

Applying Social Media for Studying Challenges of COVID-19 for Students

Tiit Elenurm

Estonian Business School, Tallinn, Estonia

tiit.elenurm@ebs.ee

Abstract: This conference paper contributes to understanding opportunities to use social media for identifying priorities and challenges of students from different countries in online and face-to-face learning and networking activities during the COVID-19 pandemic. The COVID-19 crisis has resulted in more intensive online learning and hybrid learning applications in higher education. When there is a shift from a teacher-controlled class environment to a more learner-controlled social media, the role of the educator becomes more of a facilitator. The main research question in this paper is: How social media activities facilitated by instructors can support international learner-driven online networking and knowledge sharing during the COVID-19 pandemic? Our action research aim was to reveal learning preferences and networking challenges that students do not usually share in a class environment. Despite critics of Facebook and the increasing popularity of alternative social media among young people, Facebook groups offer tools for discourse between different age cohorts and conduct polls to assess alternative educational tools and COVID-19 administrative restrictions that influence student mobility and socialisation. To study the challenges of COVID-19 for students in online learning and in physical interaction, we applied netnography methods in combination with interventions by educators to study students' preferences in the Facebook group Challenges in online learning – COVID-19. Among the most popular Facebook polls for students were questions about group work and exam arrangements during the pandemic and *work from anywhere* practice implications, cross-border mobility regulations during the COVID-19 pandemic and reasons why some students do not participate in web conferences using their computer cameras. Students shared the view that flexible online *work from anywhere* solutions will be for many organisations among trends that will remain after the COVID-19 crisis is over. Some students, both from Europe and developing countries, believed that this trend would improve job opportunities for the workforce living in low-cost countries. Facebook group enabled international knowledge sharing, where both students and educators could share their views on many issues that influence the rapidly changing online learning and networking environment.

Keywords: social media, knowledge co-creation, COVID-19, networking, Facebook group

1. Introduction

The Covid-19 crisis has resulted in more intensive use of online learning and hybrid learning in higher education. Studying the learning experience of students reveal the role of online learning technologies (Ellis and Bliuc, 2019). Educators face the challenge to engage students in self-regulated learning (Russell et al, 2019). That is even more topical in the situation, where face-to-face classroom activities are restricted during the pandemic and students face cross-border mobility and socialising restrictions. When adopting educational technologies, a poor reflection of students' cultural and cognitive differences limit learning (Akinrinola et al, 2020). Some researchers see online learning as a panacea in the time of the COVID-19 crisis (Dhawan, 2020) but there is evidence of a lack of socialisation as the result of rapid transforming face-to-face learning to e-learning (Piyatamrong et al, 2020, Simamora et al, 2020). Universities also face conceptual and technical challenges of hybrid classrooms, where during the COVID-19 pandemic, some students participated in classes conducted at the campus, and some were involved online (Triyason et al, 2020). Nugent et al (2019) explain the importance of discussing with students their emotions around learning and how emotions can be regulated to achieve learning goals. Online learning and networking are related to connectivism (Goldie, 2016; Jung, 2019). Ability to see connections between fields, ideas, concepts and people is a crucial result of connectivist learning activities.

Understanding choices and decision-making is itself a learning process (Korkmaz and Toraman, 2020). Educators at universities can engage students to express their views on social media to explain essential learning, networking, health policy and individual behaviour choices during the pandemic. The role of social media in education has been discussed already several years ago (Kiser, 2013). The role of student-generated social media data and content has been studied for university branding and student recruitment purposes (Bolat and O'Sullivan, 2017). However, there is a research gap in studying the social media cooperation of educators and learners to reflect on the COVID-19 crisis. This paper contributes to understanding how students and university trainers from different countries can be involved in knowledge co-creation in social media. We reflect this process by analysing content creation in a Facebook group from March 2020 until December 2022. The aim of this reflection is to answer the research question: How social media activities facilitated by instructors can support international learner-driven online networking and knowledge sharing during the COVID-19 pandemic?

2. Literature review

Some researchers point out that emotional engagement in social media as multitasking during active learning in the classroom may reduce learners' cognitive processing capacity, causing poor academic performance (Demirbilek and Talan, 2018). However, Thompson (2017) encouraged using digital tools such as social media in line with the flipped classroom approach to making the learning process more interactive. Social media can support international collaborative learning as an enabler of learner-driven online networking and knowledge sharing. Learner-driven learning is a broader process than studying a course and is influenced by the socialisation opportunities of learners. Song et al (2017) explain how social networking sites can facilitate informal learning both inside and outside a classroom. Sobaih et al (2020) treat social media use as a response to COVID-19 in higher education for sustaining formal academic communication in developing countries. These researchers report that students perceived social media groups as more interactive, easy to use and more valuable than such online learning platforms as Google Classroom and Zoom. Online social media helps overcome space and time zone barriers between countries, enabling global online networking between learners representing different cultures. COVID-19 crisis has facilitated both initiatives to create a better virtual environment for university-driven online and hybrid learning (Kurbakova, Volkova and Kurbakov, 2020) and online student-driven informal information sharing. Dania and Griffin (2021) use the term "collaborative learning communities" when studying social media and related collaboration solutions in the classroom. Social media can also give input to collaborative hybrid learning.

