Information and Communication Technologies in Education & Digital Literacy Implications for Universities and Academic Rankings

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Archeological findings show that instructional settings have not changed during the history in terms of its basic components and methodologies of teaching. A Sumerian classroom was similar to a 15th Century classroom, which was similar to a classroom in the 1930s and in our day, too. The basic components have always been dedicated rooms, a teacher lecturing and students learning. The cognitive expectations from the students have not changed either, which included a set of expectations from the students in terms of memory retention, recall and transfer. The influence of technology has been much less than the expectations. During the 20th Century, researchers expected that movies, radio programs and then TVs would replace lectures in physical settings. However, the expectations have failed so far. Since the past two decades, there has been an expectation that the Internet and more recently Massive Open and Online Courses (MOOCs) would replace lectures; however, these predictions seems to have been failing. Recent scientific studies show more diverse results than common findings about major questions, such as whether students do learn or remember better when they read from a tablet compared to reading on paper, and that whether they learn better from animations compared to learning from books.

On the other hand, there is room for a set of expected changes about MOOCs given that they provide novel opportunities to students, such as self-paced learning. In addition to the opportunities that the MOOCs provide for the students, the insufficiencies of classical classroom settings, in particular insufficient quality of the lecturers may result in emerging MOOC start (MOOCers, cf. youtubers) in the incoming years. The universities may offer blended learning methods that aim at bringing together efficient lecturers with students both in online and in physical settings. For this, they have to improve Information and Communication Technologies (ICT) infrastructure of the campus. This will also help the university as a center of attraction for foreign students (Akbulut, 2015).

University rankings in our day largely focus on academic performance by quantifying the number and quality of publications. Given that the major mission of a university is to conduct scientific research, most of the rankings are successful in making acceptable approximations to scientific performance of the universities. University rankings in the future, in particular field rankings have the potential to play a more significant role in the decisions made by foreign students. Accordingly, ICT-based indicators, as well as the indicators based on industry collaboration and interdisciplinarity may enlarge the scope of university rankings in a positive way, as long as they pursue the responsibility to develop open and objective ranking methodologies that aim at representing the stability over the years, as well as the changes in performance.

References

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