

Joe Dunn, Ohio Account Executive SAS US Government Practice HB 170 Proponent Testimony September 27, 2017

Thank you Chair Lehner, Vice-Chair Huffman, Ranking Member Sykes, and members of the Ohio Senate Education Committee for allowing me to offer testimony today in support of House Bill 170, legislation addressing Computer Science Curriculum.

My name is Joe Dunn and I am proud to serve as the Ohio Account Executive for SAS. In this role I work with policymakers and agency leaders to help the state recognize the value of its data and how to best leverage it to improve services and outcomes. With faster and more powerful computers, opportunity abounds for the use of analytics and "big data". From public health and child well-being to transportation and fraud fighting, analytics are already transforming the way government works. My role is to make the connection between the policy goals of the state and how SAS solutions can provide the necessary insight to ensure effective and efficient government operations.

SAS is the largest, privately owned, US based Software Company in the world. Founded over forty years ago, SAS develops cutting edge analytics technology and services used in government and industries around the globe. Our research efforts are putting SAS on the cutting edge of Artificial Intelligence, Data Analytics and the Internet of Things. SAS has over 14,000 employees with nearly 6,000 in the United States.

Our company's philanthropic efforts focus solely on education and in areas such as STEM education, 3rd Grade Reading and increasing High School graduation rates.

Why Computer Science

As SAS and other technology companies continue to grow, we anticipate an ongoing need for a well trained workforce that understands computer coding and computer science.

To help fill the gap between the number of jobs available and future employees with the right computer science skills, the business community, government and education system must each to their part address this job skills deficit.

SAS is attempting to help by leading several efforts. SAS is helping to establish Masters of Analytics Programs at the university level throughout the country. In fact, we are currently working with Cleveland State University on a new Advanced Analytics graduate degree program and have helped establish an analytics certificate program at Miami of Ohio. Graduates from these programs are in high demand as they have excellent computer programming skills. SAS also is encouraging states to fund more initiative to increase third-grade reading, including leading an effort by the Business Roundtable to develop state-level policies to achieve that goal and working with CEOs across the country to implement them. SAS has also invested over \$100 million in an effort called *Curriculum Pathways* that provides free online education resources for teachers and students throughout the country.

To meet this need, Ohio and other states can help by increasing the opportunities for students to learn what computer science is and how it is used every day to solve societal problems and help keep American businesses globally competitive.



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According to Code.org, there are currently 10 times the number of open computer science jobs than computer science graduates. The White House has predicted that by 2020, there will be 1.4 million unfilled computer science jobs with only 400,000 computer science graduates.

Just this Monday it was announced that President Trump directed Education Secretary Betsy DeVos to improve K-12 computer science education. The memo asks the Department of Education to devote at least \$200 million per year in grants toward "high-quality STEM education with a particular focus on computer science," according to press reports.

This is a great example of addressing future job needs by encouraging a curriculum that will help prepare students for a future in computer science and giving them the opportunity to explore the wonderful world of programming.

Commend this Bill

Ohio should work to introduce computer science to a larger population of young people and especially minorities and women. SAS believes this bill will help encourage and allow schools across the state to establish computer science programs which will in turn hopefully introduce computer science to students that may traditionally not have an opportunity to be exposed to it.

Females only make up less than 30% of the computer science workforce. Only 14% of computer science graduates are African American or Hispanic. One important attribute of this bill is that it encourages computer science education throughout K-12. Other states have focused on high schools with some pushing to the Middle schools. Ohio would be included in the national leadership category if it indeed introduced computer science throughout K-12.

Elementary and Middle School is the key to introducing computer science concepts. We must find a way to get young people interested and hooked on computer science and how it can be used to problem solve.

In conclusion, SAS works to help address the talent pipeline deficit by encouraging teachers and schools to offer computer science programs at the school level. We provide free SAS software for teaching and learning which has been downloaded more than one million times. However, our efforts pale in comparison to what can be accomplished by innovative state leadership and smart policy. It is with that in mind that SAS is pleased to support HB170.

Thank you very much for allowing me to present my observations about this bill. I will be glad to try to answer any questions you may have. Thank you for representing the citizens of Ohio.