. Four themes emerged from the data analysis for Research Question 1: limited focus on middle school, what's expected of teachers, on-the-job-learning, and build strong foundations. Table 4.1 portrays the themes, subthemes, and core constructs for Research Question 1. The second research question sought to understand the readiness level of middle school teachers to instruct middle school students. After completing the data analysis, four themes emerged for Research Question 2: trial by fire; they're not experts, yet; it's really not part of our curriculum; and all teaching is relational.

Research Question 1

Research Question 1 asked: From the perspectives of novice middle school teachers and higher education instructors, in what ways are teacher preparation courses designed to address the unique needs of adolescent learners? The themes, subthemes and core constructs are outlined in Table 4.1.

Table 4.1

Research Question 1 – Themes, Subthemes, Core Constructs

Themes	Subthemes	Core Constructs
1.1 Limited focus on middle school	1.1a Gaps in middle school Focus	Developmental Spectrum
1.2 What's expected of teachers	1.2a Professional Conduct and practical experience	Teacher Disposition and Professional
	1.2b Cultural competence	Behavior
1.3 On-the-job-learning	1.3a Classroom Structures	Organizational
	1.3b Practical Application	Structures
1.4 Community Building	1.4a Connections and Bonding	Relationships

How are teacher preparation courses addressing the unique needs of adolescent learners?

Research Question 1 focused on examining ways in which teacher preparation courses addressed the unique needs of adolescent learners. Teachers and instructors were introduced to the FEMLP by (Cook et al., 2016), as detailed in Appendix A. The purpose of reviewing the FEMLP was to familiarize participants with the core constructs underlying the study and to encourage them to reflect on how their coursework may have aligned with the framework.

When asked how their courses addressed the needs of adolescent students, all seven teachers and all four instructors felt that their programs were not specifically tailored to middle-level students but were instead geared toward elementary or Grade 7-12 programs. One teacher, Belinda Martin, who teaches in a rural setting, stated, "I really loved the middle school…but a lot of the coursework that I completed, I did, geared towards childhood and early childhood" (T5, 107-109). Similarly, Dr. Nichols, a college instructor, highlighted how younger adolescents "take the back seat," stating:

"Middle school, not so much because that's not really the emphasis of the pre-service

programs. It's always about the Regents level and the high school courses. And so,

middle school and those younger adolescent ages kind of take the backseat." (CI1, 75-77)

Teachers and instructors noted that only one or two courses were specifically focused on

adolescent development within the 7-12 program. George Allen Barns, a teacher in a rural

setting, stated, "I believe two courses that were specifically geared toward here's what you're

stepping into at middle school and high school level because I was a part of the 7 through 12

adolescent program" (T7, 142-144). Furthermore, Dr. Mitchell, a college instructor, confirmed,

"Anyone seeking a certification in Grades 7-12 takes one course that is specifically titled

Adolescent Development. That's taken in their freshman or sophomore year before they enter

their methods work" (CI2, 90-91). The theme of a limited focus on middle school resonated

amongst the participants.

Theme 1.1: Limited focus on middle school. A limited focus on middle school was one

of four themes that emerged from discussion about how teacher preparation courses are

addressing the unique needs of adolescent development. This theme refers specifically to what

coursework is geared toward adolescent development and the developmental spectrum of the

FEMLP, which emphasizes the importance of all stakeholders understanding the developmental

needs of adolescents. When asked about their knowledge of adolescent development two of the

seven teachers shared information about what's happening during this phase of development.

George Allen Barns shared, "Such a huge transition period" (T7, 104) and that "The gray matter

in their brains and everything and how that all functions and how they change and grow and

mature" (T7, 111-113). Moreover, Barbara King, a teacher in a rural district, mentioned "They're

also, not for nothing, going through one of the biggest changes that they will ever experience in

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their life, physiologically speaking" (T1, 198-199). Flora Rodriguez, a teacher in an urban setting, shared that her knowledge of adolescent development was minimal, stating, "Very minimal…It wasn't really something that we really touched on either" (T4, 36-37). The importance of understanding adolescent development was evident in the one subtheme that emerged from the data analysis: gaps in middle school focus.

The importance of understanding adolescent development to meet the unique needs of adolescent students was evident in teachers' responses regarding a lack of focus on middle school. Teachers reported that many programs are geared towards either elementary or high school, leaving a gap in training for middle school educators. Bill Jones, a teacher in an urban setting, stated, "So, we did talk about adolescent brains and young adolescents, but there wasn't the focus on middle school. It was mostly on high school" (T2, 92-95). Ms. Martin further noted that with limited or no courses related to adolescence, something is missing, stating "Honestly, my program was very much geared towards elementary, so I feel like that is essentially something that is missing in some of the programs (T5, 80-81). She added, "It was definitely more geared toward childhood and early childhood (T5, 97). There were no real courses on just adolescent" (T5, 105).

Theme 1.2: What's Expected of Teachers? This theme pertains to the core construct of teacher dispositions and professional behaviors, highlighting the significance of maintaining professional conduct and fostering positive attitudes. Teachers and college instructors both shared that teacher professional behaviors were embedded in the coursework with one teacher, Ms. Rodriquez, stating, "They really focused on how to set…behave in that work setting" (T4, 85-86). Furthermore, teacher Mr. Barns shared, "One huge unit was entirely on just professional conduct in the workforce. This is what's expected of teachers" (T7, 246-247). Dr. Nichols shared,

"We talk an awful lot about that…as to what is effective teacher dispositions with respect to planning and that instruction and just being in the classroom" (CI1, 135-137). College instructor Dr. Walter Charles acknowledged his institution's requirements, stating, "And we do have professional dispositions that are required for all teacher candidates" (CI4, 132-133). Two subthemes emerged from the discussion with participants about teacher disposition: professional conduct and practical experience and cultural competence.

Professional Conduct and Practical Experience. College instructors shared how teacher preparation programs often include courses on professional behaviors, such as respect, optimism, and professionalism. Dr. Nichols, discussed a rubric used in almost every course to evaluate teacher dispositions, stating:

We have a teacher dispositions rubric that we use in every course. It is specifically evaluated at the beginning and the end of the program, but most of us use it in all courses. And that dispositions rubric addresses all of the things…that talks about their ability to interact not only in the classroom, but with colleagues in clinical settings. (CI2, 137-141)

However, teachers reported that while general professionalism is covered extensively, there is often a lack of specific training on how to interact with different age ranges, and that professional conduct in the context of various developmental stages is usually learned through practical experience. Ms. Rodriguez elaborated on being taught how to behave in the work setting but not how to behave with the adolescent age group. Ms. Rodriguez stated:

There wasn't really something that really taught us that. It was very general of like; this is how you should act with students. This is how you should treat students. It wasn't really specific towards a range of ages. I think that a lot of that type of experience I got was more due to my student teaching. (T4, 86-88)

Additionally, Richard Clark, who teaches in a rural setting was in agreement with Ms. Rodriguez, stating, "I think that a lot of that type of experience I got was more due to my student teaching" (T6, 90), followed up by Ms. Martin who shared, "There's a lot that goes into teaching and I've definitely learned more on the job than ever going through my program" (T5, 169-170). Although teacher preparation programs highlight courses on professional behaviors, teachers feel that additional training is needed to effectively address the different developmental stages of students.

Cultural Competence. A second subtheme that emerged from the data analysis and aligns with the core construct of teacher dispositions and professional behaviors was cultural competence. This theme focuses on fostering cultural relevance and aims to equip educators with the tools needed to create inclusive, diverse, and effective learning environments. One college professor pointed out bullet points in the institution's disposition rubric that students are expected to know and that aligns to the core construct. Dr. Mitchell stated:

> Under our bullet points, we have such things as, do they acknowledge and respect diverse learners in the classroom? Do they display cultural responsiveness in their practices? Do they have that commitment to all learners? And do they uphold the belief that all learners can, or all students can learn? So, we actually have a pretty thorough rubric that we use to assess exactly what you're asking about dispositions and professional behaviors. (CI2, 141-146)

Dr. Mitchell also shared information regarding the core of her institution's program stating, "The core of our program, of our educator prep program is based in the philosophy that all students can learn" (CI2, 124-125).

