

Executive Summary of Research on Middle School Configuration

The Enrollment Committee was established in 2017 to examine district capacity in each of our buildings and projected increases in enrollment to analyze future capacity needs. Their work indicated that there was a need for grade reconfiguration based solely on growing enrollment and that grade reconfiguration from an educational standpoint would need to be investigated further. In November, 2018 a Middle School Exploratory Committee (MSEC) was formed to investigate a change to a 6-8 model from a best educational practices perspective for the district. The MSEC Executive Summary will share best practices and research about middle level education to help the Facilities and Bond Committee determine final recommendation(s) to the Edmonds School Board.

Based on the research of the exploratory committee (MSEC), there are educationally sound reasons to support adding 6th grade to middle schools in Edmonds School District. However, there are multiple factors to consider, especially in addressing the developmentally responsive practices that will best serve students in the district. If Edmonds School District moves forward with a 6-8 middle school configuration, then the exploratory committee recommends the following:

Engage the community and establish a representative Reconfiguration Task Force large enough to accommodate subcommittees to who will:

- Study and develop recommendations for a district-wide philosophy specific to middle grade level focus
- Study program and instructional impacts of grade reconfiguration changes. What do we want the middle school experience to look like for students in grades 6, 7, and 8?
- Study, define and develop recommendations for the academic, activity, and athletic programs to match philosophy
- Study and develop recommendations for special programs (Special Education, ELL, Highly Capable, etc) to match philosophy
- Define and initiate recommendations for staffing, budget
- Define and initiate recommendations for professional development, and curriculum work necessary for transition

History/Background on the 6-8 Middle School Model

The middle school movement of the 1960's and 1970's was a response to the problem of junior high schools that many considered inattentive to the developmental needs of young adolescents. In the late 1990's there was a significant push to return to traditional K-8 schools (Senechal, Stringer 2014). Since 2000, much of the research around middle level education relates to comparing K-8 schools to either middle schools (5-8, 6-8, or 7-8) or junior high schools (7-9).

The shift to middle schools of 5-8 or 6-8 combinations from 7-9 combinations was based on:

- Increasing evidence that children matured earlier than before
- In 1910 children reached puberty at approximately 12-14 years of age; today, most children reach puberty by age 11
- Puberty appears to start approximately four months earlier every decade
- The belief that 9th grade was more attached to high school (graduation requirements, credits)
- More sophisticated evaluation and research methods and materials provided more accurate data

(Combs, 2005)

Recent research has produced mixed results in comparing grade configurations and indicates there is no ideal grade configuration in terms of student achievement. Rather, that a **high quality educational**

experience has a greater impact than any configuration design. Using longitudinal data from national data sets, no significant difference was found between attendance in K-8 schools as compared to 6-8 schools in relation to achievement in either reading or mathematics (Carolan and Chesky 2012).

Some research completed on more focused sample sizes (district, county, etc.) indicates that achievement of students in middle grades is higher when they attended schools with a wider grade span. One study showed a fall in achievement if a transition happened in 5th, 6th, or 7th grade when compared with students who did not transition --often at K-8 schools. However, a number of studies have gone on to determine that it was not the K-8 grade configuration per se, but rather the smaller size and relative stability of the peer cohorts in those schools. So, it may have less to do with when the transition happens and more to do with the transition itself (Senechal & Stringer 2014).

What we can conclude from this research is there is consistent evidence that students in the middle grades need support in planned, intentional transitions from elementary to middle school and small stable cohorts of peers in the middle school setting. Social consequences such as physical, emotional, psychological changes also affect students during transition between grades, so supports need to be put in place to address these needs.

Instruction vs. Configuration

In terms of academic progress of students, most researchers agree that the quality of the school and classroom instruction are more important than grade configuration. In a 2004 study, Pate, Thompson, and Homestead argued that the following played a greater role in determining academic success than did grade configuration:

Instructional practice	Education and occupation of parents
Educational level of teachers	Staff specifically trained to teach middle school age children
Experience of teachers	Length of school year
Expenditure per student	Quality of instructional materials

Multiple researchers have indicated that classroom quality and school characteristics predicted youth functioning regardless of school type or entering middle school in 5th or 6th grade. Holas and Huston argue that the focus should be on **classroom quality** and **school size**. Also, several researchers stipulate that what is important is a school's organizational culture, school size, cohort size, leadership and teaching practices. They identify such practices as:

Developmentally appropriate practices for early adolescents,
Student-teacher relationships and support for learning, heterogeneous grouping and
High expectations for all students, and
Collaborative teacher relationships such as team teaching and integrated teaming.

