This is a summary of research that Mr. Estes sent to me regarding a 7-12 configuration. I wanted to include this with the other research though is may be duplicated from one or two of the included studies. Feel free to do your own research in regards to 7-12 configurations. I always like to see what research tells us and to discuss the merits of research studies.

- School-to-school transitions negatively impact academic achievement. The fewer transitions, the better chance a student has of completing high school; the more transitions, the higher the drop-out rate.
- If there is a transition into a new school for high school instruction, 7th grade appears to be the ideal time as it shows the lowest drop-out rate; the higher the grade at the time of the transition, the higher the drop-out rate, most significantly for boys. Researchers believe that making a change in the 7th grade gives students more time to acclimate to new surroundings.
- Traditional middle schools are falling out of favor. In a study of eight different schools with seven different grade spans, sixth-grade students in both elementary and combination K-12 schools outperformed sixth graders in middle schools or junior high schools. The number of transitions has been determined to be a significant factor.
- The reduction of school-to-school transitions and longer grade spans within schools is correlated with improvements in student achievement in a 2003 study of 232 Michigan schools.
- Schools with more grade levels per building have demonstrated not only higher academic achievement, but better attendance rates, self-esteem and attitudes towards school. They have also resulted in fewer suspensions and behavior programs, regardless of socioeconomic status.
- More opportunities exist for cross-age activities such as tutoring and older role model programs in schools with a broad span of grades levels.
- Longer grade spans also allow for more collaboration among teachers across grade levels and better alignment of curriculum across grades.
- A significant number of districts across the nation are transitioning away from the use of middle schools. The use of middle schools peaked in 2005 with just over 9,000 across the U.S. David Hough, the dean of Missouri State's education school and a former editor with the *Research in Middle Level Education,* recently reported that "the trend is definitely away from stand-alone middle schools" and estimated there will be fewer than 7,950 when the 2010 data are in.
- Researchers have found that students who attended middle school in sixth grade were twice as likely to be disciplined relative to their counterparts in elementary school.
- Longer grade spans have been linked with better behavior. Sixth-grade boys, in particular, experienced more suspensions in middle schools or junior high schools than in elementary schools, possibly related to the effects of the transition, the school organization or school size.

In addition to fewer transitions, the programming and practices within those schools with a longer grade span configuration are also likely drivers in the schools' improved achievement. As some educators and researchers explain: "Effective programs and practices, not grade configuration, determine the quality of schools," and "Grade configuration per se may not make the difference, but it does make a difference."

OTTAWA-CARLETON
DISTRICT SCHOOL BOARD

Transformational Recommendations for the Concept of 7-12 Schools

Kanata ARC North and South Joint Meeting
May 26, 2011

Considerations

- Academic implications for Grades 7 – 12 students
- Program implications for Grade 7 and 8 students
- Social/Communal implications for K-6 Schools and 7-12 schools
- Review of the 7-12 model in other Ontario boards
- "Protective factors" required for successful implementation of 7-12 schools based on the Ontario Ministry of Education Student Success model of Protective Factors

Academic Considerations for 7-12

- There is no research data looking broadly at academic achievement in the 7-12 model
- Research does indicate some loss of academic progress for middle schools (grade 7-8 schools, US data) when separated from younger cohorts, but this research does not include broader grade configurations, or models which include high-school grades. (*Paglin & Fager, 1997; Abella, 2005)*
- *McKenzie, et al (2006),* in their paper on the impact grade range has on school performance conclude that there is yet to be a consensus on which grade span configuration is most beneficial. "Since there is little empirical research supporting a certain grade range configuration, schools are left doing what they have always done or wishfully trying new configurations".
- Research indicates that broader grade configurations in secondary schools, including the 7-12 model, have a significant effect on reducing drop-out rates, most significantly in males. *(Alspaugh, J. W., 1999).*
- The two Upper Canada schools that include a broader grade span both tend to perform above the Board and Provincial average for EQAO Math and Literacy Test assessments.
- Port Hope High School of the Kawartha Pine Ridge noted increased student achievement on grade 9 EQAO math assessment and grade 10 literacy scores.

