RMLE Online
Research in Middle Level Education

Dan Bauer, Ph.D., Editor
Georgia Southern University
Statesboro, Georgia

Joanne L. Previts, Ph.D., Editor
Georgia College
Milledgeville, Georgia

2013 • Volume 37 • Number 1 ISSN 1940-4476

Ohio's Middle Childhood Licensure Study

Paula M. White
Ohio Wesleyan University
Delaware, OH

Robin Dever
Kent State - Geauga Campus
Burton, OH

Diane Ross
Otterbein University
Westerville, OH

Karen A. Jones
Heidelberg University
Tiffin, OH

Jennifer Miller
Hiram College
Hiram, OH

Abstract

The purpose of this qualitative study was to describe middle level prepared teachers' perceptions of their practices after completing an Ohio Middle Childhood: Grades 4–9 teacher education program. Using the National Middle School Association/ National Council of Accreditation of Teacher Education Initial Level Teacher Preparation Standards (2001) as the organizing framework for the interview protocols, the researchers interviewed middle level teachers, their administrator, and their students. The researchers in this study wanted to explore the perceptions of teachers in their implementation and understandings of the middle school concept as articulated in the teacher education program, even if the middle level schools in which they were employed did not fully implement practices consistent with these middle level practices. The findings that emerged from these analyses provide insights for middle level teacher educators about how middle level teachers construct a philosophy arising out of middle level ideals and, therefore, how they implement their understandings with young adolescents.

Background

In 1998, the Ohio Department of Education (ODE) converted from teacher certification to teacher licensure. Prior to this change, teachers were certified to teach at two levels: grades K–8 or grades 7–12. Presently, licenses are issued at three levels: Early Childhood (grades PreK–3), Middle Childhood (grades 4–9), and Adolescent-to-Young Adult (grades 7–12). The Middle Childhood license was designed specifically for teachers interested in working with young adolescents. Individuals completing this license are required to do coursework in two of four concentration areas: Language Arts & Reading, Mathematics, Science, and/or Social Studies. In 2002, Ohio graduated its first cohort of teachers licensed with the new Middle Childhood: Grades 4–9 license. In 2007, the Ohio Middle Level Professors (OMLP), a group of teacher educators, researchers, and advocates committed to the preparation of effective teachers for grades 4–9, conducted a statewide study to describe the perceptions of the middle level teachers who were prepared under the Ohio licensure system.

This qualitative study describes middle level teachers' perceptions of their practice after completing their middle childhood teacher education programs to acquire the Ohio Middle Childhood: Grades 4–9 license. Components of specific teacher education programs were excluded. In this study, middle level is defined by the licensure band as grades 4–9; therefore, middle level teachers, students, and classrooms in this study were limited to grades 4–9 in buildings that housed those configurations.

The need for this type of research is immediately evident when conducting a literature search of the ERIC database. Despite support from the National Middle School Association (2010), the National Forum to Accelerate Middle-Grades Reform (2002), and the Carnegie Council on Adolescent Development (1989) for specialized middle level teacher certification/licensure, there is still a need for empirical evidence supporting this license. McEwin, Dickinson, and Jenkins (2003) examined the degree to which the middle school concept was implemented in middle schools, and Felner and associates (1997) investigated the impact of the implementation of the middle school concept on young adolescents' achievement. Some studies examined the adoption of the middle school philosophy (Huss, 2004), and others looked at the statewide implementation of a middle level program (Meeks & Stepka, 2005). Few studies have described how middle level prepared teachers implement middle school ideals as articulated in their licensure programs (Mertens, Flowers, & Mulhall, 2005).

Research findings support the claim that teachers do not always transfer the techniques they developed during their teacher education program to the real-world settings of their classrooms (Scheeler, 2009; Brouwer & Korthagen, 2005). A gap between theory and practice can be traced back as far as Dewey (1904), as he discussed possible approaches to close this gap. Korthagen (2007) found that during the second part of the 20th century, instead of an expected decrease, this gap in transfer actually increased. This concern serves as the impetus for further research regarding the implementation of the middle school concepts.

This gap does not suggest, though, that the role of teacher education is not vital to the success of a classroom teacher. Darling-Hammond's (2000) research indicated that teachers who completed teacher education training had higher evaluations, were ranked as more effective with students, and implemented higher-order thinking skills and problem solving in the classroom. In contrast, teachers who lacked teacher education training demonstrated a low level of ability to adapt instruction, and a higher likelihood to leave the profession (Darling-Hammond, 2000). Despite this research, the American Educational Research Association (AERA) Panel on Research and Teacher Education suggests further research on topics regarding teacher education, including research that shows how teachers take what they learned in their teacher education programs and use it in their classrooms (Cochran-Smith, 2005).

Middle Level Philosophy

The mission and philosophy of middle level education is summarized in *This We Believe: Keys to Educating Young Adolescents* (National Middle School Association, 2010). *This We Believe* (TWB) is the official position statement of the Association for Middle Level Education (AMLE), formerly the National Middle School Association (NMSA), the leading professional association advocating for middle level education. During the course of this study, the organization was known as NMSA and the publications cited are credited to NMSA. Based on the 16 tenets contained in the position statement, NMSA developed standards for middle level teacher preparation. Additionally, Ohio was a National Council for Accreditation of Teacher Education (NCATE) (now Council for the Accreditation of Educator Preparation [CAEP]) partnership state at the time of this study. The principles, practices, and standards that inform middle level teacher education in Ohio include areas such as building student rapport, planning and implementing appropriate curriculum, instruction and assessment, and establishing positive relationships with families and communities.

At the core of this philosophy is the understanding of the development of young adolescents. Curriculum, instruction, and assessment are tightly woven together with this understanding of young adolescent development as the bonding agent. For this weaving to occur, teachers need to build positive student rapport, which then helps teachers to further understand their students and what developmental needs are present. Once this occurs, the teacher can use this knowledge to identify developmentally appropriate curriculum, instruction, and assessment. NMSA/NCATE Standards (2001) and *TWB* (NMSA, 2010) indicate that teacher candidates need to develop a variety of instructional strategies to support the diversity of young adolescent learners. In addition

to instruction, assessment should be continuous, authentic, and developmentally appropriate (NMSA, 2010). These strategies and assessments help teachers meet the developmental needs of their students.

Understanding young adolescent development, establishing rapport with students, communicating effectively with individuals and the class as a whole, and understanding the importance of a teacher's influence on students are all essential characteristics of middle level teachers. Torff (2005) cites pedagogical knowledge including "classroom management skills, ability to establish rapport with students, and lesson-implementation skills" (p. 304) as more important to a teacher's effectiveness than content knowledge. By establishing rapport with students, teachers are able to identify individual students' needs and make accommodations accordingly, such as placements within cooperative groups. Dunn, Beaudry, and Klavas (1989) found that students' achievement was higher when they were taught using grouping practices that matched their preferences. Dunn and associates (1989) also examined the importance of practices such as grouping and cite the need for peer interaction as a high preference among young adolescents. In fact, more than 900 articles support the use of cooperation over competition in the classroom. Positive outcomes include increased achievement, high-level reasoning, retention, and motivation (Johnson, Johnson, & Stanne, 2000). Group placement is simply one of many strategies that allow teachers to use their understanding of young adolescent development to make effective decisions regarding their students' individual needs.