Association for Middle Level Education and other researchers recommend:

- Support services to include advisory programs and comprehensive counseling services,
- Integrated team teaching,
- Small cohorts of students, cohort size, not grade configuration - focus on smaller size and stability of peer cohorts
- Bell schedule considerations,
- Transition support for students moving to new grade
- Professional development to support transitions and instruction (in integrated teams and subject areas)

All of these practices may be implemented within any grade configuration.

Adolescent Development

Association for Middle Level Learning, national organization which focuses on research and best practices serving adolescents, supports that adolescents need educational programs that serve the unique developmental needs of students aged 10-15. Young adolescents undergo significant physical, emotional and psychological changes and schools should take note and implement programs that help these students cope with the problems and confusions they experience. Programs should address not only academic achievement, but also psychological and social-emotional wellbeing, and behavior.

Early adolescents share several characteristics (Appendix A), (Combs 2005; 2011, Wood 2017):

Desire for independence	Ambivalence concerning dependence
Growth in importance of the peer group	Emancipation from the home
Sexual, emotional, and social maturation	Fluctuation of emotions
Search for values and norms	Concern about physical growth and appearance
Resentment of authority figures	Development of self concept

Middle School Configurations (Appendix B)

Edmonds current configuration serving middle grades includes four 7-8 middle schools and two K-8 schools, and one K-12.

The middle school is a grade pattern that usually begins with either the 5th or 6th grade and ends with the 8th grade. Generally, 5-8, 6-8, and 7-8 considered “middle school”. The middle school philosophy emphasizes the needs and interests of the students with a focus on the affective as well as cognitive. Middle schools have a willing attitude on the part of the staff toward instructional experimentation, open classrooms, team teaching, utilization of multimedia teaching techniques, and student grouping by talent and interest rather than age alone. They emphasize individual instruction and guidance for each pupil, focus on educating the whole child, not just the intellect, and work to help ease transition between childhood and adolescence.

Researchers have reported that 6th grade was the most appropriate entry level for the middle school. Additionally, they recommend that 5th grade teachers adopt promising middle school approaches to prepare students for middle school. They further report that 6th graders more closely resemble 7th graders than 5th graders in areas of personal adjustment and sense of personal freedom. Consequently, the 6th grade is the most appropriate entry level for the middle school.

According to Combs (2005; 2011):

- The overwhelming majority of the research supports the middle school concept.
- 7/8 combination is the worst configuration available based on the current research.
- The 6-8 combination is the most common configuration at this time, as supported by current research.
- The 5-8 grouping is growing in popularity as research is becoming more supportive of this configuration based on the constantly changing needs of the students.

Advantages and Disadvantages*

Configuration	Advantages	Disadvantages
<p>7-8</p>	<ul style="list-style-type: none"> • 7th and 8th grade pupils are given special attention • Immature 6th graders have an additional year of elementary school • Makes for less gradual transition for pre-adolescents 	<ul style="list-style-type: none"> • Makes for less gradual transition for pre-adolescents • The “revolving door” effect does not allow students to identify with the school • The largest number of students’ adjustment problems occur in this combination • The 7-8 combination continues the perception of a junior high school (7-9) with all of its drawbacks: Hull wrote that ... Junior highs mimic the educational programs of high schools for a population that is not able to deal with these approaches • Rather than providing a bridge between elementary and high school, junior highs adopt the high school programs, methodologies, etc.. resulting in a more difficult transition. • The emphasis on subject matter (as opposed to student centered program) is inappropriate for the developmental needs of the students • District/teachers must adapt curriculum that is designed for 6-8 grade bands to fit
<p>6-8</p>	<ul style="list-style-type: none"> • Supports the research findings which show that the youngster today enters adolescence much earlier than 50 years ago • The students’ ages more nearly parallel the period of human growth and development between childhood and adolescence - ages 11-13 = grades 6-8 • Pupils are grouped who are more alike than either elementary or secondary pupils. • It more appropriately meets the academic needs of students. • Increased time to build relationships with families and students • Increased leadership opportunities for 8th grade students - more effective with wider age difference • 5th graders would have greater opportunity for leadership in elementary school 	<ul style="list-style-type: none"> • Some 6th graders might still need the protective environment • 6th graders would not be able to participate in some elementary programs (safety patrol, etc.) • The elementary school challenge to teachers working with children at 6th grade would be missing • Some elementary programs might be curtailed/impacted if 6th grade is no longer there

