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Mixed Approaches to Learning in the Flipped Classroom: How Students Approach the Learning Environment

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Abstract
Flipped teaching is a trend within higher education. Through flipped teaching the learning environment can be altered by moving the lecture out of the classroom through online recordings, while in-classroom sessions focus on active learning and engaging students in their own learning process. In this paper, we used focus groups comprised of male students in a qualitative research course with the aim of understanding the ways in which we might improve active student engagement and motivation within the flipped classroom. The findings indicated that, within the flipped classroom, students mix surface and deep-learning approaches. The online recordings, which students interact with through a surface approach, can function as a stepping stone toward a deep-learning approach to in-class activities, but only if students come to class prepared. The findings therefore suggest that students must be made aware of the importance of preparation prior to flipped classroom in-class activities to ensure the active learning process is successful. By not listening to the recordings (e.g., due to technological failure, as was the case in this study), students can result in only employing a surface approach.

L'enseignement dans une classe inversée est une tendance dans l'enseignement supérieur. Par le biais de l'enseignement dans une salle de classe inversée, l'environnement d'apprentissage peut être modifié en déplaçant le cours magistral hors de la salle de classe par le biais d'enregistrements en ligne, alors que les séances en salle de classe se concentrent sur l'apprentissage actif et la participation des étudiants et des étudiantes selon leur propre processus d'apprentissage. Dans cet article, nous avons employé des groupes de discussion composés d'étudiants de sexe masculin dans un cours de recherche qualitative dans le but de comprendre les manières dont nous pourrions améliorer la participation active et la motivation des étudiants dans une salle de classe inversée. Les résultats indiquent que, dans la salle de classe inversée, les étudiants mélangent les approches d'apprentissage en surface et d'apprentissage profond. Les enregistrements en ligne, avec lesquels les étudiants interagissent par le biais d'une approche d'apprentissage en surface, peuvent servir de tremplin pour en arriver à une approche d'apprentissage profond au cours des activités en classe, mais uniquement si les étudiants viennent en classe bien préparés. Les résultats suggèrent donc que les étudiants doivent être informés de l'importance de la préparation avant de s'engager dans des activités de classe dans une salle de classe inversée pour garantir que le processus d'apprentissage actif mène à la réussite. S'ils n'écoutent pas les enregistrements (par ex. à cause d'un mauvais fonctionnement de la technologie, comme cela a été le cas lors de cette étude), le résultat peut être que les étudiants vont employer uniquement l'approche d'apprentissage en surface.

Keywords
flipped classroom, approaches to learning, male students, learning environment; salle de classe inversée, approches d'apprentissage, étudiants de sexe masculin, environnement d'apprentissage

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The flipped classroom and the use of online segmented lecture recordings have the potential to increase students' activity levels within the classroom. Specifically, it allows students to watch online course recordings outside the classroom and subsequently enter the classroom and actively participate in group sessions. Within social sciences, there is particularly promising potential in courses that exhibit a high learning-by-doing component, such as the graduate course in qualitative research that is under study here. This course was flipped in order to encourage active learning within the classroom. Students gain hands-on experience by conducting research under the guidance of their teachers. By flipping the course, the teachers, at least theoretically, have more time to support the students during their project work; however, for the flipped classroom experience to be a success, it is crucial that students internalise the information presented to them via the online recordings, as they need to apply this knowledge during both the in-class activities and hands-on research process. Prior research on course recordings indicates that male students are less likely to engage with online course recordings than female students (Heijstra & Sigurdardottir, 2018; Chen et al., 2015; Kurtz et al., 2014). As academic teachers, we are interested in understanding how to improve the active engagement of students who are least likely to actively participate in the qualitative research course. For this study, we used a case comprised of only male students, but that is not to say that the outcomes do not apply to other groups of students showing minimal active participation during courses. Ultimately, we would like to understand how we might improve the active engagement and motivation of all students within the flipped classroom. Two focus groups were conducted with the male students, in which the course, their hands-on research experience, and their experience with the flipped classroom were discussed in regard to both passive out-of-class learning and active in-class learning. "Passive," in this case, refers to the taking in and internalisation of information without the possibility of receiving instant feedback from the teacher, as is possible within a traditional in-class lecture. Meanwhile, "active" in-class learning refers to students engaging with the course material through activities such as writing, problem-solving, reflecting, analysing, and discussing. Based on the outcomes of the focus groups, we evaluated the concept of approaches to learning in a flipped classroom. Do these approaches also apply to less engaged students within a flipped classroom, or do the approaches get mixed up, because the passive online transmissions enhance the active in-class elements?

