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Girls build excitement for math from scratch.

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Summary: By 2020, five of the top ten in-demand jobs in the United States will be in information technology. Companies across the nation are seeking a new type of employee: one who is computer savvy and who is familiar with computer coding, data, mathematics, and augmented reality. Recent reports indicate that, although students are initially interested in jobs in science, technology, engineering, and math (STEM) fields, positive attitudes toward mathematics drastically decline between seventh grade and tenth grade, and interest in careers involving mathematics decrease as well. Findings indicate that girls' attitudes diminished at a far more substantial rate than that of boys, highlighting the need to focus on girls and STEM disciplines. As a result, the authors designed and implemented a computer-coding unit, specifically for girls in grades 6–8, focused on increasing their technological and mathematical understanding. This article describes their approach and provides directions for integrating technology with mathematics as students learn to create virtual games and programs. (ERIC)

Classification: D30 D40 P50 M50

Keywords: female students; activities; digital literacy; mathematical fluency; skills; teaching methods; integrated curriculum; student projects; motivation; use of technology; computer coding; integrated curriculum
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