Enhancing the Human Experience of Learning with Technology: New challenges for research into digital, open, distance & networked education European Distance and E-Learning Network (EDEN) Proceedings 2020 Research Workshop | Lisbon, 21-23 October, 2020 ISSN 2707-2819 doi: 10.38069/edenconf-2020-rw0003



STUDENTS' PERSPECTIVES AND STRATEGIES ON STUDYING AT HOME IN TIMES OF COVID-19 LEARNINGS FROM PODCAST CONVERSATIONS AND AN ONLINE SURVEY

Laura Eigbrecht, Ulf-Daniel Ehlers, Baden-Württemberg Cooperative State University Karlsruhe, Germany

Abstract

Since spring 2020, higher education institutions all over Europe and worldwide have had to quickly adapt to the new situation provoked by the outbreak of the COVID-19 virus. Most institutions have changed their study mode to pure online studies, with face-to-face studies in university buildings temporarily being abolished. Equally, other university facilities such as libraries had temporarily been closed, this meaning for most students that the major amount of study time was to be spent at their homes. In the dawn of a new academic year and with higher education institutions looking for new ways and strategies to cope with recent and future challenges, students' experiences and their reflections on their last semester should be heard and considered when planning the next ones. Two interview series released as podcasts and an online survey have aimed at collecting students' voices on their recent study experiences and their reflections on the future of higher education. Results indicate a high need of fostering selforganizational skills, an appreciation of a new flexibility brought about by digitization as well as concern for aspects such as social isolation and digital social presence.

Keywords: Podcast, Higher Education, Survey, Home studies, Online teaching, Digitization

Introduction

Changes in people's everyday lives in spring 2020 have been prompt. Due to the worldwide COVID-19 outbreak, most governments have taken measures of social distancing, this including higher education institutions, with the consequence of most institutions quickly changing their study mode to pure online studies, with face-to-face studies in university buildings temporarily being abolished. Equally, other university facilities such as libraries had temporarily been closed, this meaning for most students that the major amount of

Eigbrecht, L., & Ehlers, U.-D.

Students' Perspectives and Strategies on Studying at Home in Times of Covid-19 Learnings from Podcast Conversations and an Online Survey

study time was to be spent at their homes, most interactions being digitally mediated and most materials digitally trans- and submitted. For the next semester, most institutions have either announced to offer another digital study semester while others are adopting a hybrid mode where some classes, laboratories etc. are taking place on campus – especially those where digitization has been difficult – and some are further digitally taught.

This recent and future situation challenges the more classical model of higher education with lectures and seminars being held in lecture halls and classrooms. Higher Education is at a turning point, where the higher education institution as a physical space where most learning and studying takes place can at least be questioned. Digitization has been discussed and embraced by different degrees by the institutions before the lockdown – it has now proven to be able to provide education even in times of crisis. All institutions have met the same challenges of allowing students to pursue their studies from any possible place, which in this case meant 'home'. Some measures have already been loosened, with students being able to physically meet and learn with fellow students and with accessing resources in libraries and studying in other places such as libraries or cafés. The recent debate is thus not only on how to provide education via digital channels at all. It is also about if this is quality education enabling deep learning and social interactions, but also if all students can be reached this way.

This paper provides insight into findings of two interview series released as podcasts and a quantitative survey, both asking students about their study experiences when studying at home in their first digital semester. We will describe the research methodology, formats and limits (section 2), give an insight into the findings (section 3) and provide a summary and outlook (section 4) on how we will proceed with the project.

Research Methodology

In order to collect and disseminate students' voices, we have conducted qualitative research by interviewing them on the subject of their recent study experiences with digital studies at home, those interviews being digitally recorded and documented, and then being edited and released in two podcast series ("Studium im Shutdown" and "NextNormal"). Moreover, we have conducted an online study at DHBW (Baden-Wuerttemberg Cooperative State University) asking students about evaluating their digital study experience of the past few months, this quantitative data complementing the qualitative material gained by the podcast series.

