

Good Afternoon, Chair Huebert, Vice Chair Thomas, Ranking Member Stogsdill, and Members of the Committee:

My name is Ben Sebree and I'm a board member of FlagshipKansas.tech and an executive at a Kansas based software company. FlagshipKansas.tech supports the intent of HB 2466 to increase access for our students to computer science education and to empower teachers, through dedicated funding, to receive professional development and certification.

I'm here to talk about why it's critical to empower our youth and teachers to understand computer science and computing concepts as they move into the workforce, or into their college careers, regardless of whether they intend to pursue careers in "traditional" computer science.

Benjamin Franklin once said, "when you are finished changing, you are finished". This perfectly illustrates how we are currently seeing entire industries and occupations transform at a pace which hasn't been seen since the industrial revolution. For example, in 2009 most aerial shots for movies were done by a cameraman in a helicopter. Today they are filmed with a drone, which often are pre-programmed to get the perfect shot. In 2013, Boeing moved from using skilled workers to paint their airplanes to using robots, shifting their workforce to individuals who could program and debug software and hardware. In the last 22 months, Computer Science has played a huge role in ending the COVID-19 pandemic. In the field of bioinformatics, AI and Machine learning were leveraged in vaccine development which allowed us to move into trials in less than 6 months. To put that in perspective, the Ebola vaccine zoomed through human trials in a record breaking 5 years, gaining final approval only 3 years ago.

Today, 67% of all new jobs in STEM are in computing. In the state of Kansas, there are over 4,700 open computing jobs, while we only graduate 516 in computer science each year, according to the Bureau of Labor Statistics and National Center for Education Statistics.

There are only 35 high schools in Kansas who offer AP courses in Computer Science and a total of 297 AP exams were taken last year. 46 of those exams were taken by female students, only 31 exams by Hispanic students and 5 by Black students. Other states have successfully increased the numbers of female and minority

students signing up for computer science courses, just by providing quality access to computing courses in k-12 and allowing it to count as a graduation requirement. Kansas made great progress last year by allowing CS to count towards high school graduation. This bill furthers that progress by empowering teachers with funds to learn as well as ensuring formal access to computing knowledge for our students.

We can't rely on higher education alone to develop computational and computer science skills in our state. Through primary and secondary education, we owe it to our youth to equitably set them up for the current world, and the world of the future. A world driven by technology, constant evolution of occupations and the ability to compete for jobs in every industry, with or without a college education.

As an employer, I can't stress enough how important computing knowledge and skills are across all disciplines, from Software Engineering, to Accounting, to Manufacturing and Agriculture. Empowering all Kansans with computing skills will allow the state, and our residents to be set up for this changing and increasingly technology driven world.

I want to thank each one of you for your service to our state, and for your time this afternoon.

Ben Sebree, Vice-Chair FlagshipKansas.tech