

Hearing Brief

Date: May 17, 2024 **Prepared By**: Hathaway

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Landscape Review: Middle School Education

The middle school years often evoke a vivid image in the minds of educators, families, policymakers, and youth themselves as an immense transitory period marked by significant physical, cognitive, and emotional changes. While this mix of perceptions and associations can often evoke uncertainty and a negative view, middle school years also hold promise as a crucial time for students to experience lasting academic growth, individual development, and maturing of social skills amidst the challenges and opportunities of early adolescence.

As a time of unique blending of social, cognitive, and emotional transitions, middle school serves as a cornerstone in the educational continuum. Understanding the intricacies of middle school and its inherent complexities is paramount to LESC's ongoing work to better serve students in New Mexico.

This policy brief endeavors to define and describe middle school education, highlight New Mexico specific statutory information and data about middle school structures, summarize the developmental nuances inherent in early adolescence, and propose to the committee a plan to study these educational years during the 2024 legislative interim. Through an in-depth summary of these topics, this brief offers initial insight into middle school structures, synthesizes research on the middle school years, and lays the groundwork for an informed policy response that prioritizes the development and academic success of New Mexico's young adolescent learners.

Defining Middle School

In the context of education in the United States, middle school most often refers to grades six through eight. While seemingly straightforward, some middle schools may serve down to grade five or up to grade nine, and may also serve a smaller set of grades, such as middle school sites specifically for sixth graders, more narrowly for seventh and eighth graders, or another unique combination of grades.

In recognition of this complexity, the Association for Middle Level Education (AMLE), an international organization focused on middle school education, notes a true middle school is "one that has been planned and organized to address the developmental and cultural needs of students ages 10 to 14," which largely includes grades six through eight,

Key Takeaways

Middle school often evokes a negative perception, but it is also a time for crucial growth, intervention, and youth development.

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Middle school is usually described as serving grades 6-8, but is better understood as any grade serving children aged 10-14 years old.

Pages 1-2

Students in grades 6-8, or ages 10-14, show up in many New Mexico school structures that are not strictly middle schools.

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Outcomes begin to take a negative turn in middle school, making it a crucial time to intervene.

Page 4

There are six key principles to effective middle school education.

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but may also include grades five and nine, depending on the ages of students in a classroom. This focus on age and corresponding adolescent stage, rather than specific grades, can help frame the educational needs inherent to students in the "middle" of their kindergarten through 12th grade educations.

What About Junior High?

At their inception, middle schools <u>aimed</u> to establish distinct educational philosophies compared with junior highs, which themselves emerged in response to increasing school enrollment during the expansion of secondary education in the first half of the 20th century. During this period, school grades became increasingly segmented, with junior high schools typically serving students in grades seven through nine, but often functionally mirroring high school models. As noted in <u>research</u>, however, the emergence of middle schools in the 1960s marked the onset of a national "<u>middle school movement</u>," driven by growing evidence and knowledge about the specific developmental needs and stages of young adolescents. Educators and policymakers engaged in the middle school movement embraced principles such as interdisciplinary instruction, team teaching, advisory periods, and flexible scheduling to foster supportive and engaging learning environments more responsive to young adolescent needs.

The core distinctions between middle schools and junior high schools primarily lie in their structural organization and developmental focus—middle schools were conceptualized as distinct environments that would offer a transitional space tailored to younger learners while junior high schools continued to closely resemble high schools. In practice, this meant middle schools were designed to focus more on relationships between educators

"Middle school" and "junior high" were once distinct terms representing significantly different educational philosophies. However, most junior highs now resemble middle schools, and these terms are often used interchangeably.

and students and offer more support and structure to students than a high school model would.

Although the terms "middle school" and "junior high school" initially represented distinct concepts, today's junior high schools often resemble middle schools. This blurring of distinctions has led to these terms sometimes being used interchangeably in today's educational landscape.

Middle School in State Law

New Mexico state law formally defines four specific grade classifications in the Public School Code: 1) Elementary school; 2) Secondary school; 3) Junior high school; and 4) High school. Despite only defining "junior high school," the term "middle school" is frequently used and recognized in state law and administrative rule. Additionally, the Public School Code, in Section 22-1-2 NMSA 1978 does define a "public school" as "that part of a school district that is a single attendance center in which instruction is offered by one or more teachers and is discernible as a building or group of buildings generally recognized as either an elementary, middle, junior high or high school or any combination of those and includes a charter school."