For the podcast interviews, our research design is thus a qualitative research set with halfstructured interviews (a rough interview guide with pre-set questions and keywords serving as a basis for the conversations). These interviews can be analysed by qualitative

content analysis (Mayring, 2015) in order to find different answering categories. Accordingly, we analysed the audio material to extract main topics in order to collect, allocate and code propositions and find categories for them. The according code tree can be visualized as follows:

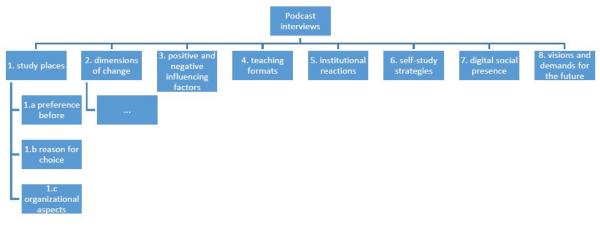


Figure 1. Code tree for the podcast analysis

The Podcasts: "Studium im Shutdown" and "NextNormal"

On April 6, 2020, the first episode of the Podcast "Studium im Shutdown" (Studying during Shutdown) aired, followed by two new weekly episodes average. Up until now $(15^{th} \text{ of September 2020})$, fifteen episodes have been released. The interview language is German, having been individually conducted and released with students studying and living in Germany, a certain diversity concerning disciplines and study environment being intended.

After fifteen episodes of "Studium im Shutdown", we've noticed that students have become more used to the recent situation: it has become the new normal. Due to the research team being involved in different EU projects, we've decided to contribute to a more European educational debate on the future of higher education with a second podcast, taking a more visionary and strategic approach, asking and envisioning the "NextNormal" of European Higher Education. The first episode of the second Podcast "NextNormal – WeStudy@Home" aired on July 27, 2020. Up until now, three episodes have been released and five interviews have been conducted. The interviews have been recorded and released in English and with students studying and living in different EU member states, the contacts being provided by ESU, the European Students' Union. The setting is a group discussion with two presenters and at least two students studying in each country. The ESU being the organization representing national student unions on a European level, a lot of the interviewees are engaged in student unions themselves, but not exclusively.

While the first interview setting allowed to get more personal insights into how students individually coped with a new situation, the future perspective is the central one in the second format.

Quantitative Survey

In the summer semester of 2020, we have conducted a survey on students' perceptions of and dealing with the current teaching during the Corona shutdown. The research setup was a quantitative online survey with open- and closed-ended questions sent to students who took part in classes that our institutions' Education Support Centers (ESC) had recommended as positive examples of digital teaching. This quantitative data can be used to complement and contrast the qualitative findings of the qualitative interview recordings. The online survey comprised 42 questions and was distributed via the online survey system EvaSys. Around 400 students were contacted, of whom 157 participated in the survey.

Limits of our data and research

For the qualitative interviews, it is important to notice that interviewer and interviewee have agreed that their contents will be publicly released as podcasts, with possible implications on the profiles and propositions of the interviewees. Answers of the interviewees might be influenced by them knowing that those will be broadcast – thus potentially taking a milder more diplomatic tone. We can also suggest that the students interviewed are more familiar and comfortable with talking in public and have prepared the interviews with some questions provided beforehand. Similarly, we must suggest that students coping less well with the situation might be less inclined to do a podcast interview with us than those who do. However, we've noticed that the students interviewed often talk about other students facing special challenges and coping less well with the situation, their interests thus being at least partly present.

We have complemented those findings with quantitative data and answers to open-ended questions from an online survey, its limits being the pre-selection of classes whose students were being interviewed, all studying at the same kind of institution of dual studies. Altogether, the three research setups and formats represent different approaches to collecting and making student voices heard in the debate on studying at home and perspectives on the future of higher education. Our research must thus be seen as an explorative thematic scouting rather than claiming for representativity.

Research Findings

When analysing the podcast interviews, certain subjects emerge as crucial – those being about study strategies, study locations, digital teaching formats, social presence and expectations to higher education institutions. These subjects comprise diverse aspects and

should serve as a basis for further research. Complemented by the data from the student survey, we can describe an explorative topical framework of students' study experiences and visions when studying at home.