The paper continues by outlining the ways in which the literature on learning approaches, such as surface, deep learning, and strategic approaches, can be linked to active learning, which is followed by a discussion on active learning within the flipped classroom. Thereafter, the course context and research methods are explained, and then the findings on how the male students in our study approached the qualitative research course content are presented. We conclude by arguing that the active element of the course seemed lost on the students who did not internalise the information from the course recordings prior to participating in the in-class activities. Based on this, we suggest that students' approach to the flipped classroom might be mixed, as they surface approach the online recordings but approach the in-class activities in a deep way. This means that the flipped classroom has the potential to help students employ a deep approach to learning even if they may not have had the intention to do so in the beginning.

Approaches to Learning

The theory behind the deep-learning approach, as opposed to the surface-learning approach, was first developed in 1976 by Marton and Säljö to address the importance of the learning environment in terms of the way in which students learn. Marton and Säljö argued that these two aforementioned approaches to learning represent students' ability to reproduce the course material (surface-learning approach) or further understand the reasoning behind the material (deep approach). Later, other scholars (Case & Marshall, 2009; Entwistle & McCune, 2004) added a third option to this model, the strategic approach, which clarifies that students do not consistently opt for one learning method but rather their selected approach depends on both the course design and assessment. The literature on both the deep and surface approaches of learning indicates that both individual preference as well as course design influence the approach students take. Nijhuis et al. (2008) found that, within the student population, there are two types of groups: one is fairly fixed in its approach and does not respond to changes in the learning environment, and the other is more easily influenced by changes in the learning environment. This means that even though the course design might not influence the learning approaches of all students, it could guide a few of them in either direction. By introducing active learning elements into the classroom, in which students are guided in reflecting on the class material, students can be encouraged to use a deep approach to learning. However, research on courses blended with online elements indicate that once a class has started, students seem persistent in their approach, whether online or in class (Ellis et al., 2008). This means that the first impression of the course is crucial for students' learning approaches, as it defines the learning approach that is utilised in the remainder of the course.

The concept of learning approaches ties together individual student preferences and the learning environment. As teachers, we can only influence the learning environment (e.g., through flipping the course or by creating a more active learning environment). At the University of Iceland, teachers are encouraged to reflect upon their teaching and create more active learning environments. Subsequently, their teaching methods are becoming more diverse, and the classic lecturing method is no longer the only way in which students are taught (Sigurdardottir & Heijstra, 2016). This transition is supported by existing literature on student-centred active learning (see e.g., Weimer, 2013), which encourages teachers to design their courses to include the active participation of students in class. Kayo Matsushita (2018) coined the term "deep active learning" in an attempt to frame active learning in terms of approaches to learning. Her emphasis on deep active learning is derived from students' "deep understanding" to learning and includes "deep engagement" and "deep learning." With the emphasis on the active aspect of deep learning, she further pointed out that, in order for deep active learning to occur, students need to internalize some information in order to apply and understand it in the classroom, which, she also points out, the flipped classroom offers through the internalization of online lectures and participation in class activities (Matsushita, 2018; Mori, 2018). The internalization of information by means of passive learning in order to enhance active learning is in conflict with some other studies on learning approaches. While Ellis et al. (2008) found learning approaches to be consistent across all platforms, we will argue that, in the flipped classroom learning environment, this is not necessarily true. Students who apply a passive surface approach outside the classroom are still expected to deeply engage with the in-class activities. Moreover, even if the online lecture is a type of passive transmission, it does not have to stop students from internalising the content in a deep way, much like when they read

a textbook. A subset of students certainly will do so on their own in terms of internalizing content in a deep way. A question we aim to explore further is: How do students who initially apply a surface approach manage the active engagement required for in-class activities in a flipped classroom?

