Overview: (I) Eva Collins, Deputy Superintendent of the Bellevue School District, opened the meeting. The committee identified information interests (II), discussed the after-school tutorial at Bellevue high schools (III), and reviewed a summary of research findings related to adolescent sleep, health, and academic achievement. (IV) The committee decided to postpone surveying until they have developed ideas to test. (V) At their next meeting, the committee will review the information requested tonight and prepare for the February 11 panel of KingCo activity directors.

Next Meeting: January 28, 2015 (7:30 p.m. to 9:00 p.m., Mercer Island Board Room)

I. WELCOME AND INTRODUCTIONS

Eva Collins, Deputy Superintendent of the Bellevue School District, welcomed committee members, who introduced themselves again for the benefit of a member attending for the first time. Facilitator Dick Withycombe asked them to consider the minutes of the November 19 meeting, and they approved them as submitted, which means they will now be posted on the two districts’ websites.

II. INFORMATION INTERESTS

Two people offered to respond to the committee’s request for information about current high school schedules, including before-school and after-school classes and activities, as well as the start and end times of the school day.

Dick will contact some of the districts identified in the research summary to ask what caused them to adopt later start times, what impacts they have seen, and what kinds of implications they had to resolve when they made the change.

Eva contacted the Issaquah School District, which didn’t implement a later start because of the cost of additional transportation routes. She learned that Bainbridge Island has an 8:35 a.m. start, though many students take zero-hour classes at 7:35 a.m.; the primary disadvantage they have identified is that some students miss class time for athletic competitions. Eva left an inquiry with Seattle and expects to hear before the winter break. Dick talked to people in Everett, where a later start was proposed as a way to increase transportation efficiency and failed to attract community support on that basis.

In the course of their review of research (below), the committee identified additional information interests, some of which, Dick suggested, also serve to inform them about stakeholder groups they need to communicate with.

- High school enrollment by school
• Levels of participation in afterschool activities by high school
• The numbers of Bellevue juniors and seniors who opt to have their first two periods free
• The numbers of Running Start students who leave school midday for the community college
• The numbers of middle school students who attend high school classes for a portion of the day
• How students and parents whose Bellevue middle schools went to a later (8:30 a.m.) start this year feel about that change
• How students and parents whose Bellevue high school went to an earlier start (7:30 a.m.) this year feel about that change
• Suicide rates and counselors’ estimations of rates of suicidal ideation

III. BELLEVUE HIGH SCHOOL TUTORIAL

The committee discussed the 30-minute, after-school tutorial at Bellevue high schools (every day except Wednesday). This period is required for teachers, but not for students; however they are expected to be available if a teacher requests their attendance. Students may choose to take advantage of this time, and many do, using it for a variety of purposes, such as making up tests, finishing labs, getting extra help, talking with teachers, and doing homework.

The school does not sign work permits for employment that begins before 3:30 p.m. on those days, and clubs and sport practices cannot start before 3:10 p.m. and 3:30 p.m. respectively. Metro makes some accommodations for this schedule, but there are so many buses it is not an issue.

Eva said the tutorial is important to students. A Bellevue parent said she knows students with 4.0 GPAs who use the tutorial, which is one reason for their academic success, and she would hate to see changes that create barriers or disincentives. She believes tutorial has benefited her children and that eliminating it would offset the benefit of a later start.

Another committee member noted that one of the research studies found that changing the start time offers an opportunity to look at the structure of the school day and suggested that, if the start times were changed in a way that impacted tutorial, there may be another place in the school day for it.

III. REVIEW OF EDUCATIONAL RESEARCH

Eva introduced and thanked June Han of the Bellevue School District’s research department, who prepared the research summary the committee read before the
meeting ("Adolescent Sleep Delay and School Start Times"). She also thanked committee members who submitted research studies to be shared.

Noting that all of the studies appear to arrive at similar findings, Eva suggested it may not be necessary for the whole committee to read additional studies. A committee member suggested that individuals who choose to read additional studies have an opportunity to share what they learn at future meetings.

June has PDF files of most of the studies summarized in her report and offered to share those with interested committee members. Eva invited committee members to ask June questions.

