

Testimony on Senate Bill 894, an Act concerning County Boards of Education and Computer Science Courses

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The gender gap in technology is nothing new. Women make up just a quarter of tech workers, and there are countless studies¹ that show that the tech industry is getting less diverse at all levels².

Yet, the pipeline can't keep up with the demand for new workers³. Maryland currently has more than 22,000 open tech jobs, and they are in industries across the state, from the farms of the Eastern Shore to the more than 12,000 cybersecurity companies in the state⁴. The average salary in the state for a computing occupation is more than \$103,000 per year⁵ and the tech sector contributes 11.7% of Maryland's overall economy at \$41.7 billion⁶.

Here in Maryland, the state acknowledged the value and importance of computing skills the passage of the ACCESS Act, which vastly increased computer science courses within K-12 schools. The ACCESS Act went further than most computer science policies by prioritizing students from underrepresented populations, and clearly acknowledging the need to address the gender gap.

One thing that the ACCESS Act doesn't address is how it will ensure that the policies are reaching the intended students. How will we know if these policies are closing the gender gap, and creating a more equitable tech future? The truth is that *we don't know*. That's why we at Girls Who Code are enthusiastically supportive of SB 894.

Here in Maryland, there is data on participation in computer science courses⁷, but it does not break that information out by sub-group, making it impossible to understand the extent of the gaps that exist. Without this data, it is hard to know what interventions to put in place, or if the interventions in place are doing enough.

¹ <https://3zjc852t4swp1lmez1171oga-wpengine.netdna-ssl.com/wp-content/uploads/2016/10/Accenture-Cracking-The-Gender-Code-Report.pdf>

² <https://www.rebootrepresentation.org/>

³ <https://qz.com/929275/you-probably-should-have-majored-in-computer-science/>

⁴ <https://www.bizjournals.com/baltimore/news/2017/08/22/maryland-cyber-group-aims-to-decrease-number-of.html>

⁵ <https://code.org/advocacy/state-facts/MD.pdf>

⁶ https://www.cyberstates.org/pdf/states/CompTIA_Cyberstates_2019_Maryland.pdf

⁷ <https://www.mdctedata.org/dashboards/summary.php>

And we know that the gender gap is not the only gap that exists in computer science. Creating effective public policies that create the rising tide to lift all boats means that we must be able to measure their success—and data tracking is the first step to ensuring equity for all in computer science.

SB 894 would take a huge step toward closing the gender gap and gaps for other underrepresented groups in our classrooms. This bill requires that the state get a complete picture of their computer science classrooms, from who is taking them to who is teaching them, and what schools are even offering computer science courses. By requiring districts to report their participation data for all grades, we can identify if we are engaging girls in the early grades, but losing them in high school- or if we aren't engaging them at all. And in requiring the state to report that data publicly, it will allow you to better understand the overall impact of statewide policies, and allow you to create more targeted interventions to make our computer science classrooms look more like the rest of the state.

What gets measured gets managed, and you can't change what you can't see. You can't solve problems if you don't have the whole picture, and you can't measure the impact of interventions if you don't know where you start from. There is already a wealth of data that gets measured in schools across the state—on ELA and Math Growth and Proficiency, on attendance, on graduation rates, on progress for English Language Learners⁸—and it is *only* through this data that we are able to identify gaps, and create interventions to close them. Knowing that huge equity gaps exist in computer science jobs and higher education, we must ensure that our schools are not perpetuating these gaps.

Using data to shine a light on the gaps is the first step toward creating policies and interventions that will effectively close the gender gap and bring true diversity and inclusion into the forefront of computer science classrooms. SB 894 is a key step toward ensuring that K-12 computer science classrooms are serving all students, and giving them the skills they need to thrive in today's economy. We at Girls Who Code urge you to support this bill.

⁸ <https://reportcard.msde.maryland.gov/Graphs/#!/AtaGlance/Index>