Teachers' responses coincide with that of college instructors regarding cultural competence. Teachers are aware of incorporating culturally relevant materials into their classroom practices as stated by Felicia Carter, "They definitely emphasize cultural relevance. Some of the classes in particular were very strong on how to integrate cultural relevance into what I taught" (T3, 231-233). Mr. Barns followed up by sharing his experience learning how to utilize equitable practices when working with diverse populations, stating:

> I took one course that was basically centered around how to teach students. It wasn't even necessarily specific content areas, but like I said, centered around what kind of strategies can we use to best teach different students. We talked a lot about equitable practices and different types of differentiation to different levels of students. (T6, 58-61)

In understanding the importance of cultural competency, teachers are knowledgeable of courses on diversity covering not only ethnic and cultural differences but also include students with special needs and English language learners. The emphasis is then placed on equitable practices and differentiation to meet diverse learning needs as described by Mr. Barns, who stated:

> There were multiple units on diversity of students, not just as far as ethnicity, but also students with special needs, second language learners or English as a second language learners. All that stuff was definitely covered by at least one of those courses that we went through really quite in depth. (T7, 250-252)

Theme 1.3: On-the-Job-Training. This theme relates to the core construct of organizational structures of the FEMLP which emphasizes the importance of establishing appropriate operational systems that support middle level students. Analyzing the data from discussions with participants revealed that teachers' clinical experiences are crucial for

connecting theoretical knowledge with practical application. However, both teachers and college instructors noted that a focus on organizational structures is lacking in teacher preparation programs. Dr. Charles stated:

> The thing that I think is super missing right now is that organizational structures component. I don't know that, except maybe by osmosis. (CI4 151-152) We hope they see it in schools. I don't know that we ever explicitly talk about it or get them ready for that. (CI4, 155-156)

> Mr. Jones shared his thoughts about gaps in his program stating, "I think my training

definitely had some gaps with that. Where there wasn't necessarily a ton of training on specifically working with middle level students, how are we building a structure to support them?" (T2, 142-144). Two prominent themes emerged from these gaps that teachers and instructors discussed the most: *classroom structures* and *practical application*.

Classroom Structures. Effective lesson planning and organizational skills were heavily emphasized as stated by Ms. Rodriguez, "Our professors really emphasized organization and actually knowing when you lesson plan, this is when you lesson plan as a group and this is how it's going to look" (T4, 105-154). Another teacher shared how the lab component of his program supported his organizational skills. Mr. Barns stated:

> This lab component where you met with a specific teacher for your content area. They kind of helped you, teach you specifically about lesson planning and setting those learning targets and relating to the standards and everything, and actually had us do little mini lessons in front of our classmates. (T6, 100-103)

Teachers and college instructors felt professors provided resources and guidance for structuring lessons, planning collaboratively, and managing classroom time efficiently, yet there were gaps

in addressing specific organizational structures, particularly for middle grades, as described by Dr. Mitchell:

> I'm not a 100% sure that we thoroughly talk about those organizational structures in a specific force. We do talk about co-planning, teaching. We talk about interdisciplinary units when planning, but I don't know how extensively we get into the actual organizational structure of middle grades. (CI2, 170-173)

With a greater focus on organizational skills, the data revealed that there's a need for the incorporation of experiences related to organizational structures, such as interdisciplinary teams and flexible scheduling, to better prepare teacher candidates for the realities of middle grades education, especially for those teachers who are not being exposed to any organizational structures. Mr. Barns shared, "I can't really recall ever discussing in a class the different blocking times and periods versus blocks and how much you can get done in this amount of time and that kind of stuff" (T6, 90-92).

Practical Application. While knowledge on lesson planning is provided, there's a perceived lack of practical application opportunities within programs. Teachers expressed the desire for more time to practice and apply what they learn. Ms. Martin stated, "I felt like there were a lot of knowledge given to us, but again, not a lot of time to practice or participate in that. Again, I wish that maybe there had just been more" (T5, 286-287). Ms. Rodriguez corroborated Ms. Martin's statement by saying, "If the teacher preparation programs were set up where you kind of do a semester of coursework and whatever you learn, you have a semester and you're able to apply it, that would've been most beneficial" (T4, 135-140).

Teachers and instructors acknowledged that real-world experiences, such as student teaching and field placements, are where teachers primarily develop organizational skills via

observations, teacher interviews, or assignments, although experience is limited, as shared by Dr. Nichols:

> They don't get as much experience with that. My thing to students that I have is "Work smarter, not harder." And so, organization is a huge thing. And even with them, the way that I am organized and the calendar that I have and color coding and things like that, I always tell them, "The things that I'm showing you and the ways that I am doing things and the strategies that I try to incorporate, I do it with a purpose so that you can see how I'm organized. And then there are some things that you can take from that. When you're in your practicum, see how your teacher is organized." (CI1 151-157)

Mr. Barns shared how his experiences have supported him, stating, "The two sort of experiences that I think helped with my timing and organization were definitely my student teaching, having the opportunity to kind of watch my mentor teacher do a lesson" (T6, 93-95). Hands-on experience through student teaching and practicum placements is important to preservice teachers. These experiences allow teacher candidates to apply theoretical knowledge in real classroom settings and develop organizational skills.

Theme 1.4: Community Building. The theme of community building pertains to the core construct of relationships, emphasizing positive and healthy interactions between all stakeholders and students. This theme addresses ways in which preparation programs incorporate relationship building into coursework. Through the data analysis teachers and instructors emphasized the importance of building strong communities early in the school year. Dr. Charles emphasized,

> I think we do a good job, and our teacher candidates do a good job understanding that relationships with students matters. They go in understanding that if you want to teach,

you got to build positive relationships. So, we teach things like early in the year. (CI4, 189-192)

Dr. Mitchell highlighted the importance of infusing theory with practice, "I think a lot of it has to do with us trying as hard as we can to tie our theory work to their clinical experience and encouraging them to build relationships there as well" (CI2, 201-203). Additionally, Dr. Melissa George shared an idea for community building, stating, "I'm trying to do this community-engaged learning in my science methods course" (CI3 116-118). Mr. Barns shared a highlight from his teacher program that acknowledges the work happening in teacher preparation programs regarding building community: "I think the biggest sort of boon I got through my master's education was less so about the education of adolescents, but more so of that aspect of relating to and creating a positive classroom community" (T6 62-64). Creating a positive classroom community connects to the one subtheme that emerged from the analysis of the data regarding building community: connections and bonding.

The subtheme connections and bonding emphasized the critical role of establishing relationships and the importance of making connections among and between all students and stakeholders. One teacher shared the importance of bonding with students, recognizing their distinct personalities, and valuing the unique contributions they bring to the classroom environment, stating, "Every single one of them is so unique and has their own personality. It's so great to be able to bond with each and every one of them" (T7, 118-120).

Teachers and instructors agreed that preparation courses are sharing information about building relationships. Ms. Carter shared how building relationships and having connections were talked about in theory in her program, stating:

And I really didn't understand what he was talking about and all those professors who say

build relationships and have connections. (T3, 141-142) I see a student, acknowledge

them, get them seen so that there's that constant relationship building. The fourth part of

the framework talks about that. It's connections. (T3, 134-135)

Additionally, a teacher shared that professors did a great job modeling how to establish a

respectful environment where students feel valued as individuals as stated by Ms. King, "The

professors, I thought did a really, really good job of emphasizing what it took for kids to feel

valued, to feel heard, and to feel respected" (T1, 171-172).

Educators need to focus not only on academic instruction but also on supporting students'

mental and emotional health. Dr. Charles stressed focusing on all the stuff that teenagers come to

school with, stating, "Teenagers are coming to school enmeshed in things like mental health,

anxiety, developing senses of themselves as people, they're part of social networks. We got to

focus on all that stuff" (CI4, 73-75).   Additionally, Dr. Mitchell emphasized the importance of

adjusting teaching practices stating, "Adapt your teaching practices based on what those students'

experiences are" (CI2, 105).

Research Question 2

Research Question 2 asked: From the perspectives of novice middle school teachers and

higher education instructors, what is the readiness level of middle school teachers to instruct

middle school students? The themes, subthemes and core constructs are outlined in Table 4.2.

