Sternheimer Speech

Education is often described as being trained by formal instruction and supervised practice. As apt a definition as this is, a non-trivial aspect of education in the eyes of those of us working with CodeVA is modern literacy. That is to say, education is not static. As the collective knowledge of those with the ability and responsibility to teach grows, so too should the standard of learning. Therefore, modern literacy is analogous to the ever-evolving, ever waxing, minimum knowledge needed for the malleable minds of our youth to be considered educated. For example, four hundred years ago there was no calculus, now we learn it in high school. With jobs requiring coding proficiency on the rise, it would be the height of hubris to ignore the need to cultivate such skills in generations to come. With this in mind, we have partnered with CodeVA for the sake of moving our public school system into the realm of modern literacy by teaching first teachers and then students the art of computer science.

CodeVA, a non-profit that partners with schools, parents, and communities to bring equitable computer science education to all of Virginia’s students, saw the flaw in our K-12 public schools and took the initiative. They have been leading the fruitful charge in computer science education across the state, the manifestation of which is the addition of computer science to the Virginia SOL. With this new stage set, the players must now be prepared.

For a student to succeed, an educated educator is a necessity. This is where we come in. Coming from a variety of backgrounds, both in and out of academia, we were tasked with making a diverse series of learning enhancements that will be used by CodeVA’s teacher-coaches, a group that has the challenge of imparting enough computer science insight to public school educators to tutor the curious minds of children in grades K-12.

This initiative, sparked by CodeVA, is one that will touch the lives of scores of thousands. It is estimated by the Bureau of Labor Statistics that, in 2020, the number of unfilled computer science related jobs will exceed one million, with only four hundred-thousand computer scientists applicable to apply for said jobs. The work that we are doing is no simple floodgate attempting to hold back these tides of projected fate, rather an array of dams strategically placed to redirect these jobs to the to-be educated youth, a group that will, thanks to the efforts of CodeVA and VCU, have the modern literacy to fulfill these empty seats.

With each passing year, the “modern” aspect of modern literacy will change. In this era of information and communication, it will not be enough to educate those who teach once. As the standard of computer science knowledge increases, so too must the skills of our educators. What we are doing is more than lesson plans and teaching tools. We are laying the foundation of a system for cultivating a brighter future for generations to come, not just with the sweat of our brows, but with the strength of the backs of the thousands of teachers who know better than any the art of guiding and inspiring youth.