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The importance of student autonomy in developing mathematical modelling ability.

Sloyer, Cliff et al., Advances and perspectives in the teaching of mathematical modelling and applications. Water Street Mathematics, Yorklyn, DE (ISBN 1-881821-05-6). 291-300 (1995).

Developing mathematical modelling ability through student-defined problems makes demands of student and tutor which are quite different from those experienced during delivery of traditional mathematics curricula. Defining an area of interest and the problems inherent, along with structuring a written report of their investigation are major difficulties for students faced with this situation for the first time. Through examination of case studies, consideration is given to how these difficulties may be overcome. The preparatory newspaper activity used to prepare students to cope with self-defined and open-ended modelling situations is described in detail and outcomes considered in terms of student interest, motivation and confidence, along with a statistical analysis. (orig.)

Classification: U95