

## Article

# A Case Study of Responsive Middle Grades Education in a Laboratory Middle School in the USA

David C. Virtue \*  and Holly H. Pinter 

School of Teaching and Learning, Western Carolina University, Cullowhee, NC 28723, USA; hhpinter@wcu.edu

\* Correspondence: dvirtue@wcu.edu

**Abstract:** This case study describes responsive approaches to middle grades education and teacher education at Laboratory Middle School (LMS), a subunit of the college of education in a public university in the southeastern USA. LMS was established with a mission to serve rural students who had experienced struggles in the regular school system and to serve as a clinical site for the preparation of middle grades teachers, counselors, and school nurses. Many students at LMS have faced challenges due to physical or cognitive exceptionalities or because of traumatic experiences. Thus, programs and practices in the school must respond to the developmental stage of the young adolescents whom it serves, as well as the many varied individual needs of the learners. The conceptual frame for the study is “responsiveness” as defined by seminal middle-level literature (e.g., *This We Believe*), and the theoretical underpinnings are constructed from theories of stage–environment fit and human ecology. The study employs a case study design and qualitative methods of data collection and analysis. The case report describes the LMS context and details manifestations of responsiveness at LMS organized in three categories: (a) culture and community; (b) curriculum, instruction, and assessment; and (c) leadership and organization. The authors offer four sets of implications for the design and delivery of responsive programming in middle-level schools: (a) a holistic approach to young adolescent education; (b) commitment to continuous improvement; (c) theoretical pragmatism in pedagogical practices, programs, and policies; and (d) engagement of preservice teachers in immersive field experiences.



**Citation:** Virtue, D.C.; Pinter, H.H. A Case Study of Responsive Middle Grades Education in a Laboratory Middle School in the USA. *Educ. Sci.* **2023**, *13*, 549. <https://doi.org/10.3390/educsci13060549>

Academic Editors: Cheryl R. Ellerbrock and Ashlee Highfill

Received: 28 April 2023

Revised: 23 May 2023

Accepted: 24 May 2023

Published: 26 May 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** case studies; laboratory schools; middle-level education; responsive teaching; USA

## 1. Introduction

Successful middle-level schools respond to the nature and needs of young adolescent learners [1]; yet, the ways in which different middle-level schools exhibit responsiveness to learners can vary based on many factors. Demographics, culture, public policies, and availability of resources are just several sets of factors that may influence the ways in which a school enacts responsiveness. Moreover, individual teachers in the same middle-level school may have varying expectations and understandings of responsiveness. Teachers who complete a nationally recognized middle-level educator preparation program will have a sound understanding of young adolescent development and classroom environments that respond appropriately to their nature and needs [2]. However, many states do not require specialized educator preparation for teachers of young adolescents, and even in places with such requirements, teacher shortages have led to the proliferation of lateral entry and alternative preparation programs that emphasize content area expertise and give short shrift to young adolescent development [3]. Because responsiveness is both *vital* to middle grades education and *variable* in its manifestations, researchers must look inside the “black box” of schools and classrooms [4,5] to describe and document responsiveness in diverse settings.

The present study paints a portrait of responsive middle level education in the context of a rural laboratory middle school that serves as a learning environment for young

adolescents in Grades 6–8 and as a clinical site for the preparation of middle grades teachers. Laboratory Middle School (LMS, a pseudonym) was established in 2017 to fulfill a state mandate that public universities establish laboratory schools. The state mandate requires laboratory schools to operate as public schools of choice and charges them with improving student performance and providing innovative training for teachers and principals to successfully address challenges in high-needs areas. Currently, LMS is one of six laboratory schools in the state, and the only middle school. The mission of LMS is to serve young adolescents who are not successful in traditional middle-level school settings. Thus, the student population includes a high percentage of students who have exceptionalities, have experienced trauma, and have had adverse childhood experiences (ACEs). In addition to serving as a clinical site for the middle grades education program, LMS hosts students, interns, and faculty researchers in the health and physical education, counselor education, and nursing programs.

### 1.1. Conceptualizing Responsiveness

The conceptual frame for the study is “responsiveness” as defined by seminal middle-level literature (e.g., *This We Believe* [1]), and the theoretical underpinnings are constructed from theories of human development (e.g., [6–8]) and stage–environment fit (e.g., [9]). Responsiveness has long been a core concept in middle-level education. Interestingly, William Alexander’s seminal 1963 address, “The Junior High School: A Changing View,” did not use the phrase “developmentally responsive” [10]. A review of the foundational literature in the field shows the concept of “developmental responsiveness” emerging later in the 1960s and 1970s as the field of developmental psychology matured. Thus, the idea of developmental responsiveness as a conceptual framework for middle-level programming is underpinned by theories of developmental psychology [7], human ecology [11], and social psychology [8].

The marriage of the middle school concept and developmental psychology crystallized in the 1980s and 1990s with the publication of *Turning Points* [12] and the revisioning in 1995 of *This We Believe* [13], the official position statement of the National Middle School Association (now the Association for Middle Level Education [AMLE]), which carried the subtitle *Developmentally Responsive Middle Level Schools*. According to the 1995 document:

Middle level education is the segment of schooling that encompasses early adolescence, the stage of life between the ages of 10 and 15. In order to be developmentally responsive, middle level schools must be grounded in the diverse characteristics and needs of these young people. It is this concept that lies at the heart of middle level education. (p. 5)

However, by the mid-1990s, middle-level scholars also came to recognize that being responsive to the developmental nature and needs of young adolescents was not enough; the concept of “responsiveness” would have to become more expansive. As Erb noted, advances in knowledge about human diversity, cognition, and neuroscience would require “supplementing Piaget in defining pedagogical approaches for promoting intellectual development among young adolescents” [14] (p. 2). Further, Lounsbury observed, “Developmentally responsive middle schools must take into account all that is known about young adolescents *and* the cultural context in which they live” [15] (p. 3, emphasis added). Accordingly, the latest iteration of *This We Believe* reflects a shift away from developmental responsiveness—that is, responsiveness primarily as responding to aspects of a young adolescent’s maturation and development (e.g., psychosocial, cognitive, physical)—toward a holistic understanding of responsiveness as responding to all facets of development as well as to a student’s culture and identity [1].