Benson and Filippaios (2015) explain the role of collaborative competencies in professional social networking that can be developed in higher education. Collaborative learning experiences allow more delegation of decision-making to students that can use various knowledge sources. It is focused on socialising students into new communities, cultures and the in wider World (Veldman and Kostons, 2019) and on knowledge co-creation (Vuopala et al, 2018). International collaborative learning assumes the involvement of students representing different nationalities and societies. Sula and Elenurm (2018) have studied how students use networking opportunities for cross-border learning. Young students rely equally on online and offline networking ties, but they often do not have a clear vision of using both weak and strong ties in their networks at different stages of their self-development. Online and offline collaboration ties are mutually complementary, and collaborative university education can create synergy between these ties. Yang and Lin (2014) explained that Facebook offers members social, hedonistic and epistemic values, but users with different aims of joining and belonging to such social media supported networks also draw different benefits from it. When there is a shift from a teacher-controlled environment to a more learner-controlled environment, the role of the educator becomes more of a facilitator (Ali, 2020). Active involvement of students in social media, where both educators and students create online content, is one option to practice the facilitating role of educators.

Van Laar et al (2018) treated online networking skills as an assumption for digitalisation. They recommended developing these skills in several directions: creating communication channels for cooperation, choosing the right goals and intensity of communication, creating own online profile, training in self-expression and critical thinking, information management, creativity and problem-solving. The digital citizenship framework is a departure point for understanding the implications of social media for trust and mutual contributions to collaborative learning (Kim and Choi, 2018). In the COVID-19 context, digital citizenship is essential for understanding the differences between fake news and meaningful truthful news, especially to overcome unreasonable fear during a global pandemic (Candel, 2020). A digital citizen should discuss and assess alternatives in social media collaboratively, even in a crisis situation. Social media communities contribute to social change (Yannopoulou et al, 2019). Comparing different opinions on social media without aggressive reactions is a way to promote pluralism and offer ideas for change. DeSimone and Buzza (2013) have explained the role of pedagogy in developing critical thinking skills. Using social media to create situations, where students have to choose in polls between several views and action principles is a way to contribute to critical thinking.

3. Methodology

Netnography consists of a broad-based study of social interaction and online experience from a human perspective (Morais et al, 2020). Netnography has been widely used in marketing research that seeks to analyse social media content to reveal habits, preferences and meanings, structures and social behaviours and needs of users. However, it also develops solutions to problems of contemporary society through the analysis of social media (Kozinets, 2018). In recent years, this method has been used to analyse social media content in the academic environment, including Facebook posts of academic libraries (Al-Daihani and Abrahams, 2018) and

high academic achievers (Hudin et al, 2020). Pedagogical content created by teachers in a Facebook group representing several disciplines has also been studied using netnography (Liljekvist et al, 2020). To study the challenges of COVID-19 for students in online learning and physical movement and interaction, we applied netnography methods in combination with interventions by educators to engage students in social media for discussing these challenges. The role of educators in our research was not limited to observing a Facebook community. Educators also initiated discussions about online learning challenges and created polls for group members. The focus was on knowledge co-creation that involved students, educators and experts interested in discussing new trends in online learning and the challenges of their application during the COVID-19 crisis.

At the beginning of the COVID-19 pandemic, on 25th March 2020, the Facebook group *Challenges in Online Learning – COVID19* was created. This group aims to bring together the international community of learners and teachers to discuss the challenges of learning and teaching online during the COVID-19 pandemic. Facebook group discussions have been mainly focused on e-learning tools, online networking practices and problems, COVID-19 spread and related administrative measures and the behaviour of people in physical space during this pandemic. During eight months of the first pandemic year until December 2020, the number of group members increased to 456. At the end of December 2021, this Facebook group had 570 members. Each month some new members join the group, and some leave. Students have been encouraged to join the group during our courses in Estonia, Finland and France, and the share of these students is about 60% of the Facebook group members. Erasmus+ exchange students from Western Europe and students from some African and Asian countries have also been active in this group. Educators from Estonia, Albania, other South European countries, and India have shared their views about online learning. Potential members are asked to accept research-based group rules, namely posting evidence-based messages, questions, and reflections to understand challenges and solutions in online learning and networking during the COVID-19 pandemic. Polls and posts in the group had four main topic areas: online networking practices, online learning process and tools, administrative measures, and people's behaviour in the physical space during the COVID-19 crisis.

