It is now more or less accepted that all educational interventions are created approximately equal. Systematic reviews comparing problem-based learning with conventional instruction tend to show quite small effects. Systematic reviews show that various digital technologies (virtual patients, e-learning) have typical effect sizes of 1.0 when compared to no instruction but 0.0 when compared to any alternative. Such findings provide little basis for continuing to conduct research comparing curricula, yet we persist in advocating the virtues of one learning method over another. Such persistent beliefs in the face of negative evidence are pervasive in education.

Conversely, contemporary educational psychology has identified a number of powerful educational interventions that can lead to large learning gains with minimal investment. Some examples are mixed practice, distributed practice, test-enhanced learning. Yet these strategies remain largely unknown to the medical education community.

In this talk, I will systematically explore things we think work that don’t, and things that do work that we don’t know about. I will then advance some reasons why this may be the case, and some suggested strategies to avoid these problems in future.