According to Bishop and Harrison, responsiveness is an “essential attribute” of successful middle-level schools characterized by the way a school uses “the distinctive nature and identities of young adolescents as the foundation upon which all decisions about school are made” [1] (p. 8). In such a school, everyone strives to make sure the school environment aligns with the characteristics of the young adolescents it serves, which is what Eccles and

colleagues called “stage-environment fit” [16,17]. To help middle grades educators fit their school environments to the nature, needs, cultures, and identities of their students, Bishop and Harrison provide a nonexhaustive list of 44 physical, cognitive, social–emotional, and psychological characteristics of young adolescents and the associated implications for educators [1]. In addition, AMLE has created resources to help schools implement the tenets of *This We Believe*, including a book study, online courses, a self-assessment, and a school recognition program [18].

### 1.2. Related Research

Here, we review literature related to our case study. We conducted online searches of the ERIC database and relevant middle-level publications (e.g., *Middle Grades Review*) to locate three types of studies: (a) case studies that used a middle-level school(s) as the “case” or unit of analysis; (b) school-level case studies of “responsive” middle-level schools, using constructs such as belonging and stage–environment fit as proxies for responsiveness; and (c) studies situated in our focal school, LMS.

Case studies of middle level schools have been widely used to illustrate program characteristics, document implementation of policies and innovative programs, and contextualize processes and issues in middle grades education. For example, the middle-level literature includes case studies describing how a school cultivates a sense of belonging and an ethic of care [19,20]; the implementation of a restorative justice approach to school discipline [21]; grassroots capacity-building efforts [22]; how a school offers “critically conscious, culturally responsive, social justice education” [23] (p. 2); and the development of school–university partnerships [24–26]. In each of these examples, case study methodology allows the researchers to holistically examine the phenomena under investigation and clearly describe complex relationships and interactions.

The extant literature includes a few school-level case studies focused specifically on the concept of responsiveness. Ellerbrock et al. conducted a year-long, multisite case study to determine teacher practices that may support students’ basic and developmental needs across the middle-to-high-school transition [27]. Through an analysis of extensive qualitative data (e.g., individual and focus group interview transcripts, observation notes, artifacts) from 23 participants, the authors identified a set of relational and academic teacher practices that helped support students during transitions. While the specific practices and the degree of responsiveness varied from site to site, the researchers found a consistent pattern supporting the warm demanding teaching stance as a promising approach. Ziomek-Daigle et al. used a middle school case study to illustrate how a multitiered system of supports (MTSS) can be integrated with a comprehensive school counseling program to create a responsive school environment [28]. In the focal school, response to intervention (RTI) and positive behavioral interventions and supports (PBIS) provided the framework to address the academic and behavioral needs of all young adolescents. Similarly, Goodman-Scott et al. used a qualitative single-case study design to provide a rich description of PBIS implementation in an urban middle school [29]. The authors found that PBIS was associated with positive outcomes, which they attributed to strong administrative leadership, consistent implementation, and a positive school community in which school counselors were well integrated.

As a laboratory school associated with a public university, LMS has been the site of several studies. Barron et al. investigated the use of coteaching at LMS with a focus on the diverse perspectives of general education teachers, special education teachers, and preservice teachers [30]. The researchers found that coteaching provided a nurturing culture for young adolescent learners and a supportive environment for preservice teachers. Some keys to successful implementation were a shared commitment to a child-centered philosophy, strong administrative leadership, and flexibility on the part of faculty. Pinter studied the use of a mediated field experience (MFE) for teacher candidates at LMS and the adjustments made to function in an online environment during the pandemic [31]. During the MFE, teacher candidates completed a learning cycle focused on experiencing

mathematics as a learner, planning for mathematics instruction, implementing mathematics instruction, and analyzing teaching episodes alongside a mathematics teacher who is also the mathematics teacher educator for a methods course. Teacher candidates reflected on this experience positively, noting the benefits of learning how to teach effectively online in a safe and supportive environment. Strahan and Poteat conducted action research at LMS focused on the implementation of social-emotional learning (SEL) and its connection to outcomes in English language arts for three focal students [32,33]. The students were able to understand and apply concepts related to SEL and enhance their understanding of the literature with guidance and support from the teacher. The research also underscored the critical role of reflection in making these connections.

### 1.3. Purpose and Significance

While numerous case studies have opened up the “black box” of middle-level schools, few have focused on laboratory school settings, and none have offered a systematic and holistic treatment of responsiveness as conceptualized in the latest iteration of *This We Believe* [1]. The purpose of our study was to provide a nuanced description of responsive practices at LMS. The research question that guided our study was: *How does LMS enact responsiveness for young adolescents and middle grades teacher candidates?* Our aims were (a) to inspire responsive programming in middle grades schools by providing examples of the possible; (b) instruct middle grades educators who plan to implement responsive practices by highlighting successes and critically examining tensions, challenges, and contradictions; and (c) inform the direction of middle-level research by raising questions for further inquiry.

## 2. Materials and Methods

To provide a detailed analysis and description of responsive practices at LMS, we decided to employ a case study design [34] with qualitative methods of data collection and analysis [35].

