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Addressing the beta image problem in the university curriculum: The Leiden Workshop 'Cases from private enterprise'.

Jensen, Jens Hojgaard et al., Justification and enrolment problems in education involving mathematics or physics. Roskilde University Press, Frederiksberg (ISBN 87-7867-070-5). 183-193 (1998).

It is hard to identify the nature and causes of the current enrolment problems in mathematics, physics and other natural and technical sciences, in the Netherlands as well as elsewhere. However, there seems to be agreement that image is an important impediment to drawing more students. Studies in these sciences are largely perceived (by highschool students as well as by employers) as attracting only those who are merely interested in a very narrow branch of purely technical work for the rest of their life. Jobs opportunities are significant as well. In the first part of the article, some recent Dutch figures and reports are presented and analyzed. At Leiden University, a new part of the curriculum is being developed that might help to broaden students' education and to correct this unfavourable image. The authors have constructed a workshop called 'Cases from private enterprise' ('Cases uit het bedrijfsleven') for the 'Faculteit of Mathematics and Natural Sciences' (which includes the departments of mathematics, computer science, physics, astronomy, chemistry, biology and biopharmacy). The workshop exposes students in the final phase of their study during one full week to the world of companies and organisations. The core of the course is formed by real world cases written specifically for students of the Faculteit. Students are presented with a number of decision making problems in companies, and have to come to well-argued decisions in small groups. During the course students learn to think and deliberate about decision problems as encountered in companies, step beyond their own disciplinary background, how to apply the problem solving capacities they acquired during their study to different (non-technical) domains. (Abstract)

Classification: D35