#### **Executive Summary: Early Start for Elementary Students**

This information was compiled as part of the Eden Prairie Schools school start times study. In November 2019, Eden Prairie School's administration provided a report to the school board regarding its intent to begin a school start time study. As part of the study, a task force of 18 members including parents, teachers, and community members was established. Taskforce members represented several industries including social work, public policy, education, child development, and research and evaluation.

The task force members reviewed the expert presentations and qualitative data collected from staff members and attendees of community meetings. Taskforce members requested additional information about the impact of earlier start times for elementary students. The following is a summary of the information reviewed.

Overall, there is limited research available related to the impact of earlier start times for elementary school students (Commonwealth of Pennsylvania, 2019; Dupois, 2015; Keller et al, 2017; Rath, 2018; Troxel, 2017; Wahlstrom, 1999). Experts explain the reason for limited research is in part because there is not the same biological rationale for why it would be detrimental for elementary students. (W. Troxel, personal communication, June 2020; C. Eiken, personal communication, May 2020).

# Experts concur that there is conflicting evidence about the impact of earlier start times on elementary students.

- 1. Research from Keller et al (2017) indicated that early start times may contribute to an increased number of unwanted student behaviors.
- Commentary from Troxel (2017) asserts that the behavior referral data analyzed in the Keller study included 6th-grade students who were in elementary schools. Dr. Troxel noted that disaggregation of the records examined indicated that of the total behavior referrals examined, 3% were for kindergarten - 6th-grade students. Of those referrals, 1.6%, about half, were for 6th-grade students.

"Thus rather than being evidence of the adverse behavioral effects of early start times on all elementary students, it is possible that the observed cross-sectional associations between early start times and behavior incidents are primarily evidenced in the sixth graders, providing future support for ongoing efforts to support later start time for adolescents." (Troxel, 2017).

## Earlier start times for elementary students appear to support greater focus, and the ability to engage in learning.

- 1. Article from education reporter, Rath (2018) quotes principal, parents, and teachers who found that their elementary students were more astute earlier in the morning, and able to actively engage in learning.
- In a 1999 report from the Center for Applied Research & Educational Improvement for Minneapolis Public Schools, investigator Dr. Kyla Wahlstrom found that students who attended schools with earlier start times "were more alert and ready to learn (p. 3)."

#### There appears to be no impact on middle school academic achievement for former elementary students who attended schools with earlier start times.

- 1. In her report for Wayzata Public Schools, Dupuis (2015) found that there was no association between earlier school start times at the elementary school level and the achievement of middle school students.
- 2. Edwards (2012) Found that middle school scores increase and "it may be possible to increase test scores for middle school students at no cost by having elementary schools start first (p. 57)."

## An earlier school start time for elementary students does not appear to decrease the amount of sleep.

- 1. Gilbert et al (2015) surveyed elementary students about sleep patterns and concluded that earlier school start time did not decrease amount of sleep.
- Boyland et al (2015) conducted a multi-year study related to parent perception of the impact of school start time changes. One area of concern was possible sleep deprivation with elementary school students. After 3 years the study participants reported higher levels of agreement with the initiative.
- 3. In her April 2020 presentation, Dr. Kyla Wahlstrom asserted that earlier school start times do not impact pre-pubertal children due to the malleable sleep schedule for pre-pubescent children.

There is limited information about the impact of elementary students standing at the bus stop early in the morning.

- 1. In a 2015 Star Tribune article, McGuire reported that parents shared concerns about elementary school students being out at the bus stop.
- 2. In her April 2020 presentation, Dr. Kyla Wahlstrom referenced concerns about elementary students being at bus stops early in the morning were addressed through parent/community support groups.

Reference List

- Appleman, E. R., Gilbert, K. S., & Au, R. (2015). School start time changes and sleep patterns in elementary school students. Sleep Health, 1(2), 109-114.
- Boyland, Lori., Harvey, M. W., Riggs, W., & Campbell, B. (2015). Changing school times to combat adolescent sleep deprivation: Perceptions of school stakeholders. Journal of School Public Relations, 36(1).
- Commonwealth of Pennsylvania (2019). Sleep Deprivation in Adolescents: The case for delaying secondary school start times. General Assembly of Pennsylvania. http://jsg.legis.state.pa.us/publications.cfm
- Dupuis, Danielle.N. (2015). The association between elementary school start time and students' academic achievement in Wayzata Public Schools. Center for Applied Research and Educational Improvement, College of Education and Human Development, University of Minnesota.
- Edwards, Finley. (2012). Do schools begin too early? The effect of start times on student achievement. Education Next, 12(3), 52-57. Retrieved 060920 from https://www.educationnext.org/do-schools-begin-too-early/
- Keller, Peggy. S., Gilbert, L. R., Haak, E. A., Bi, S., & Smith, O. A. (2017). Earlier school start times are associated with higher rates of behavioral problems in elementary schools. Sleep Health, 3(2), 113-118.
- Mcquire, Kim (2015). School districts mulling chance for teens to sleep later. Star Tribune. <u>https://www.startribune.com/school-districts-mulling-chance-for-teens-to-sleep-lat</u> <u>er/298728971/</u> Retrieved 060920
- Rath, Arun (2018) What earlier school start times mean for young brains. Retrieved 06092020 from <u>https://www.wgbh.org/news/2018/02/01/news/what-earlier-school-start-times-me</u> <u>an-young-brains</u>
- Troxel, Wendy M. (2017). Commentary on Keller et al, 2017: The problem with interpreting low base rate behaviors. Sleep Health, 3. p 227.

- Wahlstrom, Kyla L. (1999) Elementary feedback on changed start times Report for Minneapolis Schools. Center for Applied Research & Educational Improvement. pp. 1-5.
- Wahlstrom, Kyla L. (1999) The Prickly Politics of School Starting Times, Phi Delta Kappan, Vol. 80, No. 05, January 1999, pp. 344-347.
- Wahlstrom, Kyla L. (2020) Activities, Health and Transportation: Findings and concerns related to starting times for schools. Eden Prairie Schools, Eden Prairie, Minnesota.