### 2.1. Research Design

Our research design was a single, instrumental case study [36] with a focus on one concept—responsiveness—as enacted at LMS. By definition, a case study represents a bounded system [34]. Our focal case, LMS, was bounded in several ways: spatially and geographically, with our focus on a single, physical school site; temporally, with our focus on the 2021–2022 and 2022–2023 school years; and conceptually, with our focus on responsiveness as defined by Bishop and Harrison [1].

### 2.2. Site Selection and Positionality

We purposefully selected LMS as an “accessible case” of responsive middle grades education [37] (p. 100). Both authors are tenured faculty in the middle grades education program at the university associated with LMS and have ongoing research projects at the school. The first author is a member of the LMS advisory board and supervises interns at the school, while the second author is a member of the LMS advisory board, supervises interns at LMS, serves as the liaison between the university and the lab school, and has an appointment as the Math 1 course teacher at LMS. Thus, both researchers had access to the site where they engaged in participant observation and were able to offer insights and interpretations from both emic and etic perspectives [37] (p. 94).

### 2.3. Data Sources and Collection

To provide “an in-depth understanding,” case study researchers “collect and integrate many forms of qualitative data” [37] (p. 98). Our data sources included formal and informal observations at LMS, reflective notes and journal entries, secondary source material [30–33, 38], and 150 pages of documents, including advisory board meeting agendas and minutes, official school communications (e.g., handbooks, websites), and school newsletters collected during the 2021–2022 and 2022–2023 school years.

## 2.4. Data Analysis

Our approach to data analysis followed the data analysis spiral described by Creswell and Poth [37]. The iterative, nonlinear process begins with data collection and results in a narrative account of the findings. The spiral includes the following elements:

- Managing and organizing the data.
- Reading and memoing emergent ideas.
- Describing and classifying codes into themes.
- Developing and assessing interpretations.
- Representing and visualizing the data.

Following Miles and Huberman [39], we reduced our data and performed initial coding using an a priori set of three codes derived from *This We Believe* [1]: culture and community (CAC); curriculum, instruction, and assessment (CIA); and leadership and organization (LAS). Within these three categories, we aggregated relevant instances of responsiveness and responsive practices [36] and then constructed narrative accounts of our findings [37].

## 3. Case Study Results

In our case report, we first describe the LMS program and general context and then discuss manifestations of responsiveness at LMS organized in three categories drawn from *The Successful Middle School: This We Believe*: (a) culture and community; (b) curriculum, instruction, and assessment; and (c) leadership and organization [1] (p. 9).

### 3.1. The LMS Context

LMS serves up to 75 students in Grades 6–8. The LMS model focuses on young adolescents who have not exhibited success in a traditional school setting. To be admitted to the school, a student must live within the county and either be from a low-performing school as measured by state report cards or exhibit special needs related to academic, social-emotional, or behavioral areas. The special needs are wide-ranging, including students who met end-of-grade proficiency but earned poor grades; exhibited extreme behavioral issues; demonstrated a lack of growth progress over time or did not meet growth targets; or experienced social-emotional issues or contextual factors such as trauma or familial issues. About three-fourths of LMS students were previously enrolled in nearby public schools, and others were homeschooled or enrolled in private schools. The percentage of students considered economically disadvantaged is approximately 60%, which is higher than the percentage for the surrounding county. The special education population is 20–25% of total enrollment each year, far exceeding local (16%), state (12%), and national (12%) averages. LMS has consistently enrolled a number of students considered twice exceptional: having qualifying needs in special education as well as AIG (academically and intellectually gifted).

The school is housed in a wing of the local high school approximately 3.5 miles from the university campus, and the dean of the College of Education serves as the superintendent of the school. LMS students are taught by experienced teachers who hold advanced degrees in their content areas. The instructional and administrative staff includes:

- A principal;
- An administrative support specialist/data manager;
- An exceptional children (EC) teacher, who also serves as assistant principal;
- An exceptional children (EC) director, who is a tenured faculty member in the special education program;
- A counselor;
- An enrichment coordinator;
- A university nursing instructor, who serves as the health services coordinator and part-time nurse;
- A university physical education professor, who serves as the physical education teacher;



- An English language arts teacher;
- A mathematics teacher;
- A social studies teacher;
- A science teacher; and
- A university liaison who also serves as a mathematics instructor and field supervisor.

In addition, the LMS model incorporates university faculty and preservice teacher interns, as well as high school students and staff, as additional support for students. LMS also has an advisory board, as mandated by statute, that includes the dean, the superintendent of the local school district, a member of the university's Board of Trustees, two faculty from the educator preparation program, a community member, and up to four other stakeholders.

A key feature of the LMS model is a three-level approach (L1, L2, L3) to teacher preparation. L1 engagements begin in the sophomore year, when preservice teachers all take a course related to culturally responsive teaching, in which they participate in 1–3 h of observation at the school and analyze their initial perceptions of teaching practices. During L2 experiences, candidates engage in in-depth observations and begin planning and implementing mini-lessons with small groups of students. L2 experiences are embedded in three courses during the junior fall—foundations of the middle school curriculum, a seminar connected to the foundations course, and a mathematics methods course—and in methods coursework during the spring. LMS teachers serve as instructors for some of these courses, which allows them to instruct candidates in the real-world context of an actual middle school environment. L3 is the intern experience, which is divided into two semesters during senior year, culminating with student teaching in the spring. LMS is one of several schools where candidates are placed for L3 internships.

