Articles

Högre utbildning
Vol. 12 | Nr. 3 | 2022 | 47–60

Norms, appropriation, and social affordances in studying in emergency remote teaching: a meta-analysis of student experiences

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In March 2020, all Swedish university education went online practically overnight due to the COVID-19 pandemic. This study focuses on how university students experienced emergency remote teaching in the autumn of 2020. This article provides a thematic meta-analysis of 53 student group reports based on a total of 247 interviews with third-year university students. The findings suggest three themes of particular interest regarding what areas the students themselves find important or challenging: awareness of what it means to be a student, technology reframing communication, and the need for explicit guidance. The findings are discussed in relation to norms, appropriation, and social affordances, as important factors to consider in emergency remote teaching.

Keywords: emergency remote teaching, ERT, COVID-19 pandemic, university students, norms, appropriation, social affordances

INTRODUCTION

On 17 March 2020, the Swedish government recommended that teaching in higher education should be online due to the COVID-19 pandemic (Folkhälsomyndigheten, 2020). As a result of this, most Swedish university campus education closed down practically overnight. The recommendation remained in place for the rest of the year and continued for the spring term of 2021, leading, in practice, to all university education being conducted as emergency remote teaching (ERT). This came with great challenges for the administration, the teaching staff, and the technological infrastructure at the universities (Strömberg & Ovsiannikow, 2021). Students' perspective on the educational situation during the pandemic has been reported in a body of research articles, based on quantitative analysis (e.g. Aucejo et al., 2020; Chaturvedi et al., 2021; Cicha et al., 2021). However, there are still few articles reporting on student experiences, based on qualitative analysis (e.g. Gelles et al., 2020). The present study contributes to this line of qualitative research. It does so by giving rare insights into the experiences of ERT from the students' perspective, based on a meta-analysis of 53 student exam papers in total comprising 247 student interviews, all focusing on different aspects of student experiences of ERT during the COVID-19 pandemic.

In line with the argument of Hodges et al. (2020), ERT is "a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves using fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face,

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Artiklar och reflektioner är kollegialt granskade. Övriga bidragstyper granskas av redaktionen. Se https://hogreutbildning.se ISSN 2000-7558

Citation: Hernwall, P., Käck, A. & Stymne, J. (2022). «Norms, appropriation, and social affordances in studying in emergency remote teaching: a meta-analysis of student experiences», Högre utbildning, 12(3), 47–60. https://doi.org/10.23865/hu.v12.3830

[or as] blended or hybrid courses and that will return to that format once the crisis or emergency has abated" (Hodges et al., 2020, p. 7). The primary objective "is not to re-create a robust educational ecosystem, but rather to provide temporary access to instruction and instructional support in a manner that is quick to set up and is reliably available during an emergency or crisis" (Hodges et al., 2020, p. 7).

One important characteristic of ERT is that it is a short-term solution, with the ambition of going back to the format used before ERT. Therefore, ERT's "intent is to create temporary access to instruction and instructional support that is easily implemented and available during [a] crisis" (Rivera et al, 2021, p. 213). Although ERT is a short-term solution without any explicit pedagogical or didactical ambitions, ERT may include qualities that the unique students appreciate. In this article, we use ERT as a descriptive framing of the educational situation in the autumn of 2020.

Scope and research question

Although there is a growing body of primarily quantitative studies on ERT, there is still a limited number of qualitative studies on students' experiences of ERT during the COVID-19 pandemic. An in-depth understanding of students' experiences is essential in order to provide a nuanced picture of the qualities and challenges associated with ERT. The research question for this study is thus: *How do university students experience emergency remote teaching (ERT)?*

The scope of this study is a qualitative analysis of Swedish university students' responses to interview questions regarding their experiences of ERT. The empirical data give a unique insight into how 247 third-year university students experienced ERT during the COVID-19 pandemic.

BACKGROUND

A sociocultural perspective (Säljö, 2005; Vygotsky, 1978; Wertsch, 1991) has proved to be useful both in analysing how individual students learn, as well as in discussing more general educational transformations in socially situated studies of development and transformation connected to education (Marginson & Dang, 2017). The sociocultural perspective may also be used to discuss how emergency remote teaching (ERT) is constituted as a social practice shaped by values and norms among learners (Shih et al., 2017). It has also been used for the analysis of distance learning activities, similar to learning activities in ERT, as suggested by Kang and Gyorke (2008). They argue that the sociocultural perspective has its merits for distance learning activities because: "a learner is a social being and that learner development is based on a series of interactions with one's learning context" (p. 204). Because of this, the learning activities used in ERT may also be beneficially approached from the sociocultural perspective.