Program Implications for 7-12

- Planning is essential to create a one school community while honouring the needs of two groups of students and staff.
- Access to a broader range of specialized programs, including technology, hospitality, music, and art. Upper Canada cautions that creating classrooms for 7 and 8 and giving them access to specialty programming must not be accomplished at the expense of the 9 – 12 students' accessibility to specialty areas and availability of essential programming.
- Cross-panel teams and programs from basketball - literacy.
- Reach-ahead and opportunities for enrichment for gifted/talented students with subject experts in high schools are possible.

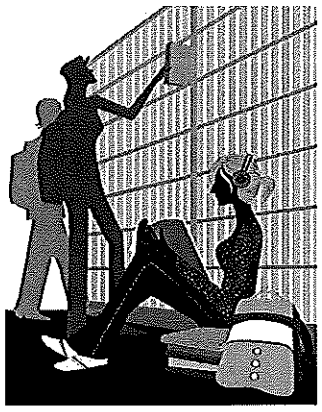
Social Implications

- In schools with the 7-12 model, in general, secondary students, rather than bullying younger students, have benefited from taking on mentorship roles, and increased opportunities to serve as tutors, coaches, etc. There are improved opportunities for earning meaningful Community Service hours supporting after-school programs.
- Evidence indicates that K-6 schools can benefit from an improved tone, where grade 6 students take on more of a leadership role, and are not intimidated by the blossoming adolescents in grade 7-8. *(Halton DSB, PARC Report on School Grade Configurations)*
- The 7-12 model is by far the most common secondary school model in the Eastern Ontario Catholic District School Board and the Ottawa-Carleton Catholic District School Board and now the Upper Canada District School Board. They have found it a very effective structure for programming, and have not noted significant problems associated with the 7-12 social milieu.
- Kawartha Pine Ridge has moved to a 7-12 configuration for many of its secondary schools. In their models, the schools run as "Distinct schools within the same building", sharing administration, resources and facilities, but existing as separate entities.

Protective Factors for Successful Implementation

- Are identified and detailed in the work of Dr. Kate Tilleczek, Associate Professor of Sociology Laurentian University in the Ontario Ministry of Education ***Student Success*** model of vital Protective Factors, ***Grade 8 to 9 Transition Project: Being, Becoming, Belonging.***

- Other boards have noted the importance of thoughtful and careful planning of;
  - Transitions for students
  - Student supports for in place for academic and social needs
  - Timetables, bells, and scheduling
  - Supervision, different for 7 and 8 compared to 9-12
  - Transition plans/team building for staff – Secondary sharing with intermediate staff
  - Understanding the fears of the Secondary staff – they experience change as well
  - Merging the community
  - Merging of the School Councils, strategic plans
  - Traditions of feeder schools, of staff, School Councils, i.e. graduations, bursaries, closing ceremonies, trophies, etc.



Conclusion

Examples from around the province indicate that when implemented in a thoughtful manner, with due consideration for protective factors and the infusion of required resources, 7 to 12 schools can be an effective model for students, both academically and socially.

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TPS SHARES RESEARCH SUPPORTING GRADES 7-12 SCHOOL CONFIGURATION

Published 4/20/2011

DATE/TIME
4/20/2011 , to

LOCATION
Tulsa Public Schools

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As Tulsa Public Schools moves toward making a final recommendation based on public comments and opinions related to Project Schoolhouse, the district today made available highlights from third-party research that is supportive of a 7th through 12th grade school configuration. The research comes from a variety of sources, and is supportive of the 7-12 configuration because it minimizes a student's transition from one school to another at a very critical time in a child's development, among other reasons.

The studies, which are highlighted on the TPS website at http://www.tulsaschools.org/4_About_District/_documents/pdf/_Project_Schoolhouse/research_7-12.pdf, offer these findings:

- School-to-school transitions negatively impact academic achievement. The fewer transitions, the better chance a student has of completing high school; the more transitions, the higher the drop-out rate.[1]
- If there is a transition into a new school for high school instruction, 7th grade appears to be the ideal time as it shows the lowest drop-out rate; the higher the grade at the time of the transition, the higher the drop-out rate, most significantly for boys. Researchers believe that making a change in the 7th grade gives students more time to acclimate to new surroundings.[1]
- Traditional middle schools are falling out of favor. In a study of eight different schools with seven different grade spans, sixth-grade students in both elementary and combination K-12 schools outperformed sixth graders in middle schools or junior high schools. The number of transitions has been determined to be a significant factor.[2]
- The reduction of school-to-school transitions and longer grade spans within schools is correlated with improvements in student achievement in a 2003 study of 232 Michigan schools.[3]
- Schools with more grade levels per building have demonstrated not only higher academic achievement, but better attendance rates, self-esteem and attitudes towards school. They have also resulted in fewer suspensions and behavior programs, regardless of socioeconomic status.[4]
- More opportunities exist for cross-age activities such as tutoring and older role model programs in schools with a broad span of grades levels.[5]
- Longer grade spans also allow for more collaboration among teachers across grade levels and better alignment of curriculum across grades.[6]
- A significant number of districts across the nation are transitioning away from the use of middle schools. The use of middle schools peaked in 2005 with just over 9,000 across the U.S. David Hough, the dean of Missouri State's education school and a former editor with the *Research in Middle Level Education*, recently reported that "the trend is definitely away from stand-alone middle schools" and estimated there will be fewer than 7,950 when the 2010 data are in.[7]
- Researchers have found that students who attended middle school in sixth grade were twice as likely to be disciplined relative to their counterparts in elementary school.[8]
- Longer grade spans have been linked with better behavior. Sixth-grade boys, in particular, experienced more suspensions in middle schools or junior high schools than in elementary schools, possibly related to the effects of the transition, the school organization or school size.[9]
- In addition to fewer transitions, the programming and practices within those schools with a longer grade span configuration are also likely drivers in the schools' improved achievement. As some educators and researchers explain: "Effective programs and practices, not grade configuration, determine the quality of schools."

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and "Grade configuration per se may not make the difference, but it does make a difference."[10]

"I am pleased with the consistent support we find among noted educational researchers for the 7th through 12th grade configuration," said Superintendent Keith Ballard. "Clearly, there is a positive influence on academic achievement, lower drop-out rates, improved self-esteem and better alignment of curriculum that comes with longer grade spans and fewer school transitions. The 7-12 configuration could be an attractive option for Tulsa Public Schools as we look at improving educational opportunities for all students while concentrating our resources. The key to making any grade configuration successful, however, is to make sure we have a great teacher in every classroom and a great principal in every building."

The final Project Schoolhouse proposal is expected to be unveiled on Friday, April 22. Next week, the Board of Education will host a public hearing for Project Schoolhouse on **Tuesday, April 26, 2011,** at **6 p.m.** in the Gymnasium/Auditorium, ground floor level, at **Eisenhower International School**, 2819 South New Haven, Tulsa, Oklahoma. The board is expected to vote on the proposed plan on Monday, May 2.

Please visit the TPS website at www.tulsaschools.org for additional information and updates related to Tulsa Project Schoolhouse. Project Schoolhouse refers to the TPS initiative and process to examine the best possible use of existing financial and physical resources to provide a quality learning experience for every student.

Sources:

[1]Alspaugh, J. W. (1999). *The interaction effect of transition grade to high school with gender and grade level upon dropout rates.* (ED 431066). Paper presented at the Annual Meeting of the American Educational Research Association); (Alspaugh, J. W. and Harting R. D. (1995). *Transition effects of school grade-level organization on student achievement.* Journal of Research and Development in Education. 28(3), 145-49.

[2]Paglin, Catherine, & Fager, Jennifer. (1997). *Grade configuration: Who goes where.* Northwest Regional Educational Laboratory. http://educationnorthwest.org/webfm_send/464.

[3]Wren, Stephanie (2003). *The Effect of Grade Span Configuration and School to School Transition on Student Achievement*). ED479332. 2003. http://www.eric.ed.gov.

[4]Alspaugh, *supra.* Offenberg, R.M. (2001). *The efficacy of Philadelphia's K-to-8 schools compared to middle grades schools.* Middle School Journal, 35(1).

[5]Paglin & Fager, *supra.*

[6] George, P.S. (2005). *K-8 or Not? Reconfiguring the Middle Grades.* Middle School Journal. 37(1).

[7] *The Middle School Mess,* Education Next, Winter 2011.