L3 interns at LMS are carefully selected by the faculty and have access to several key supports and affordances. Because LMS only has one class at each grade level, interns gain experience teaching the standard course of study in their teaching fields at three different grade levels, 6–8. LMS interns participate in a wide range of meaningful professional learning opportunities, including some optional professional development that occurs before the start of the school year. Most importantly, LMS interns become part of a close-knit community of educators that includes university faculty and staff, with whom they have ongoing communication and connections.

The LMS model has many responsive structures, programs, and practices that serve both young adolescent learners and middle grades preservice teacher-learners. We highlight these features of LMS in the next three sections.

### 3.2. Culture and Community

Successful middle-level schools are characterized by safe, welcoming, inclusive environments in which adults value, relate with, and advocate for young adolescent learners. Such schools collaborate productively with caregivers and business and community members who serve as valued partners in the school's educational mission [1]. These cultural and community characteristics are evident in the program at LMS in many ways: through relationship building and social and emotional learning (SEL); through the data-driven multitiered system of support (MTSS) that includes a positive behavior intervention and support (PBIS) system; and through aspects of the physical and sonic environments.

The LMS commitment to relationships and SEL is evident in the school's purpose statement: "[LMS is a] learning community where all students are valued and care for themselves and others. We promote health and wellness and a commitment to learning through experience in a caring, collaborative, and socially just environment" (*LMS Strategic Plan*). Adult members of the LMS community cultivate relationships grounded in trust and mutual respect. LMS teachers described some of the ways intentionally model behaviors associated with such relationships: they strive to consistently use positive, inclusive language; yield to one another in conversations; offer help and assistance when needed; and respect one another's instructional time and space.

Interns at LMS experience relationship building firsthand and witness its cultural, social, and academic impacts. As an intern recently noted:

Relationally, the students have become very close with us [the interns]. LMS really allows for the opportunities to create those conversations. It really makes for a different teaching experience and being able to know their needs as I actively plan a lesson.

One of the core educational values expressed in the LMH handbook is “an intentional focus on social and emotional development.” SEL is embedded in daily life at LMS, and students at LMS tend to experience SEL as an integrated construct—inextricably connected to classroom instruction—rather than a “stand-alone” intervention, as recommended by Main and O’Neil [40]. Strahan and Poteat described how SEL was emphasized in advisory classes and reinforced across the curriculum at LMS at the time of their study:

Each day, students spent twenty minutes in grade-level advisory groups. A primary focus of these sessions was guided exploration of social-emotional issues . . . related to themes of self-awareness, relationships, responsibility, motivation, talents and interests, organizational skills, diversity, community, and coping skills. Teachers encouraged students to make connections among these issues and the topics they are studying in their classes. [32] (p. 4)

Since Strahan and Poteat’s study, advisory at LMS has become a weekly stand-alone class facilitated by the full-time counselor, with lessons tailored to the needs of the students and a curriculum built alongside the Second Step program. In addition, students have a daily homeroom time that is very focused on teachers checking with individual students and modeling and supporting self-regulation skills, such as using to-do lists to update their agenda books. Once per week, the entire school meets for a Village Homeroom, with announcements from the principal, student and staff shoutouts, and an open floor for students to ask questions or offer thanks to a peer or teacher. The SEL interventions at LMS are associated with positive academic outcomes (see [32]).

The heart of the student-centered culture at LMS is the MTSS framework implemented within a “Community of Care” approach. The primary academic focus of the three-tiered system is student growth in core content areas, particularly literacy and mathematics, and the social/emotional focus is on student resiliency.

In the MTSS model, academic and social/emotional skills are addressed in three tiers. The first tier is the instruction of skills or strategies that apply to the whole population in terms of supporting their academic and behavioral success. The second tier applies to those who need slightly modified strategies to address their needs. Tier three applies to students who are in the most severe need of individualized, heavily modified strategies for success. Social and emotional factors also play a large part in students’ ability to access the content of classroom instruction.

The behavior component of MTSS is based on a system of PBIS that includes a school-wide behavior framework. Students are included in the development of classroom and school-wide PBIS expectations through a democratic classroom approach and morning grade-level meetings. Thus, the systems are directly linked to academic outcomes and include student buy-in. After a review of the data, it became clear that the students needed direct instruction on resiliency to promote positive behaviors and academic outcomes. A resiliency matrix was developed with daily lessons that are used by teachers during advisory time to directly teach students these skills. The PBIS system includes behavior expectations, rewards, and consequences that students and teachers develop collaboratively and review throughout the year. When issues arise, students and teachers address the problem together in daily morning meetings or in regularly scheduled whole school meetings. The aim is for all members of the community to work together to define the issue and set daily goals to improve the environment.

The physical and sonic environments at LMS have several attributes that contribute to its responsive culture. Signs and posters celebrating diversity, equity, and inclusion

(DEI) are prominently displayed throughout classrooms and common spaces in the school. Signage also supports the SEL emphasis on resiliency, such as “FAIL = First Attempt in Learning” and “Confusion is part of learning.” Throughout the day, the young adolescents and adults in the school encounter these visual reminders of the values underpinning the school and associated behavioral expectations. Faculty are very intentional about reminding students that they are in a safe space where they will be valued and affirmed for who they are. Flexible seating arrangements also support inclusivity by bringing students together in ways that foster collaboration and sharing. The sounds in a school—what students hear during the day—contribute to the school environment in subtle, but powerful, ways [41]. Faculty strive to use positive, affirming words when they interact with students. Faculty also reinforce and model DEI by using inclusive, nongendered language. They refer to LMS community members as “humans” or “learners” instead of addressing them with binary, gendered labels such as “boys and girls.”

### 3.3. Curriculum, Instruction, and Assessment

In successful middle-level schools, curriculum, instruction, and assessment are responsive to the needs of the young adolescents the school serves [1]. LMS exhibits responsiveness in this domain in several ways: through project-based curricula, differentiated instruction, and standards-based assessment.

