

**SUPERINTENDENT'S REPORT**  
**Reporting to Public Session Tuesday, March 12, 2019**

**1. Design Thinking**

Central to the redesigned curriculum is Applied Design, Skills & Technologies; a curricular area focussed on bringing together aspects of Science, Technology, Engineering, Arts & Math, commonly referred to as STEAM, from Kindergarten to Grade 12. Burnaby students are now pursuing their interests by shifting from a single subject focus to a cross-curricular, multidisciplinary approach. By learning design thinking from a young age, with an emphasis on developing knowledge in teams, students build a deeper understanding of how the world works. The importance of this divergent thinking, “thinkering” and the ability to generate innovative ideas cannot be understated. It is this way of being that will allow our local industries and economy to thrive on the global stage.

Students at Seaforth Elementary were given the task of creating objects from recycled cardboard. The “Most Magnificent Thing” project allowed students to engage in an area of interest, explored through the design process. The entire school showed creative energy and passion for exploration, culminating in a rich community showcase of student creations.

Byrne Creek Secondary’s FIRST (For Inspiration and Recognition of Science and Technology) Robotics team demonstrates a mastery of STEAM integrated education. Receiving a design challenge and given a 6-week window to build a fully functional autonomous robot requires the seamless integration of team members with varying strengths and abilities, from programming to fabrication and entrepreneurship. The dynamic nature of designing such a sophisticated product relies on each team member’s ability to access their past experiences and apply them to the task at hand.

This evening, Wendell Hiltz, Principal, École Seaforth Elementary will provide an overview of the project and introduce Alyson Vo-Tran, a grade 4 student and Kai Buysse who is in grade 7. They will explain their projects and demonstrate how they work. Effie Aadland, Principal, Byrne Creek Secondary Community School will provide some background on the FIRST Robotics initiative and teacher sponsors, Stephen Cook and Duncan McDonald will introduce team members; grade 10 students Justin Viacrusis and Jeffery Lee, grade 11 students Mehmet Talha Orenli and Giovanni Ferraresso and grade 12 student Wayne Ma who will provide a demonstration.

Recommendation: THAT the Board of Education receive this information.