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Exciting normal distribution.

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Summary: This paper describes a high school project where the mathematics teaching and learning software M@th Desktop (MD) based on the Computer Algebra System Mathematica was used for symbolical and numerical calculations and for visualisation. The mathematics teaching and learning software M@th Desktop 2.0 (MD) contains the modules Basics including tools for teachers and students and fitting routines, Differentiation, Integration and MDTools. The homepage of the project is <http://www.deltasoft.at>. MD's engine is Mathematica. An evaluation copy of MD is downloadable. After a short introduction delineating the initial situation, the aims of the project, and the methodological frame, we describe the teaching process and final outcomes. First results indicate that computer-based teaching intensifies the students' activities, their level of attention, and their contentment with mathematics.

Classification: U54 K64 C74

Keywords: CAI; normal distribution; upper secondary; teaching-learning processes; student attitudes; effectiveness