Steve Knight: Preparing our youth for the future

The youth of today need to be prepared for the world of tomorrow, on this I think we can all agree.

Unfortunately, as Californians we can probably also agree that many in our state fall short of this goal.

Every year, technology becomes a bigger part of everyday life, and so does the need for today's students to embrace and understand that technology.

To achieve this, our educational institutions must reach beyond their traditional focus on reading, writing and arithmetic and look to the future.

The future, it seems, is STEM: science, technology, engineering, and mathematics studies. By emphasizing these fields now, we can improve the success of our students and our state in an increasingly globalized and technologically advanced world.

Of course, we should not abandon the other disciplines or strip students of the choice to pursue non-STEM fields. But if we can set aside a few hours a week for students to learn about these fields, we can give them the opportunity to succeed in industries of the future.

Faced with this challenge, my office sought to find ways to provide this to our community schools. What we found was Microsoft's Technology Education and Literacy in Schools program. or "TEALS," which we have helped institute at five schools across the Santa Clarita and Antelope valleys.

Through TEALS, tech professionals donate a few mornings a week to train both teachers and students in a computer science class with the ultimate goal of sustainable computer science courses taught exclusively by existing faculty at that school.

This meaningful program is capable of inspiring the next generation of tech-savvy professionals who will work to evolve and shape our future day-to-day life.

While the TEALS program singularly hones in on the computer science aspect of STEM, it provides an excellent example of a creative and practical solution to an enormous problem that faces society today.

There are likely to be 150,000 computing jobs opening up each year through 2020, according to an analysis of federal forecasts by the Association for Computing Machinery.

However, of the 45,000 United States high schools, roughly 2,000 offer college-prep-level computer science classes.

This is creating a workforce cavity: high demand of niche tech jobs without a domestic pipeline of qualified workers.

TEALS addresses California's technology workforce shortfall by creating excitement about computer science in high school students who will then mature to be qualified professionals who fuel a growing industry.

Young minds are naturally curious; it's our job to capitalize on that and provide them with proper tools for their careers.

While our state has a long way to go on the road toward preparing our youth for the future, the TEALS program is an excellent start. My office has received very positive feedback from the participating schools that it is generating excitement for STEM-based education among students and staff, and already there are plans to improve and expand it.

In the Antelope and Santa Clarita valleys we are always asking for more middle-class jobs that can buy a house and a car. This is the future of middle-class and high-tech careers and is an opportunity for our kids and our region to have a shot at those careers.

This type of educational innovation will propel California forward and prepare its students for the world of tomorrow.

To learn more about the TEALS program or to find out how to bring it to your community schools, go to http://www.tealsk12.org/ or call my Capitol Office at (916) 651-4021.

Steve Knight is a Republican state Senator and represents the 21st California Senate District, which takes in most of the Santa Clarita Valley.