Two unique characteristics that distinguish a middle school from an elementary or high school are the philosophy and organization of the middle level school. These features can also be indicators of a school's success. *TWB* (NMSA, 2010) indicates that "the interdisciplinary team… is the signature component of high-performing [middle level] schools" (p. 31). NMSA promotes the organization and development of interdisciplinary teams consisting of two to four teachers working with the same students throughout the school year (NMSA, 2010). The positive effects of teaming are multifaceted. NMSA research has shown that teaming is beneficial for the students, resulting in improved achievement scores, enhanced school climate, and positive student attitudes (NMSA, 2003). Teaming also assists in creating smaller learning communities, in enabling teachers to establish stronger bonds with students, and in eliminating student anonymity (Flowers, Mertens, & Mulhull, 2007). In addition, teaming decreases discipline issues and provides teachers, personal and professional growth and a greater sense of accomplishment (NMSA, 2010).

TWB (NMSA, 2010) holds that "curriculum encompasses every planned aspect of a school's educational program" (p. 17). George and Alexander (2003) further emphasized that the middle level curriculum embraces core subject knowledge as well as guidance, advisory, and other provided health and wellness services. Advocates of middle level curriculum integration recommend that the curriculum be organized around real-life issues and problems significant both to young people and to adults (Beane, 1997; Springer, 2006). *TWB* states that, "real-life issues raised by students are by nature multifaceted, attention to them integrates the curriculum in natural ways" (NMSA, 2010, p. 21). Almost all middle level reform agendas see integrative curriculum as their core focus (Beane, 1997; Jackson & Davis, 2000; National Forum to Accelerate Middle-Grades Reform, 2002; National Middle School Association, 2010; Springer, 2006).

In addition to an integrative curriculum, *TWB* (NMSA, 2010) calls for a challenging and exploratory curriculum. *TWB* states, "Challenging curriculum actively engages young adolescents. It addresses substantial issues and skills, is geared to their levels of understanding, and increasingly enables them to assume control of their own learning" (NMSA, 2010, p. 18). The National Forum to Accelerate Middle-Grades Reform (2002) has defined developmentally responsive teaching as curriculum that engages students in creating their own knowledge and encourages student voice and choice, often referred to as developmentally responsive practice.

Teacher candidates are also expected to connect their curriculum and instruction with assessment and use this information to guide future instruction, as stated in the 2001 National Middle School Association/National Council of Accreditation of Teacher Education Initial Level Teacher Preparation Standards (NMSA/NCATE Standards, 2001). In this vision, teaching and learning are intricately linked with assessment in reciprocal processes. Within this vision, assessment has two components, "assessment *of* learning" and "assessment *for* learning," which function best when used in balance (Stiggins, Arter, Chappuis, & Chappuis, 2007, p. 29). To reach this expectation, teacher candidates must

be knowledgeable of a variety of developmentally appropriate strategies and be knowledgeable of the relative advantages and limitations of various assessment strategies. Additionally, they must be committed to using assessment data to enhance student learning.

The NMSA/NCATE Standards (2001) clearly identify the importance of family and community as an essential element in teacher preparation. Not only do they call upon middle level teacher candidates to understand the variety of family structures and challenges in our current contemporary society, they also call teacher candidates to have a disposition that respects all young adolescents and their families. They are called to value and appreciate all young adolescents regardless of family circumstances, community environment, health, and economic conditions. They are further called to act as advocates for all young adolescents in the school and in the larger community and to connect instruction to the diverse community experiences of all young adolescents.

Research suggests that parent involvement in children's education leads to improved academic performance (Epstein et al., 2002; Fan & Chen, 2001; NMSA, 2010; Van Voorhis, 2003) and fosters better student classroom behavior (Fan & Chen, 2001; NMSA, 2010). Parents who participate in decision making at the school experience greater feelings of ownership and are more committed to supporting the school's mission (Jackson & Davis, 2000; NMSA, 2010). Parent involvement is also correlated to better school attendance (Epstein et al., 2002). Additionally, parent involvement creates a better understanding of the roles and relationships within the parent-student-school triad (Epstein et al., 2002). Parent involvement is linked to improved student emotional well-being (Epstein, 2005). In particular, the types of parent involvement and quality of parent involvement affect results for students, parents, and teachers (Epstein, 1995).

Understanding of young adolescent development stands at the core of educational excellence at the middle level. This understanding serves as the basis for what should occur in a middle level classroom, including building student rapport, developing curriculum, employing different teaching strategies, using appropriate assessment, and building positive relationships with parents.

Method

Procedure

The research question for this study asks for middle level teachers' perceptions of their practice after completing an Ohio grades 4–9 teacher education program. This question leads to a phenomenological research design. Phenomenology is defined as a description of one or more individuals' experiences of a phenomenon (Schutz, 1970). According to Stake (1998), a case is "not a methodical choice, but a choice of object to be studied" (p. 87). Within this study, the collective case is formed by the population of recent middle childhood licensed teachers. In this specific study, "Ultimately, we may be more interested in a phenomenon or a population of cases than in the individual cases" (Stake, 1998, p. 87).

This study focuses on the subjective experiences and the interpretation of the realities of a select group of middle level educators. We examined every participating teacher's experiences and their perceptions of their realities as we sought to analyze data in the participants' words and allow their voices to be heard through their recollections of their own experiences.

Data Collection

The Ohio Middle Level Professors (OMLP) research team contacted the Ohio Department of Education (ODE) for data on graduates from 2003. Although Ohio teacher education programs began graduating individuals with the Middle Childhood: Grades 4–9 license in 2002, many institutions were still modifying and enhancing their middle level programs during 2002. Thus, we focused on 2003 graduates because these teachers would have graduated from more intact, well-developed middle level teacher preparation programs. The data obtained from ODE consisted of 1,048 individuals who received a new, in-state, two-year provisional Middle Childhood: Grades 4–9 license in 2003. ODE does not record the specific teacher education program that teachers attended; however, the "in state" criterion indicates that the teachers did attend an Ohio institution of higher education. The ODE data identified the content certification areas for the teachers, where these teachers were teaching in 2007–2008, and what subjects they were actually teaching. The researchers decided to interview individuals who had been teaching for five years—a long enough probation period for the teachers to have settled into their teaching positions but not so long that they would have difficulty remembering the specific details of the middle level teacher preparation program.

Participants

Only 54% of the 1,048 teachers who were issued the grades 4–9 license in 2003 were teaching in an Education Management Information System (EMIS) school in 2007–2008. District, school, and subject area taught information is only available for teachers working in an EMIS reporting school. The assumption is that the other 46% of the teachers licensed in 2003 are working in non-EMIS schools such as charter or private schools, they are no longer teaching, or they have moved out of state. Of the 1,048 teachers licensed in 2003, the researchers focused on the 570 for whom ODE had data (district, school, subject area taught). Next, the research team limited the selection to teachers working in a middle level school setting versus an elementary or high school setting. The decision to choose middle level schools was based on the desire to choose teachers who would have the best chance to implement the knowledge, skills, and dispositions most often prized in ideal middle level teacher education programs. The researchers did not stratify for building configuration, as we were interested in how each teacher implemented his or her understandings in the middle level settings in which he or she taught (see Table 1). The administrator and the small group of students were chosen by each participating teacher; although the researchers suggested a random group of students be chosen, we cannot substantiate the students did indeed represent a random sample. Demographic information has been included. (see Tables 2–5).

To ensure a mixture of middle level teachers and to allow for multiple interviews across the state, potential interviewees were selected from each of the eight Ohio Middle Level Association (OMLA) geographic regions. Since the purpose of this research was to describe the practices of the Middle Childhood: Grades 4–9 licensed teachers from across the state and not specific teacher education programs in Ohio, a random number generator was used to select participants from the ODE data spreadsheet. Upon review of the initial random sample, the research team recognized that urban schools were missing from the sample; thus, additional urban schools were purposively selected to ensure middle level teachers, students, and administrators from urban schools were included in the final sample. This random sample consisted of ten teachers from each of the eight regions. Next, the research team contacted potential interviewees and invited them to participate in the research study. Unfortunately, many teachers declined the invitation.

