



Evidence informed practice

This is an extract from an article by Paul A Kirschner and Tim Surma, first published in the Chartered College of Teaching's Impact Journal 10.

Source: https://my.chartered.college/impact_article/evidence-informed-pedagogy/

Some educational policy-makers, politicians and teachers use the term 'evidence-based' when they speak of instruction and teaching, while others (we, for example) use the term 'evidence-informed'. Is there a difference and, if so, what is it? There is a distinction, albeit sometimes subtle, between *evidence-based* and *evidence-informed* in terms of practice in education. Originating in medicine but now used across numerous professions such as economics, technology and agriculture, an *evidence-based practice* is an approach to practice that focuses practitioner attention on sound empirical evidence in professional decision-making and action (Rousseau and Gunia, 2016). In medical research, for instance, research processes are more rigorous, well-defined and easily controllable than in educational sciences, which makes outcomes more distinct and reliable. As Neelen and Kirschner (2020, p. 3) state:

"Sackett et al (1996) see it as a three legged stool integrating three basic principles: (1) the best available research evidence bearing on whether and why a treatment works, (2) clinical expertise of the health care professional (clinical judgment and experience) to rapidly identify each patient's unique health state and diagnosis, their individual risks and benefits of potential interventions, and (3) client preferences and values."

Here, everything is clear cut. The target population is clearly defined with respect to age, weight, disease and so forth. Further, the directions for use are clear cut – for example, that the medicine should be consumed on an empty stomach, one hour prior to eating.

Evidence-informed practice is still based on empirical evidence, but acknowledges the fact that it's harder for real classroom practice to determine what works for whom under which circumstances. What seems to work in one classroom does not always work in another classroom. Five-year-olds are different from 15-year-olds with respect to both their cognitive development and their knowledge and expertise; a lesson on concepts and definitions is different from a lesson on applications; and, to a lesser extent, a lesson in chemistry differs from a lesson in drawing. Further, what works for one teacher might not work for another because teachers differ qualitatively; subtle and not so subtle differences between teachers mean that the way in which they carry out the same thing differs, both in how it is carried out and how it is perceived by their students. Also, what works in a lesson today won't necessarily work in *the same* lesson this afternoon, tomorrow or in three months. Just the fact that learners are different with respect to their prior knowledge, beliefs, needs and/or motivations to participate can change everything. Unfortunately, this entropy (i.e. lack of order or predictability) in the classroom does not allow us to predict with statistical 'certainty' which intervention will yield which effect and when. Even in perfect circumstances with the best prepared lessons, some of our students might still underperform, despite the evidence brought to us by eminent cognitive and educational psychologists. While 'evidence-based' provides fairly hard results, 'evidence-informed' is less hard but still very useful, with a higher chance of success if applied thoughtfully. This is why in this issue we advocate a pedagogy informed by evidence, more than a pedagogy based on (or dictated by?) evidence. The challenge of going from *the evidence* to *the design* of actual pedagogical practices in the classroom calls for a deep understanding – let's call it pedagogical knowledge – of what, why and when something works in optimal conditions in order to have, for example, conversations with your fellow teachers and headteachers on certain pedagogical decisions or actions.