LMS implemented schoolwide PBL beginning in January 2023. The LMS teachers explained some of the benefits of PBL in a letter they sent home to caregivers:

A project motivates students to gain knowledge, and they remember content longer. Projects give students the chance to apply the skills they learn in school to personally relevant and real-world situations. Your child also learns skills in PBL such as how to think critically, solve problems, work in teams, and make presentations. These skills will help students succeed in the future, both in school and in today’s work world.

LMS adjusted the Friday schedule to provide an extended class time to focus on PBL. The overarching PBL question was: “How can [LMS] support student health and wellness”? Students worked together in mixed-grade-level groups based on their interest in the topic. The project was interdisciplinary, and LMS teachers guided student learning through the lenses of their content areas—including the arts. Students worked with community mentors and presented their products to an authentic audience at the end of the 12-week project.

Responsive, differentiated instruction is a hallmark of the academic program at LMS. Teachers use feedback from informal and formative assessments and from the MTSS system to make data-based instructional decisions, and these data coupled with deep knowledge of individual students help teachers differentiate for varied levels of readiness, wide-ranging interests, and diverse learning profiles [42]. Classrooms at LMS are inclusive settings, and coteaching has been used with some success as a way to differentiate for learners across the spectrum of readiness (see also [30]). In cotaught classrooms, preservice interns at LMS learn in real time how to appropriately tier and adjust instruction from different perspectives. As one intern observed of her coteaching experience:

While I learn a lot about my content area from working with my [clinical educator], co-teaching with the [special education] teacher provided me with the opportunity to learn much more about differentiation than I would have otherwise. Her expertise is based on differentiating for students with an extremely wide range of strengths and needs, and [at LMS] . . . all of these students were put together in one classroom. Planning with a co-teacher who works outside of your own content area allows you to see things from their perspectives. [38] (p. 5)

LMS uses a schoolwide system of standards-based assessment, which is widely regarded as a responsive approach to assessment in the middle grades [1,43]. Standards-based assessment focuses on mastery of content and provides opportunities for students to continuously improve based on feedback. Teachers assign scores for graded work on a four-point



scale: Exceeds Standards (4), Meets Standards (3), Progressing (2), Emerging (1), or No Evidence (0). The grading policy is described in more detail in the next section. The standards addressed in a given quarter are listed on report cards and progress reports, with student progress aligned directly to the standards.

### 3.4. Leadership and Organization

LMS exhibits responsive leadership practices and organizational structures that are characteristics of successful middle-level schools. These practices and structures include flexible scheduling, professional learning communities (PLCs), and student-centered policies and programming.

LMS utilizes flexible scheduling as a tool to be responsive to students. In addition to core instruction every day, during blocks of time in the afternoon, students alternate between enrichment classes, an intervention class called CAT time, and core academic courses. The core instruction time is adjusted flexibly, as needed, to better serve student and teacher needs. For example, if one class tends to show lower focus during the last block, the school might shift the blocks of instruction so that a different content area is being taught at that time for a quarter or semester. This allows teachers and students to engage with each other at alternative times of the day that might be more productive for students. Additionally, a large block of time is reserved on Friday for PBL, electives, and clubs.

At LMS, job-embedded professional development occurs in professional learning communities (PLCs). According to Bishop and Harrison, teachers in successful middle level schools “establish [PLCs] to discuss shared readings, student data and work, and instructional and assessment strategies” [1] (p. 50). The PLCs at LMS function in this way, and they also include preservice interns who learn and work alongside veteran teachers in the school.

In successful middle-level schools, “policies and practices are student-centered, unbiased, and fairly implemented” [1] (p. 46). The LMS grading policy is an example of a student-centered policy. The four-point scale allows teachers to communicate actional feedback to a student about mastery of content. The levels on the scale are described in the LMS student handbook:

- Exceeds Standards (4): Student possesses a deep understanding of a standard and is able to demonstrate this by completing advanced applications of materials using a variety of formats, such as—but not limited to—oral presentations, projects, rubrics, standardized assessments, and teacher-made assessments. Exceeding the standard does not mean the student is finished working with the standard, as activities and units may tie back into this standard.
- Meets Standards (3): Student has shown an increasing knowledge of the standard and is able to show mastery of the complex, targeted knowledge and skills for the class in one or two formats, such as—but not limited to—oral presentations, projects, rubrics, standardized assessments, and teacher-made assessments.
- Progressing (2): Student understands the foundational materials that support the targeted learning, but is still working to master the complex materials of the class.
- Emerging (1): The student is able to demonstrate an understanding of the foundational materials for the class with help from the teacher, but still struggles when working independently.

A zero (0) indicates “No Evidence.” According to the handbook, “The student has not demonstrated any understanding of the foundational materials for the class. This may be the result of non-participation in class or not attempting assignments/assessments that would otherwise be evidence of their understanding of the course standards.” Additionally, students may receive feedback for noncore instruction and behavior in the form of Satisfactory (S) or Unsatisfactory (U). A recent preservice intern reflected on the impact of standards-based grading on her personal philosophy of assessment:

I will ensure that my grades reflect the communication of student progress in my classroom. . . . As an intern at [LMS] and incorporating standards-based grading,

I have seen first-hand how grading and communication go hand in hand. Are we effectively showing students understanding of content if we are giving zeros for missing work or deducting point for not putting their names on assignments.

#### 4. Discussion and Implications

In this section, we highlight four areas that have implications for the design and delivery of responsive programming in middle-level schools: (a) LMS takes a holistic approach to young adolescent education; (b) the faculty and staff are committed to continuous improvement; (c) educators exhibit theoretical pragmatism in their pedagogical practices, programs, and policies; and (d) preservice teachers engage in immersive field experiences.