The research team recognizes the low number of participants within the study and, by extension, the consequential limitations to the overall conclusions. However, the following circumstances limited the number of participants. The researchers contacted potential participates by e-mail and by phone. Some teachers indicated they did not want to participate in the research due to other teaching commitments, and some did not want to participate because they felt it would be a disruption for the students due to the school's testing schedule. The research timeline overlapped with the standardized testing timeframe for most schools. Some teachers did not respond to the researchers' request to participate in the study. The researchers attempted to reach each teacher three times before moving to the next potential participant. Despite the number of participants, the research team felt that educative conclusions could still be made based on the available data.

Data Analysis

For this study, each middle level licensed participant chose both an administrator and a small focus group of young adolescents for inclusion in the study. This group of teacher, administrator, and students constituted a case or data set for the research team. We were not interested in an individual data set by itself but in the common themes that were derived by examining multiple sets (Stake, 1998). Triangulation occurred by examining themes within a single set using administrators' and students' responses that supported or refuted teacher interviews and through examination of themes across the data sets.

Following a comprehensive qualitative approach, Patton (2002) stated that the initial phase in analyzing qualitative data is developing a code or indexing system. He recommends that after the interviews have been transcribed, the researcher should seek to identify codes and categories to classify and label emerging patterns in the data. Therefore, to analyze the data, researchers identified one school site at random from the set of cases and read the three related interviews (teacher, administrator, students). Next, the researchers met and identified the themes present in these three interviews. Then, the remaining interviews were coded using the identified themes. A constant comparative method data analysis was performed vertically with the administrator and student interviews used to support or refute the data from the teacher (Gibbs, 2008; Strauss & Corbin, 1990). In addition, data analysis was performed horizontally to form a composite using all of the complete cases of each school for each identified

theme (Creswell, 2008). Last, the researchers exchanged the interviews from the two groups to verify the coding of the themes and to guarantee inter-reader reliability. Through this constant comparison of data, reflection on the data, and narrowing of themes, the researchers interpreted the meanings of the themes and the teachers' perceptions.

Interview Protocols

We used the NMSA/NCATE Standards (2001) as an organizing framework for the interview questions. Ohio teacher education programs are held accountable for accreditation according to these standards common to our profession, these standards provide an appropriate alignment between the research protocol and the teacher education programs that produced the interview subjects. In the present study, middle level teachers who graduated in 2003 from an Ohio middle childhood teacher education program, one administrator from each of their schools, and a small group of three to five students per school participated in semi-structured interviews. The research team trained 29 volunteer interviewers who were college professors and graduate students from the Ohio Middle Level Professors group.

Results

The themes that emerged from the analyses provide insights for teacher educators about how well the middle childhood teacher candidates understood the middle school philosophy, which was articulated in their licensure program, and how, as teachers, they perceived concomitant implementation with young adolescents.

The data analyses revealed the following themes, presented below in the order of the standards: Student Rapport, Curriculum, Instruction and Assessment, and Family and Community Involvement. Each theme and its sub-themes are discussed below.

Student Rapport

Gathering and using information. All of the teachers in this study recognized the developmental characteristics and needs of young adolescents and did their best to provide learning opportunities to support the students in their classrooms. Most teachers began the school year by gathering information about their students in order to relate classroom activities, lessons, grouping, parent contacts, and other interactions to student interests and needs. One teacher exemplar described the range of information she gathered as "…discussions with students, I look at their cumulative folders, interests, attitude surveys, pre-tests, OAT [Ohio Achievement Test] scores." Across this study, teachers used a variety of tools and resources to gather information about their students including interest inventories, learning styles inventories, surveys sent home for parents to complete, student journal writing, information from cumulative folders, team meetings, and talking to teachers from the previous grade level.

Teachers used this information to plan lessons and activities: "I try to embrace the social skills that the middle schoolers have definitely mastered and try to do a lot of cooperative learning. And I try to stay flexible and allow the students to have a voice." Teachers used knowledge of preferred learning styles to establish rapport for successful classroom activities, "I do as much hands-on as I can. I think if they say it and do it and touch it, it is more meaningful and relevant." Teachers used the information they gathered about students to create rapport between and among peers for successful classroom interactions in group work and project-based learning. One teacher described it this way: "I am always picking groups or pairing people by ability or [by] leaders and non-leaders, or maybe leaders together so [that] they can battle it out and learn to work together." This teacher used the knowledge she gathered about her students to make those pairings.

Another way teachers used this information to create rapport was to connect with students outside the classroom. Students recognized the teachers' level of caring and participation in the life of the school when they saw their teachers at sporting events or other activities: "If you play sports, he would go to your games and spend time." Another student responded, "She goes to all the school stuff, like the choir performances and stuff like that" as evidence that his teacher cared about her students and the school.

Interactions with students. Positive interactions with students facilitate all aspects of the classroom. Both students and teachers in this study recognized the importance of positive teacher-student interactions and, in most cases, student-to-student interactions as well. For students, the most important interactions with teachers, the ones that they talked about repeatedly across the interviews, were those in which teachers treated them with respect, showed that they cared, and did not "make us feel stupid." One student explained:

> She helps. Like the way she shows me that she cares about me is she helps me with a lot of my work, like if I need help or anything. And she is not mean about it. She's not like, 'Oh, you don't know this.' She doesn't make you feel dumb or anything. She helps you out with whatever you need help on.

The concept of not making students feel "stupid" was echoed by many participants. Young adolescents are particularly vulnerable to feelings of embarrassment and humiliation, as illustrated in multiple responses reacting to how teachers showed that they cared by not invoking these feelings. Frey and Fisher (2008) focused a study on the effects of humiliation in middle schools, concluding that humiliation can affect several areas of a student's life and that teachers need to be talking about how they treat students, how students treat each other, and be more aware of grouping and instructional interventions that could cause students to feel humiliation in the school setting.

As evidenced through interactions with students, teachers appeared to lack an understanding of advisory programs deemed essential by *TWB.* When asked, teachers either did not know the term or had misconceptions. For example, one teacher responded, "The principal does—he has a principal's advisory committee … that changes from month to month. I don't know if he is still doing that this year." Teachers did describe homeroom or home base periods, but they were used for administrative tasks or intervention periods in preparation for achievement tests. Administrators knew the term "advisory," but none claimed to fully understand the concept or have had success implementing it. This administrator's example illustrates the problem:

> I was on the data team that kind of looked at our schedule and … looked at our needs based on our OAT scores, and so we've implemented an advisory kind of period next year. It's going to be a 28-minute [period] every day, [in] which every teacher in the building will have 15 or so students that they will [advise]. We're going to call it intervention/advisory, because they tried an advisory program a couple of years ago, and it was the last period of the day, and it really wasn't successful. So, we're hoping that [by] making it more of an intervention type of period, … it will be used in a better way.

Neither administrators nor teachers know what a successful advisory program should look like or accomplish. Neither administrators nor teachers know how to use advisory time to make it successful enough or valuable enough to the teachers and to the students that it becomes a sustained program, as this administrator explained:

> You know we only have so much time during the day, and, candidly, I have been a middle school administrator for 30 years and struggled with that for many, many years. … It would eat up a lot of my time and maybe it's my own failure that I was never able to get that in place to a point where I thought it was working the way that it should work. So, with that being the case, is that the best way to spend the time? So, with our focus on keeping the numbers in teams smaller, we have … a sustained silent reading period that all of the kids participate in and that's a small number with a teacher, but we do not do … that concept. … I've kind of given up the ship on that one.