From such a perspective, norms are established to govern the relationship between an individual learner and peer learners (Engeström, 2015). ERT, in this article, involves working both individually and in groups. In group work, norms have to be established for the group to function. The norms may even have to be developed into explicit rules, for all group members to be able to contribute and for no group member to be left out. Once the rules or norms are in place, it is also possible to identify when they are breached, e.g. when one student does not finish one subtask on time as planned. In group work, rules or norms, together with the division of labour, mediate goal-directed human action (Engeström, 2015). Shih et al. (2017) presented a study of how norms among students are mediated in e-learning. Their findings confirmed earlier studies that norms were formed around the interactivity and time-effectiveness of online tools and technologies.

Appropriation, as a concept stemming from sociocultural theory, describes processes both of internalising cultural tools and of changing the relation between external and internal dimensions (Bakhtin, 1981). This may, for example, be a case of learning to use a tool by partly replacing it with a psychological tool. In ERT, students both learn to use new tools and learn to use familiar tools in new ways. For example, using a personal social media account or the built-in microphone for voice chat in learning activities, or beginning to use a video conferencing app and a webcam. Learning to use or adopt already-known tools for learning activities can be seen as appropriation, described by Bakhtin (1981) as: "the process of making something one's own" (p. 35).

Within a sociocultural context, technological and social affordances are described as giving students structure and opportunities for learning and engaging with each other (Willis et al., 2013). Both technological and social affordances may impact the sense of belonging; for example, by giving enhanced motivation, connection to others or a context, while trusting relationships with each other and a tutoring presence may also increase students' self-confidence and self-efficacy (Cung et al., 2018; Peacock & Cowan, 2019; Willis et al., 2013). Garrison (2007) discusses how understanding social presence (the ability to establish relationships) has important pedagogical implications for creating and facilitating higher-order learning, including building relationships, effective communication, open communication, and group cohesion. However, Chang and Kang (2016) identify critical factors such as commitment/responsibility, communication/coordination, structure/management, and leadership as critical for online collaboration.

A number of studies have focused on the relation between self-discipline, or rather self-regulation, and student performance. Zimmerman and Kitsantas (2014) argue that the "distinction between learning and performance processes" (p. 153), formulated as self-regulation and self-discipline, is important, as self-regulation is predictive of learning outcomes in ways that self-discipline is not. However, Gelles et al. (2020), suggest that self-discipline is an important skill for ERT during the COVID-19 pandemic, giving examples such as "creating and adhering to a schedule, finding ways to keep busy, getting work done right away, and batching time spent on schoolwork" (Gelles et al., p. 13). Gonzalez et al. (2020, p. 19) argue that students' performances increase and "that there is a significant positive effect of COVID-19 confinement on students' performance", independently of the actual teaching setup during the COVID-19 lockdown. In this vein, Holzer et al. (2021) use the term cocooning, indicating both isolation and, at the same time, cosiness and control.

There are a plethora of studies addressing the relation between academic achievement and student well-being. For example, in their study on academic performance and students' motivation, Afzal et al. (2010) found that both extrinsic (reward and/or avoiding punishment) and intrinsic (personal goals) motivation are reciprocal in relation to academic performance. Other studies, such as El Ansari and Stock (2010), emphasise the relation between health and health behaviours and educational achievement. Student well-being has also been studied during ERT. For example, Burns et al. (2020) discuss the impact of the COVID-19 pandemic on the well-being of UK university students and argue that "the psychological impact (loneliness) will be far-reaching" (Burns et al., 2020, p. 8). There are reports that the COVID-19 pandemic is leading to increased anxiety, depression, and stress (Cao et al., 2020; Odriozola-González et al., 2020). This is something that can be seen in Sweden as well. The Swedish National Union of Students (2020) compiled surveys from 12 universities in Sweden during the late spring and autumn terms of 2020, with a particular focus on health issues. Students reported increased negative stress, loneliness and decreased motivation.

