

RECOGNITION OF STUDENTS, STAFF AND COMMUNITY

POLICY ISSUE/SITUATION

Tonight, the Board recognizes the following individuals for their outstanding achievements and contributions to the Beaverton School District and the community. The following recognitions feature on example of WE Collaborate, and one example of WE Innovate, two of the four Pillars of Learning.

BACKGROUND INFORMATION:

Collaboration: Physics First Model - Susan Holveck, Bradford Hill

Susan Holveck led the Beaverton School District's implementation of a new science sequence at all high schools during the last year. For generations, the traditional high school science sequence has been: 9th-grade Biology, 10th-grade Chemistry, and for the few students who continue with science, 11th-grade Physics. Most students now take Physics in their freshman year, Chemistry as sophomores, and Biology in their junior year.

Beaverton students who take Physics, as freshman, build a solid foundation for future courses in Chemistry and Biology fostering greater scientific literacy. They participate in an engaging, hands-on, inquiry-based physics course that will provide many opportunities for data collection and analysis, critical thinking, problem solving, and making predictions for future events based on data, and connections to math.

Integral in the transformation, was Physics teacher, Bradford Hill whose Patterns course at Southridge High School laid the foundation for the articulated Science sequence and set the standard of rigor for all students in the Beaverton School District.

Led by Susan and Bradford, all high school science teachers have participated in ongoing professional development. Physics teachers meet monthly, on their own time, to review upcoming units, design common assessments, and discuss instructional practices. They also discuss student progress and what practices are working and what practices are not working for students and planning next steps. In addition to meeting monthly, teachers are using TeacherSource, an internal resource that allows teachers to share lessons, units, teaching resources and videos of instruction.

Several high schools have teamed Physics teachers so they are able to flexibly group students and have a common plan time to collaborate.

The transition to a Physics First model in the Beaverton School District has been successful due to the willingness of teachers to collaborate and share best practices, to affect greater student outcomes in the sciences.

Innovation: STEM Transformation at Chehalem Elementary School and Highland Park Middle School – Debra Nicolai. Ronda Haun

Chehalem Elementary School and Highland Park Middle School have partnered to become Science Technology Engineering & Mathematics (STEM) focus schools. Beginning last year, and continuing for the next three years, staff, students, parents and community partners will develop and implement STEM investment plans in both schools to shift the educational experience from a traditional elementary and middle school toward a cohesive K-8 STEM experience.

During the first year at Chehalem Elementary School, the STEM investment plan sought to address the inherent issue of equity, by offering enrichment opportunities for all students during the traditional school day. Staff worked closely with industry professionals to engage students in Standards-Based STEM-integrated units, connecting classroom-learning experiences to authentic real-world applications of engineering and science inquiry. During the second year of implantation, Chehalem is moving forward with a school-wide math intervention as well as implementing the Common Core State Math Standards and beginning engineering design professional development in grades k-2.

At Highland Park Middle School, teachers are collaborating to build innovative lessons that are relevant to students across the content areas. Curriculum partnerships are built throughout each schools' classes to build common language, class-to-class, to help students learn at a much higher rate. Community and business partners are teaming with the schools to connect the learning with real-world activities.

STEM education creates an integrated, innovative, learning environment in every classroom. The STEM approach facilitates a learning experience driven by problem solving, discovery, and exploratory learning. Weaving a STEM culture into all subjects allows students to connect what they learn with what they see around them. STEM learning promotes student readiness for college and prepares them for a 21st century work force.

Chehalem Elementary School, in partnership with Highland Park Middle School, and eventually Beaverton High School, working together with a STEM focus, allows students to build scientific inquiry skills in kindergarten and scaffold them up through high school.

Congratulations, Chehalem Elementary School and Highland Park Middle School for partnering, school and community wide, to build an innovative program for success for all students in Science, Technology, Engineering and Mathematics and beyond.

RECOMMENDATION:

It is recommended that the School Board recognize Susan Holveck, Bradford Hill, Debra Nicolai, Chehalem Elementary School staff, Ronda Haun, and Highland Park staff for their contributions to the School District.