



State Representative Mike Duffey, 21st District

Sponsor Testimony – Rep. Duffey HB 170 (Carfagna, Duffey) – Computer Science

Ohio House – Education and Career Readiness Committee – May 9, 2017

Chairman Brenner, Vice Chair Slaby, Ranking Member Fedor, and members of the Education and Career Readiness committee, thank you for the opportunity to provide sponsor testimony on House Bill 170, legislation that greatly increases Ohio's K-12 emphasis on computer science for career readiness, by:

- Requiring the State Board of Education to adopt academic standards specifically for computer science in grades K-12 by July 1, 2018.
- Allowing computer science as an alternative to Algebra II. Students must still achieve four units of math for graduation, but the last unit could be computer science in lieu of Algebra II.
- Allowing computer science as an alternative to advanced study in chemistry, physics, biology, life science, astronomy, geology etc. Students must still achieve three units of science overall, but the last unit could be computer science in lieu of the aforementioned list.
- Allowing computer science to count as the “technology” course in the five (5) elective units that comprise foreign language, fine arts, business, career-tech, family, technology, agriculture, ROTC.
- Providing updates to teaching credentials to provide for competency in computer science.
- Creating a \$2.5M grant program for technology in schools through professional development for teachers in computer science and the acquisition of technology in classrooms and schools.
- Requires the Ohio Department of Education to report to the House and Senate on the grants.

Mr. Chairman, science and technology are the key to replacing Ohio's traditional low-skill high-wage workforce – jobs that no longer exist. Computer science does not require a college degree. It can be supplemented with one, but just as easily, it can essentially become a skilled trade through website development, coding work or other applied computer science occupations.

Ohio will not be alone. States including Washington, Arkansas, Florida, Indiana, Massachusetts and New Jersey have already adopted K-12 computer science standards.

House Bill 170 will define “computer science” utilizing framework provided by interested parties such as Code.org, the Computer Science Teachers Association, Apple, Microsoft, Project Lead The Way, UTeach CS (at University of Texas-Austin), Dell, TECH CORPS and College Board.

The most important characteristic of this bill is its permissive nature. HB 170 *allows* school districts to adopt the standards and offer the classes, but it does not require the district to do so. Ohio would provide the *flexibility* to the student to take computer science classes in lieu of other classwork and still graduate. And for teachers, HB 170 provides opportunities for professional development with funding.

Mr. Chairman, throughout our many conversations we have had with interested parties pertaining to this bill, we have spoken with the Ohio 8 Coalition, OEA, OASBO, BASA, OSBA, and ODE to ensure that all parties who would have a vested interest in this bill, did not have conceptual concerns.

Some of the feedback we've received since introduction is not yet incorporated into this bill. For instance, we had some discussion about more closely mirroring existing law for teacher credentialing and I think we are going to do that, but this committee won't see those changes until the substitute bill is introduced. We hope to have that ready in the next two weeks, I believe.

Generally, though, I have to say we received positive feedback from all stakeholders. I think it is safe to say everyone "gets" the value that computer science offers Ohio's students and our districts want the flexibility to offer these courses in addition to or in lieu of some of the more traditional coursework.

Thank you Chairman Brenner. Representative Carfagna and I would be happy to answer any questions.

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