Table 4.2

Research Question 2 – Themes, Subthemes, Core Constructs

Themes	Subthemes	Core Constructs
2.1 Trial by fire	2.1a Adolescent development	Developmental Spectrum
	2.1b Cultural diversity	
2.2 They're not experts, yet	2.2a Initial challenges	Teacher Disposition
	2.2b Mentorship and support	and Professional
	2.2c Curriculum and instruction	Behavior
2.3 It's really not part of our Curriculum	2.3a Gaps in teacher training	Organizational Structures
2.4 All teaching is relational	2.4a Building relationships	Relationships
	2.4b Classroom culture	
	2.4c Navigating challenges	

Research Question 2 aimed to assess the readiness of pre-service teachers to instruct adolescent students. Four themes that emerged from the discussion about teacher readiness were trial by fire; they're not experts, yet; it's really not part of our curriculum; and all teaching is relational. From the perspectives of novice middle school teachers, teachers new to working with adolescents often feel overwhelmed, as shared by Ms. Rodriguez, who stated, "Throwing a teacher who's freshly graduated into the scenario, that could be overwhelming and maybe that could be what's drawing them away from the education fields and wanting to teach" (T4, 125-126). Ms. King likened it to "dropping a guppy in a shark tank" stating, "If you're a first-time teacher, it really is dropping a guppy in a shark tank. At least, that's how it feels" (T1, 264-266). Ms. Carter described the experience similarly, stating, "I was the salmon swimming upstream" (T3, 293-294). Echoing these sentiments, Dr. Charles expressed concern that although new teachers are prepared to start, they are not yet experts. Dr. Charles stated:

So, I think they're good on content, but translating it to the needs of those middle grade

students, they learn that on the ground, in school once you hire them. I'm a little worried

about, we get them ready to start, but they're not experts yet. (CI4, 259-261)

Both teachers and instructors shared that they believe teachers are only moderately

prepared to teach middle level students. Dr. Mitchell commented, "I think our students would fall

within the average range" (CI2, 231). Similarly, Ms. Rodriguez rated herself, saying, "On a scale

of 1 to 10, I'm going to say a 6" (T4, 247). Additionally, Mr. Jones shared, "If I was going to

give myself a score out of 10 when I walked into the classroom, I'd give myself a 6 or 7" (T2,

178). The theme trial by fire sheds light on the lack of preparedness for working with adolescent

students.

Theme 2.1: Trial by Fire. The theme trial by fire aligns with the core construct developmental

spectrum of the FEMLP. This construct highlights the importance of understanding the

cognitive, cultural, emotional, moral, physical, and social developmental needs of young

adolescents (Cook et al., 2016). Two subthemes developed from the analysis of the data

regarding trial by fire*:* adolescent development and cultural diversity.

Adolescent Development. When asked what they knew about adolescent development,

teachers and instructors agreed that their program touched on something pertaining to the

subject.   Mr. Jones, stated:

I mean, we talked about the big names like Piaget and Vygotsky and stuff like that. But I

mean that's more about learning theory, I feel like, than adolescent development. But we

did talk about what is the adolescent brain going through, some of the ideas I just talked

about with just their brain chemistry changing and things like that. (T2, 83-87)

Similarly, Mr. Clark, stated, "While I was taking my master's, a lot about sort of the development stage of the students that we work with, a lot of how they think and how they retain knowledge" (T6, 48-49). Additionally, Dr. Mitchell felt that they attempt to discuss age-appropriate and developmentally appropriate activities in the teacher preparation program, exclaiming, "I think we do try to talk about age-appropriate, developmentally appropriate activities…with all the differentiation instruction that they get, we try to talk about how you can meet all those expectations in a classroom" (CI2, 251-256).

While teacher preparation programs do touch on all aspects of adolescent development, teachers felt that they left with some understanding of adolescent development, but their greatest knowledge of adolescent students is acquired through experience. Mr. Clark shared, "I probably wouldn't say that I'm a master at adolescent development. But I think I definitely have an understanding" (T6, 50-51). Additionally, Ms. King stated, "But I think that as far as my understanding of kids, it really honestly came from trial by fire…. So, it really is going in and experiencing" (T1, 121-125). Furthermore, Dr. Nichols confirmed that she gained knowledge of adolescent development through her doctorate program and experience stating, "My knowledge of adolescent development comes from my doctorate program… that and then just practice, 23 years in the classroom with adolescent kids" (C1, 51-54).

Cultural Diversity. The subtheme of cultural diversity emphasizes the importance of understanding the cultural developmental needs of adolescents and ensuring representation in the classroom. Teachers' statements indicated that they are adept at diversifying activities into the classroom to get students engaged and encouraging them to collaborate and consider multiple viewpoints. Ms. Martin mentioned:

I love having the students work together. A lot of the multimodal learning, I like bringing in. I [like] trying to have students see things from multiple perspectives too because I think that's important not only just for them learning, but also just general life skills. Working together also helps. (T5, 238-240)

Additionally, Ms. King confirmed, "So, I would say the best things that came from the teacher preparation program, were looking at how to get kids working together and interacting" (T1, 391-392). Teachers understand that adolescent students need to move and be actively involved as shared by Mr. Jones' statement, "Hands-on, up and moving for sure. Or anything that tries to take something that's very bland and stale of just like, here's the information and making it more interesting" (T7, 373-374). Similarly, Mr. Clark shared:

Not only sort of a more hands-on approach is definitely good, but just anything that's games or getting them moving around and just not sitting in their seat for 20 to 40 minutes definitely helps them focus a little bit more. (T6, 129-130)

While all teachers agree that having students work together is important to their development, Ms. Rodriguez exclaimed, "I'm going to say truly finding ways to connect to them and I'm saying to their culture specifically because I'm Hispanic and we're Latin, we love our culture" (T4, 216-218). Additionally, Ms. Rodriguez, in comparing her experience of two districts, felt there was no teaching for how to engage with students from different cultural backgrounds, stating, "It wasn't also taught for cultural differences… I did middle school in a suburban versus middle school in an urban, two completely different scenarios. I don't really have lots of knowledge on that" (T4, 89-95). Furthermore, Ms. Rodriguez stressed:

When you connect something that they are so passionate on, which is their culture, which

is their food, which is their music, when you connect that to what we're learning, I think

that's when they're going to be most intrigued by it. (T4, 220-222)

Theme 2.2: They're Not Experts, Yet. In discussing teacher preparedness, the theme they're

not experts, yet aligns with the core construct pertaining to the professional behaviors and

dispositions of teachers. This construct encompasses the personal and professional beliefs,

values, and character traits that teachers exhibit (Faulkner et al., 2013). Three subthemes

developed from the analysis of the data regarding the theme they're not experts, yet: initial

challenges, mentorship and support, and curriculum and instruction. When discussing teacher

preparedness in terms of teacher dispositions and professional behavior, professors acknowledge

that there is still room for growth and learning regarding working with adolescent students. Dr.

Charles stated, "I don't know that they're ready per your question for middle grades" (CI4, 252)

followed up by a confirmation from Dr. Nichols stating, "So once they've completed my class, I

would say that they're probably more ready to go into the high school level" (CI1, 262-263). Dr.

Nichols also acknowledged that new teachers often lack a fully developed teacher identity due to

limited classroom experiences, stating, "They have not developed that teacher identity yet,

because they don't have as much experience in the classroom" (CI1, 138-139). Furthermore, Dr.

Mitchell mentioned that only those who knew they wanted to work with middle level seemed

prepared, stating:

My experiences have been that the students that know they want to teach that grade level

do really well at it. They seem prepared for the environment that they're entering, that

deals with all the social stuff and all the development stuff. (CI2, 231-233).

One professor acknowledged specific areas of growth relating to teacher dispositions and behaviors, yet they remain unfixed. Dr. Charles stated:

> Where I think we're still learning and need to get better is developing relationships across the school, with colleagues, with leadership, with things like social workers, counselors, paraprofessionals. (CI4, 195-196) And I think where we are really weak, we collect data on this, is parents and families and guardians. Our teacher candidates say they're not ready for it. They don't know how. (CI4, 200-201) So, I think that building relationships with families, especially families who don't use English, they have no idea. They're like, "I don't know what to do." So, that's a huge need in our program, and we haven't really done anything about it yet. We talk about it. We're like, "Ah, that's too bad. We should really do something about that." But everybody's busy, et cetera. It's sitting there not fixed. (CI4, 209-213)

Three subthemes developed from the analysis of the data regarding they're not experts, yet: initial challenges, mentorship and support, and curriculum and instruction

Initial Challenges. The initial challenges subtheme discusses difficulties experienced by novice teachers who are new to the middle level classroom. For Ms. King, it was dressing the part and establishing herself. She shared, "Actually, just turned 21 teaching…Some of my students were 19. So, it was something that I knew that I had to, one, really establish myself" (TI1, 112-114). Additionally, Ms. King stated:

> If you don't dress the part as a teacher, you're going to have 10 times of a harder time. And this is from experience, this is from seeing it with other teachers. The more professional you look, off the bat, the more respected you are when working with middle

schoolers and they understand that they're in a more professional and respectful

environment. (TI1, 182-185)

Moreover, Mr. Jones confirmed the importance of being mature, but being in an awkward space, asserting:

 You also need to always be mature so that you don't cross any professional boundary

lines. So, you're in a constant cognitive dissonance around that because your brain needs

in your heart and your actions and all of it need to be able to simultaneously do both. (T3,

286-288)

Echoing Dr. Charles's remarks on areas needing development, participants noted that while general professionalism is covered extensively, there is often a lack of specific training on how to navigate those challenging situations with parents, students, or colleagues. Ms. King stated, "Last layer with teacher disposition comes into how you handle those conflicts and those issues, especially with the kids and with the parents" (TI1, 229-231). Mr. Jones shared:

And after working in the classroom when I was learning how to be a teacher, I was like,

that's a really great idea. And then after working for a year and a half, I'm like, that is definitely

harder in practice sometimes. (T2, 104-106).

