

## **Towards evidence based education**

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Teacher professionalism and thus teacher autonomy are key to high quality education. But this does not necessarily imply that teaching is (only) an “art”. It also involves the hard work of applying scientifically based knowledge on what works why, how and for whom in education. In this contribution I will address the following questions that are related to his topic:

- What do we know about what really works in education?
- What do we mean with “scientifically based” knowledge?
- How do we get to such knowledge?
- Is the cluster randomized controlled trial – the true experiment - the “holy grail” in the toolbox of educational research designs or are there alternatives?
- What is the importance of best evidence syntheses and statistical meta-analyses in the process of building the knowledge base and what do these presuppose?

I will illustrate the answers to these questions with several examples taken from recent research into data-driven teaching, standards in education, differentiated instruction and also discuss the value and limitations of international comparative studies like PISA. And in closing I will delineate the core of the research agenda for the coming decades to further our understanding of what works why and for whom in education so as to better equip the teaching profession for its tasks.