	<ul style="list-style-type: none"> • Exposure to application skills; these pupils are at an age where they need reinforcement and extension of skills through application • Opportunity for specialization • Standards shift in curriculum between 5th and 6th grade can be addressed • Access to guidance counseling • Availability of labs... technology • More stimulation through departmentalization, special facilities and equipment • Availability of broader curriculum • More orderly transition (materials, instruction, expectations) • Allows students to develop identity with the building and for the faculty to get to know and work with students • Participation in after school activities - clubs, sports • Students could have a “fresh start” a year earlier 	
<p>5-8</p>	<p>The advantages and disadvantages are virtually the same as those for the 6-8 plan. Specifically, advantages of 5-8 configuration:</p> <ul style="list-style-type: none"> • Supports many research findings which show that today youngsters enter adolescence at an earlier age • Groups pupils who are more alike than either elementary or secondary pupils • These pupils are at an age where they need reinforcement and extension of skills through application • Facilitates a flexibility in grouping students for instructional purposes and affords even broader curriculum offerings than the 6-8 model • Provides for more orderly transition • The middle school would have an identity of its own. • Participation in after school activities - clubs, sports 	<ul style="list-style-type: none"> • Some younger students might be better off in the more protective elementary environment • The leadership role of 5th and 6th graders would be lost to elementary schools • The 5-8 plan assumes ... that the maturation patterns of 5th grade pupils are more like those of 6th, 7th, and 8th grade students than they are like 3rd and 4th graders

*adapted from Combs, H.J (2005, 2011)

Additional advantages and disadvantages:

Common Core Standards grade bands are K-5 and 6-12, so many publishers design their curriculum offerings as K-5 programs and 6-8 programs. There is a significant shift in standards from 5th to 6th grade (Skills to Application). Thus, Edmonds has had to expend resources to adapt curriculum to fit the current 6th grade model in elementary, which has created more “kit based” curriculum rather than the scope and sequence for which it was designed to work.

Among districts near to Edmonds School District, most have already moved to a 6-8 configuration. Recently, Northshore School District implement the format for the 2018-19 school year, and Shoreline School District will implement 6-8 grade middle schools beginning fall of 2019. Thus, there are districts we can study and learn from about the process, hurdles, and considerations as Edmonds determines its direction.

Logistical Considerations

Size Matters

We know from research that the size of a middle school does matter. Recommendations for total middle school enrollment suggest a school of no more than 750 students. However, larger middle schools can be effective provided that there is intentional programming designed to help make the school feel smaller. One study indicated that middle schools over 750 had lower academic and other outcomes, particularly for non-white racial groups and low SES (e.g., Lee & Loeb, 1998; Alspaugh, 1998, Rockoff & Lockwood, 2010), but that those schools who had “high implementation” of best middle school practices identified in Turning Points, and This We Believe had better outcomes:

- Small, stable cohorts
- Intentional transition planning for incoming 6th graders
- Strong social/emotional focus

It will be critical that we attend to this in our design of 6-8 middle schools if we ultimately determine that our school size will be greater than the recommended 750 students.

As part of the reconfiguration process, Issaquah and Tahoma school districts learned that schools too small actually cost more to operate and, especially at the high school level, cannot offer the program diversity necessary for this generation of students. Schools were deemed too large if the facility was not designed for the number attending or staffed properly. However the optimal school sizes that they defined were: Elementary = 500-600; Middle School = 700-900; and High School = 1,800-2,000. These numbers were based on operational costs, program needs, and community perception.

In Arizona, the recommended maximum school sizes are 500 students for elementary and middle schools, and 1,000 students for high schools. While these maximum size recommendations are outlined in the state’s School Facilities Board’s 21st Century Schools Report (2007), they have not been codified by the state. North Carolina has published two ranges of recommended maximum school sizes. The first, which prioritizes **school climate**, recommends maximum school sizes of 300 to 400 students for elementary schools, 300 to 600 students for middle schools, and 400 to 800 students for high schools. The second set of recommendations, prioritizing economic efficiency, recommends larger size maximums of 450 to 700 students for elementary schools, 600 to 800 students for middle schools, and 800 to 1,000 students for high schools. As is the case in Arizona, North Carolina’s school size maximums are only presented as guidelines, and are not mandated by the state (North Carolina Department of Public Instruction, 1998).

