#Week 1 assignment

Should students be forced to learn computer science in a stand-alone format?

Article 1

Article 2

At the first glance, I would like computer science to be required so that all students can have an opportunity to learn commputer science. Then, I take a step back, and think about how making math mandatory did not really help children apply what they learned in school math classes to other subjects like physics and chemistry. I can see that forcing children to study computer science in a stand-alone format will not translate to children developing a love for computer science. These children will probably treat computer science as a burden to bear, and I would not want computer science to leave a bad taste in children's mouths. I therefore think that putting more graduation requirements on children to be a bad idea. Instead, stand-alone computer science classes should be offered to students who want to take it. Students should have a choice in whether they study computer science or not.

I know some people want computer science to be mandatory for all students, and I agree with them to the extent that computer science is beautiful and practical. Yes, everyone should study computer science. Whether we are pro-choice or pro-mandatory CS, we all want children to have a chance to study computer science. My approach would not be to have the politicians pass another unfunded mandate. Instead, it is more beneficial if computer science concepts/computer programming is sprinkled in all the different subject areas. Math classes can use netlogo/python to graph instead of using some expensive graphing calculator. Science classes can use netlogo to create visual model of physical phenomenon. Art classes can use netlogo/processing as a media to produce creative expression. Music, history and English can use the multimedia and network to enhance students' learning experience.

At the end of the day, computer science can be exciting and rewarding fo students, but not when unwilling students are forced to study computer science. We all want to see students to be engaged and take initiative in their study of computer science. I am pretty sure governmental mandate will result in students developing CS-phobia, just like the mathphobia that we witness all the time. By making CS courses available to students who choose to study them, these students will have an environment where they want to learn because they are passionate about computer science/programming, not because they are coerced to. An old idiom sums up this idea succintly: You can lead a horse to the water, but you cannot make it drink the water.