A Swedish Higher Education Authority (UKÄ) report (Strömberg & Ovsiannikow, 2021) studied the influence of the COVID-19 pandemic. Positive consequences were learning how to use digital tools in a pedagogical way, which the institutions see as good for the future. Less positive was a deterioration in mental health due to social isolation (Strömberg & Ovsiannikow, 2021). Questionnaires sent out at Stockholm University showed that one-third of the students did not interact with peers outside of teaching assignments, and the most common course components lacked interactivity. Further, about half of the students in that study saw no major difference as compared to campus-based courses, whereas about 25% of students responded that the online course experience was better than campus-based courses, and about 25% that it was worse (Bolander Laksov et al., 2021).

METHOD

Study context

In September 2020, 253 students participated in a methods course given in the third year of their respective three-year university programmes. The informatics/computer and systems sciences department hosting the course is one of the larger departments at this Swedish university, with close to 5,000 students (approximately 45% women) in 2019. Before the COVID-19 pandemic, most education at the department was campus-based, still with experiences of online courses (primarily freestanding courses and contract education), technological support such as automatic recording of lectures in lecture halls, support for webcasting to lecture halls, etc. Ten or more online systems are used at the department. Online systems that most students have experience with are a learning management system, a system for schedules and administration of student records, a system for streaming recorded lectures, and a system for queuing for supervision. In that respect, the rapid change to online education in March 2020 was comparatively smooth, as students, teachers and administrative staff had experiences that helped in making the transition manageable.

Empirical data

The students were given the assignment in groups of 4 to 5 to conduct an interview study using semi-structured interviews, interviewing fellow students on the course. The thematic framing for the studies was e-learning. These exam papers all followed the prescribed setup. They started by formulating a research question on some specific aspect of e-learning (all but one group chose to focus on emergency remote teaching, ERT) and an interview guide. They were then given formative feedback on these. Each semi-structured interview, where they interviewed a classmate from another group, lasted at least 20 minutes and was transcribed word by word. After being anonymised, these interview transcripts were attached to the report. An important part of the assignment was also to do a thematic analysis, as described by Braun and Clarke (2006). The interviews were conducted in September 2020. One of the authors of this article belonged to the teaching team for the methods course.

Data collection and study design

The analysis process started with collecting the exam papers from the 55 groups (c.f. Study context section above). The analysis started with familiarisation and reviewing the student papers with regard to their respective focus and setup. Two out of the 55 exam papers are excluded based on their setup (theme and/or number of interviews). Of the remaining 53 exam papers, including a total of 247 interviews (making up more than 120 hours of material), all focused on different aspects of ERT, as this had developed out of the pandemic and university lockdown.

Our analysis focused on the analysis part of the exam papers (removing all other text). That is, our meta-analysis is on the themes and sub-themes, interview excerpts and arguments as presented by the students in their analysis.

The qualitative data analysis software MAXQDA2020 was used in the thematic analysis (Braun & Clarke, 2006). By using an inductive semantic approach to thematic analysis, we focused on "the explicit or surface meaning of the data" (Braun & Clarke, 2006, p. 84) as present in the empirical data. Therefore, the data was read through several times to develop an overview and understanding of the material. In the first step, initial codes were created by focusing on the research question, the themes and sub-themes of the exam papers, and an initial understanding of the key arguments of the 53 papers. The inductive semantic thematic analysis theory concepts are used to support the analysis in an iterative process.

In the inductive coding process, we coded the following: (i) a total of 705 codes from the themes and sub-themes in the exam papers, (ii) a total of 1252 codes from the interview excerpts used in the exam papers, and (iii) a total of 1238 codes from the arguments presented for the themes in the exam papers. In summary, nearly 3200 code excerpts were identified in our study. The codes were continuously discussed, reflected on, elaborated and reformulated, emphasising the inductive approach used for identifying and naming the themes and sub-themes.

We have followed the ethical recommendations of the Swedish Research Council (Hermerén, 2017). In the exam papers, all informants signed informed consent (as this was an explicit demand in the course), and the interviews were then presented in the exam papers without disclosing any personal information. When starting our study, all students were informed about the setup for the study and given the opportunity to withdraw their papers and/or participation as informants. Before our actual analysis started, we extracted the analysis/results part of the respective exam paper, thus deleting all personal details. The only quotations we reproduce are quotations used in the exam papers, already de-identified by the exam paper authors/students.