##### 4.1. Holistic Approach

LMS enacts a holistic approach to responsive middle-level education. The school embraces the Centers for Disease Control and Prevention (CDC) Healthy Schools initiative and its Whole School Whole Community Whole Child (WSCC) model [44]. The model includes 10 components that work in concert to promote the wellbeing of students and all members of the school community: (a) physical education and physical activity; (b) nutrition environment and services; (c) health education; (d) social and emotional climate; (e) physical environment; (f) health services; (g) counseling, psychological, and social services; (h) employee wellness; (i) community involvement; and (j) family engagement.

The holistic approach at LMS reflects the idea expressed in *The Successful Middle School: This We Believe* that each element of responsive programming “is part of a larger whole” [1] (p. 6). Each part of the WSCC model helps promote wellbeing and supports the overall academic program. LMS created the mission statement of the school based on the WSCC model, with particular attention to the social and emotional climate as the starting point for all the other components. Acknowledging that each of these ten components are not mutually exclusive, LMS faculty know that impacting one of them will likely have a trickle effect to others and that it is this interdependence among the components that makes a fully functional whole. Teachers also recognize that some of these components may be more important to a particular student on a particular day, and they utilize times such as homeroom to perform check-ins with students to assess what those ever-changing needs might be on a daily basis. The small size of LMS—with one class per grade level—also allows the teacher team to communicate the individualized needs of students throughout the day to ensure everyone is positioning students for success each day.

##### 4.2. Continuous Improvement

A commitment to continuous improvement is a key aspect of responsiveness. The faculty and staff at LMS demonstrate a school-wide commitment to continuous improvement in various ways. Regular weekly PLC meetings provide opportunities for ongoing learning and planning, and formal professional development is scheduled before the school year and after the school year as well as throughout the year. The topics for professional development reflect the LMS commitment to responsiveness; recent topics include resiliency, executive functioning, general EC services, and the Welcoming Schools antibias training offered by the Human Rights Campaign. Future topics include restorative justice and coteaching. These professional learning opportunities are offered to both LMS teachers and preservice teacher candidates.

LMS faculty, university faculty, and preservice teachers often attend and present at conferences together, and these experiences sometimes provide a catalyst for further growth. For example, a team from LMS attended the AMLE Institute for Middle Level Leadership in 2022, and that experience led to a faculty book study of *The Successful Middle School: This We Believe* [1]. LMS teachers used guiding questions provided by AMLE to collectively reflect on strengths and areas of potential growth for the school. First, the teachers rated from most to least the extent to which they believe the school program exemplifies the essential attributes of responsive, challenging, empowering, equitable, engaging. The teachers

tended to rate responsiveness as the greatest strength of the school, followed closely by empowering and engaging. The area in which teachers felt the school had room for growth was offering a curriculum that is challenging and equitable. From this conversation, the teachers set goals in these areas to highlight throughout the book study.

Focusing on aspects of the curriculum, specifically, the teachers overwhelmingly mentioned the use of school-wide PBL as a mechanism for providing a challenging, integrative, and exploratory curriculum. One teacher mentioned several attributes of the school that she thought reflected a challenging curriculum, including classroom inclusivity, after-school tutoring, study hall with one-on-one support, CAT time intervention (a targeted intervention block), a flexible curriculum, and modality to deliver instruction to students. Other teachers focused on strengths in an exploratory curriculum, noting the use of field trips, mentorship, community involvement, advisory, electives, and clubs. Many of these components also include student voice and choice. Other teachers cited some areas of need in thinking about a challenging and diverse curriculum—perhaps a need to rethink some grading practices. While the school uses standards-based grading, some teachers think that it may be worth looking into competency-based grading and the use of contracts with students to bolster challenge. Several of the teachers highlighted a diverse curriculum as an area for growth—specifically finding opportunities to discover, reflect on, and question their own cultural and social identities. Overall, the *Successful Middle School* book study has been a powerful, productive inspiration for continuous improvement.

#### 4.3. Theoretical Pragmatism

Educators at LMS use whatever theoretical tools necessary to teach the whole child. Observations of classroom instruction and interpersonal interactions between and among adults and young adolescents at LMS suggest deep commitments to constructivist and humanistic approaches to learning. Students engage in active, social learning during class, and school policies tend to prioritize students' individuality and creativity. In contrast, the PBIS program, which is an important component of the SEL program, is grounded in behaviorism with its system of rewards and incentives. In addition, the "Minor Discipline Policy" unveiled in January 2023 takes a punitive rather than restorative approach to behavior management, which exists in tension with the humanistic and constructivist theories of learning that underpin much of the academic program. Teachers, staff, and administrators at LMS work through these and other theoretical and philosophical tensions and contradictions to continuously adapt the school program in ways that best meet the needs of the students. Teachers continue to mention restorative justice practices as an area of interest and need that the entire team of teachers, counselors, nurses, and administrators needs to buy into for the model to be successful.