According to data collected from a 1991-1992 national study funded by the National Association of Secondary School Principals (NASSP), the majority of middle level administrators surveyed thought that 400-799 students was the optimal size for a middle level school (Valentine, Clark, Irvin, Keefe, & Melton, 1993).

Program Considerations

Our district has many programs that serve the unique learning needs of our students in elementary and middle school.

- Special Education: for students who receive Special Education services, we have two programs that are currently part of our elementary schools that will need to be included in a 6-8 middle school configuration.
- English Learners: Supports for students who are identified as English Learners (EL) will need to be included in our middle school configuration.
- Highly Capable: we currently have a Highly Capable program at Terrace Park Elementary and Brier Terrace Middle School. As we consider adding 6th grade students to the middle school, we will need to consider what it will look like for students in this program.
- Honors Courses: Our middle schools have some honors course offerings in English, Social Studies, Math and/or Science. We would need to consider if/how to offer honors courses as part of our 6th grade program in a 6-8 middle school configuration
- Math Placement: decisions on middle school math placement which are currently made in 6th grade would now be made in 5th grade.

Transition Planning

Engage the community and establish a representative Reconfiguration Task Force large enough to accommodate subcommittees to who will:

- Study and develop recommendations for a district-wide philosophy specific to grade level focus (6-8)
- Study program and instructional impacts of grade reconfiguration changes. What do we want the middle school experience to look like for students in grades 6, 7, and 8?
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- Define and initiate recommendations for professional development, and curriculum work necessary for transition

In addition to the planning for the system transition to a 6-8 middle school configuration, we also need to consider the needs of students as they transition to middle school.

- In the first year of a 6-8 middle school configuration, schools will need to plan for the intentional transition of two groups of students as we will have 6th and 7th grade students moving to a new school and a new programming model. We will need to plan for intentional staff professional learning to support teachers and students in this first year.

Staffing

We will need to work with Human Resources Department to identify teachers who hold the appropriate endorsements to be able to teach in a 6-8 middle school. Further, we will need work with our Teachers' Association to develop a process for how to move teachers from the elementary level to the middle level in the event that we do not have enough teachers who choose to move voluntarily.

This summary represents the research we have done to date on 6-8 middle school configuration. As we move forward, we will update this summary as needed.

APPENDICES

Appendix A

Common Developmental Traits by Age

Age/ Grade	Physical	Language/Cognitive	Social/Emotional
10 / 5th	<p>Signs of puberty begin for girls ahead of boys</p> <p>Muscles needed for big movements are developing quickly</p> <p>Need lots of outdoor play and physical challenges</p> <p>Enjoy precision tasks</p> <p>Benefit from snack and rest periods</p>	<p>Peer focused</p> <p>Descriptive</p> <p>Seek definitions</p> <p>Playful</p> <p>Gain identity through the group</p> <p>Enjoy categorizing and classifying</p> <p>Good at memorizing</p> <p>Like rules and logic</p> <p>Can concentrate on reading and thinking for long periods</p> <p>Enjoy choral reading, poetry, plays, singing</p>	<p>Contributing member of group; eager to reach out to others</p> <p>Quick to anger; quick to forgive</p> <p>Hardworking; take pride in schoolwork</p> <p>Open to learning mediation or problem-solving skills</p> <p>Listen well and enjoy talking and explaining</p> <p>Developing more mature sense of right and wrong</p>
11/ 6th	<p>Restless, very energetic</p> <p>Need lots of food, physical activity, sleep</p> <p>Growth spurts</p> <p>“Growing Pains”</p> <p>More colds, ear infections, etc.</p>	<p>Like “adult” tasks, such as researching</p> <p>Enjoy brain teasers and puzzles</p> <p>Want to learn new things more than review previous work</p> <p>Challenge assumptions —their own and those of adults</p> <p>Able to think abstractly and understand ideas</p>	<p>Common age for cliques and pairs</p> <p>Peer focused; need to save face with peers</p> <p>Moody; self-absorbed</p> <p>Sensitive about changing bodies</p> <p>Like to challenge rules, test limits</p> <p>Can be very serious</p>
12/ 7th	<p>Need lots of food, physical activity, sleep</p> <p>Growth spurts</p>	<p>May begin to excel at a subject or skill</p> <p>More sophisticated sense of humor</p>	<p>Peers more important than adults</p> <p>Question and argue with adults</p>

