Christian M. Stracke
Michael Shanks
Oddgeir Tveiten (Eds.)

Smart Universities:
Education's Digital Future

Official Proceedings of the International
WLS and LINQ Conference 2017
Organized by the University of Agder, the Open University of the Netherlands, the University of Standford and by the International Community for Open Research and Open Education (ICORE) and supported by:
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Institutions of learning at all levels are challenged by a fast and accelerating pace of change in the development of communications technology. Conferences around the world address the issue and research journals in a wide range of scholarly fields are placing the challenge of understanding “Education’s Digital Future” on their agenda. The World Learning Summit and LINQ Conference 2017 proceedings that you are now reading, take this as a point of origin. Noting how the future also has a past: Emergent uses of communications technologies in learning are of course neither new nor unfamiliar. What may be less familiar is the notion of “disruption”, marking many of the conferences and journal entries. Is “education’s digital present” as transformative as in the case of the film industry, the music industry, journalism, and health? If so, clearly the challenge of understanding goes to the core of institutions and organizations as much as pedagogy and practice in the classroom.

Research from various fields now emphasize the effects of learning technologies, texts and aesthetics, personalized learning experience, new means of assessments, the potentials of globalized learning networks, if not to say the futures of a work-life characterized much more than before by demands for flexibility, media competence, problem-solving skills, and more. Scholars come to the field of education technology from pedagogy and from a variety of other fields, such as ICT, media studies, organizational studies, psychology, geography, and anthropology. With the coming of sophisticated digital learning analytics, the questions asked will also tell a great deal about the potential answers found. Entrepreneurs in the education technology business often argue that more education technology in the classroom makes for more effective students. But is that really the case, generally? And is it the most pressing question?

If we take as point of departure the idea that media transformations of the last few decades are transformative at the wide range of levels, then it follows that the challenge of education transformation ought to be viewed accordingly. Marshal McLuhan and his contemporary Harold Innis, once noted how communication technologies and transition from one prototypical paradigm to another is also an aspect of a deeper civilizational change. Conceptions of the world change. Power relations change. Interaction conventions change. Taste relations change. Aesthetics change. Ideas about learning and how human beings learn, also change. Does not our very discourses on what it means to learn, in the 21st century reflect back profoundly on education as a social institution?
Concerns such as these frame the conference theme at the 2017 World Learning Summit. An annual conference, WLS was held for the seventh time in 2017. This year, WLS joined forces with the Learning Innovation and Quality (LINQ) Conference, to forge a new global meeting space for innovators and critical thinkers to discuss and reflect on what is ahead in the world of learning. We believe that a need for a change in future learning and education is apparent. We also believe that formulating a framework for that change is an interdisciplinary challenge. Like other conferences and summits in this field, the WLS and LINQ approach is an open and interdisciplinary one. What we add is a consistent emphasis to merge critical research with practical innovation, as these summit proceedings from 2017 amply illustrate. Previous and coming conferences bring to the discussions global thought-leaders, interested in contextualizing scholarship in education and learning within a broader frame of social change and development.

Several challenges were formulated in the summit call: Learning technologies are changing the face of learning, education and society, but a surprisingly small number of world-encompassing companies own that world change. So, is the future of learning and education open? Do we foresee a sustainable future learning space available to all? Is learning and education the last digital frontier in a world of disruption and change foreseen and owned by the few – in a world of escalating digital divides? How do we respond, as citizens, learners and custodians of education?

One approach to the pursuit of a critical debate is the concept of *Smart Universities* – educational institutions that adopt to the realities of digital online media in an encompassing manner:

Universities now co-operate globally in networked modes, bridging North and South, High and Low – if not to say formal and informal learning. Would a key perspective then seem to be our capability to understand learning technologies from the point of view of the *medium, mediation, and media*? Technology enables, but context is cultural. Smart universities address both. They transfer the innovative process from the drawing board and the tools at hand to the learning designs that in turn reflect on human interaction; what it is that technology aims at helping us achieve.

