Putting Computer Science Into State Plans for the Every Student Succeeds Act

Enactment of the Every Student Succeeds Act (ESSA) (http://www2.ed.gov/documents/essa-act-of-1965.pdf) in December 2015 represents a major shift in federal K-12 education policy that will give states new opportunities to expand K-12 computer science. The new law gives states more authority to develop a school accountability model that extends well beyond student proficiency in mathematics and English language arts. It also authorizes districts to use their federal funds to invest in programs that meet the needs of their states' employers and provide all students with a "well-rounded" education, which includes computer science as an eligible subject.

ESSA provides a new opportunity for states and computer science advocates to use provisions of the new law that specifically call out K-12 computer science to grow access to this important subject. State education agencies (SEAs) will have to tell the US Department of Education (ED) how they plan to use federal funds to shrink achievement gaps and ensure equity in PK-12. These plans, filed by each state with the federal government in return for ESEA Title I, Title II and other federal funds, often cover comprehensive plans for PK-12 education across the state. States subsequently require local educational agencies (LEAs) to file their local plans for these funds with them. SEAs and LEAs have an opportunity to increase equitable access to K-12 computer science by putting computer science into these plans. Although every state plan, every process for developing that plan, and the priorities of every state chief and governor can be different, below are five specific ideas for incorporating computer science into ESSA plans.

1. Stakeholder Engagement in State Title I Plans

As states detail their visions for serving the students in K-12, they are required to engage with key stakeholders reflecting the state's educational needs and geographic diversity. These stakeholders include:

- the Governor or appropriate officials from the Governor's office;
- members of the State legislature;
- members of the State board of education, if applicable;
- local education agencies (LEAs), including LEAs in rural areas;
- representatives of Indian tribes located in the State;
- teachers, principals, other school leaders, paraprofessionals, specialized instructional charter school leaders, if applicable;
- parents and families;
- community-based organizations;
- civil rights organizations, including those representing students with disabilities, English learners, and other historically underserved students;
- institutions of higher education (IHEs);
- employers; and
- the public.

OPPORTUNITY: In every state in the country, computer science supporters can be found within these groups. Computer science supporters can advocate for access to high-quality computer science courses as a factor measured in statewide school quality indicators. Access to these courses is a matter of educational opportunity and equity for disadvantaged students that should at least be monitored. For example, state plans can set concrete, measurable goals for the penetration of AP Computer Science or other high-quality courses and the diversity of student enrollment and then measure this by counting the number of schools that offer these courses and the diversity of student enrollment in them as a broad school quality indicator in the state. Governors, as leaders of states' education and workforce systems, are valuable allies in raising the importance of computer science education in preparing students for their state's workforce. Section 8540 of ESSA requires states to consult with the governor in the development of the plan, and requires his or her sign off on the final submission to the US Department of Education. Some states are soliciting input publicly, like Colorado (https://www.cde.state.co.us/fedprograms/ESSABlogPosts/essainputwindows). Computer science supporters should also ensure that they, principals and superintendents are talking to the chief state school officer and governor about the value of computer science.

2. Coordination with Other Federal Education Laws

States must describe how their plans coordinate with other federal and state education laws. The federal laws include:

- the Individuals with Disabilities Education Act;
- the Rehabilitation Act;
- the Carl D. Perkins Career and Technical Education Act of 2006;
- the Workforce Innovation and Opportunity Act;
- the Head Start Act;
- the Child Care and Development Block Grant Act of 1990;
- the Education Sciences Reform Act of 2002;
- the Education Technical Assistance Act of 2002;
- the National Assessment of Educational Progress Authorization Act; and
- the Adult Education and Family Literacy Act.

OPPORTUNITY: States can emphasize the strong linkage between ESSA and the *Carl D. Perkins Career and Technical Education Act* (http://s3.amazonaws.com/PCRN/docs/perkins_iv.pdf) in state plans filed with the federal government, as well as in LEA plans filed with the state. As a condition of receiving Title I funding, ESSA requires LEAs to detail to the state how they will "implement strategies to facilitate effective transitions for students from middle grades to high school and from high school to postsecondary education including… coordination with institutions of higher education, employers, and other local partners." This requirement is a significant opportunity for computer science supporters to integrate existing (or burgeoning) efforts to grow computer science into these plans, and assert computer science is a subject that gives students 21st century skills (e.g, coding, collaboration, problem solving, etc.) that will put them on a path toward college and career readiness. Career and Technical Education (CTE) directors and superintendents should consider computer science when they are drafting plans for this requirement. For innovative approaches to using Perkins to expand access to computer science, see this policy paper (https://code.org/files/RethinkingPerkins.pdf). More details about CTE-related provisions of the new law that could be helpful in growing computer science are

described in this (http://wa-acte.org/Pdf/List%20of%20CTE%20Provisions%20in%20ESSA.pdf) ESSA-CTE crosswalk from the Washington Association for Career and Technical Education.

3. Title I "Schoolwide" Programs

Of the two types of Title I programs an LEA can operate—targeted assistance or schoolwide—the "schoolwide" programs permit the LEA to use funds to support comprehensive schoolwide reforms. Generally, "schoolwide" programs are implemented in areas where most of the students are growing up in impoverished families. ESSA includes new provisions designed to enable SEAs and LEAs to focus on providing all students a diverse, integrated curriculum and learning experiences necessary for a well-rounded education (which explicitly includes computer science, per the new law) . To implement this strategy, administrators must take on a number of compliance requirements, including completing a "comprehensive needs assessment" with significant input from stakeholders, such as parents and local employers, prepare a schoolwide plan and assess that plan annually. The schools participating in this program also have significant leeway for how to use the funds.

