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Educational Digital Games: Opportunity for Successful Mathematics Learning in Saudi Arabian Primary Schools

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The effects of teaching mathematics by digital gaming on students' performance in mathematics in Saudi primary schools are encouraging signs for educational reforms. 111 female students from sixth grade in two Saudi primary schools, public and private, were assigned to either an experimental or control group. The groups in both schools studied the same mathematics curriculum unit over a 13-week period. In the experimental group, educational digital games were employed to teach mathematics, while in the control group traditional methods of teaching were used. An analysis of pre- and post-test scores using SPSS analyses showed that the experimental group had significantly greater improvement on their mathematics performance than the control group. The main finding of this study supports the value of educational digital gaming pedagogy as an effective tool for enhancing students' mathematics knowledge.

Keywords: Computer games; Mathematics education; Primary schools