[8]Philip Cook, Robert MacCoun, Clara Muschkin, and Jacob Vigdor (2008). *The negative impacts of starting middle school in sixth grade.* Journal of Policy Analysis and Management, 27, 104-121.

[9]Franklin, B., Glascock, C. (1996). *The relationship between grade configuration and student performance in rural schools.* Paperpresented at the Annual Conference of the National Rural Education Association.

[10]Coladarci, T. & Hancock, J. (2002). *Grade-Span Configurations: The (Limited) Evidence Regarding Effects of Academic Achievement.* ED467714, 8/2002. http://www.eric.ed.gov) quoting a finding of the National Middle School Association Research Summary.) (Regional Educational Laboratory Northeast and Islands (2010). *Reference Desk Response No. 431: School Grade Configurations K-8.* Newton, MA.

For more information visit:

Tulsa Public Schools
Research Supporting a 7-12 School Configuration

I. Minimizing Transitions to Improve Academic Achievement:

A transition from one school to another brings a different facility, unfamiliar teachers and administrators, new groups of friendships and classmates, as well as different expectations. As detailed below, research reveals that school-to-school transitions negatively impact academic achievement. The fewer transitions, the better chance a student has of completing high school. If there is a transition into a new school for high school instruction, however, grade 7 is preferable to transitioning in later years. Schools with more grades, and fewer students per grade, are also related to improvements in academic achievement and the dropout rate.

- There is a decline in achievement during a student's transition year from elementary school to the next level. As the number of transitions experienced by a student increases, so does the high school dropout rate. Further, the higher the transition grade level (the later the student transitions into the high school), the higher the dropout rate, most significantly for boys. Specifically, of the high school configurations studied (7-12, 9-12, and 10-12), the lowest high school dropout rates were seen in high schools where students transitioned in at grade 7. The highest dropout levels were seen in 10-12 grade high schools. Alspaugh suggests that the link between higher dropout rates and later-grade transition years is most likely attributed to the academic achievement loss commonly experienced during the transition year and the fact that students transitioning at grade 7, as opposed to grade 9 or 10, have more time to acclimate to high school. In addition, he notes that schools with more grades (i.e., 7-12 schools) are usually smaller schools with fewer students per grade. Smaller high schools typically have lower dropout rates than larger schools. Consequently, his findings also supported previous research that with regard to minimizing dropout rates, it is optimal to structure schools with more grades and fewer students per grade. (Alspaugh, J. W. (1999). *The interaction effect of transition grade to high school with gender and grade level upon dropout rates.* (ED 431066). Paper presented at the Annual Meeting of the American Educational Research Association); (Alspaugh, J. W. and Harting R. D. (1995). *Transition effects of school grade-level organization on student achievement.* Journal of Research and Development in Education. 28(3), 145-49).

- In a study of eight different schools with seven different grade spans, researchers found that sixth-grade students in both elementary and combination K-12 schools outperformed sixth graders in middle schools or junior high schools and considered the number of transitions a significant factor. (Paglin, Catherine, & Fager, Jennifer. (1997). *Grade configuration: Who goes where.* Northwest Regional Educational Laboratory. http://educationnorthwest.org/webfm_send/464).

- A 2003 study of 232 schools in Michigan revealed that the reduction of school-to-school transitions is correlated with improvements in student achievement and that longer grade spans within schools is positively correlated with student achievement. The number of transitions was a significant predictor of student achievement. The study evaluated student performance on the state assessment administered in grades 4, 5, 7, 8 and 11.

(Wren, Stephanie (2003). *The Effect of Grade Span Configuration and School to School Transition on Student Achievement*). ED479332. 2003. http://www.eric.ed.gov).

- A researcher from Johns Hopkins revealed in a 1987 study that the positive impact of longer grade spans in schools teaching sixth graders was an advantage most evident among students of lower socio-economic status. (Becker, H. J. (1987). *Addressing the needs of different groups of early adolescents: Effects of varying school and classroom organizational practices on students from different social backgrounds and abilities.* Office of Educational Research and Improvement, U.S. Dept. of Education).