Research conducted before the lockdown on students' preferred "places of study" has indicated that most students prefer to study at home – with a smaller but increasing part of students studying almost completely in the buildings provided by higher education institutions such as libraries, those being the most frequented (Vogel et al., 2018). Studying at home is mostly preferred due to the flexibility of time. The library represents, for most students, not a place of learning and studying, but of getting access to study resources. Other reasons for studying on campus mentioned are the possibility of doing group work and social interactions, but also that it might be hard at home to find the necessary calm to concentrate and focus (ibid.). The cited study focuses on the domain of "self-study", meaning everything taking place additionally to face-to-face study. In the recent situation, both self-study and face-to-face study have taken place at home for most students. However, research has indicated that even when studying at distance, the idea of a physical campus remains important in material and symbolic ways (Bayne et al., 2013).

While several students in the podcasts indicate that they have preferred to study at home already before the lockdown, others say that they have done all their studying in the library, with several students switching locations in-between. Library and campus are preferred for helping to structure the day and for the access of resources, but also for social contacts. When at home, most students now have a specific location for studying and try to separate it from other parts of the apartment dedicated to other such as leisure activities. Other interviewees indicated that they try to switch locations in order to simulate moving on campus or that they reorganized their shared apartment in order to study with other student housemates. Concerns are issued concerning the need to concentrate and not being able to freely move at home. For example, a Teaching student claims that "one of the biggest personal burdens in the recent situation is to have my own working space at home" (Studium im Shutdown, episode 13, 20:28, translated from German).

When analysing the "dimensions of change", lots of aspects are mentioned, such as concerning study contents and one's personal study organization and curricula. The one featuring most prominently, however, is the aspect of social and psychological well-being, this being a crucial subject to most students interviewed. Students are missing opportunities to make new contacts, to exchange ideas or just to spend some time together. A Psychology student states that "usually, in a beginning of a new semester, making new contacts is very valuable, and this is not possible right now" (Studium im Shutdown, episode 5, 22:45, translated from German). Several students indicate that their workload

has significantly risen in the past months, partly due to newly introduced assignments or new examination formats such as portfolios. It was indicated by several student representatives that the visibility of and the interest in student participation and representation has risen in the past months.

When it comes to "positive and negative impacts on the study experience", digital competences are seen as crucial in successfully participating in online learning. More flexibility in scheduling lectures is seen as positive by some students. However, a lack of motivation and productivity is observed by several students. Some of them indicate that their research is more difficult to conduct due to the lack of access to different resources. Also, several students indicate that discussing and debating study subjects with teachers and fellow students outside of class is much harder when studying online. In the European context, it has been mentioned several times that a lack of sufficient internet connection is excluding students from successfully pursuing their studies. A Romanian Engineering student mentions that "there are many students that come from rural areas that do not have the necessary reception, so the accessibility to higher education during the past three months was [...] nonexistent" (NextNormal, episode 1, 8:30).

In the online survey, accordingly, several students mentioned in the open-ended answer section that the appropriate technical equipment and internet connection was crucial for following classes – and also that the lack of it, for example on the side of teachers, prohibited successful teaching and learning.

Research has found evidence that students prefer synchronous, face-to-face and interactive "online teaching formats" to asynchronous formats and rate them as more efficient (Ward et al., 2010; Skylar, 2009). Accordingly, participative teaching setups in the mostly constructivist light of 'Media Education for Participatory Learning and Teaching' are seen as a contemporary way of approaching current and future challenges of higher education (Mayrberger, 2020). In a learner's perspective of quality in digital learning, the learner is empowered by playing a more important role when it comes designing education (Ehlers, 2003).

As for the interviewed students, when it comes to study designs experienced, there is a big variety between more and less complex and interactive digital study setups. In the beginning of the interviews, there were a lot of positive reactions to how well studying actually worked. In the course of time, students have become more demanding and asked for more interactive learning environments, but also for reacting to students' feedback on what suits their learning. Some also mention that they appreciate when a certain structure concerning lecture's duration and time is ensured. Some students stated that other

students have experienced situations of overwhelming due to the lack of interaction with teachers and other students, such as a Belgian Anthropology student tells: "It was like they were disconnected from us. They just had that reflex [...] just do some work and send it to me, if you have questions, send it to me. They didn't interact with us, they don't teach" (NextNormal, episode 4, 22:35).

