Senate Higher Education Committee March 15, 2025 Computer Science Teachers Association Testimony - Sarah Bailey HB 96 - Proponent

Chair Roegner, Vice Chair Timken, Ranking Member Ingram, and members of the Senate Higher Education Committee. Thank you for providing me the opportunity to testify in support of retaining \$8 million for the Teach CS program in HB 96.

My name is Sarah Bailey, and I am currently a STEAM teacher for grades 6-8 at East Middle School in Youngstown, Ohio.

I was recruited to be the STEAM (science, technology, engineering, art, and math) teacher when it was added as a new elective. I was truly excited to be piloting a revolutionary program that would help our students learn and grow in ways never offered before. However, there was a lot for me to learn.

One of the objectives in the STEAM program was to teach Computer Science, which was beyond my scope of knowledge at the time. I went home and began researching the resources available to me, desperately trying to figure out how I was going to teach my students how to code. My son (who was in 5th grade at the time) actually had done coding in school already and showed me how it worked. We planned a great lesson together, and my students loved coding.

I realized that I needed to better educate myself in the area of computer science. I perceived that computer science had the potential to elevate my students, and if I ever wanted to give them that opportunity, I needed more education. That is where Teach CS rescued me. I was able to take courses to grow in both knowledge and understanding of computer science. I am now able to answer questions and design projects on my own that will help my students grasp concepts such as Computational Thinking, where they learn how to break problems into smaller problems and then find solutions to those smaller problems. This is not only a core of computer science learning, it is fundamental to living. It teaches my students how to think and analyze. It makes their own life problems manageable because they have a process by which to solve them.

Besides the obvious gains in technology knowledge my students are getting, computer science has changed their whole outlook on life. It gives them hope. My students are surrounded by violence on a continual basis. Several students in my classes were shot over the summer. Some of my students miss school to care for a sick relative or have to babysit so that their parents can go to work to provide for their family. I have students who are being bounced around to different foster cares, some live in homeless shelters. All of these situations look so hopeless, but computer science skills can be a way out for these students.

One of my students, who lives in a group home, absolutely loves coding. He was a master at <u>Code.org</u> and wanted to move on to something more challenging. I taught him a program that I

learned in my Teach CS classes that allows you to draw as you code JavaScript. He completely immersed himself in the program. Even after class was done, he would show me his latest design. This is his way out; his way past everything he has already lived through.

Now comes my plea to you. I am doing my part to inspire and create passion in the computer science arena. But without others to teach computer science, everything I have inspired fizzles away. We need more computer science teachers. Not just any teachers, but teachers who have the proper education to make sure our students are able to thrive and continue their success.

I was able to increase my value as a teacher due to this grant, but my district would not have been able to cover the cost of it on its own. I would have been expected to pay out of pocket for my courses. There's no way I would have been able to afford that without working a second job to pay for it, but the program that I am in is a lot of work, which would have made it impossible for me to accomplish the coursework.

As you make your budget decisions, please understand that the Teach CS program has a very high return on investment. I taught a little over 150 students just this year alone. I was able to inspire them, teach them new skills, and help them learn how to solve problems through computer science. Many students are pursuing education in the computer science fields and are interested in coding. Next year, I will be able to repeat the process with another 150, then another 150. In 4 years, I would have reached more than 600 students. Just imagine the impact of all of the teachers that participated. But even more importantly, imagine what would happen if the program continued and more and more teachers were able to become educated and inspire more and more students. Many of my students are also teaching other students the programs we use in class like tinkercad for 3D printing, and <u>P5.JS</u> and <u>code.org</u> for coding. The information is spreading like wildfire and many more students are being impacted that I cannot even begin to count. None of this would have been possible without the grant I received, and more support is needed. Please retain the Teach CS Program in the state budget.

Thank you and I'd be happy to answer any questions.