- Some studies have found that schools with more grade levels per building (i.e., fewer number of transitions) evidenced not only higher academic achievement, but also better attendance rates, self-esteem and attitudes towards school, with fewer suspensions and behavior problems, regardless of socioeconomic status (Alspaugh, *supra*) (Offenberg, R.M. (2001). *The efficacy of Philadelphia's K-to-8 schools compared to middle grades schools.* Middle School Journal, 35(1)).

- A 1997 study of Connecticut elementary and middle schools found that sixth graders performed better on standardized tests when they were in K-6 configurations, as opposed to 6-8 middle school configurations. The researchers also determined that a K-6 configuration led to greater school accountability for sixth grade performance than that occurring in a 6-8th grade configuration. (Tucker, Charlene G., and Andrada, Gilbert N (1997). *Accountability Works: Analysis of Performance by Grade Span of School.* Paper presented at the Annual Meeting of the American Educational Research Association. ED 411 278. http://www.eric.ed.gov).

II. Other Benefits of the PK-6/7-12 Grade Configuration:

- In elementary schools, student environment is more nurturing with fewer stressors than a middle school. The stressors of a middle or high school—navigating through the school, forming peer relations, organizational instructional adjustments—are so critical that they neutralize or even diminish the achievement gains made in elementary school. (Wren, *supra*).

- Schools with a broad span of grade levels present opportunities that do not exist in middle schools. There is more opportunity for cross-age activities such as tutoring and older role model programs like "kindergarten buddies." Parents are more involved in a school in which their children are more likely to be in the same building. (Paglin & Fager, *supra*).

- The shift to longer grade span elementary schools allows students to stay in their neighborhood schools for a longer period of time. (George, P.S. (2005). *K-8 or Not? Reconfiguring the Middle Grades.* Middle School Journal. 37(1)).

- Having schools with longer grade spans allows for more collaboration among teachers across grade levels as well as better alignment of curriculum across grades. With regard

to a K-7 school, it can become a place where subject matter depth and expertise is more highly valued and leveraged than before the reconfiguration, and its secondary students and teachers can benefit from the "whole child" perspective of education more commonly found in elementary schools. (George, *supra*).

III. Challenges and Criticisms of Middle Schools

A significant number of districts across the nation are transitioning away from the use of middle schools. The use of middle schools peaked in 2005 with just over 9,000 across the United States, and as of 2007-2008, the National Center for Education Statistics reported 500 fewer middle schools. David Hough, the dean of Missouri State's education school and a former editor with the Research in Middle Level Education recently reported that "the trend is definitely away from stand-alone middle schools" and estimated there will be fewer than 7,950 when the 2010 data are in. (*The Middle School Mess,* Education Next, Winter 2011). Many in the education reform community believe that the reconfiguration of schools is a response to the evidence showing that middle schools have failed to serve the academic and developmental needs of 6-8th grade students. *Id.* Studies critical of the middle school configuration include the following studies.

- In an award winning study by researchers from Duke and the University of California, researchers studied and compared sixth graders in North Carolina in the 2000-2001 school year who were in middle schools serving grades 6-8 and sixth graders who were kept within the elementary school. The researchers found that students who attended middle school in sixth grade were twice as likely to be disciplined relative to their counterparts in elementary school. They found that the behavioral problems of these middle-school sixth graders persisted beyond the sixth grade year through the ninth grade and that exposing sixth graders to older peers had persistent negative consequences on their academic trajectories. The authors note that their results complement the recent findings by other researchers that school systems that move sixth graders from elementary to middle school experience a 1-3 percent decline in on-time graduation rates. As such, the authors explained, "Based on our results, we suggest that there is a strong argument for separating sixth graders from older adolescents (Philip Cook, Robert MacCoun, Clara Muschkin, and Jacob Vigdor (2008). *The negative impacts of starting middle school in sixth grade.* Journal of Policy Analysis and Management, 27, 104-121).

