

Tuesday, March 5, 2019

To: Members of the Education Committee

Re: SB 957

I support SB 957, AN ACT CONCERNING THE INCLUSION OF COMPUTER SCIENCE INSTRUCTION IN THE PUBLIC SCHOOL CURRICULUM, PROGRAMS OF TEACHER PREPARATION AND IN-SERVICE TRAINING PROGRAMS FOR TEACHERS. But I would urge the Committee to go further in its effort to support computer science education in Connecticut.

I am recently retired from Trinity College where I taught computer science (CS) for more than 30 years. During that time, I have seen interest in CS among women and underrepresented minority students (African Americans, Hispanic Americans, and others) stagnate and even diminish. For example, according to the National Center for Education Statistics, in 1986 women made up 37% of bachelor degrees in CS¹. In 2017, the last year for which we have data, the percentage of bachelor degrees in CS and related fields that went to women was 19%.² The data for underrepresented minorities is similar.

I spent the last several years of my teaching career working on projects aimed at broadening participation in CS. I was the recipient of several National Science Foundation (NSF) grants. Our particular focus was at the high school level and involved the development of Mobile CSP³, an AP Computer Science Principles course that was part of the NSF's and College Board's joint effort to create a widely accessible AP computer science course. Since 2013 our project has trained more than 100 teachers in Connecticut and more than 350 around the U.S. It currently supports 700+ teachers and more than 10,000 students around the U.S. In 2018 more than 4,000 Mobile CSP students from around the U.S. took the AP CSP exam and 79% of the students passed the exam. Our project is just one of many that make up the CSforAll movement, a broad national effort to bring CS education to all levels of K-12 education.⁴

One thing I've learned from these projects is the *importance of providing high quality professional development* for both pre-service and in-service teachers. Schools and teachers cannot be expected to shoulder the costs of professional development. If we truly want to make CS education available to all Connecticut students, funding to support professional development is absolutely crucial. Therefore, in addition to the provisions set forth in this bill, the Committee must work to appropriate Department of Education funding that can be used to train K-12 pre- and in-service teachers in computer science content and pedagogy.

Sincerely,



Ralph Morelli

Professor of Computer Science, Emeritus

Trinity College

1 https://nces.ed.gov/programs/digest/d12/tables/dt12_349.asp

2 <https://cra.org/wp-content/uploads/2018/05/2017-Taulbee-Survey-Report.pdf>

3 <http://mobile-csp.org>

4 <http://www.csforall.org>