None of the teachers in this study was able to successfully articulate what an advisory program is as defined by the National Middle School Association, and none worked in buildings with administrators who felt confident that they could schedule or design a successful advisory program.

Curriculum

Integrative curriculum. In the present study, most of the teachers discussed interdisciplinary teaching, and there was some evidence that curricular connections were made across content areas; however, the researchers consistently found that what the teachers described as interdisciplinary did not align with the true essence of integrative curriculum. Most often, what the teachers in this study described was no more than a multidisciplinary project that happened in parallel classrooms. One principal offered the following example:

> Two years ago they pulled off what they called Pioneer Day [as] part of a social studies curriculum, but they also implemented some science and math. They wrote about their experience, they had a big gathering outside [with] a bunch of parents involved; they had a feast, [and] they had activities for the kids to make it what that era looked like. It was very cool.

More often, integrative curriculum was seen as too time consuming. Another principal indicated that interdisciplinary teaching was implemented in a haphazard manner. He stated, "We do that

[integration], but it is not planned, more haphazard, depending on the teacher. The freshman teachers coming out of school are more willing to do that. Some of the older [ones] are not."

Developmentally responsive practice. An analysis of the data highlighted four specific examples of developmentally responsive practice: diverse teaching methods, cooperative learning, project-based learning, and student voice. We discuss each of the four examples.

Most teachers reported using diverse teaching methods. Viewed collectively, the use of these methods indicates student-centeredness, knowledge of constructivist philosophy, and adherence to the tenets of middle level instruction as recommended in *TWB* (NMSA, 2010). Only one teacher reported using direct instruction 100% of the time because she perceived that the students were inexperienced with group work and, therefore, could not handle it. This teacher noted, "They are all very used to just straightforward direct instruction, I guess. That's what they're used to; they kind of struggle with doing anything other than that." However, most teachers in this study recognized student differences from the information they gathered about their students and used that information to plan instruction. The following teacher response exemplifies the connection between student rapport and diverse teaching methods:

> We all learn in different ways—All children can learn, but in different ways. I think through appropriate teaching and appropriate strategies, students learn. Good teachers understand what strategies will work with individual students and what will work with others.

Teachers in the study showed evidence that they understood the importance of cooperative grouping with young adolescents and used it in well-structured and meaningful ways. One teacher stated, "I like to use a lot of cooperative learning and discovery of patterns and students discussing categories, depending on the content; sometimes I will have the students discover patterns and discover formulas and things." Additionally, some teachers indicated that they were intentional about their grouping practices, "I use a lot of grouping, not necessarily by ability, I do random grouping, groups based on behaviors." Overall, the frequency of responses indicated that the teachers recognized the developmental need for students to work collaboratively.

Current research finds that the implementation of project-based learning in middle level classrooms provides evidence of increased student achievement (NMSA, 2003), as well as increased subject matter understanding (Boaler, 1997). One teacher stated, "We do projects. We do a lot of projects. We did monthly book projects, and they had to read a book on their own every month, and then at the end of the month, they presented a project."

Some students reported having a voice and a choice in learning. "We get to pick about half of the day pretty much. [Our teacher] doesn't say—here's a book, read it. We get to pick what books we're reading and we get to pick what we want." Others reported a lack of choice. For example:

> We have an election, and we have an African American and a woman running for president, and that is pretty revolutionary. ... I know we aren't supposed to be doing American History, but we could touch on it. Everything is based around curriculum that leads up to the OATs. It is the only thing they care about.

Relevancy of curriculum. *TWB* (2010) posited that curriculum relevancy is necessary for a middle level school to be successful. A relevant curriculum affords students the opportunity "to pursue answers to questions they have about themselves, the content, and the world" (p. 2). Students should have opportunities "to study concepts and learn new skills in areas that interest them," but the learning of new concepts and skills, as determined by adults, must also occur (NMSA, 2010, p. 22). An administrator provided this example:

> A lot of kids around here want to be farmers and so, I know they did a farm project with their geometry and they had to build farms using different geometric shapes and figure out the volume and the area and all that stuff using that. We look at what their goals are in life and [try] applying it to sports because they are very into their sports. We try to apply it to anything that they like.

However, the teachers did acknowledge that relevance is sometimes difficult to achieve.

> I don't know that if it's just this age group or just this area, but kids have a real hard time seeing how things are relevant. They have a real hard time going home and seeing math in their everyday life. … I try. I really try. I use sports

> statistics; there is tons of math in every sport you can think of. I use that to show that you do use math outside the classroom. They really struggle seeing the relevance and connections.

Curriculum design and lesson planning. The majority of the teachers mentioned using the state academic content standards for planning. Additionally, the majority of teachers indicated they planned lessons with student differences in mind. For example, one teacher indicated, "The considerations I take into account is that big green book over there, the state tells me what I have to teach, but I try, I just think I know they're kids." There was also evidence of an ongoing struggle between teaching the standards and meaningful curriculum development. One principal stated, "Well, she doesn't plan the curriculum."

Differentiation in curriculum and instruction. Differentiated curriculum and instruction implies that teachers have clear learning goals and provide various avenues and support systems to maximize that chance of each student reaching the learning goals (Tomlinson, 2005). One teacher conceded the difficulty in creating a differentiated curriculum:

> I try to do my best to have some enrichment, to differentiate instruction; it seems to be a word more than anything. In theory it is wonderful, until you get it in your room, then it is very hard to do. I try to give options and project choices; sometimes it is successful, and sometimes it is not.

Two teachers described their curricula as layered, with instruction designed at several levels, using Bloom's Taxonomy to accomplish the differentiation.

Assessment

Informal and formal assessment strategies. Most of the administrators and the teachers reported the use of a variety of both informal and formal assessment strategies: bell ringers, exit tickets, discussions, homework, projects, rubrics/checklists, quizzes, and tests. Informal, formative assessment by its very nature is student-centered and an integral part of the teaching and learning process (Chappuis & Stiggins, 2008). Support for the student-centered, developmentally appropriate nature of formative assessment is evident in responses such as: "She does a 'bell ringer' at the beginning of class, they go over problems, and, at the end of class, she does a 'quick check'" and "We have discussed how is she assessing learning on a daily basis, and, again, we have talked about informal assessments, how is she closing her lesson on a daily basis, collecting that data through more informal, formative assessments rather than the final." One teacher summarized it best: "I do formative and summative. I do informal; I mean, one of my best things is just talk to me, just tell me." There was sufficient evidence of teachers using formative assessments to focus on learning. For example, a principal noted:

> I also think she's really big on daily assessment and even more so with her system where each kid gives an answer with an electronic clicker. I mean she gets immediate feedback, and she can take that data and set up her intervention strategies or change her lessons for the next day.

However, there was no evidence to suggest that students were taught how to self-assess. Heritage (2007) indicated that a key aspect of formative assessment requires that students be involved in their own assessment to help their teachers develop a shared understanding of what they need to do to move forward.

Use of assessment data to guide future instruction. Teachers demonstrated the use of assessment data to guide future instruction in three ways: 1) through pre-assessments, 2) through test-retest, and 3) through differentiated instruction. One teacher communicated the necessity of pre-assessing students in the following comment: "If I am doing a diagnostic and we're doing grammar, if they already understand everything they need to know about nouns, I am sure not going to start on nouns." Other interviewed teachers stated, "Reteach, reteach, reteach" and "There is a recycling, sometimes if I feel it is a majority, I wouldn't hesitate to go back and reteach it. If it is a group, we would reteach during study hall, do small groups." Yet another teacher stated, "You can look at grade level bands and the strands, do item analysis to see where they had weaknesses the previous year. You see where their weaknesses are and set up instructional strategies to meet the individual needs of students." Additionally, one principal indicated, "He tries to get a tiered lesson that kids can pick, whether it's going to be a project or writing assignment, or whatever, … so that they can use their talents to showcase that they really know the stuff."