		<p>Enthusiastic about purposeful schoolwork; can set goals and concentrate</p> <p>Interested in civics, social justice</p>	<p>Like both group and individual work</p> <p>Need rituals to mark turning points</p> <p>Can be self-aware, insightful, empathic</p> <p>Can take on major responsibilities</p>
13/ 8th	<p>Lots of physical energy</p> <p>Skin problems are common; hygiene becomes more important</p> <p>More physically developed/ mature</p> <p>Can be physically awkward</p>	<p>Tentative, worried, unwilling to take risks on tough intellectual tasks</p> <p>Interested in fairness, justice, discrimination, etc.</p> <p>Often write better than they speak, so better at written work than oral explanations</p> <p>Need short, predictable homework assignments to build good study habits</p> <p>Starting to enjoy thinking about the many sides of an issue</p>	<p>Moody and sensitive, anger can flare up suddenly</p> <p>Feelings are easily hurt; can easily hurt others' feelings</p> <p>Very concerned about personal appearance</p> <p>Like to be left alone when home</p> <p>Prefer working alone or with one partner</p> <p>Spend hours with social media or video games</p> <p>Can be mean (may stem from being insecure or scared)</p> <p>More focus on friends, group</p> <p>Challenge the ideas and authority of parents and teachers</p> <p>Answer parents with a single word or loud, extreme language</p>

(Adapted from Yardsticks:Children in the Classroom Ages 4–14, 3rd edition,by Chip Wood, CRS, 2007)

The Center for Responsive Schools describes development for ages 11-13 years:

Elevens are going through huge changes in their bodies, minds, and social behavior as they begin adolescence. The easy friendliness of ten often gives way to awkward, sometimes rude behavior at eleven. With their growing capacity for higher thinking, children this age like to try work that feels grown up, such as researching and interviewing.

Twelves are often unpredictable and hard to read as they swing between childhood and adulthood. Their greatest need is to be with peers as they sort through their physical, social, and emotional challenges and the all-important identity question, "Who am I?"

Thirteen is typically an age of rapid growth in mind and body, an age of contrasts and confusion. Thirteen-year-olds are both pushing away from adults and seeking them. They're excited about new teenage opportunities but hesitate to take risks. Adding to the confusion, physical and emotional development is happening much faster in girls than in boys. (2005)

Appendix B

Middle School Grade Organization
1971- 2000

Grade Configuration	1971	% 1971	2000	% 2000	1971- 2000 Change	1971- 2000 % Change
5- 8	772	7%	1,379	10%	+607	+79%
6- 8	1,662	16%	8,371	59%	+6,709	+404%
7- 8	2,450	24%	2,390	17%	- 60	-2%
7- 9	4,711	45%	689	5%	- 4,022	-85%
Other	850	8%	1,278	9%	+428	+50%
Total	10,445	100%	14,107	100%	+3,662	+35%

*Source: Middle Level Leadership Center, July 2000

*Cited by DeJong, William S. and Craig, Joyce in *Age Appropriate Schools: How Should Schools be Organized*

KEY RESOURCES

Association for Middle Level Education (2010). *This We Believe: Keys to Educating Young Adolescents*. Westerville, OH: AMLE

Carolan, B. V., & Chesky, N. Z. (2012). The relationship among grade configuration, school attachment, and achievement. *Middle School Journal*, 43(4), 32-39.

Erb, T. (2006) . *Middle School Models are Working in Many Grade Configurations to Boost Student Performance*. Retrieved from <https://about.jstor.org/terms> 164.116.16.233 on Tue, 04 Dec 2018

Gordon, M. F., Peterson, K., Gdula, J. and Klingbeil, D. (2011). *A review of the Literature on Grade Configuration and School Transitions*. Center for Applied Research and Educational Improvement. University of Minnesota.

Hanover Research (2015). *Best Practices in Middle School Design*. Prepared for Boyertown Area School District.