Active Learning and the Flipped Classroom

The flipped classroom has become a trend within educational innovation (Fidalgo-Blanco et al., 2017) and higher education institutions. There are many versions of this method, but what they all have in common is that the traditional format of teaching, in-class lectures, is replaced by (short) online course recordings. The in-class time that then consequently becomes available is then used for active learning, during which the distance between the teacher and the student is smaller than in traditional teaching (Chen et al., 2014). Specifically, students are encouraged to become more active in their learning (Hmelo-Silver, 2004), and, if the flipped classroom is well designed, it can hold more autonomy and responsibility than they did previously (McCollum et al., 2017). The flipped classroom is believed to influence the individual learning style of students by triggering a deep-learning approach (Bishop & Verleger, 2013). Studies on the flipped classroom can be divided into two strands: students' attitudes towards the flipped classroom (Moffett & Mill, 2014; Gilboy et al., 2014; Roach, 2014; O'Flaherty & Philips, 2015) and the design principles (Kim et al., 2014; Chen et al., 2014; O'Flaherty et al., 2015).

Various research on student and teacher satisfaction with the flipped classroom find that the majority of students have a positive perception of the flipped classroom (Gilboy et al., 2014; Moffett & Mill, 2014; O'Flaherty & Philips, 2015; Roach, 2014), some explaining that it better trains them in the problem-solving skills relevant to the objectives of the course (Sohrabi et al., 2016). Students have also found the lessons to be more interactive and interesting (Roach, 2014), and this is especially true among more senior students (Cavalli et al., 2014; Kurtz et al., 2014). First year students, on the contrary, seem less willing to part from a passive learning approach and are more negative towards flipped teaching altogether (Magolda, 2001). When it comes to the passive, outside-of-class aspect of the flipped classroom, a study on viewing patterns of students regarding recorded lectures in a flipped course, has positively linked age to the number of minutes students spend listening to their recordings, with older students listening for a longer amount of time than younger students (Heijstra & Sigurdardottir, 2018). Moreover, in this same study, the male students watched, on average, fewer minutes of the course recordings than their female counterparts, a finding also supported by other studies (Chen et al., 2015; Kurtz et al., 2014).

However, it remains unclear the extent to which the flipped classroom is effective, as studies on the topic have provided inconclusive evidence (Bishop & Verleger, 2013; Merrill, 2015). Specifically, some studies have shown that flipped classrooms enhance student outcomes (Foldnes 2016), while others have demonstrated that it either makes no difference (Braun et al., 2014; Baepler et al., 2014) or leads to worse student outcomes (Moffett & Mill, 2014). Students in a Dutch study perceived greater self-efficacy in the flipped classroom, spent less time on exam preparation, and produced comparable results as those within a traditional, lecture-based learning environment (Bouwmeester et al., 2019).

At an Australian university, the regularity of pre-class activities turned out to be important in the performance of engineering students (Jovanovic et al., 2019). The authors' research on study patterns based on data from online course recordings

(Heijstra & Sigurdardottir, 2018) revealed a positive relationship between the amount of time students spent viewing the recordings and their final course grades; however, a cause and effect relationship could not be established.

Most research on the flipped classroom revolves around the in-class learning experience, as it has been deemed the design's critical component (Merrill, 2015). As Steen-Uthein and Foldnes (2018) argued, the flipped classroom can provide a safe-space in which students feel recognised by and committed to their peers (McCollum et. al, 2017). An assumption underpinning this current study is that the in-class learning experience is key to deep approaches to learning through active participation in the flipped classroom. Yet, students' participation in these in-class activities requires their coming to class prepared. By studying students less likely to hold a positive attitude towards the use of online recordings, we aim to improve our understanding of that which initially motivates students to participate.