- The 2010 study by Columbia Business School researchers Jonah Rockoff and Benjamin Lockwood concluded that "middle schools are not the best way to educate students" in urban districts. These researchers compared academic achievement of New York City's middle schools (6-8) to the city's K-8 schools. Data revealed that students who enter public middle schools in New York City fall behind their peers in K–8 schools. The effects are large, present for both math and English, and evident for girls as well as boys. The academic achievement lag persists at least through 8th grade, the highest grade for which we could obtain test scores. The most notable lag by students in middle school as compared to a K-8 school was experienced by children with lower initial levels of academic achievement. The researchers also found evidence that student absence rates increased when students entered middle schools as compared to their counterparts in a

K-8 school. Further, parents' perception of schools declined more in the 6th to 8th grade years when the students attended a middle school than when they attended a K-6 or K-8 school. Finally, sixth grade students reported less academic rigor, less mature social behavior among students, that the schools are less safe and that the school provides lower quality education than do sixth graders in K-6 or K-8 schools.

Rockoff and Lockwood explain that the grade size (cohort size) has a pronounced influence on student achievement in the 6th to 8th grade years. Though they could not find evidence to support any particular cause, they speculate that it is harder to educate middle-school aged students in large groups because of their developmental stage, which is characterized in part by negativity, low self-esteem, and an inability to judge the risks and consequences of actions. They also suggest that some of the difficulty is a result of the combining of students from multiple elementary schools, which disrupts students' immediate peer group.

(Benjamin Lockwood, Jonah Rockoff (2010, December). *Stuck in the Middle: Impacts of Grade Configuration in Public Schools*, Journal of Public Economics). (Offenberg, *supra.*)

- Several studies on grade configuration have reported middle schools to be less effective in terms of test scores than K-8 schools in the same district. The evidence is especially strong for students in high-poverty schools. (Offenberg, *supra*).

- An analysis and comparison of middle schools with various configurations revealed that each time students switch schools, their feelings of anonymity increase. Further, the researchers found that sixth-grade students in both elementary and combination K-12 schools outperformed students in middle schools or junior high schools and considered the number of transitions a significant factor. (Paglin & Fager, *supra*).

- Authors of a book regarding the interaction of puberty and school context report that upon transition into middle school or junior high school, girls in early adolescence frequently suffered from a drop in self-esteem, extracurricular participation, and leadership behaviors, but not if they remained in an elementary school setting. The effects of this transition persisted throughout the school years. For boys transitioning into middle and high school, there were similar negative effects in extracurricular participation and grades, but not in self-esteem. The authors concluded that the relatively protected elementary school setting made the entry into adolescence less stressful for both boys and girls. Moreover, the authors state that the students who had not had the stress of the earlier transition seemed to cope better with the transition into high school than did other students (Simmons & Blyth (1987). Moving Into Adolescence: The Impact of Pubertal Change and School Context).

- In a study undertaken in rural Louisiana schools that examined the relationship between grade configuration and student behavior, researchers concluded that longer grade spans were linked better behavior. Specifically, they found that sixth-grade boys experienced more suspensions in middle schools or junior high schools than in elementary schools, possibly related to the effects of the transition, the school organization, or school size.

(Franklin, B., Glascock, C. (1996). *The relationship between grade configuration and student performance in rural schools.* Paper presented at the Annual Conference of the National Rural Education Association).

IV. Recommendations and Caveats Relating to School Configuration

- While research suggests that the absence of school-to-school transitions may be one factor that contributes to higher academic achievement in longer-spanning elementary schools, the programming and practices within those schools resulting from the longer grade span configuration are also likely drivers in the schools' improved achievement. As some educators and researchers explain: "Effective programs and practices, not grade configuration, determine the quality of schools." and "Grade configuration per se may not make the difference, but it does make a difference." (Coladarci, T. & Hancock, J. (2002). *Grade-Span Configurations: The (Limited) Evidence Regarding Effects of Academic Achievement.* ED467714, 8/2002. http://www.eric.ed.gov) quoting a finding of the National Middle School Association Research Summary.) (Regional Educational Laboratory Northeast and Islands (2010). *Reference Desk Response No. 431: School Grade Configurations K-8. N*ewton, MA).

- When school-to-school transitions must occur, regardless of the grade, there should be articulation and transition activities that ensure the alignment of curriculum and the smooth transition of students into a new school. "Teachers and students alike should have an informed view of the instructional and social world of the next school in line." (Coladarci, T. & Hancock, J. (2002). *Grade-Span Configurations: The (Limited) Evidence Regarding Effects of Academic Achievement.* ED467714, 8/2002. http://www.eric.ed.gov).