ANALYSIS

Three overall themes, each including a number of sub-themes, were identified (see Table 1). The first theme is students' experiences of the *awareness of what it means to be a student*, as education went online in 2020. That sets the scene and is followed by first *technology reframing communication* and, finally, the *need for explicit guidance*.

Table 1. Overview of themes and sub-themes

Themes	**Sub-themes**
Awareness of what it means to be a student	Distractions, self-discipline and self-regulation
	Motivation
	Mental and physical well-being
Technology reframing communication	Cooperation rather than collaboration
	Changed and new communication patterns
	Experienced anonymity and webcam
Need for explicit guidance	Quality of instructions and teacher availability
	Lectures and teacher support
	Remote exams and cheating
	Ubiquitous attendance and routines

Awareness of what it means to be a student

In answering the question of how university students experience emergency remote teaching (ERT), there are three qualities for awareness of what it means to be a student: distractions, and self-discipline and self-regulation, motivation, and mental and physical well-being.

Distractions, self-discipline and self-regulation

Students experience being easily distracted when studying from their homes. The distraction may come from other family members, household chores, playing computer games, watching Netflix or social media: "[you] find other things to do at home, for example, that you start, distractions, start poking around with other things. It might, for example, be that you start watching some interesting series on TV instead [laugh]." (Student 81) There are also students who find it harder to get started in the morning and to stay focused on their studies during the day, and it can be challenging to distinguish between study time and free time. Here the capacity for study planning, structure and routines (as was seen in the previous theme), and consequently for self-discipline and self-regulation with its executive functions (organising and planning the study, time management and reflection over the outcome), is considered helpful in finding the right motivation and experiencing successful study.

Motivation

Finding the motivation to study seems to be intertwined with the ability to take personal responsibility for the studies:

> I have more personal responsibility, and then I put more pressure on myself to actually study. (Student 163)

Also, physical distance from the university campus and fellow students can be seen as an opportunity, as can the possibility to plan your own time. Still, the distance from other students, teachers and the physical study context may adversely affect motivation, as: "You get lazy, kind of, with distance education." (Student 167)

Distractions and motivation are two important dimensions of how university students experience ERT in the first year of the COVID-19 pandemic. Adding to the awareness of what it means to be a student is mental and physical well-being.

Mental and physical well-being

Less physical interaction with other students tends to result in an experience of loneliness among students: "this also creates, how can I put it, you become a little lonelier than in everyday life if you're always at home and don't go out and meet people." (Student 18) Intertwined with the lack of physical contact is the absence of the everyday dialogue about study results, interpretations of assignments or merely the quality of lectures (or lecturers).

Furthermore, students stress the collective expectation of being constantly available and active at all times. There are also experiences of increased stress due to an unclear perception of time or too little or too much information from teachers and/or course platforms. In contrast, other students experience increased mental well-being as they feel more rested now and in control of the study plan. For them, the situation has led to reduced stress.

Students exercise less and sit still more: "It got very stressful, kind of […] and I wasn't doing any training… at all, then." (Student 128), not least as a consequence of lack of motivation. Whereas others say that they have more time for going to the gym: "Oh God I liked training

[…] that you, you know, that you could continue to get that routine in while also working on the digital education, that was good." (Student 163)

Technology reframing communication

Since students consistently address how their communication is determined by the digital tools, this makes the qualities of digital platforms an important aspect when campus education is closed. On the one hand, technology is seen as an enabler, making it possible to work in a way that was not common before due to online tools. On the other hand, each technology has limitations, and students use different and complementary tools. However, there is no guidance on how to use these tools, even though the analysis shows an increased awareness of the quality of communication and increased responsibility for communication. Or in other words, the experienced anonymity of online communication challenges the established patterns for interaction in student groups.

Cooperation rather than collaboration

The analysis suggests that group work is more task-focused in online meetings than on campus: "When you work strictly at a distance […] I think that […] the meetings should be structured and after the meeting, you arrive at clear action points on who is to do what, when by and how it should be structured." (Student 225) If a group meeting online is unproductive, then a group member might suggest that the work can be divided between group members for individual work, and that the group can meet up again later for discussions. Some of the students mention that this way of working, with individual work followed by group meetings focused on the task, makes coursework more cooperative and less collaborative.

