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Computing is a foundational skill for K–12 students. It develops students' computational and critical thinking skills and teaches them how to create—not just use—new technologies. Computer science is driving job growth and innovation in Michigan and throughout the U.S., and this decade, computing occupations have become the single largest sector of new wages in the U.S. with more than 500,000 currently open jobs. These opportunities go far beyond just coding and California; 91% of open software and computing jobs are outside Silicon Valley, and 67% of computing jobs are in retail, banking, transportation, entertainment, agriculture, manufacturing, and government. For the first time, openings for software jobs are outpacing production jobs, and in the auto industry, software developers are in higher demand than mechanical engineers.

But without a foundational knowledge in computer science, Michigan students are getting left behind; just 23% of high schools (of schools that have AP programs) offer an AP Computer Science course. Michigan can become a leading state for computer science education by **funding professional development to ensure that goal can be met through teachers in the classroom.**

Because computer science courses are often electives, there is insufficient funding for professional learning and staffing support at the district level for teachers. Michigan should provide resources for professional learning to prepare in-service teachers from diverse backgrounds to teach K–12 computer science. Funding priority should be given to districts in which a demonstrable effort will be made to engage underrepresented groups. Keeping costs focused on high-quality professional learning for current in-service teachers keeps costs minimal while allowing for quick scaling.

Michigan should establish an open computer science grant fund, which would consist of a \$1,000,000 appropriation from the legislature to start, as well as the ability to accept private grants. Subject to the availability of funds appropriated in this grant program, the Michigan Department of Education shall establish, develop, and administer a grant program to provide assistance to districts for the development and growth of computer science programs in line with the new computer science standards adopted in 2019.

Whether a student aspires to be a software engineer, or just wants a well-rounded education in today's changing world, access to computer science in school is an economic imperative for Michigan to remain competitive.

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