This study contributes to the existing literature, as it seeks to expand the discussion on different learning approaches by raising conceptual questions regarding the interplay between the passive and active aspects of learning within the flipped classroom. Our main research question is as follows: Can the theory of approaches to learning successfully be applied to male students in a flipped classroom or do the approaches potentially get mixed up with the passive online transmissions enhancing active in-class elements?

Context: About the Flipped Classroom

A graduate course in qualitative research within the School of Business Administration at the University of Iceland was flipped. The course qualified as a large course ($N > 100$) and consisted of students with a broad variety of educational backgrounds. Students were divided into four in-class discussion groups to create the opportunity for active learning through in-class projects and discussions. Lectures were segmented into a series of short online recordings available to students via the learning management system (LMS) software application. The recordings were around 10–15 minutes each, which has been deemed more beneficial to the learning process than longer recordings (Gilboy et al., 2014). Additionally, by recording short lectures, the content creep trap (See & Conry, 2014) may be avoided, in which teachers try to include too much information in their lectures, creating a flood of information too difficult to absorb. By keeping the recordings short, the aim was to further limit students' temptation to employ a surface approach due to time constraints. The in-class activities centred around the week's topics and the student research projects. Thus, overall, the organisation of the course was in line with the concept of the flipped classroom.

Method

The data was derived from the two focus groups, which were comprised of five and nine male students, respectively, and were conducted in January 2017 and January 2018. The participants were all graduate students, 18 years and older, enrolled in the qualitative research course either during the autumn of 2016 or 2017 semester. As previous research (Heijstra & Sigurdardottir, 2018) has indicated less enthusiasm among male students when it comes to the flipped classroom, we decided to focus on this particular group. The focus groups were held less than a month after the course grades and assignments had been returned and the course had officially ended but also before too much time had passed since the students were involved in the course. By

participating in the focus groups, the students gave their consent for participation in the study. An ethics board clearance was not required for the research project, as the study did not revolve around personal information (as defined by the data protection in Iceland), such as that about health or finances.

The focus groups were led by an external facilitator and an assistant facilitator. Both are experts in pedagogy and experienced in performing focus groups. They held no role in terms of teaching in the qualitative research methods course. The facilitators made use of an interview framework developed by the researchers (see appendix). After an introductory round that focused on the subject of the course, attention was concentrated on the flipped classroom and included questions about both the in-class sessions and outside-of-class recordings. Participants were also asked about improvement suggestions and the ways in which they incorporated the flipped classroom teaching style into their daily lives. The focus groups lasted over 60 minutes and were purposively held around lunchtime. Participants were offered a free lunch during the session, and it is plausible that the students willing to participate were those holding the strongest opinions or felt it was socially desirable to do so. The general discussions varied between the groups capturing, highlighting both supportive and critical student attitudes towards the course and learning environment.

Focus groups were deemed the preferred qualitative research method for a number of reasons. First, focus groups have high ecological validity and are a useful tool for exploring under-researched areas (Braun & Clarke, 2013), such as the out-of-class component of flipped teaching. In focus groups, participants are encouraged to talk to one another, which can reveal a wide variety of perspectives and creates an interactive group discussion. As Macnaghten and Myers (2007) stated: "Focus groups work best for topics people could talk about to each other in their daily lives but don't." Furthermore, focus groups are useful when wanting to examine the views of an underrepresented group, as participants are more likely to speak up in a group of people with whom they identify and feel comfortable (Braun & Clarke, 2013). Focus groups are, however, susceptible to dominating individuals, but this can be mitigated through trained focus group conductors (Stewart & Shamdasani, 2014), as was the case in this research project.

