

Book Review / Рецензия книги / Buchbesprechung
by Fabian Mußel & Renate Girmes

Arthur K. Ellis, John B. Bond (2016): *Research on Educational Innovations*. New York: Routledge. (210 Seiten; ISBN-13: 978-1138671225; ISBN-10:1138671223)

Arthur K. Ellis and John B. Bond begin their multi-faceted book on the state of research in education innovation with a look at the benefits of science and evidence-based education research. The discussion of the "nature of innovation" (p. 17) makes it necessary and possible for each generation to find answers to the questions posed by the previous generation. To guarantee this, a constant critical and constructive updating of already researched knowledge with possibly adapted empirical-analytical methods is necessary.

The authors name the many innovative ideas and strategies developed over the past decades, e. g. "Mastery Learning, Whole Language Learning, Interdisciplinary Curriculum, Learning Styles, Developmentally Appropriate Practice, Cooperative Learning, Effective Teaching, School Restructuring, Site-based Management, and the list goes on" (p. 18).

Organised education in the classroom, teacher training and school administration is subject to constant change. The authors claim that such development processes are due to a lack of evidence-based results of educational science. The reactions to innovations are ambivalent. On the one hand, almost everything that is new seems attractive for implementation in practice. The concern of the "left behind" in organized education sometimes promotes the acceptance of innovations without knowing their actual impact in the field of application. On the other hand, the authors note a certain degree of cynicism from those directly involved in organized education due to the large number of innovations that failed to keep their promises.

The book is therefore aimed at: „teachers, administrators, counselors, and other school personnel “with the aim "to provide (...) insights into a carefully selected set of innovations" (p. 18).

The authors point to many misunderstandings of innovations and state in this context a "multi-billion-dollar industry" (p. 20), which could make it necessary to enable teachers and responsible persons in schools to distinguish between useful empirically validated innovations and simple trends or fashions. This effect is supported by the frequently used attribute "research-based", as an alleged quality criterion of innovation, which may have a calming effect on those responsible for education. In order to counteract this, Ellis and Bond design a three-level system that makes educational theory and its empirical-analytical examination comprehensible:

"Three Steps are involved along the way to your classroom or school: (1) pure research, (2) educational implications, and (3) suggested classroom or school practice (p. 22)".

Using cooperative learning as an example, they show the protracted development process of a theory that arises from observation and research.

At the *first* stage, the theory or a model of mediation emerges as a reception and further development of previous theories. Subsequently, the developed models will be made available to the scientific community, which will expand, criticize or challenge them.

The *second* stage includes experimental research as an educational outcome (p. 37). At best, it provides practical insights that cannot be expected from the theory-based first level. This is intended to ensure and support the implementation of theory-based models and programs during the school day.

On the *third* stage, the findings of the previous stage are tested in the area and adapted if necessary. The authors themselves point out the possible limits of this system, because their three levels can partly overlap or modify each other. The emergence and application of new approaches in schools is also influenced by political, economic and cultural environments that cannot be validly verified (p. 39).

In the course of the book, the authors undertake a complex survey of various innovative programs and learning models, e. g. in the case of cooperative learning or with regard to contributions from the neurosciences.

In six detailed chapters and ten less voluminous "snapshots" (p. 119), which cannot be discussed in more detail in this review, the authors provide a comprehensive insight into (anglo) American educational science. Recent and past major American projects, such as the "No Child Left Behind" campaign or the "Goals 2000" are combined with relevant research contributions

The restriction to US developments is advantageous in two respects. From a theoretical perspective, the authors show on the one hand the influence of other scientific disciplines (especially the natural sciences) on educational contributions to the further development of organized education. On the other hand, reading this book provides insights into the American outcome-oriented education system with its quite different empirical requirements for applied research.

From the viewpoint of the reviewers, it seems possible that the call for evidence-based optimization of the outcomes of learners continues to increase - through a critical view of the change in internationalized and standardized education systems.

In any case, the authors succeed in making the importance of educational theory and empirical research accessible and clear to a broader scientific community. The authors present an interdisciplinary field of science in a comprehensive way, which makes use of different theories to increase learning results. In this way, the book provides widespread insights into the development of learning models, programs for measuring and assessing learning success and the design of teaching environments.

In the concurrently sophisticated and reader-friendly, clearly arranged presentation, the reviewers note an emphatically scientific and positivist point of view with a psychological foundation. In the chapter "Self-Esteem" and "Self-Efficacy" (p. 80), for example, this leads to a focus on narrow guidance in the perception of the influence of theories on the discussion in education science.

The authors note that self-esteem and self-efficacy have been tested concepts in many empirical studies since their introduction by Albert Bandura, however, how empirically valid the concepts are, is still open. Nevertheless, there is a heightened awareness of self-esteem and self-efficacy, such as in the "Self-Effective Schools" movement in Germany, where they tend to convert it in a stance or attitude. Here, however, an empiricism based solely on standardized canons gets into difficulties. Pedagogical knowledge often also arises, especially in the testing and discursive way of doing things and is therefore also the product of construction methods and knowledge practices which cannot be measured by empirically proven outcomes of learners.

However, the authors also give room for this assessment in their final chapter ("Beyond Empiricism") when they write: "Some things that are done, or should be done, in the name of education are not of a nature to be empirically based (p. 171)".

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