Still, the term middle school—most accurate for the majority of schools in New Mexico serving grades six through eight—does not carry a formal definition. For reference, Section 22-1-3 NMSA 1978 defines a junior high school as "a public school providing a junior high school program approved by the state board [department] for grades seven through nine, or for grades seven and eight."

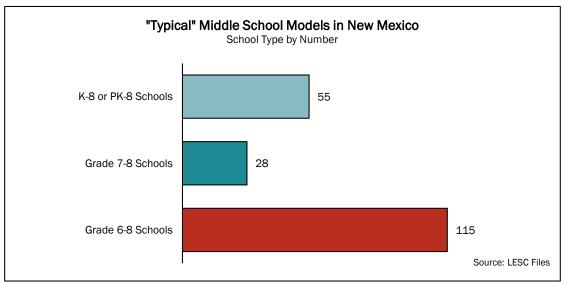


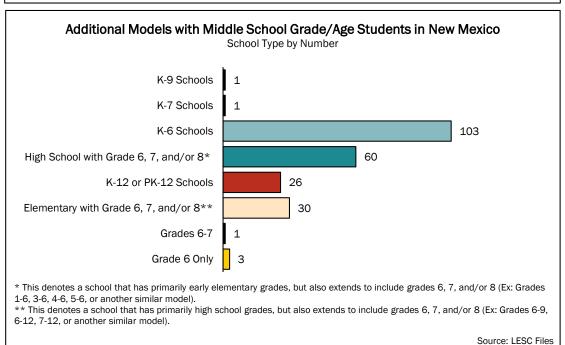
New Mexico Structures

National research shows "typical" models of middle school fall into one of three main types: 1) Kindergarten or prekindergarten to grade eight schools (K-8 or PK-8); 2) Grade six through eight schools; or 3) Grade seven and eight schools. LESC staff analysis shows that of these typical models, most middle schools in New Mexico serve grades six through eight (115 schools). Despite this, students in middle

Most traditional middle schools in New Mexico are structured to serve grades six through eight, but students in these grades show up in many school models.

grades (six, seven, or eight) show up in many schools outside of these typical structures. The graphs below show a count of school types, segmented by typical models and less typical models. This means that many schools in New Mexico serve middle grades, whether technically middle schools or not. As LESC studies educational practices for students ages 10-14, it will be important to keep in mind these students are in many schools statewide and as a result, effective strategies may be widely applicable.



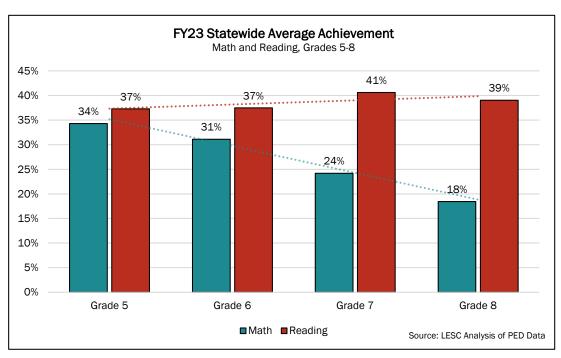


LESC staff will review geographic, demographic, and structural trends associated with each of these models, as well as student outcomes in these various models. While national research to date has not found a clear relationship between a specific middle school model and student outcomes, LESC staff will look at outcomes specific to New Mexico and assess this for any relevant trends as the committee determines policy actions to best serve students between the ages of 10 and 14. In particular, research has shown any point of transition (for example, moving from elementary to middle school, middle to high school, or even between schools) in a student's academic journey can pose challenges, so investigation into this topic will consider how middle school models ease, create, and otherwise influence the academic transitions a student may go through.

New Mexico Middle School Outcomes

In recent years, LESC has prioritized the issue of secondary school redesign with a focus on middle and high school students. This work has been spurred by data that shows several concerning outcomes begin to emerge in middle school years: lower student achievement rates, increased rates of chronic absence, and decreased school engagement all begin to develop in middle school.

For example, national survey results show that in sixth grade, about 67 percent of students are engaged in school, but this begins to drop over middle school to 54 percent in seventh grade, 45 percent in eighth grade, and ultimately, 34 percent in 12th grade. Further, achievement levels also begin to decline in middle school. While analysis of FY23 assessment data shows reading achievement is holding somewhat steady in middle school years, mathematic achievement declines in each grade as middle school progresses. For example, in FY23 data, proficiency rates in mathematics peak in fifth and sixth grade (34 percent and 31 percent, respectively), but begin to fall in later grades with 24 percent proficiency in seventh grade, 18 percent proficiency in eighth grade, and 15 percent proficiency in 11th grade. Intervening in middle school years could offer an opportunity to keep students on track academically, allowing for continued growth across the educational spectrum rather than decreased engagement and reduced academic achievement.





