

CAREER & TECHNICAL EDUCATION CURRICULUM ADOPTION PROPOSAL (CAP) REPORT BCMS TECHNOLOGY APRIL 2016

Background of sixth grade Technology Class Programming in BHM Schools

Grade 6 Technology is a required semester long class that all sixth graders complete in their first year of middle school. The four main targets of the class are that students will be able to Create, Communicate, Critically Think and Collaborate in their current world and to prepare them to be positive digital citizens.

In order to meet those targets, instruction focuses on keyboarding skills, digital citizenship responsibilities, website evaluation, internet research strategies, computer coding and project based learning. Students demonstrate learning by producing collaborative and creative projects and showcasing them on a class website.

Standards

The focus of this course is based on the <u>Standards from ISTE</u> (International Society for Technology in Education).

ISTE Standard Headings

- 1. Creativity and Innovation
- 2. Communication and Collaboration
- 3. Research and information fluency
- 4. Critical thinking, problem solving, and decision making
- 5. Digital citizenship
- 6.Technology operations and concepts

Goal:

The goal of BCMS technology education is to develop digitally fluent individuals who have the knowledge, skills, and confidence to apply 21st Century Learning skills to future technological experiences.

- *implement the BCMS design process and the 4C's (collaboration, communication, creative problem solving and critical thinking) into instruction and assessments*
- add STEAM curriculum at BCMS to connect the elementary technology experiences to the high school offerings

Summary of Process for Review of Instructional Resources

After visiting various technology programs at local school districts, the BCMS Technology teachers found that the current practices at BCMS align with trends in technology education. The results of BCMS parent and student surveys reflect satisfaction with current curriculum. Students and parents report confidence in student application of technology skills.

Recommendations

The 6th Grade Technology course is changing from a one quarter course to a semester course beginning with the 2016-2017 school year. The course will be STEAM focused and will utilize the BCMS design process.

Financial Implications

Brainpop subscription \$250/1 year Keyboarding Online subscription \$350/1 year 2 classroom sets of Chromebooks \$11,000/set 8 iPads to use for collaboration, communication, creative problem solving, critical thinking \$3200 Total: \$25,800

Evaluation: How do we know it is working?

Evaluation of the curriculum adoption will be monitored in several ways. Some evaluation ideas are:

- Collect data from student pre and post quarter self-rating on digital literacy (4Cs)
- Collect feedback of student application in the form of a google survey from staff and parents

Next Steps

The Technology class teachers will stay current on STEAM topics and trends. They will modify course as needed to meet updated standards and practices. Students will continue to archive evidence of learning and reflect on growth while implementing K-12 district wide ePortfolios. Start out with Code.org

STEAM challenges