

## Inverted Classroom: Panacea or Placebo? An Empirical Study About the Effectivity of the Inverted Classroom Method at The University of Applied Sciences Zurich

## Jäckli Urs

University of Applied Sciences Zurich, Switzerland urs.jaeckli@fh-hwz.ch

## **Abstract**

In the quest for more effective lectures, the inverted classroom concept has recently been at the forefront of academic debate. The inverted classroom combines two learning theories that do not interact well together: Problem-based learning based on constructivist ideals and lectures based on behaviourist principles. The concept reverses lecture-based teaching. Videos serve as preparation and face-to-face teaching is used to engage in problem-based, collaborative approaches. The field of studies that research the inverted classroom show an inconsistent picture of its effectiveness. An extensive meta-analysis that included studies at every level concluded that the inverted classroom concept is only slightly more effective in achieving learning outcomes. As there is no clear verdict about the concept's effectiveness, more research is needed in different disciplines at different educational levels. This study focuses on the field of higher education in business and adds to this body of research by comparing two cohorts that signed up for an introductory business administration class. The cohorts were compared in four different areas: formative tests, semester tests, qualitative feedback and a quantitative student survey. The results showed that the cohort that was taught by applying the inverted classroom concept performed statistically significantly better in the formative tests as well as in the semester tests. For business courses at a university level, these results support the proposition that flipping the classroom can be a way to improve students' performance. Further, it allows students to be more responsible for their learning journey, which had a positive impact on their motivation.

**Keywords:** Inverted classroom, flipped classroom, learning outcomes, problem-based learning, constructivist principles, behaviourist principles