

Preparing Educational Standards in the Field of Object-Oriented Modelling

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In Germany the results of the international PISA study disclosed a demand for an increase in the quality and an improvement in the comparability of educational results. In the subjects German, maths and first language (i.e. English) this demand already resulted in the development and publication of first educational standards. In the subject Informatics the development of nationwide educational standards is impeded by the fact that in contrast to almost all other subjects still no binding basic education exists for all learners. Existing educational recommendations, curricula, educational concepts and lesson examples moreover show that there still exists no generally accepted consensus about the competences learners should acquire and the exercise classes learners should be able to cope with. In context of this contribution this will be discussed in more detail for one important section of the subject Informatics, namely object-oriented modelling (OOM). It is shown and justified, how the components of a so called *didactic system* (for OOM in this case), a compound of traditional and new components of the learning process with so called *exercise classes*, *exploration modules* and *knowledge structures* as main constituents, can be applied to prepare educational standards in the OOM field. A particular important contribution to the preparation of educational standards comes from a method developed by the author for selecting, abstracting, analysing and structuring exercises, which has effectively been applied to more than 320 exercises and also successfully been tested in Informatics education. It is discussed in detail in how far the proposed method can also be used in other Informatics fields to develop educational standards.