In the student survey, as for the forms of online teaching, a big diversity was observed: Most students have experienced online lectures with and without interaction, online blended learning formats and complete self-study. The average amount of self-study was estimated at 69%, this being rated neither very satisfying nor unsatisfying. When asked about the satisfaction with different forms of online teaching, the blended and interactive forms (interactive lecture, mix of online and self-study) were rated better than the noninteractive online lecture and pure self-study, this being rated the least favourable. However, 60.9% of students indicate that they learn less in this online setting than in a classical presence study setting. Several students indicated that video recordings of lectures and less interactive formats should be kept in the future, especially for allowing more time and spatial flexibility.

When it comes to evaluating "higher education institutions' reactions" to the new situation, the most crucial point seems to be transparency or the lack of it. Communicating well seems to be very important in this situation of fast change. Students mentioned that many teachers did not have the necessary skills to offer quality online education in the beginning. However, many students appreciate teachers' openness and engagement to trying new ways of digital teaching and of considering students' feedback in this. A Slovenian Law student states that "through preparing various types of educational materials, they showed willingness to actually help and make studying in quarantine as useful as it could be" (NextNormal, episode 2, 18:10).

Students' "self-study strategies" seem to be a crucial aspect in online studying at home. Many students interviewed mentioned that they were able to acquire those in previous semesters and that this was helpful in the recent situation. Contrasting studying with leisure activities is seen as important to one's well-being by many students. Almost all students indicate that when studying at home, there is a bigger need to actively structure one's day. A German Business student claims that "I try to make a weekly schedule [...] and I try to stick to it as closely as possible" (Studium im Shutdown, episode 14, 11:25, translated from German). Several students stress that they have learnt new things about themselves that might be useful to them. It can be deducted that studying has become an even more individual challenge with a high demand of self-organizational skills and other Future Skills that are crucial and could even be enhanced in this period, such as Learning

Eigbrecht, L., & Ehlers, U.-D.

Students' Perspectives and Strategies on Studying at Home in Times of Covid-19 Learnings from Podcast Conversations and an Online Survey

Competence, Self-competence, Self-efficacy, and Initiative & Performance Competence, those all being closely related to the individual development (Ehlers, 2020).

Several studies have found evidence that perceived "digital social presence" of instructors and peer students has implications fur students' satisfaction with their learning experience (Richardson & Swan, 2003; Swan & Shih, 2005).

In the podcast interviews, social aspects and contacts are among the points seen as most critical by students when it comes to online studies: most students indicate that keeping in touch and being socially connected is something that is difficult to ensure when studying online, such as a Belgian student says: "We are connected every second of the day, but still we are lacking in this crisis the corridors to meet each other and we are really lacking the small talk" (NextNormal, episode 3a, 4:29). The fear and experience of social isolation is present in several students' answers. Possible solutions are seen in collaborative study designs and in digital meetups.

When it comes to "what could be improved", several students ask for a better communication on the institutional side. For the future, many students ask to keep some of the aspects allowing more flexibility for students as well as to enhance digital teaching offers such as lecture recordings and to maintain a more positive attitude towards digital teaching. However, some students also ask for institutions to tackle challenges such as interdisciplinarity and sustainability and to remain open to change. A German Psychology student claims that "higher education institutions have proved that they are able to quickly adapt [...] and they will have to explain why they do not want something. I am looking forward to this debate" (Studium im Shutdown, episode 5, 26:00, translated from German). Some students express their expectations on institutions critically evaluating the recent study experiences and of also taking students' views into account. There is a certain wish for institutions collaborating and exchanging more closely with other students and a certain concern for studies not being inclusive enough and thus a demand for higher education to become more accessible to everyone. One of the central aspects mentioned, however, is for institutions to find ways of ensuring social interaction between students and their teachers as well as between students and their fellow students. There is also a wish of considering students' individual study situations which might have become precarious due to the loss of jobs etc.

In the online survey, a big amount of students indicated that they would like to keep certain digital teaching formats, especially lectures, for allowing more flexibility in a hybrid study model thanks to on-demand classes, with a possible mix of formats. However, it was expressed that face-to-face classes were still favourable by most students, especially in

Eigbrecht, L., & Ehlers, U.-D.

Students' Perspectives and Strategies on Studying at Home in Times of Covid-19 Learnings from Podcast Conversations and an Online Survey

regard to discussions and social exchange. Several students also wished for central, institution-wide technical and software solutions, this possibly being due to the specific institutional circumstances of the interviewed students. Another option is to offer smaller group sessions with teachers in order to allow more timid students to actively participate. Digital group work is also given preference to as well as different interactive formats.