Ms. Martin added that there was a lack of preparation in knowing how to engage with challenging colleagues, stating:

It's been a learn as you go because they don't prepare you very much for...They teach you

how to write the lesson plan and teach it, but they don't prepare you for how to work with

other colleagues or how to work with challenging colleagues or if you are in this

situation, how might you handle it or who might you go to. Those things have kind of

been learning as you go. That is something that I wish programs would focus more on

because no matter where you go, no matter what district you go to, you're always going

to have to work with other teachers. (T5, 155-160)

Mr. Barns summed up his preparedness by stating, "So, as far as preparedness, I definitely feel

like I was as prepared as I could be (T7, 433).

Mentorship and Support. Having a mentor teacher is a significant aspect of support for new

teachers, as stated by Ms. King, "Now, one of the beautiful things, and I love, love, love this for

new teachers…is mentor programs (T1, 261-262). Ms. Rodriguez stated that she had six

mentors, explaining:

I really unapologetically had so many mentors my first year. (T3, 349) And they'll always

be my mentors. That doesn't go away. And they are everything. They're everything. Their

advice is their wisdom is so important. So, I think some of that is from the mentors. (T3,

353-354)

Teachers noted that they benefit significantly from collaborating with colleagues. Ms.

Martin stressed, "We have really awesome admin and really awesome support, and that

definitely helps us succeed as well. But it's definitely a team effort and collaborating and just

sharing everything with each other" (T5 131-133).

Sharing experiences and seeking advice from colleagues is highlighted as a critical

support system for addressing diverse student needs and enhancing teachers' effectiveness. Ms.

Martin mentioned, "Obviously, working together and collaborating, that's how you give students

the best education. Teaching is definitely not just go in and close your door and do your thing. It

definitely takes working together as a team" (T5 124-126). Ms. King provided an example of

seeking advice, stating:

> Or when I would have a power struggle, for instance, in the classroom, I would then go to
>
> my mentor and say, "Hey, I had this happen today. What are some things that you think
>
> that I could do to avoid the situation in the future? (T1, 271-273)

Ms. Carter expressed the continuous connection, stating, "We're all in it together because you can feel you're like soldiers at war. So, you're constantly bonded" (T3, 337).

Curriculum and Instruction. The subtheme curriculum and instruction highlights teacher preparedness in understanding their content and readiness to instruct middle level students. While teacher candidates may be knowledgeable about their subject matter, they often struggle to translate this knowledge to meet the needs of middle-grade students and need to be more prepared, particularly in literacy, as expressed by Dr. Charles:

> I think they are knowledgeable of their content. (CI4, 229) A lot of our middle grades
>
> teachers need to be ready to support literacy. They just do…You are going to teach
>
> reading. You just are. You got to be ready for it. (CI4, 272-275) They do take a couple of
>
> literacy classes at the adolescence level. I don't think it's enough. I would like to see, if
>
> we built a middle grades program from scratch, I think we need to be a lot more explicit
>
> about, you're going to have sixth graders reading at a third-grade level. It happens, so
>
> what are you going to do about it? How are you going to help them with basic reading
>
> comprehension and teach vocabulary and giving a purpose for reading and using features
>
> of text, like using pictures and headers? They got to be a lot more ready for that. (CI4,
>
> 276-283)

Additionally, Dr. George highlighted the emphasis put on content, stating:

> Our field experience will put them in front of middle school students, but their student
>
> teaching experience needs to be in 10 through 12 as much as possible because of them

getting the experience teaching content. So, because it's a 7 through 12 certification, there's an emphasis on them being able to teach the content. (CI3, 354-356)

Teacher participants expressed that while they felt prepared in terms of content and curriculum, they gained a deeper understanding of strategies, instructional practices, and systems through their classroom experiences. Mr. Clark shared, "I think that I felt pretty prepared when I went into my middle school role" (T6, 202). Mr. Clark also stated, "But overall, I definitely think a lot of the sort of practices that I've developed or the practices that I've kind of used were more gained through experience than in my classes" (T6, 216-217). Additionally, Mr. Barnes shared, "And so as far as preparedness goes, I feel like I was as prepared as I could be curriculum-wise" (T7, 443). Furthermore, Mr. Jones expressed his preparedness regarding content, "Knowledge-wise and understanding the content, I was fine. Knowing how to plan a lesson, fine, more or less" (T2, 179-180). Ms. Martin expressed her thought regarding her preparedness, stating, "I feel that I was very prepared in how to take that curriculum and figure out how to really transform it and deliver it in a way that my students can understand" (T5, 321-322).

Theme 2.3: It's Really Not Part of Our Curriculum. College instructors and teachers both expressed that there is a lack of specific training for middle school education in teacher preparation programs as it relates to organizational structures. Dr. Charles acknowledged the missing component in his program stating:

I think we're thin on organizational structures. I really do. We send them out to schools and say, "Go learn something." (CI4, 161-162)…They're expected to teach at least one lesson, but I don't know that it's really deliberate. We're not really saying, "Hey, look for an interdisciplinary team and get on one to see what that is." (CI4, 168-170)…We send our teacher candidates out to schools, but all these things that you talk about there, like

interdisciplinary teams, common planning time, flexible block schedule, intramurals, advisory programs, it's really not part of our curriculum. (CI4, 152-155)

Through the discussion regarding the theme, it's really not a part of our curriculum, one subtheme emerged: gaps in teacher training.

The subtheme gaps in teacher training sheds light on teachers' experience with gaps in their teacher preparation programs. Gaps in understanding organizational structures resulted in teachers feeling less prepared to handle the unique developmental needs of middle school students. Mr. Jones explained:

I think that's one of the bigger gaps, I feel like in my training. When I got into the classroom the first time, I felt like...I was like, oh, there's a bunch of things organizationally that I'm not really sure, like I just have to make up because I haven't really thought about it. So just thinking about how do the students enter the classroom, what are the logistical things of when they have to go to the bathroom or get a pass or get a pencil or all that kind of stuff. I feel like I didn't necessarily get a lot of training around that, and I wish I'd had more. (T2, 128-133).

Similarly, Ms. Martin explained how she felt she wish she was better prepared, stating:

And honestly, my program kind of lacked on that. They were very good with providing us the knowledge, but then not so much allowing us to participate in it or experiment with it. (T5, 272-273) That was one thing that I definitely wish I was more prepared for. (T5, 279)

Theme 2.4: All Teaching is Relational. All teaching is relational was the last of four themes that emerged from discussion about the readiness level of middle school teachers to instruct middle level students. This theme refers specifically to teachers' understanding of the importance

79

of building positive, healthy relationships with students and colleagues. Three subthemes emerged from the discussion with participants about relationships: building relationships, classroom culture and navigating challenges.

Building Relationships. Teachers emphasized the importance of knowing students well and fostering a connection where students feel valued and understood. Mr. Jones emphasized building genuine relationships with students is crucial in order to engage and teach students, stating:

> I think all teaching is relational. And so, we need to make sure that we're building
>
> relationships with students in order to encourage them and to engage with whatever we're
>
> teaching. Because if they don't know us well...if we don't know them well, we're not
>
> going to be able to teach them well. But if they don't have any relationship with us,
>
> they're not going to care enough to give us the time of day. So that's definitely part of it.
>
> (T2, 53-58).

Ms. Carter shared, "There's a lot that can come when their voices heard. It's really important that they feel valued and seen and I think at this age that's really key" (T3, 121-122). Similarly, Ms. King shared her thoughts on students feeling valued, stating, "I've seen literal change and how kids respond to me just with them feeling valued, cared for, and respected" (T1, 206-207).

Classroom Culture. Teachers and professors understand the importance of establishing a positive classroom climate and fostering positive relationships with students is vital for effective teaching and classroom management. Dr. Nichols stresses to her teacher candidates the importance of classroom culture, stating:

The emphasis for student teaching is going to be creating that culture of learning and that

inclusive culture of acceptance across the board. Because if you don't have relationships

and you don't have that good learning culture that's engaging to kids, it doesn't matter

how effective you are, they're still not going to learn from you. (CI1, 287-290)

In establishing a positive classroom culture teachers shared ideas for how they connect

with students. Ms. Baker discussed personalizing assignments, stating, "So things that I do that

connect with adolescent students, the question of the day tends to be personalized depending on

the unit" (T1, 340-341). Similarly, Ms. Carter stated:

I do a lot of writing with them, and I think the writing can benefit me because that's how I

get to know them so that it gives me time to get to know them outside of that rigid

timeframe because then I read their words and then I can circle back and acknowledge

that I got to know them that way. (T3, 154-158)

In addition, Ms. Carter plainly stated, "It's maybe, just be real" (T3, 326-327) when it comes to

building relationships.