Young Adolescent Development

Comprehensive <u>summaries</u> of adolescent development completed by the AMLE, as well as extensive bodies of compiled <u>research</u>, have found that young adolescents—generally defined as ages 10 through 15 years old—have specific and nuanced needs, particularly across four domains: 1) Physical development; 2) Cognitive development; 3) Social emotional development; and 4) Psychological development. Each of the paragraphs below includes a short summary of changes across the specified domains as characterized by AMLE, as well as established literature reviews on youth development.

Physical Development. AMLE notes young adolescents undergo rapid physical growth characterized by skeletal growth spurts, the onset of puberty and corresponding development of primary and secondary sex characteristics, and neural changes in their brains (notably the frontal cortex, the cerebellum, and the amygdala) that affect executive functions such as planning, strategic thinking, and emotional regulation. The physical changes experienced by youth may precede muscular development which can cause classic growing pains as well as physical coordination issues.

Cognitive Development. Cognitive development for young adolescents is described as equally "intense" as physical development by the AMLE. While young adolescents exhibit a wide range of cognitive abilities, they are generally undergoing development that allows them to transition from concrete to abstract thinking, are curious and eager to learn, display wide-ranging interests with more personal preferences emerging, tend to favor active learning and peer interactions, begin to develop critical thinking and metacognition, and are forming complex impressions of themselves and the world around them. As a result of this immense cognitive development, young adolescents are particularly sensitive to social interactions and relationships. They begin to reason and argue positions, may challenge adult directives more frequently, and also have a greater ability to develop personal goals and think about the future.

Social Emotional Development. AMLE notes social emotional development is related to both physical and cognitive development but refers specifically to how people interact with individuals and groups as well as regulate their own emotions. Research shows young adolescents often seek belonging in social relationships, are sensitive to status and group norms, may experiment with new behaviors, and are increasingly aware of social identities. In the current age of social media, young adolescents may also be particularly vulnerable to the influence of social media and yet also often use social media to connect with their peers. This trend is creating a troubling new dilemma about the impact and presence of social media—it is both a form of connection and also a force that research is increasingly finding can harm adolescents.

Psychological Development. AMLE finally notes individual psychological development in early adolescence is characterized by emerging identity formation and an increased desire for independence. As young adolescents' bodies, brains, cognition, and emotions all begin to mature, it is common for young adolescents to develop a greater sense of who they are and what they prefer. Additionally, friendships become increasingly important, and youth are sensitive to situations and experiences that may impact their self-esteem.

Implications for Education Systems

In response to developmental changes across these domains, numerous models have been offered as ways to structure school and learning environments for young adolescents.



However, one of the most comprehensive and longstanding comes from AMLE, which has found successful middle schools exhibit the following 18 characteristics across three domains:

Culture and Community:

- 1. Educators respect and value young adolescents.
- 2. The school environment is welcoming, inclusive, and affirming for all.
- 3. Every student's academic and personal development is guided by an adult advocate.
- 4. School safety is addressed proactively, justly, and thoughtfully.
- 5. Comprehensive counseling and support services meet the needs of young adolescents.
- 6. The school engages families as valued partners.
- 7. The school collaborates with community and business partners.

Curriculum, Instruction, and Assessment:

- 8. Educators are specifically prepared to teach young adolescents and possess a depth of understanding in the content areas they teach.
- 9. Curriculum is challenging, exploratory, integrative, and diverse.
- Health, wellness, and social-emotional competence are supported in curricula, school-wide programs, and related policies.
- 11. Instruction fosters learning that is active, purposeful, and democratic.
- 12. Varied and ongoing assessments advance learning as well as measure it.

Leadership and Organization:

- 13. A shared vision developed by all stakeholders guides every decision.
- 14. Policies and practices are student-centered, unbiased, and fairly implemented.
- 15. Leaders are committed to and knowledgeable about young adolescents, equitable practices, and educational research.
- 16. Leaders demonstrate courage and collaboration.
- 17. Professional learning for all staff is relevant, long term, and job embedded.
- 18. Organizational structures foster purposeful learning and meaningful relationships.