Hong, Kai & Zimmer, Ron & Engberg, John, 2018. *How does grade configuration impact student achievement in elementary and middle school grades?* *Journal of Urban Economics*, Elsevier, vol. 105(C), pages 1-19.

Humann, C., Palaich, R., & Griffin, S.S (2015). Preliminary Report on the Impact of School Size. Prepared for Maryland State Department of Education. Retrieved on 4 Jan 2019 from <http://www.marylandpublicschools.org/Documents/adequacystudy/PreliminaryImpactofSchoolSize.pdf>

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

McEwin, C. K. & Greene, M.W., (2011). *The Status of Programs and Practices in America's Middle Schools: Results from Two National Studies*. Association for Middle Level Education.

Senechal, Jesse & Stringer, JK (2014). *Middle Level Learning: Compendium of Research and Best Practice*. Metropolitan Educational Research Consortium (MERC) Publications.

Wood, Chip (20017). *Yardsticks for Elementary School*. Center for Responsive Schools, Inc.

GENERAL RESOURCES

Alexander, W. M. (1968). *A survey of organizational patterns of reorganized middle schools*. Washington, DC: United States Department of Health, Education, and Welfare.

Alexander, W. M., & McEwin, C. K. (1989). *Schools in the middle: Status and progress*. Columbus, OH: National Middle School Association.

Alspaugh, J.W. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research*, 92(1), 20–25.

Andeman, E.M. & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle- level schools. *Contemporary Educational Psychology*, 22(3), 269-298. doi: 10.1006/ ceps.1996.0926

Anderman, E. M., Maehr, M. L. & Midgley, C. (1999). Declining motivation after the transition to middle school: Schools can make a difference. *Journal of Research & Development in Education*, 32(3), 1999, 131-147.

Anderman, Lynley Hicks (1999). Classroom goal orientation, school belonging and social goals as predictors of students' positive and negative affect following the transition to middle school. *Journal of Research & Development in Education*, 32(2), 89-103.

Atwell, N. (1998). *In the Middle: New Understandings about Writing, Reading, and Learning*. Second Edition. Portsmouth, NH: Elsevier.

Boulton, M.J. & Smith, P.K. (1994/2011 Jul). Bully/victim problems in middle-school children: Stability, self-perceived competence, peer perceptions and peer acceptance. *Developmental Psychology*, 12(3), 315-329. DOI: 10.1111/j.2044-835X.1994.tb00637.x

Brown, D.F. & Knowles, T. (2007). *What every middle school teacher should know* (2nd ed.). New York: Heinemann. Buehl, D. (2008). *Classroom strategies for interactive learning*. International Reading Association.

Carjuzza, J. & Kellough, R.D. (2012). *Teaching in middle and secondary schools* (10th ed.). New York: Pearson.

Combs, H. Jurgen (2008). *Middle School Configuration: Middle School Organizational Structure A Summary of the Research*. Retrieved on 28 March 2016 from <http://www.edulink.org/msconfig.htm>

Combs, H. Jurgen (2005, 2011). *Choosing the Right Model: Defining Middle School*

Cook, P. J., MacCoun, R., Muschkin, C., & Vigdor, J. (2008). The negative impacts of starting middle school in sixth grade. *Journal of Policy Analysis and Management*, 27(1), 104-121.

Cotton, K (1996). *School Size, Climate, and Student Performance*. School Improvement Research Series, Research You Can Use. Retrieved on 19 Feb, 2019 from <http://educationnorthwest.org/sites/default/files/SizeClimateandPerformance.pdf>

D'Amico, J. & Gallaway, K. (2010). *Differentiated instruction for the middle school science teacher: Activities and strategies for an inclusive classroom*. San Francisco, CA: Jossey-Bass. Dixon, A.L.,

DeVoss, J.A. & Davis, E.S. (2008). Strengthening links between the levels: School counselor collaboration for successful student transitions. *Journal of School Counseling*, 6(21).

Dove, M.J., Pearson, L.C. & Hooper, H. (2010). *Relationship Between Grade Span Configuration and Academic Achievement*. *Journal of Advanced Academics* 21(2) 272-298.

Emmer, E.T. & Evertson, C.M. (2012). *Classroom management for middle and high school teachers* (9th ed.). New York: Pearson.