Navigating Challenges. The subtheme of navigating challenges highlights the challenges

faced by teachers while navigating the complexities of adolescent life. Teachers expressed the

difficulties in supporting adolescent students while remaining resilient in the face of daily

challenges. Ms. Martin stated:

And it is challenging because like I said, one of the things that I wasn't really aware of is

just all of the things that you have to navigate between the students themselves, all of the

challenges that they face like finding themselves, finding friends. All those things, it's

very difficult in middle school. Especially now with social media and all those different

aspects that maybe weren't so prevalent before, it's greatly impacting them now. So,

trying to navigate all of that, it is difficult. It is. And truly just understanding them and

how they feel. They're going through all these changes too, and they're trying to figure

everything out. And I agree, it's a challenging time. (T5, 417-423)

Additionally, Ms. Martin shared about the challenge of building relationships when all students are different, exclaiming,

And sometimes I feel like you kind of just have to take it as you go, and really no student

is the same as any other student, so that's also kind of a challenge when building

relationships. But also, I feel like it just comes as you continue to teach. (T5, 294-296)

Some teachers felt that their teacher training program did not adequately prepare them to

address the individual differences among students and manage the logistical aspects of the

classroom. Consequently, this highlighted a gap in their training, as shared by Ms. Martin:

We didn't get much of that. It was more so just categorizing all the students together, which

I feel like isn't always the best because every student is different. They didn't focus on that,

and then when you get into a classroom with 20 kids and you're trying to build a

relationship with all of them, it can be challenging. Yeah. I feel like maybe that was lacking

a little bit. (T5, 304-308)

Correspondingly, Mr. Jones mentioned:

All the logistical things that have to go into a classroom and what good boundaries look

like with middle schoolers, I think that's one of the hardest things. Is knowing just how

much they're going to push back and where your boundaries need to be before they show

up is really difficult. And I feel like I didn't have a lot of training on that. (T2 182-185)

Teachers emphasized the importance of engaging with middle school students by meeting

them at their level. They stressed maintaining a fun, loving, and relaxed attitude, while

understanding that challenges and hormonal changes are part of this developmental stage. Ms. Carter stressed that teachers get in that frame, stating:

> Get in that frame. Get there, get there with them. You can do it. You can do it. And be fun and be loving and be joking and just, let it go, let it go, let it go. This is their age. This is what they're supposed to do. They're supposed to challenge you. They're supposed to throw pillows at each other and then you make it and then you tuck them in because they also need that. It's not that you let that happen, but you have to get there with them so that you're not fighting them against it. (T3, 299-303)

Similarly, Ms. Rodriguez conveyed the importance of teachers remaining resilient and recognizing the unique difficulties middle schoolers face. Ms. Martin stated:

> You just cannot give up with middle schoolers. And they're in a tough age. And I think that's something that I continuously also tell my coworkers. It's not an easy age. A lot is going on. Hormonally, a lot is going on. (T4, 187-189)

Documents Review Summary

In the review and analysis of course syllabi and course descriptions, information regarding the core constructs of the FEMLP emerged. Three of the four institutions offered courses focused on human development during adolescence, aligning with the developmental spectrum of the FEMLP. One institution, however, provided adolescent courses with a greater emphasis on teaching and learning strategies, including literacy, assessment, and creating and maintaining a positive classroom environment. Additionally, only one of the four institutions emphasized the core construct teacher dispositions and professional behaviors, highlighting its social justice philosophy.

All four institutions emphasized the importance of building relationships with students and recognizing the developmental diversity of young adolescents aligning with the relationship core construct. Additionally, they required teacher candidates to engage in field experiences and student teaching to gain practical insights into daily school operations, teaching practices, and classroom management as shared in the organizational structure core construct.

Field Notes Summary

The researcher's field notes supported the reoccurring theme around the lack of middle level practices to support the unique and diverse needs of adolescent youth. During the researcher's interview with Ms. King and Ms. Carter she wondered about the challenges they faced due to their lack of experience in working with adolescent students and lacking knowledge about their unique needs, relating their experiences to a guppy in a shark tank or a salmon swimming upstream. Additionally, the researcher's field notes highlighted gaps in preservice teacher training, particularly regarding organizational structures beneficial for adolescent students. Participants expressed feelings of inadequacy in understanding effective structures for middle-level schools and classrooms, noting that most of their practical knowledge is acquired on the job. Moreover, the researcher observed participants' facial expressions showing more excitement when discussing their knowledge of curriculum and instruction, indicating they felt better prepared in this area, as shared by both teachers and professors.

Chapter Summary

This chapter presented the results of 11 semi-structured interviews conducted individually with seven middle school teachers from a rural or urban school setting and four higher education instructors. For Research Question 1, data were analyzed to examine ways in which teacher preparation courses addressed the unique needs of adolescent learners. Four

themes emerged from the data analysis for Research Question 1: limited focus on middle school, what's expected of teachers, on-the-job-learning, and build strong foundations. For Research Question 2, data were assessed to examine the readiness of pre-service teachers to instruct adolescent students. Four themes emerged from the discussion about teacher readiness: trial by fire; they're not experts, yet; it's really not part of our curriculum; and all teaching is relational. Field notes taken during participant interviews, along with an analysis of teacher preparation program course syllabi and descriptions, served to disclose valuable data that might have otherwise gone unnoticed. For instance, the field notes strengthened the researcher's observation concerning insufficient middle-level preparation, while the document review shed light on the curriculum content covered in the courses.

The results presented from the data analysis indicate that teacher preparation programs have gaps in adequately preparing preservice teachers for middle-level students. Participants experienced classroom challenges during their first few years of teaching. A more detailed summary and discussion of these findings will be presented in Chapter 5.

Chapter 5: Discussion

Introduction

Researchers have examined the emergence of middle schools and adolescent development, emphasizing the importance of considering the developmental stage of adolescents when designing educational preparation programs (Cook et al., 2016). Despite the extensive empirical and historical literature on middle school philosophy and concepts, there is limited research on how teacher preparation programs are preparing teachers to work with middle level students. The purpose of this study was to evaluate how effectively teacher preparation programs equip novice, preservice teachers to address the developmental needs of adolescent students, as perceived by novice middle school teachers and college instructors. Chapter 5 offers an overview of the study's findings, discussing implications and limitations. Additionally, this chapter provides recommendations for middle-level teachers, teacher preparation programs, and future research. Using the FEMLP (Faulkner et al., 2013) the two research questions were addressed:

1. From the perspectives of novice middle school teachers and higher education instructors, in what ways are teacher preparation courses designed to address the unique needs of adolescent learners?

2. From the perspectives of novice middle school teachers and higher education instructors, what is the readiness level of middle school teachers to instruct middle school students?

During the data analysis process, several themes and subthemes emerged, leading to three key findings. These themes formed the basis of the study's results, summarized in the implications of findings.

Implications of Findings

The first key finding from the study was that there are very few teacher preparation programs in NYS dedicated solely to middle level education, which aligns with existing research regarding no specific focus on middle school specific teaching programs (Valentine, 2000). The second key finding was that most teacher learning happens on the job through field experiences, student teaching, and the initial years of teaching. This finding emphasized that teachers are not yet experts in these areas and highlights a need for continued professional learning. The third key finding was that middle school teachers lack the level of preparedness that might make them better equipped to teach middle school students prior to acquiring practical experience in the classroom.

The key findings align with the existing body of research, which emphasized the need for specialized middle level programs related to the needs of adolescent students. The literature indicated that despite advocacy for specialized middle level programs, some teacher preparation programs still lack pathways to middle level licensure in certain states (Howell et al., 2016). Additionally, in a study by Hesson (2016), participants rated their teacher preparation programs as moderately effective in preparing them for teaching the adolescent age group, highlighting field experiences as a particularly influential part of their training due to the practical, hands-on nature of these experiences.

