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Playing mathematics, or hard fun

Can playing computer games help students aged 10-14 think deeply about mathematical concepts? For the past nine years the E-GEMS project has attempted to answer this question through research on the design and use of computer games incorporating mathematical concepts. While it is easy to see playing computer games can enhance rote learning and solidification of algorithmic skills, it is less obvious that it might enhance understanding of complex concepts. This talk presents an overview of research findings on how various factors influence the effectiveness of computer games in supporting mathematics learning. The findings suggest that computer games can be highly effective in increasing children's learning and enjoyment of mathematics. The extent of the effectiveness, however, depends on many things including details of the software design such as interface styles and scaffolding, teacher and student expectations, the level of integration with other learning activities, and the setting and pattern of use.

Note: on Wednesday April 10, Maria Klawe will present the [Regents' lecture](#).