Changed and new communication patterns

Group chat is experienced as something that works well up to a point, but a different communication channel is needed, such as video conferencing, when discussing something complex. Still, body language and facial expressions are understood to be important to feel the mood in the group or when you want to present your opinion: "So I would say that the number of times you communicated became more frequent, but it may have the effect that when you communicate things, it isn't as clear. It's easier for misunderstandings to arise." (Student 4) Solely voice discussions during communication lead to less involvement in the work and also reduce relationship-building.

The students experienced changed conditions for building and maintaining relationships: "I have not really gotten to know anyone on my new programme during the digital teaching." (Student 55), despite having collaborated for two months. One reason given is that online meetings often focus primarily on the work and not the social interaction. For example, a break online is a time to log out, but on-campus students socialise more informally. When meeting online becomes an everyday practice, this of course influences the dynamics of the group:

> […] when you first meet as a group, you don't really get the chance to build the same kind of group dynamics anyway. Which I think is quite valuable. (Student 4)

Experienced anonymity and webcam

The relative anonymity in online group work allows for an experience of increased equality among the group members. A person who tends to be shy in physical meetings can have a safer place for his or her voice, for instance, by not using a webcam. Nevertheless, the relative

anonymity might also lead to the opposite, as some find it more challenging to participate in an online conversation: "I think it's very awkward, I become very self-aware when I have the [webcam] on." (Student 30) Whereas other students find that the webcam made group meetings more similar to face-to-face meetings: "I think that the [webcam] was positive for the group dynamic; it was more personal. Without the [webcam], it's easy for people to hide a little behind the screen. So participation increased with the [webcam]." (Student 55)

One further aspect of the experienced anonymity, one that risks being a source of conflict between the students, is individual students not fulfilling the expectations set by the group:

> People have sometimes come up with very far-fetched excuses for why they've not been able to participate or people have "muted" themselves [turned off the microphone] during meetings and not been so active. (Student 55)

Having webcams turned off in student group meetings makes it difficult to discuss and leads to talking at the same time: "Difficult to have your voice heard, because there were lots of guys just babbling, who never shut up and then, if you have the [webcam] or are sitting together you can gesture that 'I've got something to say'." (Student 162) With the difficulty of discussing in a video conference, student group meetings are focused on what the task is, and then they split it up for individual work between meetings.

Need for explicit guidance

Students express the need for explicit guidance in the form of instructions, teachers' availability, and teacher support. They also discuss their experiences of remote exams and attitudes towards cheating.

Quality of instructions and teacher availability

Communication between student and teacher is about personal contact, teachers being accessible, and the quality of information given. This means that the interaction and communication between the teacher and students are experienced as important in online education. Here students experience changed conditions from a relational perspective and state that it is difficult to establish personal contact with teachers during ERT as (if) the teacher does not pay attention to them. The overall experience is that the teachers' commitment is lower, and one proposed reason was that the teachers seemed unfamiliar with and somewhat insecure about ERT.

A critical aspect of the interaction with teachers and professors is therefore the quality of information given:

> First of all, it is very important to have clear instructions, so that you know what to do, something that has never been great, but you've been able to back it up by talking to the teachers. It has become quite a big problem with distance learning. (Student 73)

Furthermore, communication with teachers is slower online than on campus. On campus, students could talk directly to teachers, for example, after a lecture: "You know I often used to, if I wanted to talk to a teacher, stay behind after lectures and ask questions […] however, that's no longer possible." (Student 87) However, with communication online, students hesitate to ask questions in a forum or via email, and if they do, it may take some time before they receive an answer from a teacher. Still, some students have experienced teachers responding to questions in an online forum much more quickly than expected.

Lectures and teacher support

The experience of attending video conference lectures can be a test of the ability to be attentive: "I would say it's even more drawn out now." (Student 20) When reflecting on this, students note the challenge of sitting alone at home instead of interacting with fellow students when sitting in the lecture hall. Another important dimension of this is the experience of not just decreased pedagogical quality in the video conference lectures, but also the level of ambition of lecturers:

> Yes, they have been worse. Not that they've been really bad, but more that the lecturers seem a little lazy almost? And do the least possible from home. (Student 35)

The analysis indicates that the types of communication supported in lectures, seminars and workshops are one-way or questions and answers: "It rather turned into the teachers sitting and answering questions from students, as opposed to sitting in the group and brainstorming ideas and such." (Student 96). Some students also report that they are hesitant to ask questions at all in lectures, seminars and workshops when they are at a distance.

