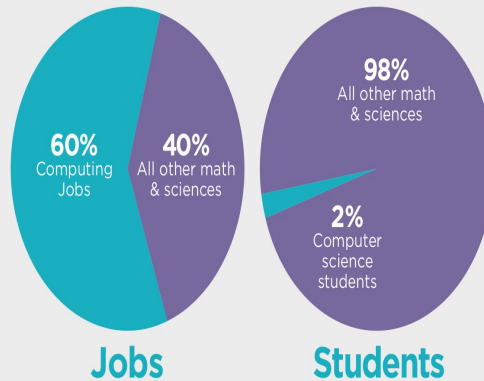


WE CODE! How About You?



The job/student gap in computer science



Less than 2.4% of college students graduate with a degree in computer science. And the numbers have dropped since last decade.

HOUR OF CODE

Start with one #HourOfCode

Why computer science?

Every 21st-century student should have the opportunity to learn computer science. The basics help nurture creativity and problem solving skills, and prepare students for any future career. Software and computers are everywhere, but fewer schools teach computer science than 10 years ago. Not only did the School City of Hobart participate in the Hour of Code, the district is proud to offer Project Lead the Way's Computer Science Engineering at Hobart High School and Scalable Gaming at Hobart Middle School. In addition, students are engaged in many other STEM/STEAM units of study. Amongst the favorite programming for students, LEGO ROBOTICS is number one! Problem solving through design as well as finding and fixing errors is fun! Students are proud of their outcomes.

Check out the showcase of Brickie STEM/STEAM projects at <http://hobart.schoolwires.com/STEM>

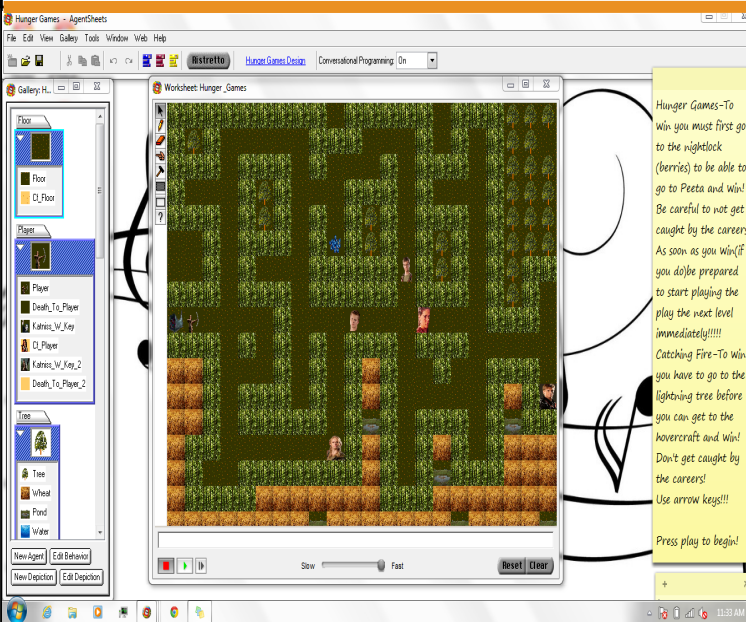
Why are the numbers so bad?



9 out of 10 schools don't even offer computer programming classes.

HOUR OF CODE

Start with one #HourOfCode



HMS Scalable Gaming!

The goal of Scalable Game Design is to get middle school students interested in coding (computer science) in a highly motivating learning environment. You may ask what does game design have to do with learning? Computational thinking patterns are common to a number of computer science applications including game design, science and robotics. Using a spiral approach, we start with basic computational thinking patterns. For motivational reasons, game design is used to begin. These basic patterns are used to make 1980 arcade style games such as Frogger and Pac-man. The same patterns can be employed in computation science. This is very much in the spirit of teachers asking "Now that you can build Space Invaders, can you build a science model of a mud slide?" Gradually, students move on to more sophisticated thinking patterns. The computational thinking patterns captured here are found to be useful in educating a wide array of users ranging from middle school students building video games to experienced scientists building computer models.