Effective teaching and successful learning are closely linked to teacher autonomy. Even though the concept of autonomy is subject to debate and controversy, there is a general definition that applies particularly well to the teaching profession. Instead of following considerations and conditions imposed upon educators from outside, autonomous teachers are able to make their own choices and to determine their own actions.

But aren’t standards – I am referring to Common Core Standards as well as to educational standards all over the world – a frontal assault on teacher autonomy? Asking similar questions means confounding autonomy and arbitrariness. Autonomy presupposes a rational individual able to make informed decisions. Self-determination is based on information and reflection leading to one’s own choices.

How can teachers today gather all necessary information to be autonomous in the defined sense in order to help their learners to be free of external manipulative forces? My book *Effective Teaching and Successful Learning. Bridging the Gap between Research and Practice* contributes to teacher and learner autonomy offering all necessary information accumulated in theory, research and practice during the last decades with particular focus on newer findings of evidence-based education.

In order to enable professionals to optimize their teaching – even good things can be improved – the main features and types of scientific research on education (Chap. 1 and 2) are presented in a succinct and reader-friendly manner so that every motivated and passionate teacher can easily catch up on recent developments. What follows is a critical look at evidence-based research on education (Chap. 3) and the results of meta-analyses as well as the respective effect sizes that are nothing more than suggestions or tendencies to be taken into account with due caution, i.e. the required autonomy.

What is true for any single meta-analysis devaluates every attempt of synthesizing hundreds of meta-analyses relating to student achievement (see Chap. 4 and 5). Only autonomous teachers can overcome the temptation to simply follow the results of similar studies without confronting their own teaching and learning contexts with the hundreds of social environments in which the (quasi) experimental research was conducted.

Does this critical examination and analysis of recent research mean that teaching professionals need no guidance? My critique (as well as the critical reviews of other educational scientists) refers to meta-analyses in general and in particular to the
shortcomings of an accumulation and compilation of hundreds of these studies. That does not imply that teaching models, e. g. lesson plan design dating back to Madeline Cheek Hunter, may damage teacher autonomy and effectiveness, on the contrary! Starting with backward design and bringing together curriculum and instructional design is a precondition for every informed teacher being able to make un-coerced decisions.

The MET (Model of Effective Teaching and Successful Learning) summarizes the most important steps, but by no means in a prescriptive way. My model offers an overview of well validated results of scientific research and the vast experiences of practitioners (Chap. 6 to 11). The MET is intended as a scaffold for practitioners. It is a summary compiled for teachers of all grades and subject matters who want to try out the suggestions of others in order to reconsider the teaching and learning processes in their particular context. Therefore concrete teaching (and learning) examples are above all exemplifications of what can be done in order to reach all students. They are not intended as “recipes” in the sense of the advice literature but as hints that can even be discarded considering the advantages and disadvantages for one’s own students.

In my view, the following statement of Thomas Huxley (1825 - 1895) should not only be taken into account by today’s scientists but by teachers and other education professionals as well:

“Science is simply common sense at its best, rigidly accurate in observation, and merciless to fallacy in logic.”