Studying, in this particular case, on an educational programme in informatics/computer and systems sciences implies being exposed to, and developing proficiency in, a number of different digital tools and apps: "I think that my studies are adapted to the tools I have at home and the conditions you have at home, I would say." (Student 149) But when the students are not allowed on the premises of the university, the responsibility for providing and supporting different digital tools lies with the students themselves, and that opens up inequality issues, as the tools and skills differ among the students.

Remote exams and cheating

Going from on-campus exams to remote exams not only changes the way students study and/or how they plan their studies, but also how they approach the actual situation of examination, as they now have access to resources that were never an option in a traditional on-campus exam: "[you] can google and, well, talk to others." (Student 161)

With remote exams, some students report that the complexity of the exams has increased. Long answers are required in a limited time, and the exam questions ask for analysis or reflections: "[A] home exam is based on deep analyses and a lot of text to be written in a short time." (Student 150) Adding to that challenge, there are technical aspects that need to be handled to be able to submit the exam:

> The exam itself, you don't have time, there is a lot of technical stuff, and you have to draw models that you have to make into a pdf, that you have to put in a document and then you have to make a zip file, such stressful stuff that you don't have to think about when sitting in an exam hall. (Student 161)

This then diverts time and attention from the actual content of the actual exam.

Even though cheating is considered a bad thing, there is a tendency to see it as someone else's responsibility if the student actually cheats: "it's no good. Those who create the exams need to make it harder to cheat." (Student 51) Cheating is furthermore context-dependent and depends, for example, on the specific educational programme: "I think it is unethical in some programmes. In law or medical programmes. When you have people's lives in your hand." (Student 111) For some, the rules are clear, but since there are no consequences, it is considered an option to cheat: "I almost think it's a little less bad to cheat on a home exam because

there are so many [students] who do it." (Student 172) This attitude can upset other students, who state that they would rather fail than cheat, seeing the benefits of learning the content to cope with their working lives: "I feel that it benefits me more to be able to handle it honestly." (Student 114)

Ubiquitous attendance and routines

Lectures and seminars can be attended from anywhere, for example at home on the sofa or in bed: "Yes, I guess you could say that digital education is more comfortable given that you can lie at home on your sofa or in bed and watch a lecture" (Student 18). However, some settings are more prone to distractions, and it is harder to stay focused: "You don't listen as well, I mean if I'm watching the lecture at home, who knows if I pick up my mobile phone. If you're on site, then you really want to listen and not just pick up the phone and scroll if it gets boring." (Student 83)

Students appreciate that lectures are recorded and available for streaming on demand. This makes the study schedule flexible in that students can choose when to watch the recorded lecture: "Because lectures are made available afterwards, this gives more options and flexibility since I can postpone, reschedule and plan in another way." (Student 32) At the same time, some students note that flexibility might lead to losing focus or procrastination and even watching the same part of a lecture many times. In managing studies, creating and maintaining routines seems to be a key component.

Notably, routines are also about how you prepare for the day, in terms of e.g. dressing, eating (breakfast), and putting on make-up.

DISCUSSION

In answering the research question, *How do university students experience emergency remote teaching (ERT)?* 247 university students interviewed each other and wrote exam papers, which were then collected and analysed for this article. Even though ERT is a short-term solution (Hodges et al., 2020; Rivera et al., 2021), the in-depth findings give examples of pedagogical qualities that teachers may consider. The thematic analysis suggests three main themes: The students have a *need for explicit guidance*, primarily from teachers and professors. The students feel that *technology is reframing communication*, emphasising that the qualities of digital platforms are important to consider when campus education is closed. Furthermore, the students experience an *awareness of what it means to be a student* in studying from home with sparse contact with fellow students.

The sociocultural perspective frames the discussion by using the theoretical concepts of norms, appropriation and social affordances, as introduced in the background.

Norms

Regarding rules and norms (Engeström, 2015), in ERT, students renegotiate norms and break the rules regarding remote exams and cheating. The results of this study show how they give a rationale for doing so. For example, they state that cheating is okay in some cases, as remote exams are too difficult, requiring them to cheat, or that they can cheat because nothing prevents them from doing it. It may be argued that there is a need for explicit guidance from teachers to help students understand what behaviour is allowed and what is not. Another example of students renegotiating norms is when students replace online group work with individual work, as technology reframes their communication. Dividing group work into individual work may also

be seen as renegotiating the norms associated with group work. From a sociocultural perspective (c.f. Säljö, 2005; Vygotsky, 1978; Wertsch, 1991), it may be seen as an explicit division of labour taking place, with collaboration replaced by cooperation. Also, from a sociocultural perspective, it may be argued that group work depends on having established norms for working together and achieving a suitable division of labour (Engeström, 2015). These are all findings that may be relevant and have implications for future course design planning.