Source: Association for Middle Level Association, The Successful Middle School: This We Believe

Additional Research on Middle School Reforms and Framing

In addition to the framework noted above, LESC staff review of several national research articles and summaries of successful middle school education found a common set of six key features that foster academic achievement, social-emotional development, and positive youth outcomes among middle school aged students. These include:

- Developmental responsiveness by designing middle schools around adolescent development: Successful middle schools recognize and respond to the <u>unique</u> developmental needs of early adolescents noted above. By tailoring instruction, school environments, and support services (such as school counselors and social activities) in a way that recognizes young adolescents' needs for interactivity, social connection, and belonging, middle schools may be transformed into developmentally appropriate environments.
- 2. Interdisciplinary instruction and team teaching: Research shows middle school students benefit from the integration of content across subject areas as a way to engage students, provide experiential learning, and better respond to young adolescents' needs for learning experiences that foster critical thinking and holistic understanding of complex topics. Related to this, team teaching has often been a feature of successful middle schools as a way to foster interdisciplinary



- instruction, provide common planning time, and increase the opportunities for educators to collaboratively support students.
- 3. Advisory programs and personalized support: Given the complexity of adolescent growth in middle school, <u>longstanding research</u> has offered evidence that opportunities for personalized support, such as advisory programs, academic and school counseling, and opportunities to build strong relationships with educators and other caring adults can benefit middle school students.
- 4. Flexible scheduling and engaged learning experiences: Flexible scheduling that allows for longer class period, block schedules, or other creative models that enhance a student's likelihood to engage in in-depth exploration of topics, project-based learning, or enrichment activities has been a common feature of the middle school movement.
- 5. **Positive school climates:** As young adolescents are particularly sensitive to social environments, belonging, and peer dynamics, <u>positive school environments</u> that prioritize safety, inclusivity, caring relationships with adults, equity, meaningful student engagement, reduced bullying, and respect are necessary for positive academic and social outcomes.
- 6. **Engaging extracurricular activities and career exploration**: Middle schools that offer a variety of <u>extracurricular</u> opportunities and <u>career exploration activities</u> that help expose students to options for their future have both been shown to foster student engagement, a sense of purpose, and to bolster student identity.

By using this body of research, as well as other identified frameworks to evaluate middle schools, LESC staff intend to compare New Mexico middle school models with best practices and determine what a state policy response to bolster education environments for this age range of students could look like.

Study Path: 2024 Interim

In closing, included in **Attachment A: Middle School Study Research Plan** is a draft research plan, including key questions for inquiry, anticipated members in the study group, and a timeline for LESC staff plan to convene a study group during the 2024 legislative interim.

By focusing on gathering New Mexico specific research and data, exploring the comprehensive structuring of middle school models, and comparing options with research-based options that are responsive to New Mexico's young adolescents, LESC staff will produce a final report, anticipated to be completed by October 2024, summarizing findings and recommendations for LESC consideration.



Legislative Legislative Legislative Study Committee

Middle School Research Plan

Date: May 17, 2024 Prepared By: Hathaway

Attachment A: Middle School Study Research Plan

Overview and Background

- In response to House Memorial 4, signed during the 2024 legislative session, and in response to the crucial role middle school plays in transitioning students between elementary and high school, LESC staff will conduct a comprehensive study of middle school during the 2024 interim.
- This research plan includes key questions for investigation and research, outlines anticipated membership in the study group, and details the anticipated timeline for producing a final report for LESC members.

Rationale

• As the pivotal transitional phase between elementary and high school, middle schools play a crucial role in shaping students' academic, social, and emotional development. However, existing middle school structures often fail to adequately address the needs of adolescents and their educators, evidenced by disengagement, drops in math and reading achievement, challenges with attendance that emerge in middle school, and educator wellbeing. This research aims to evaluate current middle school structures (funding, scheduling, staffing, design) and propose reforms to create more responsive school environments.

Anticipated Membership

• LESC members; A representative group of youth that reflect New Mexico's student demographics and the student groups named in the *Martinez-Yazzie* consolidated lawsuit; teacher preparation program leaders; middle school teachers and educational leaders; school counselors and other instructional support providers, school safety and school resource officers; higher education institutions; health professionals; community members; and the Public Education Department (PED).

Key Questions for Inquiry

- What are the models of middle school environments being used across New Mexico; How and in what ways do these align
 with research and best practices on middle school design?
- What is the relationship between various middle school designs (K-8 schools; 6-8 grades; 6th grade academies, etc.) and student outcomes (in available data)? If there are differences, what are the key drivers?
- What are the articulated needs of middle school students and educators and how does middle school design align to these needs?
- What is a plausible statewide policy approach to support middle school students? How can the legislature support middle school environments that enable student success?

Timeline and Outcome

- April May 2024: Literature review, development of research plan, and forming of working group.
- June September 2024: Working group meetings, site visits, and drafting of recommendations.
- October 2024: Final report and presentation to LESC.

