

MEMO

TO: Superintendent Gina Butters, Board President Jon Ritchie, WSD Board Members

FROM: Sheri Heiter

DATE: November 28, 2022

SUBJECT: K-6 Computer Science - Board Presentation

It is projected that employment for computer and information research scientists will grow by 21 percent from 2021-2031. This is much faster than the average for all other occupations. It is essential to provide computer science instruction and multiple learning opportunities for all students. This experience will help students discover their talent and passion in coding from an early age. By introducing computer science topics to students beginning in Kindergarten, we build and strengthen their critical thinking and problem solving skills and give them the tools necessary for a computer science related career in the future.

The Utah State Board of Education introduced the Computer Science Standards for Grades K-5 in 2019 to ensure all Utah students enter the secondary schools with a robust exposure to computational thinking and with competencies in digital literacy. In support of this mission, Weber School District adopted the *Skill Struck* platform which is available to all students K-8. Within the platform, students have a variety of experiences, including coding, web development, critical thinking and problem solving.

In order to support professional development for our teachers, a Canvas course has been created to facilitate learning relative to the Computer Science Standards and how to implement them into classrooms. Developmentally appropriate robots have also been identified for each grade level so all students have access to hands-on coding opportunities. Additionally, each grade level has a Computer Science Fellow who supports teachers as they learn the content and best practices necessary to fully implement the Computer Science Standards.

Melissa Hadley, the Elementary Mathematics and Computer Science Teacher Leader, will present our work relative to the Computer Science Standards and will describe the various opportunities for students to learn and grow within this exciting domain. Students from Kindergarten and 6th grade will demonstrate their robots and will show the amazing growth in coding, problem solving and critical thinking skills that occurs in the K-6 space.