Appropriation

In Sweden, nine out of ten students report that their higher education institution is able to provide the technology and that they themselves have the digital tools needed for ERT (Internetstiftelsen, 2020, p. 148). Still, students found the need for appropriation of technology (Bakhtin, 1981) as well as learning activities in ERT. The students in the present study needed to consider the old and make a new appropriation. For group meetings, the off-camera behaviour may be attributed to students experiencing anonymity and low social presence in appropriating webcam use. Garrison (2007) and Peacock and Cowan (2019) emphasise the importance of social presence. However, the results show that the low social presence in group work during ERT may open up behaviour where students are not held accountable for their actions by their peers or in group assessments by teachers. Off-camera behaviour is one further example of how technology is reframing communication. These findings highlight the need to consider questions of presence and communication in course design during ERT.

Social affordances

Questions about creating new routines when attendance is ubiquitous are raised when studying anywhere and at any time, supported by technology. Self-regulation and self-discipline may be important concepts in creating the new routines necessary (Gelles et al., 2020; Zimmerman & Kitsantas, 2014), which also could be seen in this study. Further, the ability to organise and plan their study, time management and reflection were helpful in experiencing successful study. If a student is able to regulate learning at a distance, the increased flexibility can be seen as something positive and lead to increased effectiveness (Gonzales et al., 2020). However, if regulation is problematic, it may lead to procrastination, and it may even result in losing a frame of reference, losing control of not just study achievements or personal capabilities but also everyday life. This two-sided issue, called cocooning – the experience of isolation and cosiness (Holzer et al., 2021) or health issues such as loneliness or stress (Burns et al., 2020; Cao et al., 2020; El Ansari & Stock, 2010) – was also seen in in the results. When students have to practise self-regulation in ERT, this contributes to an awareness of what it means to be a student and the changes that follow this situation. The results raise the question of how the teacher can support students in this process. One challenge is tutoring presence and teacher support since explicit guidance seems to be needed. For example, students want accessible, available teachers, more personal contact, and clarity regarding the quality of information and instructions. The social affordances and sense of belonging the students get in this educational context is a matter of debate (Willis et al., 2013). Social affordances enable student engagement, enhanced motivation and trusting relationships, with tutoring presence in particular increasing students' self-efficacy (Cung et al., 2018; Peacock & Cowan, 2019; Willis et al., 2013). Regardless, students in the study experience a change in the conditions for this relationship since it is more challenging to build the relationship online. Knowing this means that the issue can continually be addressed during a course.

LIMITATIONS AND CONCLUDING REMARKS

Even though the methodological setup provided us with comprehensive data, it is interview data collected by bachelor-level university students. Adding to that, the interviews are of fellow students, from the same methods course, meaning that there are as many interviewers as interviewees. Drawbacks are, of course, that there is a variety of not just experience of and competence in conducting interviews, but also in the actual precision in the respective study (research question, interview guide, etc.). Still, it would not have been possible to collect that amount of interview data any other way (given our resources), allowing for the kind of meta-analysis used in this study.

The students were supervised during the process, focusing on methodological issues. As one of the authors was also one of the teachers in that particular methods course, in writing this article the critical dialogue, not the least during the analysis phase, has been crucial. Triangulation of investigators supports credibility and dependability in the general pursuit of trustworthy analysis (Krefting, 1991).

Using an inductive semantic thematic analysis means focusing on patterns within the empirical data. Theoretical concepts are used to support the analysis in an iterative, or perhaps abductive, process. The analysis thus uses theoretical concepts to further the analysis, guiding the framing of themes and the subsequent discussion. Although not a limitation per se in this study, it opens up for theoretical development in the field of distance education in general, and emergency remote teaching (ERT) in particular.

With the focus on emergency remote teaching, this study adds primarily to the empirical understanding of students' experiences of studying during the first phase of the COVID-19 pandemic. Obviously, this is a situation that has happened to the students, rather than something chosen. This implies a need to adapt to an educational complexity where not just norms for interaction need to be renegotiated, but also the use of technology.

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