#### 4.4. Immersive Preservice Experiences

As we described in Section 3.1, middle grades majors have a scaffolded progression of experiences with LMS teachers and students across their sophomore, junior, and senior years. These experiences give preservice candidates an immersion into the life of the school, especially during L3 internships. Candidates at LMS work very closely with their assigned clinical educators, but they also participate as members of the instructional team, which includes all core and exploratory teachers, administrators, and staff. They engage in weekly PLCs, caregiver conferences, field trips, and community events, as well as professional development, and the preservice candidates often make substantive contributions in these areas. Where most preservice candidates begin their yearlong internships at the start of the university calendar, candidates at LMS are invited into the professional fold before the school year even begins, with invitations to participate in all schoolwide professional development and community engagement activities, such as the school's opening picnic, where LMS staff initially meet and engage with families. Furthermore, it is not uncommon for middle grades preservice candidates to team-teach with one another or to collaborate with interns from counselor education or inclusive education. Interns at LMS are provided

a seat at the decision-making table from day one. They are encouraged to share their ideas and actively participate as if they were already teachers, all while being supported and guided by their clinical educators at every step. The LMS case illustrates the value of immersive field experiences in which preservice candidates engage in all aspects of the work of the school; by the time they finish their internships at LMS, candidates are very well prepared to assume the role of a licensed middle grades teacher. The fact that preservice teachers also engage across all three grade levels provides them a unique experience with a vertical alignment of standards and the curriculum that is uncommon in internship experiences, which by and large are dedicated to a single grade level and content area.

## 5. Conclusions

Responsive middle-level education aims to orient a school's policies, programs, and practices toward the unique needs, identities, and cultures of the young adolescent learners it serves. Responsiveness takes many forms depending on the school context, the beliefs and dispositions of the faculty and staff, expectations of the community, and a host of other factors. Here, we described responsive practices at LMS, a university laboratory school committed to the education of both young adolescents and the future educators who wish to learn to work with them. The example of LMS highlights several key features of middle-level school structures that allows for truly responsive education. At this school, we see master-level teachers who are trusted by their administrators to make sound instructional choices to support middle-level students (and teacher candidates). This is accomplished through flexibility, autonomy, and creativity in how instructional practices are implemented. Responsive middle-level education depends on a commitment to lifelong learning and acknowledging the ever-changing landscape of education. To stay current, teachers and administrators must continue to be reflective of practices and procedures to continually improve upon existing models to best serve our student population.

**Author Contributions:** Both authors contributed equally to all research and writing processes. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of Western Carolina University (Protocol: 2022-06-23-01, Analyzing student and teacher responses to LMS; Continuation approval 29-Jul-2022).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data excerpts are reported in this study. Full data sets are not publicly available due to privacy and confidentiality concerns.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Bishop, P.A.; Harrison, L.M. *The Successful Middle School: This We Believe*; Association for Middle Level Education: Westerville, OH, USA, 2021.
2. Bishop, P.A.; Nagle, J.F. The case for specialized middle grades teacher preparation. *Middle Grades Rev.* **2016**, *2*, 1–3.
3. Howell, P.; Faulkner, S.; Cook, C.; Miller, N.; Thompson, N. Specialized preparation for middle level teachers: A national review of teacher preparation programs. *RMLE Online* **2016**, *39*, 1–12. [[CrossRef](#)]
4. Black, P.; William, D. Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan* **1998**, *80*, 139–148. [[CrossRef](#)]
5. Long, M.H. Inside the “black box”: Methodological issues in classroom research on language learning. *Lang. Learn.* **1980**, *30*, 1–42. [[CrossRef](#)]
6. Bronfenbrenner, U. *The Ecology of Human Development: Experiments by Nature and Design*; Harvard University Press: Cambridge, MA, USA, 2009.
7. Piaget, J. Piaget's theory (G. Gellerier & J. Langer, Trans.). In *Carmichael's Manual of Child Psychology*, 3rd ed.; Mussen, P.H., Ed.; Wiley: New York, NY, USA, 1970; Volume 1, pp. 703–732.
8. Vygotsky, L.S. *Mind in Society: The Development of Higher Psychological Processes*; Harvard University Press: Cambridge, MA, USA, 1978.

