

**ZMATH 2001c.02216**

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**Mathematics at work: Cases out of the real world.**

International conference on the teaching of mathematics. Wiley, New York, NY. 47-49 (1998).

One way to change the image of the exact sciences (including mathematics) and to provide real-world evidence of their utility, is to find and then build into the curriculum a set of 'case studies' from the private and/or public sectors, evidence, that is, of mathematics at work. The authors have been engaged in such an effort at Leiden University since 1996, using especially written cases to broaden students' outlook on the exact sciences. A 'case', as used in our course, covers the background issues and available options an individual enterprise has to consider pursuant to some strategic decision having weighty consequences. Students are provided with a written case description of 4 to 6 pages, giving some background on the company and the particular decision that has to be made. The decisions always bear upon a heterogeneous set of considerations, some quantitative, some qualitative, some factual, some interpretive, the point being that the decisions cannot be made by technical or mathematical calculations alone. The cases are all actual, which enhances the students' feeling of being in touch with the real world. The idea of teaching by way of case examples is not new. What is new in the cases used in Leiden is that they combine technical and nontechnical issues, such as patent law, regulatory affairs, and investment decisions in relation to new product development. The authors describe one particular case relating to mathematics.

*Classification:* D45