To sum up, the following subjects are those that, from a students' point of view, require special attention in future concepts for higher education and according research: For a certain group of students, public study spaces are necessary in order to successfully pursue their studies, and the diversity of students' individual challenges must be respected. When planning courses, the workload for students needs to be considered. For the digital study experience, the adequate infrastructure is crucial in order to make it a valuable experience and to be accessible for all students. Interactive and synchronous formats and a high level of interaction with teachers and other students are important in order to allow a quality learning experience, but they do not completely solve the question of lacking digital social presence. Moreover, institutions need to find ways of promoting self-organizational skills, but also of communicating efficiently with students – and students will expect them to remain open to change.

Summary and Outlook

From analysing the data collected by podcast interview recordings and an online survey, we can learn that the recent situation has highly challenged students on an individual level, fostering their self-learning and self-organizational skills when structuring their study routines, thus stressing the importance of Future Skills learning. When thinking about the future after the COVID-19 shutdown, many students wish for keeping some of the digital teaching formats, for example for lectures, in order to allow them more spatial and time flexibility. However, there is a consensus that face-to-face studies are important and the basis for deep exchange with teachers and students – this often taking place before and after the actual class. Social aspects seem to be a crucial point for explaining what does not really work right now and in the past months – this also including aspects such as isolation and the feeling of being disconnected. Deeper analysis especially on the aspect of social presence is highly needed and in progress, with those interviews as well as the survey not claiming for representativity. However, they are a strong signal towards including students' voices in the debate on higher education in times of COVID-19 and in the future in order to provide quality education accessible to everyone.

References

- Bayne, S., Gallagher, M. S., & Lamb, J. (2014). Being 'at' university: the social topologies of distance students. *Higher Education*, *67*(1), 569-583. doi:10.1007/s10734-013-9662-4
- Ehlers, U.-D. (2003). *Qualität beim E-Learning. Empirische Grundlegung und Modellkonzeption einer subjektorientierten Qualitätsentwicklung.* Bielefeld: Unpublished dissertation.
- Ehlers, U.-D. (2005). Qualitative Onlinebefragung. In L. Mikos, & C. Wegener (Eds.), *Handbuch Qualitative Medienforschung* (pp. 279-290). Stuttgart: UVK/UTB.
- Ehlers, U.-D. (2020). *Future Skills Future Learning and Future Higher Education*. Wiesbaden: Springer.
- Mayrberger, K. (2019). Partizipative Mediendidaktik. Gestaltung der (Hochschul-) Bildung unter den Bedingungen der Digitalisierung. Weinheim: Beltz Juventa.
- Mayring (2015). *Qualitative Inhaltsanalyse: Grundlagen und Techniken*. Weinheim & Basel: Beltz.
- Mikos, L., & Wegener, C. (Eds.). (2005). *Handbuch Qualitative Medienforschung*. Stuttgart: UVK/UTB.
- Richardson J., & Swan, K. (2003). Examing Social Presence in Online Courses in Relation to Students' Perceived Learning and Satisfaction. *JALN*, 7(1), 68-88. Retrieved from http://hdl.handle.net/2142/18713
- Skylar, A. A. (2009). A Comparison of Asynchronous Online Text-Based Lectures and Synchronous Interactive Web Conferencing Lectures. *Issues in Teacher Education*, 18(2), 69-84. Retrieved from https://eric.ed.gov/?id=EJ858506
- Swan, K., & Shih, L. F. (2005). On the nature and development of social presence in online course discussions. *Online Learning*, *9*(3), 115-136. doi:10.24059/olj.v9i3.1788
- Vogel, B., Willige, J., Grützmacher, J., & Sudheimer, S. (2019). Orte des Selbststudiums 2018. Eine empirische Studie zur zeitlichen und räumlichen Organisation des Lernens von Studierenden. Hannover: HIS-Institut für Hochschulentwicklung e.V. Retrieved from https://his-he.de/publikationen/detail/orte-des-selbststudiums-2018
- Ward, M. E., Peters, G., & Shelley, K. (2010). Student and Faculty Perceptions of the Quality of Online Learning Experiences. *International Review of Research in Open and Distributed Learning*, 11(3), 57-77. doi:10.19173/irrodl.v11i3.867