Evaluating student progress. Although *TWB* suggests, "Grades alone are inadequate for reporting student progress…" (NMSA, 2010, p. 25), but our data show grades are still the primary, summative method for measuring student achievement in the classroom. Some of the interviewed teachers implied

that their assessment practice exemplified this belief; however, the researchers considered their grading practices to be somewhat ambiguous. One teacher made the following statement:

> I can look at my grades to tell you if I thought they were passing and mastering the concepts, but just because a kid isn't successful by grade doesn't mean that they're not mastering the concept. For example, if you have a special education kid, maybe they have never gotten above an F, and they're still not getting above an F, but you can see them mastering it, they're getting it. … Well, the grade doesn't always show that.

However, another teacher acknowledged that assessment is, essentially, "...grading homework and testing, definitely right or wrong."

Family and Community

Parenting skills. Little to no evidence emerged to suggest that the schools saw teaching parenting skills focused on the unique needs of young adolescents as a part of their role in the community. The primary area of parent and guardian involvement revolved around communication and this communication was mostly one-way from the teacher to the students' guardians.

Communication. On the whole, most teachers saw maintaining contact and having those communication lines open with parents and guardians as an important element in their work. In fact, one teacher stated that she "met 90% of her students' families," and another indicated, "I know I've talked to every parent on my team this year." Many of the teachers sought multitudinous ways to create this conversation: e-mails, letters, phone calls, websites, parent nights, open houses, and after-school functions. One teacher provided the following reasons for contacting parents: "I try having a phone call home once a week, once every other week, to let mom and dad know how things are going." Another teacher indicated, "I try to call for a lot positive things, too, especially with kids that might not get a lot of positive phone calls." An administrator provided one example of a teacher in his/her building who went beyond the basic elements of the above communication style. This teacher used a "coffee shop" in her classroom, in which her students shared their writings with the community and parents. Her administrator reported the following:

> She does a fifth grade coffee house in the fall—part of her language/poetry unit. The students write haikus. She gathers her whole team, her classroom and her partner's classroom. Last year they did it in the gym, this year the cafeteria. She brings all the kids in, they dress up, and they have a coffee house. She goes to the local coffee house, and the owner donated all the coffee for us this year, so that is one way she gets the community involved, parental involvement, you get community businesses involved—it is a huge, huge success.

Unfortunately, a number of negative examples of parental communication appeared as well. Many teachers talked about only contacting parents when there were problems with their students. Some stated that in middle school they "call parents less." One of the most telling conversations was a principal who indicated that the best sign of parent communication with his teacher was that "I never had a parent call me upset with something that Mr. M. has done." This lack of communication was more prevalent than expected. Additionally, the only true evidence of decision making occurring with the parents was through student-led conferences.

Volunteering. The data suggests there was some evidence that teachers saw the importance of involving parents in volunteering in the class. One teacher reported:

> We have involved them ... with some different activities and events that they come in and help with. We also have moms that come in to do reading with the students, that we do as a team. They sign up to come in, as far as curriculum; they will come in and read, do math flash cards, things like that.

Collaborating with the community. There was evidence of a number of community collaboration efforts that were single-day events. Many schools had one event that seemed to pull people together at least once a year, but minimal to no evidence materialized to demonstrate "appropriate partnerships with businesses, support service agencies, and organizations," as called for in *TWB* (NMSA, 2010, p. 41). Examples of the one-day events were as follows: reality day, career day, spelling bee, spaghetti dinner, Pennies for Patients, Veteran's Day Celebration. The coffee house project described previously was the only project that was truly supported by the community.

What was not evident in the above involvement activities was the deeper concept of understanding students' backgrounds by talking to their parents and learning their students' needs. In fact, there was some

evidence that parents were disenfranchised and discounted. For example, one teacher indicated the following:

> I don't think parents belong in the classroom. Obviously, I am going to call them if I want their support for something that is going on and to keep them informed as well—so that it doesn't become a home issue where the kid is grounded or whatever. But I don't think they necessarily need to be in my classroom. If they wanted to come and observe that is fine; it's not happened yet (laughs, knocks on wood).

Strong evidence suggests a negative response to parents based on socioeconomic class:

> Low socioeconomic students, the welfare recipients and those type of students, when they come from that background, they're not taught the value of an education; they're not pushed to do well, so those kids tend not to do very well. It's the ones where mom and dad work at whatever or have a degree or have gotten degrees in the past.

Unfortunately, the repeated mantra from interviewees was that there was "not much parental involvement." The exception to this was when a principal stated that one of his/her teachers had "a well-developed understanding of the surrounding community called 'The Bottoms.'" This teacher was able to explain how the area got its name and why the students call themselves "The Bottoms Kids." However, even she indicated that "it is very difficult to get the community involved in the classroom."

There has been extensive research for many years about the racial divide between teachers and their students, issues of white privilege, and the lack of cultural competence and social consciousness in teachers (Bradfield-Kreider, 2001; Howard, 1999; Ladson-Billings, 2001; McIntosh, 1989; Sobel & Taylor, 2001; Tatum, 1997). There have been increased requirements in teacher education to address multicultural education requirements (Bohn & Sleeter, 2000 & Bradfield-Kreider, 2001, Gay, 2000). However, according to this study, culturally responsive teaching is an area on which we, as teacher educators, must continue to focus much more of our attention.

Conclusions and Implications

One of the foundational middle level research studies (Felner et al., 1997) indicated that young adolescents had higher achievement, as measured by standardized tests, when they attended middle level schools with higher implementation levels of the middle school concept/philosophy (integrated curriculum, interdisciplinary teaming and instruction, advisory). However, the researchers in this study wanted to extend the research base by examining teachers' perceptions of their implementation of the middle school concept, as articulated in the teacher education program, even if the middle level schools where they were employed did not fully implement the middle school concept.

Aspects of specific teacher education programs were not the focus of the study. Analysis and evaluation of teacher education programs were not included but rather how new teachers applied the knowledge acquired from their programs. However, we contend that these findings are important for middle level teacher educators and that future research and discussion is warranted. The four conclusions and their implications for middle level teacher educators are discussed in the subsequent paragraphs.

The first conclusion that can be drawn from this study is that middle level prepared teachers display a strong knowledge of their students, and they use that knowledge to establish rapport. The establishment of rapport leads to improved cooperation and collaboration within the classroom between teacher and students and peer to peer. However, most schools were not structured to support the further development of rapport to meet the needs of young adolescents through an advisory program, and the data suggests the interviewed teachers had little to no understanding of advisory; therefore, they were not able to implement its principles or advocate for programs in their buildings. These findings are consistent with the research presented in *Research and Resources in Support of This We Believe* (NMSA, 2010), which indicated that advisory programs seldom function as theoretically planned and remain among the most difficult of the middle level practices to implement (NMSA, 2003). The implication of this finding is that teacher educators need to take middle level teacher candidates beyond advisory to advocacy. Regardless of the school structure, middle level prepared teachers must find ways to build opportunities to advocate for young adolescents beyond the individual classroom.

