

DIGIFLEX - from flexible and digital courses to an overall networked learning perspective on digital course design

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Abstract

The digital two-way communication that society expects today can be said to blur the boundaries between the universities and the surrounding society. As the campus becomes more of an open network, the gap between formal and informal learning narrows. One can see a shift towards a perspective of lifelong learning with a more social and global perspective. Seen in that perspective, higher education has a greater value for people, than just specific skills or a specific degree. How people in society interact with various groups and organizations on social media also demonstrates this development and it challenges how we traditionally view learning. It also affects how the university conducts course design. Students and educators have come to expect the use of new digital tools. Many of these tools contribute to interaction between educators and students in collaborative learning. In a societal perspective we see a two-way exchange of meanings and needs, which makes it possible to create solutions that neither the university nor organizations in society could have adopted on their own. The focus of this paper is the course design process of a commissioned education course, DIGIFLEX. The practice meanings from students, colleagues and a reference group are referred to as feedback loops. These feedback loops continuously drove the course design and development forward and clearly indicated the need for an adaptation to a more societal context. The design process is described via three stages and two feedback loops. The first stage focused on finding a modern digital design with lots of audiovisual elements for short and flexible courses. In the first feedback loop, we gained inspiration via a learning technology conference, which led to sessions with reverse brainstorming where the project group further challenged the standard norm for course design. In step two, the pilot course was implemented with the new elements generated from the first feedback loop. We received support from a reference group with expertise in networked learning and the students evaluated the course. Our findings show a need for more dialogue and informal structure as complement to the existing digital course design. This insight was confirmed by the experiences and lessons learned from distance education during the pandemic. There is a need for a networked learning perspective in this kind of digital course design. More frequent reconciliations, evaluations of needs and expectations from the surrounding society is important for the success of similar projects in the future.

Keywords

Audiovisual Learning Resources, Digital Course Design, Lifelong Learning, Networked Learning

Research Context

People and society today expect digital two-way communication and this digital two-way communication can be said to blur the boundaries between higher education institutions and the surrounding society. The conditions for lifelong learning in higher education are affected when technology becomes a natural part of the course design. (Jaldemark, 2021, p. 33–35). As a result of the networked perspective on learning, it becomes obvious that new and innovative ways of conducting distance education are welcomed. Through a two-way exchange of meanings and needs, it is made possible to create solutions that neither the university nor organizations in society could have embraced on their own. Students can then gain practical knowledge that cannot come from a purely formal environment at the same time as they can gain theoretical perspectives on knowledge that could not have been obtained in their workplace (ibid, p.37).

The challenge for higher education with creating digital active learning environments partly has to do with financial and organizational issues, but also with the development of suitable technological solutions and how to engage both students and educators in the process (Børte, Nesje & Lillejord, 2020). Even so, one can

clearly argue that the barriers are more about pedagogy than technology (Kirkwood & Price, 2013). There are also a large group of educators that don't see their need for pedagogical development (Newland & Byles, 2014). The shift to active learning with new technologies requires for the educators to analyze and focus on the student learning needs instead of just relying on their own expertise (Walker, Jenkins & Voce, 2017). This way of thinking about teaching and learning also requires competence when it comes to learning design. By working with collaborative learning via various technological solutions, higher education can make it easier for students to set common goals and to share learning space in a new way. New technical solutions (wikis, blogs and cloud solutions) have contributed to a change in how educators and students interact with each other and what the learning process looks like (Zheng, Niiya & Warschauer, 2015).

Social media is one area where students and educators, higher education and society can interact with each other. Social media therefore can be seen as a hybrid space of activity for a large number of various producers and consumers. (Guerin, Aitchison & Carter, 2020). Networks of learners grow online at the same time as academics become more active as content writers and consumers. Higher education can in this perspective be seen as an e-learning trading zone. When the digitalized academy is seen as more of an exchange, traditional teaching and learning power hierarchies are destabilised (Nørgård, Mor, & Bengtsen, 2019). Viewing the university campus or classroom as an open network recognizes its contacts with various individuals and organizations in the society and contributes to a transformation from skills factory to an ecological network. It also means that higher education has a greater value to people, than just specific skills or a specific degree (Goodyear, 2019). This can be interesting to relate to the definitions of formal and informal learning and also to lifelong learning, an area that combines several aspects of formal and informal learning and also adds a social and global perspective (Jaldemark 2021).

Aims and Research Questions

Based on a digital course project during the pandemic, this paper aims to analyze how the digital course design process was affected by the societal context. It answers the following research questions:

- How has the digital course design process developed through various feedback loops?
- In what way can one explicate the importance of a networked learning perspective for future digital course design projects?

The DIGIFLEX project

DIGIFLEX started out a concept for commissioned education, which is a growing area in higher education in Sweden. Higher education in Sweden is free, but there is a demand from the society for shorter and tailor-made higher education courses for organizations. These courses (associated with a cost) are often referred to as commissioned education by Swedish universities (University of Lund, Umeå etc). The aim in our specific project was to produce shorter courses with free start, free speed and easy digital access. The idea was that students could watch short videos, listen to podcasts and join in on some of our optional seminars.

Methods

The project discussed in this article applies design-based research (e.g., Barab & Squire, 2004) and a learning through practice design (e.g., Hansen & Dohn, 2019). Design based research means that the research outcomes should result in a theory on learning and teaching (here defined as a lifelong learning perspective on networked education). As the project has developed, new impressions, knowledge and experiences have resulted in new design principles being implemented in the course design. In the pilot course in the project, the students have contributed to improving the content of the course in line with a learning through practice design. Learning through practice design means that students adapt their actions to the course objectives and that they then, without the teacher's intervention, use their results to get better (Laurillard, 2012, p. 162). Hansen and Dohn argues that when a student engages in a discipline's knowledge and skills, he or she can learn more than the knowledge and skills themselves. The resonant field of practice meanings, that the student develops, can be used to develop curricula and thus the content of courses. In this way, work practice can be used as a lever for participation and knowledge transformation in pedagogical practice (Hansen & Dohn, 2019, p. 130). In this paper, this work practice is called feedback loops.

