

Testimony in support of HB 4098

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Chair Rep. Doherty and members of the Education Committee

I urge your support for HB 4098. Computer Science learning opportunities in K12 need to be increased for the health of our Oregon economy and the futures of our students.

Oregon only graduates about 20% of the Computer Science majors that are hired in Oregon. About 5% of the Oregon workforce is directly employed in High Tech occupations. That is 100,000 Oregon workers. I believe the Oregon economy is being constrained by the lack of qualified people ready to work in those jobs. Computer Science and Digital Literacy are in-demand workplace skills.

All Computer Science education in Oregon is optional. There is no state requirement that any computer science is taught in any K-12 school. Some teachers have chosen to learn how to teach computer science on their own. These brave folks need affirmation and support for their heroic efforts.

The high school CS programs are all elective. Out of over 300 high schools there are less than 10 high school teachers who have a full schedule of CS classes. Most high school CS teachers also teach a variety of other courses to fill their schedule of classes taught. Less than 80 of the 300 High Schools offer at least one CS course! It is estimated that there are less than 30 CTE recognized CS Programs of Study. That means that well planned sequential CS coursework is available in less than 10% of our high schools.

There is no Computer Science K-12 Teacher Training Program offered by any higher education institution in Oregon! There are some non-profit grant funded efforts to train K-12 teachers so they can expose students to CS concepts. The largest of these efforts is the Digital Literacy grants coordinated by the Oregon Computer Science Teachers Association. OCSTA worked with the Oregon Legislature and ODE between 2015 and 2019 to provide workshops and classes where teachers could learn best practices from the best digital literacy teachers in Oregon. Teachers donated over 20,000 hours of their own time to attend trainings that were delivered between 2015 and 2019 at various locations all over Oregon. The value of this time would have cost school districts over \$700,000 just for sub costs! Hundreds of teachers and thousands of students are impacted by this grass roots effort. OCSTA worked with colleges, community colleges, industry, Tech Start, STEM Hubs, ESD's, and school districts to provide curriculum, standards, a playbook, resources, mentoring, and encouragement. The Oregon 2015-19 Digital Literacy grants are a national model of grassroots advocacy by the CS teachers in K-12.

It is time to become serious about CS Education and to create a continuous support system for CS K-12 teacher training. It is also time to create a CS requirement for Oregon students. Both are needed for a healthy Oregon economy and a school system that is helping students prepare for jobs that are mission critical for our state and our nation.

Respectfully submitted,

Don Domes