As advocates for developmentally responsive instruction, Faulkner et al. (2013) proposed the FEMLP, a framework for middle teacher preparation consisting of eight constructs that, when systematically implemented, enhance the likelihood of effective learning experiences for all students. These constructs are the developmental spectrum, teacher dispositions and professional behaviors, organizational structures, relationships, content knowledge, classroom

management, assessment, and curriculum and instruction. The core constructs of the FEMLP emphasizes the developmental spectrum, teacher dispositions and professional behaviors, organizational structures, and relationships, upholding the belief that effective middle level teaching practices must be grounded in the developmental needs of adolescent students (Faulkner et al., 2013). The core constructs of the FEMLP were used as a framework to examine the perspectives of novice teachers and higher education faculty on teacher preparedness to teach middle level students.

Finding 1

Finding 1, there are very few teacher preparation programs dedicated solely to middle level education aligned with research results from Valentine (2000), indicating that a persistent issue in middle schools is the lack of focus on middle school-specific teacher education programs. All seven teachers and all four instructors indicated that their programs were not specifically designed for middle level students but were instead focused on an elementary or a Grade 7-12 education certification. The focus on elementary and high school certifications aligns with the results of Howell et al. (2016) which indicated that some teacher preparation programs still lack pathways to middle level licensure in certain states despite advocacy for specialized middle level programs.

Additionally, the interview findings revealed that middle school certification is often an extension of elementary and high school certification, rather than a stand-alone program. These findings are consistent with Faulkner et al. (2013), who discovered that some teacher preparation programs prepare candidates through a general elementary program, others through a specialized middle grades program, and some through a secondary subject-specific program. Although these routes lead to certification and allow candidates to teach in middle schools, many recognize that

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this approach is less effective than a specialized middle grades teacher preparation program (Faulkner et al., 2013). Additionally, Ochanji et al. (2016) found that teachers trained in elementary or secondary teacher programs were less prepared for middle level classrooms compared to those trained in specialized middle level preparation programs.

Furthermore, the participating teachers highlighted the importance of understanding adolescent development to address the unique needs of middle school students. They noted that many programs focus on either elementary or high school, resulting in a gap in training for middle school educators. These findings are corroborated by Hesson (2016), who noted a significant majority of teachers nationwide are trained in either elementary education programs or subject-specific secondary programs.

The lack of emphasis on middle level certification results in significant gaps in teacher training specific to the developmental needs of middle school students. Research Question 1 focused on the ways teacher preparation courses are designed to address the unique needs of adolescent learners. The research findings revealed that teacher candidates only need to take one or two courses to receive middle level certification. Teachers and instructors observed that within the Grade 7-12 program, only one or two courses specifically focused on adolescent development. These findings align with Preston (2017), who revealed that approximately 65% of middle level programs required one course in educational psychology, and about 70% required one course in adolescent development. Furthermore, Howell et al. (2016) found that while 45 states have clear mandates for middle level certification or licensure, nearly half of the colleges preparing candidates for the middle grades do not offer courses or experiences specifically focused on middle level education or adolescent students.

The study's first key finding was not surprising as the push for specialized middle level teacher preparation programs has been a topic of discussion and research for many years. The absence of teacher education programs specifically tailored for the development of middle level teachers continue to plague middle schools (Valentine, 2000). Although the NYSED recognizes the personal transformations that middle level students experience and has outlined seven essential elements for standards-focused middle level schools and programs, these standards do not address teacher preparation programs.

Finding 2

Finding 2 revealed that most teacher learning happens on the job through field experiences, student teaching, and the initial years of teaching. During this on-the-job learning, teachers gain practical experience with class structures, building relationships with adolescent students, and understanding adolescent development. Teachers ranked field experiences as a highly influential component of their programs because of the practical, hands-on action involved. Teachers and instructors recognized that real-world experiences, like student teaching and field placements, are where teachers mainly develop organizational skills through observations, teacher interviews, or assignments. This finding concurs with Hesson (2016). Participants reported that their teacher preparation programs were moderately effective in preparing them to teach middle level students.

The teacher participants expressed that having a mentor teacher is a crucial form of support for new teachers as they gain on-the-job experience. Teachers emphasized the significant benefits of collaborating with colleagues, recognizing teaching as a team effort. Sharing experiences and seeking advice from peers was also highlighted as critical support systems for addressing diverse student needs and improving teachers' effectiveness. Doran (2020)

recommended that teacher preparation programs incorporate fieldwork placements to provide access to experienced mentors and exposure to diverse communities.

Teachers interviewed in the study emphasized the importance of understanding adolescent development to meet the unique needs of students, while acknowledging a lack of focus on middle school. Researchers emphasized the urgent need to consider adolescents' developmental stages when designing educational preparation programs (Cook et al., 2016). Six of the seven teachers interviewed revealed that although their teacher preparation programs covered some aspects of adolescent development, they only gained a basic understanding. One teacher felt the program was heavily geared toward elementary education, noting that adolescent development was essentially missing. Teachers reported that their deepest knowledge of adolescent students comes from experience, acknowledging they are not experts in adolescent development.

During an analysis of the researcher's field notes, teachers expressed concerns about the challenges they would face due to their lack of experience working with adolescent students and their limited understanding of these students' unique needs. The inadequate preparation of middle-level teachers highlights the urgent need for teacher preparation programs to provide courses and experiences that address the needs of middle school adolescents so that teachers are not feeling like a "guppy in a shark tank" or "a salmon swimming upstream."

Finding 3

Finding 3 revealed that middle school teachers lack the level of preparedness that might make them better prepared to teach middle school students prior to acquiring practical experience in the classroom. Research Question 2 explored the readiness of middle school teachers to instruct middle school students, as perceived by novice middle school teachers and

higher education instructors. Professors acknowledged that there is still room for growth and learning in working with adolescent students. These findings are also voiced by Greenberg et al. (2013), who concluded that many of these programs inadequately prepare our nation's future teachers, resulting in teachers with insufficient classroom management skills and content knowledge necessary to thrive in classrooms.

Although teachers felt they were prepared in areas such as curriculum, they lacked training in areas pertaining to building relationships and organizational structures. Gaps in understanding organizational structures resulted in teachers feeling less prepared to address the unique developmental needs of middle school students. These findings coincide with Doron (2020), who concluded that teachers felt well-prepared in lesson planning but poorly prepared in data analysis and relationship-building with students and families. Teacher preparation programs touch on some core aspects of the FEMLP, but novice teachers and faculty believe they need to focus more on helping teachers understand organizational structures to better support students' unique developmental needs. Teachers felt less prepared to address the unique developmental needs of middle school students due to gaps in their understanding of organizational structures. Teacher participants emphasized that although preparation programs were good at providing them with content knowledge, there are many organizational structures such as establishing classroom management routines, lining up students, or planning bathroom breaks, that they were not exposed to and wished they had been. Cook et al. (2016) noted that Nagel Middle School used a traditional advisory program where each student had an adult advisor, and promoted student-led initiatives, creating numerous opportunities for students, staff, teachers, and administrators to interact and build caring relationships.

Some teacher participants felt their training programs did not adequately prepare them to address individual differences among students and manage classroom logistics. This finding is similar to Nunley (2020) who found that while teachers began their first year with enthusiasm and excitement for teaching and addressing classroom challenges, they struggled with managing discipline problems and implementing effective pedagogy practices.

Furthermore, teacher participants shared that, although lesson planning knowledge is provided, there is a perceived lack of practical application opportunities within teacher participation programs. They expressed a desire for more time to practice and apply what they learn, agreeing with Nunley (2020), who concluded that while most novice teachers felt somewhat prepared for teaching, they believed they were not adequately exposed to realistic classroom situations.

Limitations

Due to its small scale, the study is not fully generalizable and may not apply as directly to higher education institutions in other states. In addition, teachers from suburban districts were not included as participants.

Recommendations

The findings in this study resulted in recommendations for middle level teachers, school districts, teacher preparation programs in institutions of higher education, and future research. Included in this section is one recommendation for middle level teachers, two recommendations for school districts, two recommendations for teacher preparation programs in institutions of higher education and two recommendations for future research.

Middle Level Teachers

First, it is recommended that teachers in a middle school placement stay abreast of evolving educational practices to ensure they are using the most effective teaching methods, addressing diverse student needs, and integrating new technologies and research into their classrooms. Continuous learning helps them remain adaptable, improve student outcomes, and foster a more engaging and relevant learning environment for middle level students. Deering et al. (2015) emphasized examining educational practices and their relevance to the success of adolescent students. Continuous learning opportunities provide information that can enhance a teacher's understanding of adolescent development and pedagogy, improving classroom practices. Based on the research findings, it is recommended that middle school teachers participate in annual professional development focused on adolescent development and effective student engagement strategies.

