March 5, 2019

Members of the Education Committee:

My name is Heather Sutkowski. I am an elementary computer science teacher and a resident of Simsbury. I am writing in support of S.B. 957, An Act Concerning Computer Science Instruction in the Public School Curriculum, Programs of Teacher Preparation and In-service Training Programs for Teachers, with additional suggestions for its improvement. I have taught for 14 years, and for the last six years I have been teaching computer science to students in grades K-6 at CREC Montessori Magnet School, here in Hartford. While I support the addition and change of language from “computer programming” to “computer science” that S.B. 957 proposes, I would like to also express the need for further amendments to be made, in order to make a true impact for our Connecticut students and teachers.

Computer science (CS) is an area in which all students should have the opportunity to receive instruction from a young age. As it stands, CS is currently taught in only some of our Connecticut schools. There is no accountability for districts to provide its instruction, and our teachers need support. If we maintain the language of this current bill, we are unfortunately creating further inequity among our schools and our students, especially among females and underrepresented minorities. Please set legislation to require its instruction at elementary and secondary levels with the recommendation that all students have the opportunity to receive instruction, beginning in elementary school. The majority of my current students will leave 5th and 6th grade and head to middle schools and high schools where CS will never be offered to them. If we leave this bill as is, we are enabling a structure in which some students learn it and others do not.

We do not know which skills our students will need for their jobs of the future, but we do know that they need to be creative, independent problem-solvers, with the ability to solve unstructured tasks and collaborate effectively with others. These are the skills that computer science education can provide, while also fostering a level of thinking and self-confidence that boosts student engagement. The end goal is not that all students need to follow a career path in computing, however, in Connecticut we currently have 5,324 open computing jobs. If we want to fill these positions with CT students, our goal needs to be for all students to have the chance to learn CS in school, and this relies on how effectively we can provide training for pre-service and in-service teachers.

I have facilitated professional development in Code.org’s CS Fundamentals course to K-5 teachers in our state for the last five years. This training is provided to classroom teachers, specialists, and any certified teacher interested in teaching CS to their students. Computer science is not confined to its own course, it can be used to enhance learning in all subject areas, especially when integrated with math, language arts, and social studies. Our CT teachers are eager to expand their learning in CS, no matter what area in which they are certified to teach, but opportunities are limited. We need to provide districts and teachers high-quality
professional development in CS. Our districts are not currently prepared to provide appropriate levels of professional development in this area, and S.B. 957 does not encourage a high-level of training be provided to in-service teachers. In-service teachers should be provided training in order to prepare them to teach CS, especially now since CS standards were adopted by the Board of Education in June, 2018. As I read it, the current language only suggests that teachers be provided training that informs them of its existence, but does not encourage its teaching.

A commitment from our state to create a new Computer Science for Connecticut Initiative which would oversee a funded, K-12 computer science pathway available to all students, with ongoing professional development provided to teachers from high-quality trainers and curriculum providers is desperately needed. Our CT students should not receive less than their counterparts in other states, and our teachers need to be equally supported in teaching it. We need mandated funding to support K-12 computer science education and to develop an exemplary program that sets the standard for high-quality CS education.

Thank you for considering adjustments to this bill,
Heather Sutkowski