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**Mathematical modelling. A path to political reflection in the mathematics class.**

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This paper describes the construction of pedagogical environments in mathematics classes, centred on mathematical modelling and denominated 'investigative scenarios', which stimulate students to investigation, to formulation of problems and to political reflection, as well as the sharing of acquired knowledge with other persons in the community. The paper is based on the application of modelling as a teaching and learning strategy and on the pedagogical work with teenagers in an assisted freedom program. Both were accomplished in a scenario built with 10 volunteer students taking calculus in a Computer Engineering course in 2003. Among the main results we emphasise the academic maturing process for the student, how competent he gets in making models, accomplishing simulations, his perception of the relation between mathematical learning and everyday situations and political reflection about the results from working with modelling as much as about his participation in the community work. (Abstract)

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