- When making decisions regarding grade configurations and adapting to new grade configurations, schools should consider and address the following:
  - The cost and length of student travel
  - That parent involvement typically decreases in the higher-level schools, but parent involvement is greater in elementary schools.
  - Combining schools into separate grade centers may affect whether neighborhood schools close or remain open.
  - Current buildings may have a design more suitable for several grade levels.
  - School population may increase or decrease substantially as configurations change.

  (Clearinghouse on Early Ed. and Parenting. http://ceep.crc.uiuc.edu/poptopics/gradeconfig.html).

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Grade Configurations in Middle Grade Schools

By Steve Mertens and Vince Anfara

Currently, a number of school districts, particularly large, urban ones, have converted their middle grades schools (generally grades 6-8) to K-8 or 7-12 schools in an attempt to improve academic outcomes for young adolescents. However, there is little empirical evidence, to date, to suggest that simply shifting students from one type of grade configuration to another will improve their academic performance. Recent research suggests that improving student academic (and other) outcomes is less likely to be associated with the specific grades housed in a building as opposed to how young adolescents are being educated in these schools.

What are the Critical Issues?

The academic performance of students is the major concern behind the return to K-8 schools. Districts that have moved to K-8 configurations, or who are contemplating such a shift, typically cite the need for improved academic performance as the primary criteria for the change. However, not all movements in favor of K-8 schools emerge from discussions of student achievement or even adolescent development. Some want K-8 schools to create true neighborhood schools. Others seek K-8 schools as a way to preserve racial and/or economic segregation. This multiplicity of purposes seems to make the K-8 grade configuration more attractive because it appears to accomplish several desirable ends all at once.

Another major factor in the decision to adopt K-8 schools involves the issues of student control, discipline, and safety. Truancy, high dropout rates, violence, and substance abuse are all associated with middle schools, while K-8 schools are deemed to be "safe places." Because K-8 schools are typically smaller than many middle schools, they may provide young adolescents with the personalization they could not get in larger middle schools.

Converting to a K-8 configuration also eliminates the transition from fifth to sixth grade that occurs in 6-8 middle schools. These transitions require developing new relationships with adults and peers in a typically larger, more bureaucratic school and negotiating unfamiliar school regulations and social norms. The K-8 configuration may also lead to sustained parent involvement in their children's schooling. While many families are quite involved in their children's elementary schools, their participation declines dramatically when their children enter middle school.

Research Evidence

Empirical research on the topic of grade configuration is sparse. Many reports are anecdotal in nature and describe the perceived benefits and drawbacks of various grade configurations. Very little research attempts the more difficult task of determining if a cause-effect relationship exists between grade configurations and academic achievement, while controlling for variables like school size, student socioeconomic status, teacher experience, and the like.

Numerous scholars and practitioners have argued that middle schools influence students' behaviors and social-emotional outcomes in negative ways. Studies have suggested that middle schools have detrimental effects in the areas of self-esteem, sense of belonging or connectedness to school, interpersonal relationships, and school safety (Byrnes and Ruby, 2007). Only a handful of these early studies actually compared students in middle schools to students in other grade configurations, however. In most cases, the authors based their arguments on hypothetical assumptions, rather than directly comparing student outcomes in different types of schools.

Four recent studies suggest that converting middle schools to K-8 or 7-12 schools has little or no impact on students' academic achievement when other school and

demographic factors are taken into account. At the same time, some of these studies suggest that K-8 schools may benefit young adolescents' social and emotional development.

Schmitt (2004) conducted a study of the impact of professional development (PD) and grade configuration on student achievement. Her sample included 292 middle-grade teachers from 43 schools in Missouri, 22 of which were designated as high PD schools and 21 as low PD schools. She found that neither PD nor grade configuration had a direct relationship to student achievement, although teachers in 6-8 schools were more likely to be highly engaged in PD than their K-8 or 7-12 counterparts.

McKenzie et al. (2006) examined grade configuration as an environmental contextual factor that could potentially affect academic success. The researchers examined data from 500,000 Arkansas students in the fourth, sixth, and eighth grades between spring 2001 and spring 2005. They found that grade configuration was not a statistically significant predictor of student academic success. What did seem to matter in the fourth and sixth grades was the state's accountability system. That is, students in these grades often performed better in schools that were configured to match the state examination schedule (i.e., the last year at school was a year in which tests were administered). For students in the eighth grade, who were the lowest performing group, this effect was not evident.