How can we as smarter universities and societies build sustainable learning eco systems for coming generations, where technologies serve learning and not the other way around? Perhaps that is the key question of our time, reflecting concerns and challenges in a variety of scholarly fields and disciplines?
These proceedings present the results from an engaging event that took place from 7th to 9th of June 2017 in Kristiansand, Norway. First the scientific papers submitted to the Open Call for Papers and selected by the international programme committee in double-blind peer review followed by the invited keynotes and articles:

**Esther Tan et al.** discuss the horizontal key competence "Learning how to Learn" and its need to meet the future challenges in work and society.

**Gaustad and de Paoli** focus on the different roles of professors as writer, director, actor and producer in online education.

**Konert et al.** research the use of open badges and how they can be applied to competency alignment.

**Gjesteland, Vos and Wold** analyse the flow experiences by students in a physics laboratory while using mobile phones and free software.

**Jahn, Jacquet and Lombaerts** present first steps towards an evaluation toolkit for asynchronous book clubs and their provided audios.

**Smith and Qayyum** demonstrate in their short paper how visualization software can improve the online assessment by students.

**Guardióla Lopez** discussing in her short paper the required change for 21st century schools related to leadership and education.

**Uvalić-Trumbić and Sir Daniel** highlight the challenges of openness and quality for smart universities in the post-truth and post-trust era that is based on their keynote and introducing the section of invited papers.

**Obiageli Agbu** reflects on smart universities based on her incidental learning experiences of open and distance education.

**Tveiten** proposes a new theory framework called "Contact Education" for exploring media rich learning designs.

**Stracke** addresses the quality of open online education and learning and the current efforts towards a "Quality Reference Framework" for online courses.

**Nampijja** provides empirical data on smallholder farmers in resource limited and non-formal learning setting using mobile technologies.

**Tveiten** reflects on the emergent learning technology industry by discussing MOOCs as a framework for thinking through journalism education.
From the Calls for Projects, **seven projects** are also selected and briefly introduced in these proceedings. Opening this section of project presentations, and ending the proceedings, **Trondsen** outlines his vision of Nordic EdTech – the formation of a Nordic education technologies network: He discusses challenges and opportunities relating to future Nordic collaboration, as studied in two projects from 2013 to the present, aimed at fostering that joint Nordic arena.

This book volume contributes to the debate on the need and imperatives to change education from a broader and more deeply embedded understanding of how digital media now transform society. The future of education is digital, it is online, it is open: Smart Universities may be a promising concept and a first step on our long-term journey along that trajectory. We were pleased to welcome experts and practitioners from all parts of the world at WLS and LINQ 2017!
WLS and LINQ 2017 Scientific Programme Committee

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The Conference Co-Chairs thank the Members of the Scientific Programme Committee for their valuable and great support by their double-blind peer-reviews for the selection of the scientific papers submitted to the Open Call for Papers 2017.

http://2017.learning-innovations.eu/

http://worldlearningsummit.com
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The International WLS and LINQ Conference 2017 is organized by these experts:

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Oddgeir Tveiten  
(*WLS, University of Agder, Norway*)

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(*LINQ, Open University of the Netherlands*)

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Is the disruption of education and learning as transformative as in the case of the film industry, the music industry, journalism, and health? If so, clearly the challenge of understanding future learning and education goes to the core of institutions and organizations as much as pedagogy and practice in the classroom.

One approach to the pursuit of a critical debate is the concept of Smart Universities educational institutions that adopt to the realities of digital online media in an encompassing manner: How can we as smarter universities and societies build sustainable learning eco systems for coming generations, where technologies serve learning and not the other way around? Perhaps that is the key question of our time, reflecting concerns and challenges in a variety of scholarly fields and disciplines? These proceedings present the results from an engaging event that took place from 7th to 9th of June 2017 in Kristiansand, Norway.