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Sommario/riassunto

Learning concepts is a real challenge for learners because of the abstract nature of concepts. This holds particularly true for concepts in science and technology education where learning concepts by doing design activities is potentially a powerful way to overcome that learning barrier. Much depends, however, on the role of the teacher. Design-Based Concept Learning in Science and Technology Education brings together contributions from researchers that have investigated what conditions need to be fulfilled to make design-based education work. The chapters contain studies from a variety of topics and concepts in science and technology education. So far, studies on design-based learning have been published in a variety of journals, but never before were the outcomes of those studies brought together in one volume. Now an overview of insights about design-based concept learning is presented with expectations about future directions and trends.