Haggerty, K., Elgin, J & Woolley, A. (2011). *Social-emotional learning assessment measure for middle school youth*. Social Development Research Group, University of Washington Commissioned by the Raikes Foundation.

Heard, G. (1998). *Awakening the heart: Exploring poetry in elementary and middle school*. Portsmouth, NH: Heinemann.

Holas, I. & Huston, A.C. *J Youth Adolescence* (2012) 41: 333. <https://doi.org/10.1007/s10964-011-9732-9>

Hoy, W.K. & Sabo, D.J. (1998). *Quality middle schools: Open and healthy*. Thousand Oaks, CA: Corwin Press.

Jacob, B.A. & Rockoff, J.E. (2012 Apr). Organizing schools to improve student achievement: Start times, grade configurations, and teacher assignments. A Hamilton Project policy paper of the Brookings Institute. Educational Digest, Prakken Publications.

Kellough, R.F. & Kellough, N.G. (1999). Middle school teaching: A guide to methods and resources. (3rd ed.). Upper Saddle River, NJ: Merrill.

Kesidou, S. & Roseman, J.E. (2002). How well do middle school science programs measure up? Findings from Project 2061's curriculum review. *Journal of Research in Science Teaching* 39(6), 522-549.

Kinney, D.A. (1993 Jan). From nerds to normal: the recovery of identity among adolescents from middle school to high school. *Sociology of Education*, 66(1), 21-40.

Kleran, E. (1992). *Imagination in Teaching and Learning: The Middle School Years*. Chicago, IL: University of Chicago Press.

Kolodner, J.L., Camp, P.J., Crismond, D., Fasse, B., Gray, J., Holbrook, J., Puntambekar, S. & Ryan, M. (2003). Problem-Based Learning meets Case-Based Reasoning in the middle-school science classroom: Putting learning by Design(TM) into practice. *Journal of Learning Sciences* 12(4), 495-547.

Krueger, A.B. & Whitmore, D.M. (2001). The effects of attending a small class in the early grades on college-test taking and middle school test results: Evidence from Project STAR. *The Economic Journal*, 111(468), 1-28.

Lesh, B. (2011). "Why won't you just tell us the answer?": Teaching historical thinking in grades 7-12. Stenhouse Publishing.

Levine, M.P., Smolak, L., Moodey, A.F., Shuman, M.S. & Hessen, L.D. (1994 & 2006). Normative developmental challenges and dieting and eating disturbances in middle school girls. *International Journal of Eating Disorders*, 15(1), 11-20.

Levstik, L.S. & Barton, K.C. (2011). *Doing history: Investing with children in elementary and middle schools*. New York: Routledge.

Lorain, P. (2011). Transition to middle school. National Education Association. Retrieved on 19 December 2018 from <http://www.nea.org/tools/16657.htm>

Lorain, P. (2012). Brain development in young adolescents: Good news for middle school teachers. National Education Association. Retrieved on 19 December 2012 from <http://www.nea.org/tools/16653.htm>

Manning, M.L. & Bucher, K.T. (2011). *Teaching in the middle school* (4th ed.). New York: Pearson.

Martin, W. & Schwerdt, G. (2012). *The middle school plunge*. Palo Alto, CA: Stanford University, Hoover Institution.

McEwin, C. K., Dickinson, T. S., & Jenkins, D. (1996). *America's middle schools: Practices and programs- A 25-year perspective*. Columbus, OH: National Middle School Association.

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

Mertens, S, Flowers, N., & Mulhall, P. (2001 May). *School Size Matters in Interesting Ways*. *Middle School Journal*, 32(4), 51-55