Preliminary results

The course design development of DIGIFLEX and the findings regarding the impact of the societal context (from audiovisual demands to a lifelong learning perspective on networked learning) will be demonstrated and discussed through feedback loops.

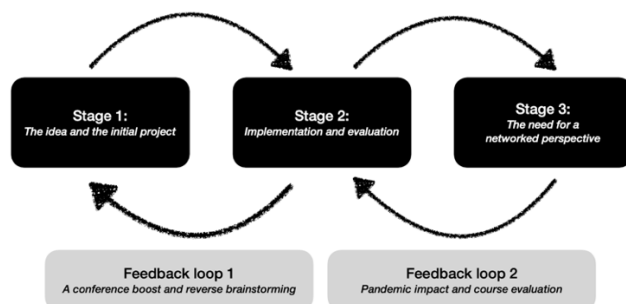


Figure 1: Course design development via feedback loops

Stage 1: A two-year project for flexible and digital commissioned education

After working many years in a text-based Moodle environment with lots of limitations regarding images, videos and design a couple of educators at our department started to feel that our course design was not in line with the students' expectations. Considering the fact that the educators involved in the project actually teach skills like social media publishing, video- and podcast production it was clear that there was room for improvement. The pilot was set up as a Wordpress page, structured in modules for smooth navigation and designed to minimize long texts, focus on audiovisual elements such as short podcasts or videos. The visual language and how the viewer is addressed in a video has been important in the design process. The aim was to deliver the feeling of a YouTube-video or tutorial, rather than a traditional lecture more frequent reconciliations, evaluations of needs and expectations from the surrounding society is fundamental (with too many slides).

Feedback loop 1: A conference boost that led to reversed brainstorming

The projects educators attended the 2019 Association for Learning Technology conference in Edinburgh and were impressed by how far digital pedagogy had come in the UK and how technicians, pedagogical support teams, educators and students often worked together. These new insights led to a creative seminar with reverse brainstorming where the educators in the project identified what they did NOT want to see in the new course design: 1) A boring design in the digital environment. 2) No audiovisual elements. 3) Fixed dates for the course start and stop date, for lectures and exams.

Stage 2: Implementation of the DIGIFLEX pilot course

The pilot course in the DIGIFLEX project was set up as a Wordpress page that students got access to after buying the course. The website was designed to minimize long texts, focus on audiovisual elements and to create variation. Since this specific course was about videos for social media it mainly consisted of just videos. The course was structured in three basic modules for smooth navigation. The pilot course had participants from two different organizations. The project received support and nourishment for development and continuous evaluation through a pedagogical development project together with other similar projects. The support from the networked learning expertise within the project group was particularly valuable.

Feedback loop 2: Pandemic impact and course evaluation

When the pilot course was about to be completed, we were in the middle of the covid-19 pandemic. The effects the pandemic had on our project could not be predicted, and several of DIGIFLEX's unique selling points were overturned. Suddenly everyone was forced to quickly learn how to produce films with decent results. In that sense, the project idea wasn't as unique anymore and there was no longer the same expectancy for technical perfection. The most important was to get something done and to establish a dialogue. The quality of the work (videos, digital design) seemed to develop as everyone learned for themselves and from each other. The direct indictment was still very important. These pandemic experiences can be summed up in a conclusion we did not really anticipate; how important dialogue is. This conclusion was reinforced by the pilot course evaluation and the voluntary workshop, both of which showed the need for dialogue. This is a quote from the course

evaluation: "The seminar with the teacher and the other students was very rewarding. It gave me inspiration and a whole new understanding on how to think". This feedback demonstrates the importance of human contact and dialogue in a digital learning process, regardless how well thought out the course design is otherwise.

Discussion: current state and the need for a networked perspective

The initial focus of the project for commissioned education was to meet the target group's demands for an attractive and functionally efficient digital environment inspired by social media and external actors outside the education sector. The projects concept with modular thinking for smooth navigation and designed to minimize long texts and a focus on audiovisual elements proved to be right on time. We currently need to adapt some changes from the second feedback loop. Our findings indicate that the need for dialogue has increased during the pandemic. While the module structure will remain, the view of dialogue will be the subject of the next feedback loop. The pandemic reinforced the two-way perspective because since the majority, now accustomed to various technical solutions, felt an increasing need for more dialogue in the digital context. The project gradually shifted from a design perspective, with focus on a modern and appealing digital course design, to a societal, interpretative perspective of dialogue, collaboration and networking. The theoretical framework of education and course design is developing towards a networked and lifelong learning perspective with other motivational forces for learning than we traditionally have seen (grades, credits and degrees). Our conclusion is that an attractive learning platform isn't enough, even if it is important to emphasize the need to adapt the learning platforms to an audiovisual expression that reminds more of social media platforms than traditional learning platforms. It is also desirable to use a more informal and direct linguistic approach rather than a formal approach. Another conclusion that could be applied on future development projects is that more frequent reconciliations, evaluations of needs and expectations from the surrounding society is fundamental. By continuously exchanging opinions and sharing needs in a societal network it is possible to create a type of education (eg commissioned education) that neither the university nor other organizations in the surrounding society could have created on their own.

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