School Districts

It is recommended that school districts allocate funds for additional professional learning opportunities to help teachers close gaps not addressed in their training programs. Teachers noted a lack of training in building relationships and organizational structures. Alverson et al. (2019) found a lag in teachers' implementation of organizational structures. Although teachers reported using traditional structures like interdisciplinary teaming, advising, and common planning time, these were not implemented as extensively as their importance suggested. Howell et al. (2013) emphasized that structures like teaming, flexible block scheduling, and common planning times are crucial for middle school teachers.

A second recommendation is for school districts to establish organizational structures that support the developmental needs of adolescent students. The FEMLP emphasizes organizational

structures that are developmentally and culturally responsive to student needs and professionally supportive of teachers (Cook et al., 2016). To ensure this, school districts should implement middle school systems that emphasize the holistic development of students and provide nurturing work environments for educators. Developmentally responsive practices for students should include inclusive curriculum that is reflective of diverse cultures, histories, and perspectives coinciding with the cognitive and emotional stages of adolescent development. Additionally, a variety of activities that cater to students' diverse interests and developmental needs are also key organizational structures. Professional support for teachers should include cultural competence training, mentoring programs, and training regarding collaborative planning time.

Teacher Preparation Programs in Institutions of Higher Education

First, based on the results of this study, it is recommended that teacher preparation programs establish specialized middle level stand-alone programs that prepare teachers for the unique needs of middle level students. Despite advocacy for specialized middle level programs, Howell et al. (2016) revealed that some teacher preparation programs still lack pathways to middle level licensure in certain states. Many teacher participants interviewed for this study felt their teacher preparation program was geared toward elementary or high school programs, leaving them with a lack of experience for working with middle level students. Faulkner et al. (2013) highlighted the significant variability in the pathways to obtaining a middle level credential across different states. While all routes lead to middle grades certification allowing candidates to teach in middle schools, many acknowledge that these routes are not as effective as specialized middle grades teacher preparation programs.

Second, it is recommended that teacher preparation programs consider additional coursework for teachers to ensure they are truly qualified to teach or work with adolescent

middle grades students. The content is thin as teachers and higher education instructors shared that only one to two courses are generally required for middle level certification. Preston (2017) observed that approximately 65% of middle level programs required a course in educational psychology, and about 70% required a course in adolescent development when focusing on teaching adolescent students. Additionally, teachers felt they needed more coursework on adolescent development, planning engaging activities for middle grade students, and collaborating with colleagues. DiCicco et al. (2016) revealed that teachers felt most of their stress stemmed from an increased focus on testing and a reduced emphasis on interdisciplinary collaboration. Based on the corroborating findings from the teacher participant interviews and the study by DiCicco et al. (2016), it is recommended that teacher preparation programs incorporate opportunities for interdisciplinary collaboration, so that teachers feel better prepared to work with their colleagues.

Third, it is recommended that higher education institutions align fieldwork and student teaching with the core construct of organizational structures from the FEMLP, ensuring that teachers gain practical experience in establishing effective operational systems and feel well-prepared to teach adolescent students. Hesson's (2016) study found that field experiences are highly impactful due to their practical, hands-on nature. However, participating teachers and instructors reported that their teacher preparation programs lacked specific training on organizational structures. One instructor noted that while teachers are sent into the field to plan and teach lessons, they are not required to focus on key elements such as common planning time or student advisory programs during their student teaching or field study. Real-world experiences are crucial for helping teachers develop organizational skills through observations, interviews, and assignments (Doran, 2020). Therefore, field experiences and student teaching should be used

by teacher preparation programs as opportunities to require teachers to identify and gather information about organizational structures.

Future Research

Future researchers should extend this study to include suburban teachers to understand their preparedness for teaching middle school students. Additionally, since this research focused on New York State, exploring districts and higher education institutions in other states would provide a more comprehensive understanding of how teacher preparation programs meet the needs of adolescent students.

Furthermore, researchers should focus on examining course offerings for middle level certification in teacher preparation programs. This will help in gaining a broader understanding of how these programs prepare teachers to meet the developmental needs of adolescent students.

Conclusion

For over 60 years, middle level advocates and researchers have documented the critical need for specialized middle level programs that prepare professional teachers and educators with a deep understanding of adolescent students and their developmental characteristics (Howell et al., 2016). Despite advocacy for specialized middle level programs, some teacher preparation programs still lack pathways to middle level licensure in certain states (Howell et al., 2016). A qualitative approach was used to investigate the extent to which teachers and higher education instructors perceived the teachers' preparedness to teach middle school students. Additionally, the study examined the extent to which teachers are learning about adolescent development in teacher preparation programs.

Semi-structured interviews were conducted online and face-to-face with seven middle level teachers and four higher education instructors. This study focused on middle level teachers due to the limited existing research on the alignment of teacher preparation program courses with the developmental needs of adolescents. Participants shared insights from their program and teaching experiences related to their readiness to teach middle level students. Additionally, the study included field notes and a documents review to triangulate the data. This study utilized the core constructs of the FEMLP as the lens to explore and interpret the data. This study aimed to evaluate how well teacher preparation programs equip novice teachers to address adolescents' developmental needs. The findings confirmed that teacher preparation programs need to improve in better preparing teacher candidates for middle level education.

First, the lack of focus on teacher education programs specifically tailored for middle school preparation contributes to the challenges faced in middle schools (Valentine, 2000). One key finding revealed that there are very few teacher preparation programs dedicated solely to

middle level education, aligning with existing research on the lack of focus on middle school-specific teaching programs (Valentine, 2000). Understanding adolescent development and the unique characteristics of middle school students is crucial for educators (Cook et al., 2016). The Middle Grades Collaborative (2016) recommends providing middle grades teachers with specialized certification pathways within districts and credentialing programs so that teachers are better prepared to service middle level students. Aside from not being properly prepared for the unique needs of adolescent students, teachers' varying credentialing impacts teachers' readiness to teach middle level students. Ochanji et al. (2016) found that teachers trained in specialized middle level preparation programs were better prepared for middle level classrooms compared to those trained in elementary or secondary teacher programs. Teacher preparation programs must ensure that candidates are well-equipped to meet the developmental needs of adolescent students. It is the hope that by enhancing their knowledge of adolescent developmental changes, teachers can better prepare students for their futures.

While teachers are receiving content knowledge through their teacher preparation program, improvement in practical application and hands-on experience is needed. A second finding revealed that most teacher learning occurs on the job through field experiences, student teaching, and during the initial years of teaching. Similarly, in Hesson's (2016) study, participants reported that their teacher preparation programs were moderately effective in preparing them to teach middle level students and found field experiences particularly influential due to their practical, hands-on nature. The similarity in these findings underscores the urgent need for teacher preparation programs to offer courses and experiences that address the needs of middle school adolescents. Re-educating teacher candidates is crucial for middle level educators,

as it will help the teachers understand the changing conditions of the adolescent brain and the cultural aspects of their students as they plan for instruction.

In hopes of improving teacher readiness, researchers have long examined teacher preparation programs and the best way to prepare teachers for the developmental needs of adolescent students. Despite consensus among middle level advocates on the importance of specialized teacher preparation, teachers across the nation are not prepared in a consistent manner (Faulkner et al., 2013; Hesson, 2016). This study could impact the way school districts allocate resources. School districts are encouraged to allocate funds for additional professional learning opportunities to help teachers address gaps not covered in their initial training programs. With varying credentialing, teachers in middle school placements must stay updated on evolving educational practices to ensure they employ effective teaching methods, address diverse student needs, and integrate new technologies and research into their classrooms. This continuous learning supports adaptability, improves student outcomes, and fosters an engaging learning environment for middle level students. Additionally, superintendents of school districts should use their unique position to establish organizational structures in their middle schools that align with the developmental needs of adolescent students.

Implications to teacher preparation programs include establishing specialized stand-alone middle level programs that adequately prepare teachers for the unique needs of middle school students. Additionally, it is recommended that these programs consider additional coursework to ensure teachers are thoroughly qualified to teach or work with adolescent middle grades students since results of this study indicated that only one to two courses are typically required for middle level certification, which may be insufficient.

Future research should expand this study to include suburban teachers to assess their readiness for teaching middle school students. Additionally, given the focus on New York State in this research, exploring districts and higher education institutions in other states would provide a more comprehensive understanding of how teacher preparation programs across the country meet the needs of adolescent students. Furthermore, researchers should delve into the examination of course offerings for middle level certification in teacher preparation programs to gain a deeper understanding of how these programs are equipping teachers to meet the developmental needs of adolescent students.