The second conclusion is that many of the middle level teachers spoke of curriculum, instruction, and assessment as separate concepts; these teachers had developed, at best, a rudimentary understanding of the principles and practices of middle level education, which was reflected in their flat, one-dimensional interview responses. On the other hand, some of the interviewed teachers displayed a complex, interconnected understanding of the concepts, which was reflected in their multi-dimensional responses. Two implications for teacher educators can be drawn from this analysis. First, teacher educators need to prepare graduates to move beyond the "checklist" of good teaching practices to a holistic understanding of high-quality middle level practices. Second, teacher educators need to help their graduates develop enduring understandings that are sustainable in the complex and pragmatic world of teaching.

A third conclusion surmised from analyses is that most of the interviewed teachers did understand the concept of interdisciplinary instruction, and they did work effectively as members of teaching teams; however, few teams implemented interdisciplinary instruction. Thus, the implication is that teacher educators need to prepare graduates to think and teach in interdisciplinary ways, even when the structure of the school does not fully support interdisciplinary instruction. For example, teacher educators must prepare their graduates to make connections to other content areas within the curriculum they teach in their own classrooms, instead of abandoning interdisciplinary instruction altogether.

The final conclusion drawn from the data analyses is that few of the interviewed teachers demonstrated a deep understanding of how to solicit the voice of parents/families in decisions about school policies and practices; nor were they able to demonstrate an understanding of how to collaborate with the community to develop a vested interest in the education of young adolescents. Thus, teacher educators need to provide experiences through which teacher candidates can become deeply aware of the community in which they are teaching (e.g., community mapping activities, home visitations) and support them in the development of community and parent projects in their schools.

In conclusion, this research supports the belief that "the most direct way to improve education is to improve the personal effectiveness of individual teachers" (Lounsbury, 1991, p. 18). It is essential that middle level teacher education programs provide future teachers with knowledge, skills, and dispositions that align with the middle school philosophy so that they develop and implement these "enduring understandings." This research represents an important first step in the qualitative study of the knowledge, skills, and dispositions middle level teacher candidates develop in their licensure programs. Future research is needed to replicate this study and to validate the interview protocols.

References

Beane, J. (1997). *Curriculum integration: Designing the core of democratic education.* New York, NY: Teachers College Press.

Boaler, J. (1997). *Experiencing school mathematics: Teaching styles, sex, and settings.* Buckingham, UK: Open University Press.

Bohn, A. P., & Sleeter, C. E. (2000). Multicultural education and the standards movement: A report from the field. *Phi Delta Kappan, 82*, 156–159.

Bradfield-Kreider, P. (2001). Personal transformations from inside out: Nurturing monocultural teachers' growth toward multicultural competence. *Multicultural Education, 8*(4), 31–34.

Brouwer, N., & Korthagen, F. (2005). Can teacher education make a difference? *American Educational Research Journal, 42*, 153–224.

Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing American youth for the 21st century.* New York, NY: Carnegie Corporation.

Chappuis, S., & Stiggins, R. (2008). Finding balance: Assessment in the middle school classroom. *Middle Ground, 12*(2), 12–15.

Cochran-Smith, M. (2005). Studying teacher education: What we know and need to know. *Journal of Teacher Education, 56*, 301–306.

Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education, 51,* 166–173.

Dewey, J. (1904). The relation of theory to practice in education. In C. A. McMurray (Ed.), *The relation between theory and practice in the education of teachers: Third yearbook of the National Society for the Scientific Study of Education, part 1.* Chicago, IL: The University of Chicago Press.

Dunn, R., Beaudry, J. S., & Klavas, A. (1989). Survey of research on learning styles. *Educational Leadership, 46*(6), 50.

Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappa, 76*, 701–712.

Epstein, J. L. (2005). School-initiated family and community partnerships. In T. O. Erb (Ed.), *This we believe in action: Implementing successful middle level schools* (pp. 77–96). Westerville, OH: National Middle School Association.

Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2002). *School, community, and community partnerships: Your handbook for action* (2nd ed.). Thousand Oaks, CA: Corwin.

Fan, X. T., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review, 13*, 1–22.

Felner, R., Jackson, A., Kasak, D., Mulhall, P., Brand, S., & Flowers, N. (1997). The impact of school reform for the middle years: Longitudinal study of a network engaged in Turning Points–based comprehensive school transformation. *Phi Delta Kappan, 78*, 528–532, 541–550.

Flowers, N., Mertens, S., & Mulhull, P. (2007). *Applying current middle grades research to improve classrooms and schools.* Westerville, OH: National Middle School Association.

Frey, N., & Fisher, D. (2008). The under-appreciated role of humiliation in the middle school. *Middle School Journal, 39*(3), 4–12.

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice.* New York, NY: Teachers College Press.

George, P. S., & Alexander, W. (2003). *The exemplary middle school* (3rd ed.). Belmont, CA: Thompson Wadsworth.

Heritage, M. (2007). Formative assessment: What do teachers need to know and do? *Phi Delta Kappan, 89*, 140–145.

Howard, G. R. (1999). *We can't teach what we don't know: White teachers, multiracial schools.* New York, NY: Teachers College Press.

Huss, J. A. (2004). Monitoring the middle school movement: Are teachers in step? *Current Issues in Education* [Online], *7*(2).

Jackson, A.W., & Davis, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century.* New York, NY &Westerville, OH: Teachers College Press & National Middle School Association.

Johnson, D. W., Johnson, R. T., & Stanne, M. B. (2000). Cooperative learning methods: A meta-analysis. Retrieved from http://www.clcrc.com/pages/cl-methods.html

Korthagen, F. (2007). The gap between research and practice revisited. *Educational Research and Evaluation, 13*(3), 303–310.

Ladson-Billings, G. J. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms.* San Francisco, CA: Jossey-Bass.

Lounsbury, J. (1991). *As I see it.* Westerville, OH: National Middle School Association.

McEwin, K., Dickinson, T., & Jenkins, D. (2003). *America's middle schools in the new century: Status and progress.* Westerville, OH: National Middle School Association.

McIntosh, P. (1989). White privilege: Unpacking the invisible knapsack. *Peace and Freedom*, July/August, 10–12.

Meeks, G., & Stepka, T. (2005). State-wide middle level implementation: Lessons learned. *Research in Middle Level Education Online, 29*(3), 1–17.

Mertens, S., Flowers, N., & Mulhall, P. (2005). How does middle grade teacher certification affect teacher practices and student learning? *Middle School Journal, 36*(5), 56–61.

National Forum to Accelerate Middle-Grades Reform. (2002). *Policy statement: Teacher preparation, licensure and recruitment.* Retrieved from http:mgforum.org

National Middle School Association. (2010). *This we believe: Keys to educating young adolescents.* Westerville, OH: Author.

National Middle School Association. (2010). *Research & resources in support of This We Believe.* Westerville, OH: Author.

National Middle School Association /National Council for Accreditation of Teacher Education (2001). *Initial level teacher preparation standards.* Retrieved from http://www.nmsa.org

Patton, M. (2002). *Qualitative research & evaluation methods.* Thousand Oaks, CA: Sage.

Scheeler, M., Bruno, K., Grubb, E., & Seavey, T. (2009). Generalizing teaching techniques from university to K–12 classrooms: Teaching preservice teachers to use what they learn. *Journal of Behavioral Education, 18*, 189–210.

Schultz, A. (1970). *On phenomenology and social relation*. Chicago, IL: University of Chicago Press.

Springer, M. (2006). *Soundings: A democratic student-centered education.* Westerville, OH: National Middle School Association.

Stake, R. E. (1998). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 86–109). Thousand Oaks, CA: Sage.

Stiggins, R., Arter, J., Chappuis, J., & Chappuis, S. (2007). *Classroom assessment for student learning: Doing it right—using it well* (pp. 29–51). Upper Saddle River, NJ: Pearson Education.

