

Mathematics lessons and Classroom examples, inspired by the "Dresden Morning Post"

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Lecture Proposal for the ACDCA Strand

ABSTRACT

The use of new tools for mathematics at school wins increasingly importance. This offers consequences as well as on aims and contents of mathematics at school as like on methods in the lessons. The use of new technology opens a variety of new possibilities. The lecture should show general aims of mathematics education at the example of a new teaching curricula in Saxony.

The examples are taken from the "Dresden Morning Post", an "infamous" newspaper in Saxony. It is an aim of the lecture to illustrate how to find interesting mathematical examples in situations of everyday life.

- What is the effect of speed restriction in the traffic?
- Where is the optimal point for a soccer player to hit the goal?
- How often should tickets in a tram be controlled?

With motivating examples the contribution of graphic computers and CAS shall be presented for the realization of didactic strategies like motivating, discovering, visualizing and experimenting.

Keywords

Curricular standard, Classroom Examples using graphic calculators, CAS as pedagogical tool.