The law also makes the program easier to access. ESSA grants states the authority to waive the current requirement that at least 40% of the students in a school are eligible for free and reduced price lunch for the use of schoolwide programs, so long as the schools ensure that the funds will be used to serve at-risk students, as identified under the new state accountability model.

OPPORTUNITY: Title I Schoolwide programs allow LEAs to combine state, federal and local funds to reach underserved populations. Despite common misconceptions that these schools must focus on the teaching and learning of mathematics and reading, the US Department of Education provides guidance (https://www2.ed.gov/policy/elsec/leg/essa/essaswpguidance9192016.pdf) on a number of activities that can be supported by these funds. Title I schoolwide funds can be used for a number of activities that directly support increasing access to computer science, including:

- Recruitment and retention of effective teachers, particularly in high-need subjects (such as computer science courses).
- Activities designed to increase access and prepare students for success in high-quality advanced coursework to earn postsecondary credit while in high school (e.g., Advanced Placement, International Baccalaureate, early college high schools, and dual or concurrent enrollment programs).
- Career and technical education programs to prepare students for postsecondary education and the workforce.

4. Title II Professional Development Investments

As in previous versions of the law, Title II of ESSA provides funds to invest in teacher and school leader quality, including high-quality professional development to help educators meet ambitious goals for teaching and learning. The new law cites "computer science" as a subject that can be supported by the program, creating a significant funding opportunity for teacher professional learning programs supporting computer science. In 2016, $2.34 billion was federally appropriated for Title II, with funding available at both the state and district levels. (Funds are awarded to states via a formula based on population and poverty.)

ESSA's revised Title II program continues prior law's focus on raising student achievement by improving the quality of teachers, principals, and other school leaders, and affords significant flexibility for states and districts to carry out a wide variety of activities, consistent with their specific needs. States can draw a clear line between the law's requirements for improving the quality of education professionals to high-quality professional development opportunities for computer science. (This resource (https://code.org/educate/curriculum/3rd-party) details numerous high quality offerings for computer science professional learning.) In addition, the law also provides specific pathways for states and districts to develop and implement programming in a strategic and collaborative manner to better prepare, develop, recruit, retain, and ensure equitable access to our strongest educators.

ESSA gives state and local leaders more flexibility in how they use Title II funds. This means states and districts have the power to decide how to use these funds—and with much more flexibility than during the No Child Left Behind era. It's also worth noting that the new law gives local districts explicit permission to invest in professional development for teachers, principals, and other school leaders on STEM (including computer science) and how to better incorporate career and technical education locally. These changes present opportunities for computer science educators.

OPPORTUNITY: The US Department of Education recently released non-regulatory guidance (http://www2.ed.gov/policy/elsec/leg/essa/essatitleiipartaguidance.pdf) for Title II, Part A, of ESSA to help in the development of state and local plans for spending these funds. State and local advocates should be making the case for computer science in those plans now. Title II funds can support professional development for computer science educators as computer science is part of the "well-rounded education" envisioned in the new law. Further, computer science educators should participate in the required needs assessment undertaken by states and districts, identifying the professional development needs of the profession. (This is different from the needs assessment required in Title I.) Teacher evaluation systems that met requirements of ESEA waivers should be revised to better reflect the needs of all educators involved in delivering a well-rounded education (which includes computer science).

5. Title IV, Part A, Student Support and Academic Enrichment Grants (SSAEG)

ESSA created the Student Support and Academic Enrichment Grant (SSAEG) program as a large, block grant program that allows states to competitively award those funds to districts to support a wide range of school programs designed to deliver a well-rounded education, which includes computer science; create safe and healthy school environments; and improve the use of technology in every school district. Title IV, Part A funding could be used to support a wide range of activities to improve STEM (including computer science) teaching and learning, including:

- Expansion of high-quality STEM courses;
- Increased access to STEM for underserved and at-risk student populations;
- Support for student participation in STEM nonprofit competitions;
- Providing hands-on learning opportunities in STEM;
- Integration of other academic subjects, including the arts, into STEM subject programs;
- Creation or enhancement of STEM specialty schools;
- Integration of classroom based, afterschool and informal STEM instruction; and
- Expansion of environmental education.

OPPORTUNITY: The opportunity for this program is tied to ongoing federal budget issues; it is unclear how much funding will be available in year 1 for this program. Under ESSA, the program could receive up to $1.65 billion, but Congress is likely to give this program far less funding in year 1. This means very few resources would be spread among fifty states. Further, a provision in ESSA allows state chiefs to divert any of the funds they receive under this program for Title I or Title II activities. Of course, the program could receive substantial investment in later years. The US Department of Education has developed guidance (http://www2.ed.gov/policy/elsec/leg/essa/essassaegrantguid10212016.pdf) on this program, so when its funding level is decided, computer science advocates can pursue funding in districts and their states to expand computer science, per the allowable uses of the law summarized above.

This document isn't an exhaustive list of opportunities for computer science expansions as states implement ESSA. The flexibility the new law gives to states means that state-level supporters will have to connect computer science to the state's overall goals and, in most cases, show that connection to improvement, accountability and assessment plans. The US Department of Education (under new leadership) will be reviewing state plans in 2017. Advocates should pay attention to the process and who is leading it and make the case for computer science as often as possible.