Summary of Research on Grade Configuration and Learning Environment

Research Conducted by Members of the Future Ready D36 Core Team
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This subset of Future Ready D36 Core Team Members collected data from a variety of research articles, representing public schools in the US and Canada in either K-8 or K-12 districts. The data was then synthesized for themes and relevancy, and presented to the greater Core Team at the January 10, 2018 meeting, as well as the Winnetka Public Schools Community at a presentation on January 23, 2018. It is important to point out that the vast majority of the research indicates strengths and challenges of various grade configurations and environments; however, they all note that there is no greater impact on the student experience than quality of instruction. Below is a summary of this research as well as a cited bibliography for reference.

Vulnerability of Middle School Years

Transition is highlighted as a particular challenge throughout the reviewed research; however, it is particular significance during the middle grade years (i.e. 5th-8th grade). Middle School students asked to make a transition to a new building during these years can be linked to an increase in negative behavior, reduced academic success and/or a lack of belonging or identity with the school. The research notes that schools with a designated building transition during the middle school years is adding a geographic transition to the lives of adolescents already experiencing numerous physiological, emotional and social transitions. Additionally, it can be noted that there is typically an achievement loss during the year of a transition. The loss can be made up, but that typically occurs over the course of the full following school year. Districts with transitions at 5th and 7th grades may see this rise and fall in academic performance over the course of a student’s full experience in each of the two middle schools, and/or not stabilize academically until their final year in a 6-8 configuration.

Significance of Transition

Much of what is noted above can be repeated in this section as well; however, the significance of transition can be noted in the elementary grades as well. Some grade configurations cluster primary grades together, intermediate and then middle school (K-2, 3-5, 6-8). While the reviewed research shows that transition presents a challenge at any grade level, it also indicates that transition has a less substantial overall impact on primary aged students as opposed to middle school aged students (given the social-emotional challenges typical amongst adolescents). Overall, the fewer transitions a child experiences over their educational career, the more consistency exists for both students and their families. Relationships between the families and their schools tend to be stronger, more communicative, reciprocal and supportive given the longer amount of time in a single school.

Parity of Environment and Developmental Needs

Schools with experience renovating or building a new building point out the significance of the parity between the learning environment and the developmental needs of the children being served. For example, a renovated middle school that previously served primary students would need to be redesigned in such a way that the facilities of the building, the furniture, the learning spaces all reflected the physical and developmental needs of students in the middle school grades. The research points out that there is no “one size fits all” model when it comes to renovating or building a school. If a school does not take into
consideration the impact that environment has on the learning experience, there can be negative consequences. Everything from lighting to acoustics to furniture can impact behaviors like student motivation, lethargy and collaboration. Additionally, the timing and schedule for the school building plays a role in impact on environment, and was a consideration for a number of the studies reviewed by the research team. Research indicates that primary aged students perform better when the academic timing of their day is scheduled during the earlier hours, and the reverse is true for adolescents (later start shows a great academic impact). This research is based on other studies around the sleep patterns of various developmental ages. This topic in particular was not explored by the research team, but may be something for consideration in the future.

Identity of School Community

Given the body of research reviewed by this group, findings suggest that the K-8 model is the most preferred in its ability to provide a consistent environment for students with few transitions. Overall, a fluid experience for students in which they can self-identity as a contributory member of a school community (and that feeling is shared by the student’s family) is the most beneficial to the student’s overall learning experience. After that, any configuration that offers the fewest transitions is preferred, most traditionally being a K-5, 6-8 model. The research highlights that the smaller a school community can be, the better, promoting more intimate, supportive relationships amongst staff, students and families. This also aids in strengthening the student’s identity with membership in the school community. Overall, the research indicates that the longer a student can spending in a single school environment, the better for their academic, social-emotional and behavioral growth.

Resources


California Department of Education


Prospect Heights School District 23


Stillwater Public Schools (March, 2011). Review of Literature on Grade Configuration and School Transitions.