9. Midgley, C.; Middleton, M.J.; Gheen, M.H.; Kumar, R. Stage-environment fit revisited: A goal theory approach to examining school transitions. In *Goals, Goal Structures, and Patterns of Adaptive Learning*; Midgley, C., Ed.; Lawrence Erlbaum Associates Publishers: New York, NY, USA, 2002; pp. 109–142.
10. Alexander, W.M. The junior high school: A changing view. *NASSP Bull.* **1964**, *48*, 15–24. [CrossRef]
11. Bronfenbrenner, U. Toward an experimental ecology of human development. *Am. Psych.* **1977**, *32*, 513–531. [CrossRef]
12. Carnegie Council on Adolescent Development. *Turning Points: Preparing America's Youth for the 21st Century*; Carnegie Corporation: New York, NY, USA, 1989.
13. National Middle School Association. *This We Believe*; NMSA: Columbus, OH, USA, 1995.
14. Erb, T. If “this we believe,” how are we doing? And do we need to be doing something else? *Middle Sch. J.* **1994**, *26*, 2. [CrossRef]
15. Lounsbury, J.H.; Key Characteristics of Middle Level Schools. ERIC Digest (ED401050). 1996. Available online: <https://files.eric.ed.gov/fulltext/ED401050.pdf> (accessed on 16 March 2023).
16. Eccles, J.S.; Midgley, C. Stage/environment fit: Developmentally appropriate classrooms for early adolescence. In *Research on Motivation in Education*; Ames, R.E., Ed.; Academic Press: New York, NY, USA, 1989; Volume 3, pp. 139–186.
17. Eccles, J.S.; Midgley, C.; Wigfield, A.; Buchanan, C.M.; Reuman, D.; Flanagan, C.; Mac Iver, D. Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *Am. Psychol.* **1993**, *48*, 90–101. [CrossRef] [PubMed]
18. Association for Middle Level Education. The Middle School Model and Successful Middle School Program. Available online: <https://www.amle.org/the-successful-middle-school-this-we-believe/> (accessed on 4 March 2023).
19. Ellerbrock, C.; Kiefer, S.M.; Alley, K.M. School-based interpersonal relationships: Setting the foundation for young adolescents' belonging in middle school. *Middle Grades Res. J.* **2014**, *9*, 1–17.
20. Kiefer, S.M.; Ellerbrock, C. Supporting young adolescent motivation in school through an adolescent-centered community of care. In *International Handbook of Middle Level Education Theory, Research, and Policy*; Virtue, D.C., Ed.; Routledge: New York, NY, USA, 2020; pp. 161–178. [CrossRef]
21. Weaver, J.L.; Swank, J.M. A case study of the implementation of restorative justice in a middle school. *RMLE Online* **2020**, *43*, 1–9. [CrossRef]
22. Seward-Linger, R.; Dowden, T.; Andrews, D. Building capacity for grassroots reform: An Australian case study. *Asia Pac. Educ. Rev.* **2022**, *23*, 221–232. [CrossRef]
23. Milne, A. Where am I in our schools' white spaces? Social justice for the learners we marginalise. *Middle Grades Rev.* **2016**, *1*, 2.
24. Howell, P.B.; Deweese, A.; Gnau, A.; Peavley, L.; Sheffield, C. Enacting a mission for change: A university partnership for young adolescents. *Middle Grades Rev.* **2017**, *3*, 1.
25. Ruben, B.; Becker, L. Rowe Middle School/SDEP partnership: Growing great teachers in a win-win arrangement. In *Clinical Preparation at the Middle Level: Practices and Possibilities*; Howell, P., Carpenter, J., Jones, J., Eds.; Information Age: Charlotte, NC, USA, 2016; Handbook of Resources for Middle Level Education Volume 2, pp. 147–165.
26. Williams, T.M.; Virtue, D.C.; Smith, D.E. Working hand-in-hand to strengthen preservice teacher education: The development of a middle level PDS partnership in South Carolina. In *Clinical Preparation at the Middle Level: Practices and Possibilities*; Handbook of Resources for Middle Level Education; Howell, P., Carpenter, J., Jones, J., Eds.; Information Age: Charlotte, NC, USA, 2016; Volume 2, pp. 119–134.
27. Ellerbrock, C.R.; Abbas, B.; DiCicco, M. Developmentally responsive teacher practices across the middle-to-high-school transition. *J. Res. Educ.* **2014**, *24*, 17–37.
28. Ziomek-Daigle, J.; Goodman-Scott, E.; Cavin, J.; Donohue, P. Integrating a multi-tiered system of supports with comprehensive school counseling programs. *Prof. Couns.* **2016**, *6*, 220–232. [CrossRef]
29. Goodman-Scott, E.; Hays, D.G.; Cholewa, B.E. “It takes a village”: A case study of positive behavioral interventions and supports implementation in an exemplary urban middle school. *Urban Revivo* **2018**, *50*, 97–122. [CrossRef]
30. Barron, T.L.; Pinter, H.H.; Winter, K.K. Supporting student and preservice teacher successes through co-teaching. *Theory Pract. Rural. Educ.* **2019**, *9*, 65–78. [CrossRef]
31. Pinter, H.H. Mediated field experiences during worldwide pandemic: Adjusting pedagogies to a changing climate. *Curr. Issues Middle Level Educ.* **2020**, *25*, 13–18. [CrossRef]
32. Strahan, D.B.; Poteat, B. Middle level students' perceptions of their social and emotional learning: An exploratory study. *RMLE Online* **2020**, *43*, 1–15. [CrossRef]
33. Strahan, D.B.; Poteat, B. Extending research on SEL in the middle grades. In *Dialogues in Middle Level Education Research Volume I*; Routledge: New York, NY, USA, 2022; pp. 193–202. [CrossRef]
34. Yin, R.K. *Case Study Research: Design and Methods*; Sage: Thousand Oaks, CA, USA, 2014.
35. Creswell, J.W.; Creswell, J.D. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed.; Sage: Thousand Oaks, CA, USA, 2018.
36. Stake, R.E. *The Art of Case Study Research*; Sage: Thousand Oaks, CA, USA, 1995.
37. Creswell, J.W.; Poth, C.N. *Qualitative Inquiry & Research Design: Choosing among Five Approaches*, 4th ed.; Sage: Thousand Oaks, CA, USA, 2018.
38. Boyles, A. *Co-teaching Reflection. Undergraduate Honors Project*; Western Carolina University: Cullowhee, NC, USA, 2022.
39. Miles, M.B.; Huberman, A.M. *Qualitative Data Analysis*, 2nd ed.; Sage: Thousand Oaks, CA, USA, 1994.



40. Main, K.; O'Neil, M.A. Social and emotional learning in the middle grades. In *Literature Reviews in Support of the Middle Level Research Agenda*; Mertens, S.B., Caskey, M.M., Eds.; Information Age Publishing: Charlotte, NC, USA, 2018; pp. 155–174.
41. Wozolek, B.; Gershon, W. Ethnography and middle level education. In *The International Handbook of Middle Level Education Theory, Research, and Policy*; Virtue, D.C., Ed.; Routledge: New York, NY, USA, 2020; pp. 293–302.
42. Tomlinson, C.A.; Moon, T.R. *Assessment and Student Success in a Differentiated Classroom*, 2nd ed.; ASCD: Arlington, VA, USA, 2013.
43. Wormeli, R. *Fair Isn't Always Equal*, 2nd ed.; Stenhouse: Portland, ME, USA, 2018.
44. Centers for Disease Control. Whole School, Whole Community, Whole Child (WSCC). CDC Healthy Schools. Available online: <https://www.cdc.gov/healthyschools/wsc/index.htm> (accessed on 4 March 2023).

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.