Tatum, B. D. (1997). *Why are all the Black kids sitting in the cafeteria? And other conversations about race.* New York, NY: Basic Books.

Taylor, S., & Sobel, D. (2001). Addressing the discontinuity of students' and teachers' diversity: A preliminary study of preservice teachers' beliefs and perceived skills. *Teaching and Teacher Education, 17*, 487–503

Tomlinson, C. A. (2005). Differentiating instruction: Why bother? *Middle Ground, 9*(1), 12–14.

Torff, B. (2005). Getting it wrong on threats to teacher quality. *Phi Delta Kappan, 87*, 302–305.

Van Voorhis, F. L. (2003). Interactive homework in middle school: Effects on family involvement and science achievement. *Journal of Education Research, 96*, 323–338.

Appendix A
TEACHER INTERVIEW PROTOCOL

Ohio Middle Level Professors Association
Middle Level Licensure Study
Teacher Interview Protocol

The purpose of this study is to describe the practices of middle level prepared teachers in Ohio with grades 4–9 licensure. The organizing framework for the interview questions is the National Middle School Association (NMSA) Initial Standards for Teacher Preparation. (The state-adopted standards for grades 4–9 middle level licensure in Ohio.)

NMSA Standard	Draft Interview Questions
Standard 1. ***Young Adolescent Development*** Middle level teacher candidates understand the major concepts, principles, theories, and research related to young adolescent development, and they provide opportunities that support student development and learning.	How would you describe the demographics of your students this year (in terms of gender, race/ethnicity, SES, learning needs/styles, maturity, etc.)? How do you become familiar with relevant aspects of your students' backgrounds and experiences? What impact, if any, does the diversity of your classes have on the learning environment? On your planning instruction? On your interactions with students and their families? On the instructional choices and decisions you make? Are there specific ways you address (1) the diverse learning needs of your students? (2) the cultural and social diversity in your classes? (3) the developmental needs and characteristics of your young adolescents?
Standard 2. ***Middle Level Philosophy and School Organization*** Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within these organizational components.	Is your school organized around an interdisciplinary team structure? If so, describe how teams function at your school? What are your team's goals? What does a typical team meeting look like? Describe your level of participation. What would you consider the strengths and weaknesses of your team? How could your team work be enhanced for you and your students? Does your team engage in any level of interdisciplinary unit planning or instruction? If so, what does this look like on your team? How do you, your colleagues, and your students respond to this type of curricular planning? What are the strengths and weaknesses of your current curricular practice? How could it be enhanced? Does your school currently have an advisor-advisee program in place? If so, what does this look like in your school? What is your level of participation in this program? What would you consider the strengths and weaknesses of the current practice or the benefits for staff and students? How could it be enhanced? [If the school does not have an advisory program, would you see benefits in instituting such a program? As a leader in the school, how might you encourage the administration and your colleagues to explore an advisory program?] How are students invited to be involved in the life of the school and classroom? What type of daily schedule does your school use? What are the strengths and weaknesses of this current schedule? Is the schedule currently meeting the needs of faculty and students? As a leader in the school, are there any suggestions you might put forth to enhance the current structures? How would you describe the current grouping structures in your school/classroom? What are the strengths and weaknesses of the way students are grouped? As a leader in the school, are there any alternative structures you might suggest? What would be your rationale for proposed changes?

Standard 3. ***Middle Level Curriculum and Assessment*** Middle level teacher candidates understand the major concepts, principles, theories, standards, and research related to middle level curriculum and assessment, and they use this knowledge in their practice.	What are some of the considerations you take into account when planning your curriculum? Would your students say that the curriculum you teach is meaningful and relevant to them? If so, what do you do to make the curriculum meaningful and relevant? [If not, why not? Are there obstacles? How might these obstacles be overcome?]
Standard 4. ***Middle Level Teaching Fields*** Middle level teacher candidates understand and use the central concepts, tools of inquiry, standards, and structures of content in their chosen teaching fields, and they create meaningful learning experiences that develop all young adolescents' competence in subject matter and skills.	Are you currently teaching in one or both of your licensed teaching fields? How would you assess your level of knowledge in your teaching content areas? How do you go about adding to your content knowledge base?
Standard 5. ***Middle Level Instruction and Assessment*** Middle level teacher candidates understand and use the major concepts, principles, theories, and research related to effective instruction and assessment, and they employ a variety of strategies for a developmentally appropriate climate to meet the varying abilities and learning styles of all young adolescents.	If an administrator or guest to the school were to walk by your classroom at any given moment, what would they see going on? When you are at your best, how would the students characterize your teaching? Describe the instructional strategies you most often use in your classroom. Why do you use these particular strategies? How would you assess their effectiveness? Are students successful in your classroom? How do you know that your students are successful in your classroom? Are some individuals or groups of students more successful than others? How do you account for the differences? How do you respond to these differences? Describe the assessment strategies you most often use in your classroom. Why do you use these particular strategies? How do you use assessment information to plan for instruction and for monitoring student progress? When individuals or groups of students are not successful in meeting the goals and objectives you have set, how do you respond? How would you describe the learning environment you have created in your classroom? How would your students describe it? When you think about the type of environment you want to create, what are the important elements you believe must be present? What are the principles that guide your thinking about the learning environment? What are the major management issues you face on a daily basis in your classroom? What management strategies do you use to address student behaviors? How would your administrator describe your management style and your effectiveness in this area? Your students?

Standard 6. ***Family and Community Involvement*** Middle level teacher candidates understand the major concepts, principles, theories, and research related to working collaboratively with family and community members, and they use that knowledge to maximize the learning of all young adolescents.	How would you characterize your relationships with your students' families? How would your students and their parents/guardians characterize their relationship with you? What role do you see parents playing in your school/classroom? Have you, in any way, involved the community in your planning and instruction, and/or are your students involved in the community as a part of the school's mission or as part of the curriculum?
Standard 7. ***Middle Level Professional Roles*** Middle level teacher candidates understand the complexity of teaching young adolescents, and they engage in practices and behaviors that develop their competence as professionals.	How would you characterize your relationships with other personnel in your school? What role do these relationships play in your effectiveness as a middle level teacher? Can you provide examples when you have worked collaboratively with others in the school for the benefit of the students? How could these relationships be enhanced in your school? How satisfied are you, at this moment, as a middle school teacher? If satisfied, what factors contribute to this high level of satisfaction? [If not, what factors contribute to your lack of satisfaction?] How well do you believe your specialized middle level teacher preparation program prepared you to be successful in teaching young adolescents? Have you taken any leadership positions in your school or district? If so, what is the nature of these positions, and why did you get involved? Have you engaged in any professional development? If so, describe these experiences. How have the professional development experiences enhanced your effectiveness as a middle level teacher? Are there other areas of professional development you feel you need to enhance? What three "I Believe" statements would best define your philosophy of teaching young adolescents?

Appendix B
ADMINISTRATOR INTERVIEW PROTOCOL

Ohio Middle Level Professors Association
Middle Level Licensure Study
Admnistrator Interview Protocol

The purpose of this study is to describe the practices of middle level prepared teachers in Ohio with grades 4–9 licensure. The organizing framework for the interview questions is the National Middle School Association (NMSA) Initial Standards for Teacher Preparation. (The state-adopted standards for grades 4–9 middle level licensure in Ohio.)