Middle schools have undergone continuous restructuring over the years (Valentine, 2000). Since their inception, researchers have advocated for specialized programs to develop leaders who address adolescents' cognitive, physical, social, and emotional needs while engaging them in meaningful learning experiences (DiCicco et al., 2016). Despite these efforts, middle school reform remains challenging, particularly due to the lack of teacher education programs focused on the middle school level (Valentine, 2000). There has been insufficient emphasis on adolescent development and the uniqueness of middle school students (Cook et al., 2016).

The AMLE stresses the importance of educators being committed to and knowledgeable about adolescent learners, educational research, and best practices (Cook et al., 2016). This study investigated how teacher preparation courses address the unique needs of adolescent learners and assessed middle school teachers' readiness. The findings of this study are particularly important for a few reasons. First, the study highlighted a noteworthy gap in specialized middle level teacher preparation programs, which leads to teachers being underprepared to meet the specific needs of adolescent learners. From a social justice perspective, this lack of preparation can contribute to inequitable educational experiences for students during this critical developmental

period. Students who are underserved in rural and urban areas, or who have fewer outside resources, are especially vulnerable. Inadequately prepared teachers may struggle to meet the unique needs of these students, exacerbating existing educational disparities. Understanding adolescent development is crucial not only for students' mental health needs, but also for their future success and adjustment to society.

Second, by investigating the perspectives of novice teachers and college instructors, the study provided valuable insights into the challenges faced by educators entering middle level classrooms. This information is vital for executive leaders in education to understand the necessity of revising and enhancing teacher preparation programs to ensure that teachers are better equipped to support all students, including those from diverse and underserved communities.

Lastly, the study emphasizes the need for targeted support and professional development for middle level teachers. By addressing these gaps, districts can enhance educational outcomes and create a more inclusive and supportive learning environment for adolescent students. For executive leaders, this involves prioritizing the development of specialized training programs and resources that cater to the unique needs of adolescent students, ultimately promoting educational equity.

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Core Constructs of the Framework for Effective Middle Level Practices

Developmental Spectrum--This construct highlights the importance of all stakeholders understanding the cognitive, cultural, emotional, moral, physical, and social developmental needs of young adolescents and ways in which the developmental spectrum interacts with all aspects of teaching and learning in the middle grades.

Teacher Dispositions and Professional Behaviors--This construct emphasizes the importance of professional behaviors and positive dispositions which include the ability to view all students as able to succeed, to identify positively with others, to display a positive attitude, to accept constructive criticism, to respect diversity and individual differences, to understand the long-term goals of teaching, to demonstrate a commitment to develop the "whole" child, to build and maintain relationships with students and colleagues, and to create a climate that promotes fairness and equity.

Organizational Structures--This construct identifies specific structural components critical in establishing the appropriate operational system to support effective middle level practices. Organizational structures such as interdisciplinary teams, common planning time, a flexible block schedule, intramurals, and advisory programs are key structural elements providing the means for middle grade schools to meet the various needs of its students in a developmentally responsive manner. It is through these organizational structures that stakeholders are able to provide developmentally responsive school experiences and to encourage meaningful relationships between teachers and students.

Relationships--This construct emphasizes positive, healthy relationships among and between all school stakeholders and students. These relationships develop through an understanding of the developmental spectrum, appropriate dispositions and behaviors, and supportive organizational structures. These relationships are built on trust and mutual respect, honor the developmental diversity of young adolescents and impact every aspect of teaching and learning at the middle level.

Appendix B

Data Collection Tool: Teacher Interview Protocol Questions

Introduction: Thank you for agreeing to meet with me today. The purpose of this study is to examine the extent to which teacher preparation programs prepare novice teachers for the developmental needs of adolescent students. I would like to ask you some questions about your experiences with adolescents as it relates to the Framework for Effective Middle Level Practices. I would also like to explore your perspective of your teacher preparation program as it relates to your preparedness to teach middle level students. My study is about adolescent students and the extent to which middle level teachers are prepared to teach them. I want to reiterate that what you share with me will remain confidential. To ensure confidentiality, pseudonyms will be assigned to participants. Additionally, all related interview documents will be secured in a locked file or on a laptop with password protection and kept for three years after the successful defense of the dissertation and then destroyed. To ensure that I capture all your responses and can review the interview later, I would like to record your interview. Do I have your permission to record this interview?

Opening Statement: Let me take a moment to review the Core Constructs of the Framework for Effective Middle Level Practices as explained by Faulkner et. al, 2013. (I will review Faulkner et. al Framework for Effective Middle Level Practices using Appendix A.) Tell me about your experience with adolescent students and where you may see some evidence of the FEMLP in your daily practices?

Interview Questions:

1. What is your knowledge of adolescent development?
    a. In what ways, if any, did your teacher preparation program include adolescent development?

2. How did your teacher preparation program prepare you to teach middle school students?

3. Please explain what you know about teacher dispositions and professional behaviors as it relates to adolescent development.
    a. Tell me where you obtained this information; on the job or in college or both?

4. How did your program prepare you for effective organizational structures at the middle school level?
    a. What structural components are established in your classroom or school that support middle level practices?
    b. What kinds of activities seem to engage students the most?

5. What concepts were covered during your undergraduate or graduate program regarding building healthy relationships among and between all school stakeholders and students?

6. Based on the FEMLP, what is your perspective on your readiness level to instruct middle school students?
    a. What did you learn in your teacher preparation courses that you would consider relevant to your readiness to teach middle level students?

Closing statement: Our interview is ending. Is there anything else that you would like to discuss with regards to adolescents and your teacher preparation program? Thank you for taking the time to meet with me today.

Appendix C

Data Collection Tool: Higher Education Faculty Interview Protocol Questions

Introduction: Thank you for agreeing to meet with me today. The purpose of this

study is to explore what middle level teachers know about adolescent development, and to what

extent that knowledge came from their undergraduate teacher training. My study is about

adolescent students and the extent to which middle level teachers are prepared to teach them. I

am interested in gaining a better understanding of how much adolescent development is part of

teacher training programs. I would like to ask you some questions about your current teacher

training program as it relates to the Framework for Effective Middle Level Practices (FEMLP). I

would also like to explore your perspective of your teacher preparation program as it relates to

the FEMLP. I want to reiterate that what you share with me will remain confidential. To ensure

confidentiality, pseudonyms will be assigned to participants. Additionally, all related interview

documents will be secured in a locked file or on a laptop with password protection and kept for

three years after the successful defense of the dissertation and then destroyed. To ensure that I

capture all your responses and review the interview later, I would like to record your interview.

Do I have your permission to record this interview?

Opening Statement: Let me take a moment to review the Core Constructs of the Framework for

Effective Middle Level Practices as explained by Faulkner et. al, 2013. (I will review Faulkner

et. al Framework for Effective Middle Level Practices using Appendix A.) Can you describe the

current requirements and curriculum of your undergraduate teacher preparation program?

Interview Questions:

1. What is your knowledge of adolescent development?
   a. In what ways, if any, does your program curriculum prepare teachers for adolescent development?

2. How does your teacher preparation program prepare teachers to teach middle school students specifically?

3. Please explain what you know and teach about teacher dispositions and professional behaviors in your teacher preparation program as it relates to adolescent development.

4. What in your teacher preparation program has prepared candidates for establishing effective organizational structures to support middle level practices? What kinds of activities engage middle school students the most?

5. What in your college course prepares candidates for building positive, healthy relationships among and between all school stakeholders and students?

6. Based on the FEMLP, what is your perspective on teacher readiness level to instruct middle school students?
   a. What was taught in your teacher preparation courses that you would consider relevant to teachers' readiness to teach middle level students?

Closing statement: Our interview is ending. Is there anything else that you would like to discuss with regards to adolescents and your teacher preparation program? Thank you for taking the time to meet with me today.

Appendix D

Documents Review Guide

Document Type: _____ **Date Reviewed** _____

FEMLP Core Constructs	Attributes Observed	Yes	No
Developmental Spectrum	• Adolescent development (cognitive, cultural, emotional, moral, physical, and social developmental needs)		
	• Connections between developmental spectrum and aspects of teaching and learning in the middle grades.		
Teacher Dispositions and Professional Behaviors	• View all students as able to succeed • Demonstrate a commitment to develop the "whole" child • Advocate for adolescent students		
	• Identify positively with others • Display a positive attitude		
	• Accept constructive criticism		
	• Respect diversity and individual differences		
	• Understand the long-term goals of teaching		
Organizational Structures	• Work collaboratively with colleagues • Effective planning teams		
	• Advisory programs • Interdisciplinary Teams		
	• Block scheduling		
	• Intramurals		
Relationships	• Build and maintain relationships with and among students and colleagues • Create a climate that promotes fairness and equity		
	• Honor cultural diversity		
	• Honor the developmental diversity of young adolescents		