When joining the group, they see that the primary research focus of the group is to understand how coronavirus and measures to limit its spread influence face-to-face (in physical space) and online communication, learning and networking practices in different cultures. Students from several countries participating in different business and management courses were encouraged to find the most topical posts and related polls in this Facebook group and express their opinions about the group's issues. Thematic analysis of students' comments and their answers to polls that were created in the Facebook group was focused on three questions:

1. What issues in online learning and networking do students consider important to discuss?
2. What are the differences in their opinions related to online learning and networking choices in the context of COVID-19 restrictions that were reflected in Facebook polls?
3. How can activities in this Facebook group contribute to courses on management, entrepreneurship and international business?

4. Online learning, networking and physical interaction challenges for students

Netnographic analysis had three steps. At first, we identified which Facebook polls were the most popular for members of this Facebook group. After that, the popularity of alternatives that these polls presented was identified. Finally, the thematic analysis of posts and comments on these posts was conducted, and connections between polls and posts were analysed.

Students participating in different business and management courses were encouraged to find the most topical posts and related polls in this Facebook group and express their opinions about the group's issues. Among 48 polls that were created by educators and by some students in the Facebook group until December 2021, the most popular were the polls that are related both to the learning process, to *work from anywhere* practices and also to the changing administrative rules of cross-border mobility and self-isolation needs during the pandemic (table 1).

Students supported the application of quizzes for online exams and were less positive about combining quizzes with online oral exams or applying team-based exam projects in online learning. Seventy-three students commented on their answers to this poll. Later class discussions indicated that many students were unprepared for online teamwork challenges and considered this a problematic way to prove their lessons learnt during the pandemic.

Table 1: Most popular Facebook polls 2020 March -2021 December

The essence of the poll and its creation date	Number of voters	Preferred alternatives
What is the best way to assess learning results during the COVID-19 pandemic? (25.10.20)	197	Online quizzes -130 votes
Is 14-day self-isolation needed for persons arriving from countries where infection per 100 000 people is higher than 16? (04.09.20)	170	Yes – 147 votes
What type of self-isolation for persons arriving from European countries, where infection per 100 000 people is higher than 25? (27.09.21)	147	If the test on arrival is negative, then 7 days limited self-isolation – 101 votes
Which are the best online breakout room tools?	137	Zoom -51 votes, MS Teams – 41 votes; BigBlueButton – 35 votes
What are <i>work from anywhere</i> future prospects?	130	This trend stays after the pandemic – 81 votes
Why do students often not use their camera during online conferences?	123	They feel less tense not showing their face - 83 votes
Why do students prefer WhatsApp for online networking?	116	WhatsApp works well in mobile phones - 58 votes; It is handy for receiving an instant response – 31 votes

Poll results demonstrate that students see face-to-face networking and cross-border mobility as relevant to their self-development. Learning for young people is a broader social process than studying university courses, and self-isolation can lead to stress. However, students generally accepted COVID-19 restrictions imposed by authorities even if these restrictions limited their mobility and student life. During the first year of the COVID-19 pandemic, students were generally satisfied with the 14-day self-isolation regulation for cross-border mobility that can be shortened by giving two negative COVID-19 tests. At the same time, many students expressed support for administrative measures for disbanding self-organised events such as the European Rainbow Gathering during the pandemic. During the second wave of COVID-19, students living in Central and Western European countries that had applied strict measures to restrict the spread of infection even supported fines. Students from Estonia and Nordic countries preferred voluntary wearing masks supported by social control and not monitored by police. As governments in the European Unions had relaxed cross-border mobility restrictions in 2021, students supported more relaxed self-isolation rules and criticised more strict entrance rules of Australia and the USA in their comments.

The majority of students shared the view that flexible *work from anywhere* solutions will be for many organisations among these future trends that will remain after the COVID-19 crisis is over. However, students did not have the same opinions about the economic and social implications of this trend. Some students pointed out that it will increase income differences between manual and knowledge workers; others stressed that technology would take over many obligations and jobs would be lost. Some students from Europe and more from African and Asian developing countries believed that this trend would improve job opportunities for the workforce living in low-cost countries. During class discussions, students agreed that work from anywhere is a trend that will increase the role of online learning communities in organisations.

