“Students Teaching Students” is a well-recognized model in higher education; Nebo School District is implementing this model and has seen great success with 80 high school students teaching 900 fifth grade students coding this past school year.

Nebo School District implemented the “Students Teaching Students” model by creating a STEM Ambassadors Program where high school students taking Exploring Computer Science classes were chosen by their teachers to visit elementary schools near them and teach coding.

“The high school students have loved learning a skill that they could teach to others,” said Elise Ford, a computer science teacher at Spanish Fork High School. “Because of the fact that they were required to teach coding, their level of understanding and depth of knowledge has vastly increased. The elementary school students were excited about coding and created great relationships with the high school students. Student engagement was at 100 percent every single time we showed up to teach. As a teacher of the STEM Ambassadors, I loved watching some of my students come out of their shell and seeing the increased confidence in their abilities solidified that the program does more than teach students to code—it also builds confident speakers, teachers, and leaders. I feel lucky to have been a part of a successful program.”

JoAnn Tuttle, former CTE Director for Nebo School District, says that the inspiration to start the STEM Ambassador Program came from a partnership they have with InsideSales.

“The owner of InsideSales lives in our district and one of his kids went to one our elementary schools and he decided to send some of his employees to teach coding at the school,” Tuttle said. “We saw how receptive and excited the students at that school were and we thought ‘how can we expose more elementary school students to these opportunities?’”

Learn more about STEM Action Center programs at stem.utah.gov
Eighty high school students were involved in last year’s roll out of the STEM Ambassador Program and 900 fifth grade students received eight hours of coding instruction.

The STEM Ambassadors spent January learning how to teach coding and then in February, March and April they visited elementary schools near them and taught students curriculum from code.org.

"With less and less high school students signing up for computer science classes each year, we decided something needed to change," Tuttle said. "Exposing these elementary school students to coding at a young age helps them to develop this 'Can do' attitude, so when they go to high school they will hopefully be more likely to take these essential computer science classes."

Next year Nebo School District plans to double the size of the program, giving even more elementary students the opportunity to learn coding.

"I really enjoyed being a STEM ambassador this year," said a high school student from Salem Hills High School. "It was a great learning opportunity for me on how to be responsible and how to be an example to kids. I was able to get to know the kids and I felt I was able to make an impact on their lives. I hope I was able to teach the kids to love coding. I am so glad I was able to be a part of this."

Comments from 5th Grade Students on Learning to Code

- “Fun, helps me figure out formulas and steps to get my program to work.”
- “Challenging but very fun, helps me learn.”
- “Really fun, hard, learned a lot.”
- “Fun to make stuff move. Didn’t know anything about this before we did it.”
- “Helps with math. Helps with following directions and the importance of following steps.”
- “Was fun and entertaining, helped with math. Great to learn from high school students.”
- “Fun learning how to figure out problems. Worked with friends to figure things out. Helps with math skills.”
- “Cool coding stuff. It was great to learn new things.”
- “Was hard and demanding but I learned to problem solve.”
- “Fun, challenging for my mind. Good to problem solve.”

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