Weiss and Kipnes (2006) conducted a rigorous, multilevel analysis of the effects of different grade configurations on student outcomes in the Philadelphia School District. The first wave of the study began during the summer of 1996 with a random stratified sample of 1,483 students attending 45 Philadelphia schools. Researchers found the following:

· Students in 6-8 schools were more likely to have parents with lower education levels and to receive public assistance than those in K-8 schools.

· Students in 6-8 schools fared significantly worse than their K-8 counterparts on a number of measures such as course grades, failure rates, perceived safety and threat, and self-esteem.

· When school size was taken into account, along with several socioeconomic and demographic variables at the school and individual level, grade configuration had no significant effect on the four academic outcomes studied: grades, standardized test scores, attendance, or disciplinary problems.

· According to parent and student interview data, students in K-8 schools did have significantly higher self-esteem and were less likely to perceive threat in the school environment.

· School size mattered—larger schools had a more detrimental effect on student outcomes regardless of grade configuration.

The authors concluded that there were "far fewer differences in student outcomes by school type" than previous research would suggest.

Byrnes and Ruby (2007) also compared the achievement of students in middle schools to students in K-8 schools in Philadelphia, using a sample of 41,000 eighth grade students across five cohorts from 95 schools. The researchers found that the older K-8 schools did perform significantly better than the city's middle schools as expected, but these differences were related to differences in student and teacher populations, average grade size, and school transition rates. The newer K-8 schools did not achieve the same advantage, despite having smaller grade sizes and lower transition rates, due to the more disadvantaged student and teacher populations. After controlling for school transition and average grade size, there were no discernable differences between K-8 and middle schools in terms of academic achievement.

A fifth study provides contrasting results. Using administrative data on public school students in North Carolina, Cook et al. (2008) found that sixth grade students attending middle schools (6-8) were much more likely to be cited for discipline problems than those attending elementary school (K-6). After adjusting for the socioeconomic and demographic characteristics of the students and their schools, that difference remained and persisted at least through ninth grade. When the researchers analyzed end-of-grade test scores, they found complementary findings. Note that these researchers contrasted middle schools with traditional elementary schools serving grades K-6 rather than K-8.

Taken together, these studies suggest that simply reconfiguring schools does not necessarily enhance student academic performance, although it may have some benefits on young adolescents' social-emotional development. At the same time, creating small schools or small learning communities within large schools may help facilitate greater personalization which, in turn, may lead to improved teaching, learning, behavior, and healthy social-emotional development. Interestingly, none of the studies we found considered whether or not the middle school concept was implemented—K-8 schools were simply compared to middle schools. The results could be vastly different if exemplary middle schools were used in this research.

Implications for Practitioners and Policymakers

Researching the topic of grade configurations leads to a very consistent set of questions that should be addressed by each district and its school administrators and school boards when examining the issue of grade configurations. These include:

· Will the grade configuration increase or decrease parent involvement?

· How many students will be enrolled at each grade level and what implications does this have on course offerings and instructional grouping?

· How many transition points will occur? How will these be addressed?

· How will the presence or absence of older students affect younger students?

· Is the design of the school building suited to this grade configuration?

· What is the cost and length of student travel?

· What are the opportunities for interaction between age groups?

· What are the effects of the grade configuration on curriculum? Is there better continuity and articulation in curriculum with fewer gaps and overlaps?

· Are there stronger ties among schools, students, and parents?

In conclusion, the research evidence is clear on one aspect of grade configuration—no particular sequence of grade spans, in and of itself, guarantees student success or improved achievement. Currently, there has been a focus on abandoning middle-grade schools in favor of K-8 or similar configurations. Unfortunately, this national trend is not supported by the research literature. Compounding the issue is the current lack of studies on grade configuration that employ rigorous empirical designs. As previously mentioned, most of the purported "research" that is cited to support the shift to K-8 is descriptive in nature or anecdotal. In order to address the issue more scientifically, more comparative studies specifically comparing and contrasting schools with K-8 configurations to middle grades schools with 6-8 configurations are needed.

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