- Midgley, C., Anderman, E. & Hicks, L. (1995). Differences between elementary and middle school teachers and students: A goal theory approach. *Journal of Early Adolescence*, 15(1), 90-113.
- Mizelle, N.B. & Irvin, J.L. (2000 May). Transition from Middle School to High School. What Research Says. *Middle School Journal*, 31(5), 57-61.
- National Middle School Association (2003). *This we believe: Successful schools for young adolescents* : A position paper of the National Middle School Association. Westerville, OH: NMSA.
- Oakes, A. & Waite, W. (2009). *Middle-to-high-school transition practical strategies to consider*. Washington, DC: Center for Comprehensive School Reform and Improvement.
- Pajares, F. Critner, S.L. & Valiante, G. (2000). Relations between achievement goals and self- beliefs of middle school students in writing and science. *Contemporary Educational Psychology*, 25(4), 406-422.
- Pajares, F. & Graham, L. (1999). Self-efficacy, motivation constructs, and mathematics performance on entering middle school students. *Contemporary Educational Psychology*, 24(2), 124-139.
- Pate, P., Thompson, K., & Homestead, E. (2004). 30 Years of Advocating for Young Adolescents: Middle School Organization Through the 1970s, 1980s, and 1990s. *Middle School Journal*, 35(3), 1-7, 56-60. Retrieved on 26 February 2019 from <http://www.jstor.org/stable/23044243>
- Robb, L. (2010). *Teaching middle school writers: What every English teacher needs to know*. Boynton/Cook.
- Robb, L. (2010). *Teaching reading in middle school (2nd ed.): A strategic approach to teaching reading that improves comprehension and thinking*. Scholastic Teaching Resources
- Roeser, R.W., Eccles, J.S. & Sameroff, A.J. (1998 Jun). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology*, 10(2), 321-352.
- Roseoro, A.J.S., Jago, C. & Schultze, Q.J. (2010). *Teaching middle school language arts: Incorporating twenty-first century literacies*. R&L Education.
- Ryan, A.M. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437-460.
- Schwerdt, G. & West, M.R. (2011). *The Impact of alternative grade configurations on student outcomes through middle and high school*. Program on Education Policy and Governance, Harvard University 11-02. Cambridge, MA: Harvard University.
- Smolak, L., Levine, M.P. & Thompson, K. (2001). The use of the sociocultural attitudes towards appearance questionnaire with middle school boys and girls. *International Journal of Eating Disorders*, 29(2), 216-223. DOI: 10.1002/1098-108X(200103)29:2<216::AID-EAT1011>3.0.CO;2-V
- Sweetland, S.R. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly*, 36(5), 703-729.
- Tokuhama-Espinoza, Tracey (2012, 2017). *Best Practice in Middle School Education: Preliminary View of the Data*. Universidad San Francisco de Quito.
- Valentine, J. W., Clark, D., Irvin, J., Keefe, J., & Melton, G. (1993). *Leadership in middle level education, volume I: A national survey of middle level leaders and schools*. Reston, VA: National Association of Secondary School Principals.

Van de Walle, J., Karp, K.S. & Bay-Williams, J.M. (2012). Instructor's review copy and field experience guide for elementary and middle school mathematics: Teaching developmentally, 8/E. New York: Pearson Education.

Weiss, C.C. & Baker-Smith, C. (2010). Eighth-grade school form and resilience in the transition to high school: A comparison of middle schools and K.8 schools. *Journal of Research on Adolescence*, 20(4), 825-839. doi: 10.1111/j.1532.7795.2010.00664.x

Wentzel, K. R. (1998 Jun). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90(2), 202-209. doi: 10.1037/0022-0663.90.2.202

Wentzel, K. R. (1997 Sept). Student motivation in middle school: The role of perceived pedagogical caring. *Journal of Educational Psychology*, 89(3), 411-419. doi: 10.1037/0022-0663.89.3.411

Wentzel, K. R., Barry, C.M. & Caldwell K. A. (2004 Jun). Friendships in middle school: Influences on motivation and school adjustment. *Journal of Educational Psychology*, 96(2), 195-203. doi: 10.1037/0022-0663.96.2.195

Wentzel, K.R. & Caldwell, K. (1997/2006). Friendships, Peer Acceptance, and Group Membership: Relations to academic achievement in middle school. *Child Development*, 68(6), 1198-1209. DOI: 10.1111/j.1467-8624.1997.tb01994.x

Williams, T., Kirst, M., Haertel, E., et al. (2010). *Gaining ground in the middle grades: Why some schools do better*. Mountain View, CA: EdSource

Wineburg, S., Martin, D & Monte-Sano, C. (2011). *Reading like a historian: Teaching literacy in middle and high school history classrooms*. New York: Teachers College Press.

Wormeli, R. (2001). *Meet me in the middle: Becoming an accomplished middle level teacher*. Portland, ME: Stenhouse Publishers.

Wormeli, R. (2006). *Fair isn't always equal: Assessing and grading in the differentiated classroom*. Portland, ME: Stenhouse Publishers.