Modelling in mathematics education – a survey on the current debate and recent trends

KAISER, Gabriel
Hamburg University

The lecture will start with an analysis of the recent international discussion about modelling in mathematics education, describing different perspectives on modelling around the world. Furthermore the concept of modelling competencies is presented and different facets of this concept are elaborated.

Afterwards, the lecture will discuss various attempts for establishing modelling examples in school teaching. It will be reported amongst others about joint modelling projects with future teachers in school, so-called modelling weeks or days. Selected modelling examples, which have been used in modelling weeks with students from upper secondary level, will be described, such as the optimal positioning of bus stops.

Finally, results from research on the promotion of modelling competencies and on the usage of scaffolding or intervention measures on fostering independent modelling activities.