

Swiss Tropical and Public Health Institute Schweizerisches Tropen- und Public Health-Institut Institut Tropical et de Santé Publique Suisse

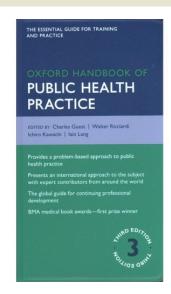
Associated Institute of the University of Basel

Department Education and Training

Transformation in the Age of Digitalisation



Axel Hoffmann, 8 May 2019



Digital Transformation is **NOT**



just adding digital technologies to teaching



$$IT + OO = EOO$$

IT + Old Organisation = Expensive Old Organisation

Here's your sign....

Lengthy

Endless

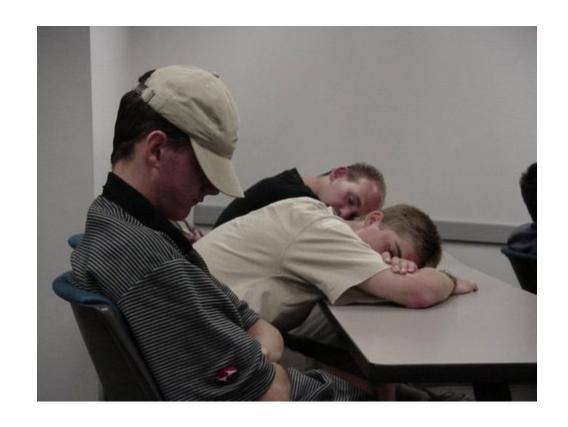
Continuous

Torture with

 $\underline{\mathbf{U}}$ nending

Repetition of

Explanations







Digital transformation refers to the changes associated with the application of digital technologies in all aspects of human society.

Chan, 2018







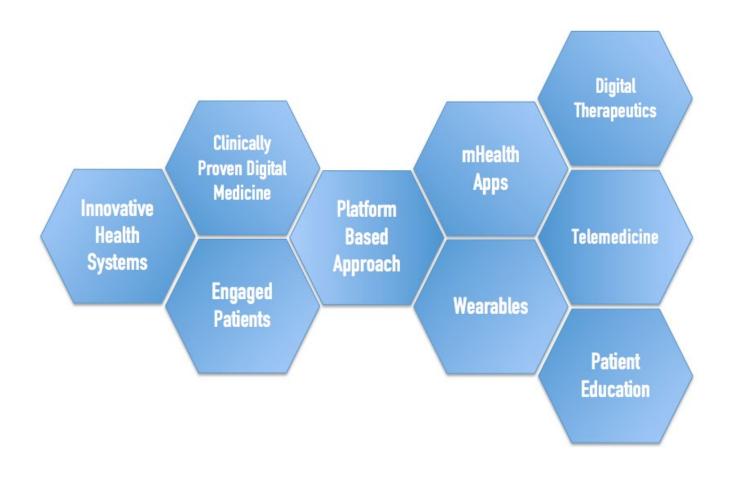








As Digital Transformation is a self-enforcing change process in the whole societies, the question for the educational sector is not if we should re-think our approaches, but how we steer the process to sustain good quality and improved health outcomes.





Digital Transformation in Education is ...



re-thinking everything to set-up education for future growth, with the aims to meet the ever growing demands of your

- students,
- faculty and
- campus

to create a learning environment where everything connects.

The big challenges:

- A pressing need to implement efficient and cost-effective training to address the worldwide shortage of health professionals.
- Health personnel has to be equipped with the knowledge and skills to deal with digital innovations in healthcare.



Objection to new digital approaches in education:

- Produces higher numbers of graduates only, with lower quality of skills
- Missing interaction with peers and lecturers leads to learning in isolation





What we know (from systematic reviews)

- Digital education seems to be more effective than traditional education in improving disease-related knowledge and skills.
- mLearning is effective as traditional learning or possibly more so in acquiring knowledge

Dunleavy 2019

- Knowledge, skills and attitudes of trained practicing physicians were at least as good in digital education approaches as self-directed learning and blended-learning approaches
 - George, 2019
- Satisfaction of learners was at least at the same level in digital education than in self-directed learning
 - George, 2019
- Digital problem-based learning in health professionals is as effective as traditional PBL and more effective than traditional learning in improving knowledge, and may be more effective than traditional PBL and traditional learning in improving skills.



Education of health professionals has to admit the digital transformation processes in our societies; educational institutions have to (proactively) re-think their curricula and foster innovative approaches.