- **At our first meeting, [Mercer Island Superintendent] Dr. Plano mentioned that, although a lot of the research found that a later start is beneficial to students, some studies did dispute that.**

- **I included some, for example Hinrichs’ study, which found no effect on academic achievement. However, his study has been disputed by other researchers because he used a single measure — and that a test students must take in the morning (the ACT). There is a large and growing literature about the effects of sleep deprivation and obesity. With children, the evidence of a relationship between lack of sleep and a higher BMI is clear; with adolescents it’s mixed, but more studies show a relationship than not. Overall, there’s overwhelming research about the positive effects of children getting enough sleep.**

- **I take teams to evening games and I wonder, if those stay fixed, whether we can actually get our students more sleep. If the number of hours of sleep remains the same, is getting up later beneficial?**

- **Most studies show that, even with a later start time, students go to bed at about the same time; in some studies, they went to bed earlier (maybe because they saw the value of getting enough sleep). For me, the point is that we can’t force students to go to bed at a certain time, or to wake up earlier, because these are biological processes. Adolescents have a natural tendency to go to bed later and to wake up later.**

- **Where the report talks about sleep deprivation pertaining to sleeping at the wrong circadian phase, does that speak to getting up later? Yes.**

- **What about melatonin levels?** Melatonin levels rise and fall over the course of the day in children, adolescents, and adults; I don’t remember coming across research that found melatonin levels in

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*The comments of committee members appear in italic print, those of the facilitator and of presenters in regular print. Unless enclosed in quotation marks, comments have been edited for brevity and clarity.*
adolescents to be significantly different. There was a reference to the homeostatic sleep process; adolescents experience less pressure to sleep than younger children do, until later at night.

- One of the studies revealed clear differences, based on household wealth and income, in how families adjusted to the schedule change. We need to keep that in mind.

- One of the conversations in Bellevue is around the idea of more being better in terms of academic rigor. Coaches believe the same thing; more practice is better. One of the recommendations may be to reduce homework, so you wouldn’t have a high school junior who has an hour of homework in each of six classes every night — which is physically impossible.

- We need to remember that we have a parent of a Mercer Island High School student who is also a sleep specialist at Virginia Mason and has offered to help the committee.

- What part of our student population are we trying to impact? A lot of the athletes I see are already high-GPA. Are we trying to impact them or the kids not in activities? Do we expect to see gains in kids who are already high? Are we trying to bring lower kids up a little, to give them more chances?

- The research shows that later starts benefit disadvantaged students and students with lower test scores disproportionately more.

- The studies also found positive effects on depression and suicide (and I would add anxiety). As a psychologist, when I see kids in my practice, the first thing they need to do is to get more sleep. There are also issues with substance abuse and traffic accidents.

- Looking ahead to the stakeholder phase, the later-start Facebook page suggests involving the Chamber of Commerce (because they can speak to effects on lower-wage families) and the teachers’ union (because this will affect them directly).

- Does the research give us any clues about the amount of additional time needed to gain the benefits? There’s no absolute number, but most research suggests that, ideally, high school would start at 8:30 a.m. or later and that students would get eight to nine hours of sleep. Studies also show that even a modest delay in start time greatly benefits students.

- We need to consider the impact of interscholastic competitions. One of the implications in the research is missed class time because other schools start earlier and kids miss class time for games.
• *If school started later, more kids might be interested in before-school activities, such as music programs and zero-period classes, which would really benefit them. Now those start at oh-dark-thirty.*

• The committee may wish to consider reaching out to a hospital or sleep center; the director of the pediatric sleep disorder center at one Seattle hospital has been working with schools on this issue.

**Conclusion**

Dick asked committee members whether they agreed that there appears to be compelling evidence of health and academic benefits for adolescents in a later school start time and more sleep. Seeing consensus, he said this is “a building block for the work we’ve been asked to undertake.”

**IV. SURVEY STRATEGY**

Eva distributed copies of draft survey questions, as requested November 19, however she said she had been advised by June as well as by Bellevue’s director of research that it is too soon to survey. Among other reasons, there is the risk of survey fatigue. She asked the committee about the relative value of surveying now and later. The committee decided to postpone the survey, for several reasons.

• Survey findings will be more useful when the committee can give people a straw man to respond to; they may be hesitant to provide information without knowing what the later start might look like.

• The research suggests that people need to be educated about a later start; without a context, they are more likely to oppose it.

• It is better to wait until the committee has a specific proposal, when it’s possible to explain how it might work and what the expected benefits are. It’s important to enable people to think it through, and also that the request for input is genuine.

• The committee will want to develop multiple ways to provide information to parents and the community before launching a survey.

**V. NEXT MEETING JANUARY 28**

On January 28, the committee will review the information requested tonight and prepare for the February 11 panel of KingCo activity directors.