Students were generally more positive about their Zoom conference experience compared to Microsoft Teams online meetings. However, some students pointed out in their comments that MS Teams integrates online meetings better with sharing documents and with other cooperation tools. An interesting exchange of posts and comments resulted from the poll about possible reasons why some students do not participate in web conferences with their computer cameras. Among the reasons for not showing their face during online learning sessions, 67% of students voted for the poll answer option added by a student from an African country “They feel less tense not showing their face”. Some mainly European students voted for the answer, “They are doing multitasking and actually not participating 100% in class discussions”. Two students pointed out that if all students do not use a camera during an online conference, also those using their camera when presenting are more stressed. Some French and Finnish students, however, pointed out in their comments that video use is essential for online networking. They stressed that leaving the comfort zone in online communication for future careers is essential.

Students were less active in answering and commenting on these polls that were not directly related to their own social isolation or international mobility but were asked to explain differences in infection rates in countries

with low- and high vaccination levels. At the same time, no anti-vaccination opinions were expressed in this Facebook group, as it has often happened on social media in recent years. Before summer 2020, trainers shared several posts about specific sources and tools for online learning in this Facebook group and received comments from other professionals acting in this field. However, it was easier to engage students to comment on polls than on informative posts, where alternatives for voting were not presented. Later more polls were used to initiate comments for discussion.

5. Contributions of the Facebook group to collaborative learning at universities

Learning outcomes of courses on management, entrepreneurship and international business are linked to teamwork and networking skills. COVID-29 crisis has focused the development of these skills even more than before on online collaboration. Student contributions to the Facebook group served as an input for collaborative learning during management and entrepreneurship courses when discussing the online learning tools and how to use social media for knowledge sharing and business networking. This input enabled reflective discussions, where students had the opportunity to share their thoughts about the changing online learning and social media landscape. Lockdowns and restrictions on face-to-face socialisation have been a challenge, especially for the young generation. Educators have to understand the social learning implications of these challenges that restrict face-to-face contact of young people and their international mobility. University faculty can act as initiators in developing social media communities, where students can internationally share their views about learning and networking during the COVID-19 crisis. Students' priorities and content creation in such online communities also give input for research on opportunities to develop further synergy between university education and self-directed knowledge acquisition in social media.

Comparing Facebook online poll results and related comments by students during follow-up classroom and online discussions allows educators to understand students' different mindsets influenced by their national culture, earlier social media user and work experience, now expressed in Facebook posts and poll votes. Such classroom discussion enabled us to use social media examples to explain the importance of diversity and respecting different viewpoints in the international collaborative learning process.

Discussions also demonstrated interconnections and differences between social media and e-learning in Moodle, MS Teams, Blackboard or Canvas as collaborative learning modes. Facebook group enabled more emotional self-expression compared to these learning environments. Students had more opportunities to post on issues that were important for them than in a usual e-learning course. At the same time, the Facebook timeline resulted in students focusing on more recent discussion issues. Further efforts are needed to get more students to create their own polls, to propose new ways to use social media for business networking, and discuss future trends in the new normality after the COVID-19 pandemic.

6. Conclusions

COVID-19 crisis has complicated established academic practices in many disciplines but at the same time created new incentives for higher education to integrate different online learning and social media tools to initiate student-friendly collaborative learning spaces, where students from different universities and countries can compare their learning experiences. We agree with Rapanta et al (2020) that experience with different online learning tools will increase the readiness of both teachers and students for the post-digital era, where organisations are implementing disruptive technologies using mobile, cloud and artificial intelligence applications. Social media users need to set their priorities of self-expression, knowledge acquisition and networking and choose these online communities that match their socialisation and self-development needs. University educators should not see the social media involvement of young people as an activity competing with their academic learning. They should combine social media use and e-learning by offering students examples of social media applications for learning and research. The paper contributes to the literature on collaborative learning by explaining practical opportunities to use social media in the COVID-19 crisis context for blended learning. Netnography, in combination with action learning, has demonstrated how social media activities facilitated by instructors support international learner-driven online networking and knowledge sharing during the COVID-19 pandemic.

Limitations of the present research are related to educators' active role in promoting the Facebook group among students. Educators' roles were not limited to observation in line with the passive ethnographic research that has adapted classical content analysis principles to online texts. Educators actively introduced polls to facilitate

learning in the Facebook group, where students made their choices. However, students were more active content creators and commentators than in traditional sociological surveys, where respondents usually cannot develop survey questionnaires that they have to fill in. Further research is needed to collect data for statistical analysis in a more representative sample of different countries to reveal and compare specific online learning challenges influenced by cultural differences and students' social media and work experiences.

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