NMSA Teacher Preparation Standards	**Interview Questions**
Standard 1. ***Young Adolescent Development*** Middle level teacher candidates understand the major concepts, principles, theories, and research related to young adolescent development, and they provide opportunities that support student development and learning.	Is the teacher aware of the demographics of his/her students this year (in terms of gender, race/ethnicity, SES, learning needs/styles, maturity, etc.)? How does the teacher become familiar with relevant aspects of his/her students' backgrounds and experiences? Does the teacher respond to the diversity of his/her class in regard to the learning environment? The planning of instruction? The interactions with students and their families? In the instructional choices and decisions he/she makes? Are there specific ways the teacher addresses (1) the diverse learning needs of his/her students, (2) the cultural and social diversity in his/her classes, and (3) the developmental needs and characteristics of young adolescents?
Standard 2. ***Middle Level Philosophy and School Organization*** Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within these organizational components.	Is your school organized around an interdisciplinary team structure? If so, describe how teams function at your school. What does a typical team meeting look like? How does this teacher participate in teaming at the school? How would teaming, if applied, advance instruction? Does the teacher develop interdisciplinary unit planning or instruction? If so, what does this look like? Does your school currently have an advisor-advisee program in place? If so, what does this look like in your school? What is the teacher's level of participation in this program? How does the teacher invite students to be involved in the life of the school and classroom? What type of daily schedule does your school use? What are the strengths and weaknesses of this current schedule? Is the schedule currently meeting the needs of faculty and students? Does the teacher use the current schedule in meaningful ways to improve student learning?
Standard 3. ***Middle Level Curriculum and Assessment*** Middle level teacher candidates understand the major concepts, principles, theories, standards, and research related to middle level curriculum and assessment, and they use this knowledge in their practice.	What are some of the considerations the teacher takes into account when planning his/her curriculum? Would students in this teacher's classroom claim that the teacher develops curriculum that is meaningful and relevant to them? [If so, what does he/she do to make the curriculum meaningful and relevant?]

Standard 4. ***Middle Level Teaching Fields*** Middle level teacher candidates understand and use the central concepts, tools of inquiry, standards, and structures of content in their chosen teaching fields, and they create meaningful learning experiences that develop all young adolescents' competence in subject matter and skills.	Is this teacher currently teaching in one or both of their licensed teaching fields? How would you assess his/her level of knowledge in your teaching content areas? How does he/she go about adding to his/her content knowledge base?
Standard 5. ***Middle Level Instruction and Assessment*** Middle level teacher candidates understand and use the major concepts, principles, theories, and research related to effective instruction and assessment, and they employ a variety of strategies for a developmentally appropriate climate to meet the varying abilities and learning styles of all young adolescents.	If you walked by this teacher's classroom at any given moment, what would you see going on? What would the teacher be doing? What would the students be doing? Describe the instructional strategies you see most often used in this teacher's classroom. How would you assess his/her effectiveness? Are students successful in this teacher's classroom? How does the teacher know if students are successful in his/her classroom? How does the teacher account for differences in student achievement? How does the teacher respond to these differences? Describe the assessment strategies this teacher uses most often in his/her classroom. How does he/she use the information to plan instruction and for monitoring student progress? When individuals or groups of students are not successful in meeting the goals and objectives set, how does the teacher respond? How would you describe the learning environment the teacher has created in his/her classroom? How would students in his/her classroom describe it? What are the major management issues this teacher faces on a daily basis in his/her classroom? What management strategies does he/she use to address student behaviors? How would you describe his/her management style and his/her effectiveness in this area?
Standard 6. ***Family and Community Involvement*** Middle level teacher candidates understand the major concepts, principles, theories, and research related to working collaboratively with family and community members, and they use that knowledge to maximize the learning of all young adolescents.	How would you characterize this teacher's relationships with his/her students' families? How would the students and their parents/guardians characterize their relationship with the teacher? Has this teacher, in any way, involved the community in his/her planning and instruction and/or are his/her students involved in the community as a part of the school's mission or as part of the curriculum?

Standard 7. ***Middle Level Professional Roles*** Middle level teacher candidates understand the complexity of teaching young adolescents, and they engage in practices and behaviors that develop their competence as professionals.	How would you characterize this teacher's relationships with other personnel in your school? Has this teacher worked collaboratively with others in the school for the benefit of the students? How satisfied do you believe the teacher is, at this moment, as a middle school teacher? [If satisfied, what factors contribute to this high level of satisfaction?] [If not, what factors contribute to his/her lack of satisfaction?] How well do you believe his/her specialized middle level teacher preparation program prepared him/her to be successful in teaching young adolescents? Has he/she taken any leadership positions in your school or district? [If so, what is the nature of these positions, and why did he/she get involved?] Has he/she engaged in any professional development? Describe the experiences. How have they enhanced his/her effectiveness as a middle level teacher? Are there other areas of professional development you feel this teacher needs to enhance his/her effectiveness?

Appendix C

STUDENT INTERVIEW PROTOCOL

Ohio Middle Level Professors Association
Middle Level Licensure Study
Student Interview Protocol

The purpose of this study is to describe the practices of middle level prepared teachers in Ohio with grades 4–9 licensure. The organizing framework for the interview questions is the National Middle School Association (NMSA) Initial Standards for Teacher Preparation. (The state-adopted standards for grades 4–9 middle level licensure in Ohio.)

(***NMSA Teacher Preparation Standards** have been aligned to each question and are found after the question by number.)

1. Let's think about Mr./Ms._____'s classroom.
   - What is it about Mr./Ms. _____ that helps you learn the most?
   - What types of teaching strategies does Mr./Ms. _____ use that help you learn?- **V**
   - Do you think Mr./Ms. _____ cares about you? How do you know? In what way?- **I**
   - Is there anything about this classroom that gets in the way of your learning?- **V**

2. Do you think that Mr./Ms _____ knows you well? How do you know? Are there things you wish Mr./Ms. _____ did know about you that would help him/her understand you better?- **I**

3. Do you think that Mr./Ms. _____ expects you to do your best work in his/her class? How do you know? What does he/she do that helps you do your best?- **VI**

4. On a scale of 1–5, with 5 being the most, how much do you agree with each of the following statements when you think about Mr./Ms. _____?
   - I have fun learning. (probe – What makes it fun?)- **III**
   - I have choices in what I learn. (probe – What kinds of choices?)- **III**
   - I feel part of a team.- **II**
   - My teacher treats me with respect.- **I**
   - My teacher listens to my ideas.- **I**
   - We're always doing interesting and different things in class.- **III**
   - My teacher understands what I'm going through. (How do you know?)- **I**
   - I am challenged by the work my teacher asks me to do.- **III, V**
   - My teacher really knows a lot about the subjects he/she teaches.- **IV**

   (Probing questions could be used for some of these questions based on the students' responses.)

5. Are your parents involved in your school? Does Mr./Ms. _____ do anything to help get your parents involved in your classroom or school?- **VI**

6. When you have trouble in school with your schoolwork or with another student, who do you turn to for help? Why do you turn to this person? (Possibly, if they don't mention the teacher being studied, we might ask, Would you ever think to ask Mr./Ms. _____ for help in this situation? Why, or why not?)- **II**

Appendix D

Table 1
Building configurations to define middle level

Building Configuration	
Grades 5–6	2
Grades 5–8	1
Grades 6–8	9
Grades 7–8	2

Table 2
Participants

Participants	Male	Female
Teachers	4	10
Administrators	12	2
Students	22	22

Table 3
Grade levels of classrooms studied

Grade Levels	
5th	1
6th	5
7th	2
8th	6

Table 4
Primary content areas of teacher participants

Content Areas	
Language Arts	3
Math	5
Science	3
Social Studies	3

Table 5
Coursework beyond bachelor's degree for teacher participants

Degree Completed	
Master's Administration	1
Master's of Education/ Curriculum	7
Hours Toward Master's	1
None	3
No Report	2