We coded and analysed the focus group data according to thematic analysis, a method originating in grounded theory (Charmaz, 2014). This approach builds on inductive reasoning and open coding, which ensure the researchers can stay relatively open-minded to the information collected. Both researchers coded the data individually and then compared their codes for validity purposes. The analytic grounded theory process starts by open coding, in which the data is coded line-by-line, segmented, sorted by meaning, and, eventually, clustered into descriptive categories (Charmaz, 2007; Creswell, 2007). The main themes found in this study included: organization of the flipped classroom and student engagement. We will discuss these themes further in the next section. We compared our findings to the learning approaches literature (Marton & Säljö, 1976), and, based on this we then proposed a novel way of examining learning approaches within the flipped classroom. The focus groups offered insight into what we refer to as a mixed approach to learning, an approach we argue warrants further research in the context of the flipped classroom.

Findings

Upon first examination, the outcomes of the two focus groups starkly contrasted with each other. While the focus group from 2017 was generally happy and supportive

of the flipped classroom learning environment, which was especially apparent in in their efforts to participate in both the outside- and inside-classroom elements, the focus group from 2018 describes the flipped classroom as nonsensical, confusing, incoherent, and fussy. These participants questioned whether the course had actually been taught according to proper flipped classroom methods, and one participant commented: "If this is an example of the flipped classroom, then it's dreadful." The teaching of the two groups in terms of design did not differ significantly, but the students in the 2018 group experienced technological problems when viewing the recordings on certain mobile phones and web browsers at the beginning of the course. While this problem was resolved well before the course ended, it seems to have influenced the students' attitudes towards the flipped classroom in general.

Organization of the Flipped Classroom

Overall, the students were quite happy with the pre-recorded lectures available online or at least the potential thereof, not in the least because they found them related to time-efficient learning. That is to say, the recordings gave the students the feeling they could control the studying process as well as their own study time. This freedom becomes encouraging when all other aspects of the flipped classroom are in place. However, participants of the 2018 focus group were more negative than their predecessors. Some blamed the teachers for the technical issues, even though the problems were software-related. It is clear from the 2018 focus group that this cohort of students, from the beginning of the semester, felt lost and insecure, which set the tone for the rest of the course. The students who did not experience problems in accessing the pre-recorded lecturers, however, felt that this way of learning "created" time, as they were able to listen to the lecture at a time and place which suited them. When probed for examples of when they listened to the recordings, one male student explained he had listened to all of the recordings when hiking, while others listened to them at the gym or while doing the dishes. Some students devoted their commuting time to listening to the recordings. One male student described the following: "I listen to the lecture while driving to university in the morning [and am stuck] in traffic. You feel very happy that you have started work already during a completely useless time." However, this method turned out to be quite unreliable for the 2018 class, as the students who intended to listen to the recordings at the last minute sometimes arrived to class without having been able to listen to them due to error messages on their smartphones when trying to get access. Understandably, these students did not feel the recordings comprised an efficient way of learning. Students listening to the recordings while actively working on other projects or on their way to class indicate their use of a surface approach.

In terms of time-saving, some of the students expressed they were happy that the recordings could be played at a faster pace: "I often listen twice and listened at 200% speed; this cuts the time you use on the subject by half." Here, the student felt he saved time in listening to the recording at a faster playback rate. Interestingly, the 2018 focus group was quite negative towards being able to play the recordings at a faster pace, as this was seen as an indicator of a lack of course standards rather than enhancing the clarity of the recording content.

According to the 2017 focus group, the adjustment of playback time added to the students' feeling of control and time-saving, with the fact that the recording was available at any time of day being an added bonus. This meant they could listen again to the recording when they needed specific information rather than having to take in the

information at a fixed time defined by the course schedule. The students emphasised that, by doing this, they felt better prepared to tackle the projects, as "you knew what you had to do to finish the project." The fact that the in-class sessions were shorter than traditional lectures within the same study program meant that the students believed they were using their time more efficiently. While these efficient learning approaches seem to bear greater resemblance with a surface rather than a deep approach, not all the students in the 2017 focus group approached the recordings in this way. One student in particular believed that listening intensely to the online segmented lectures without other interruptions was a proper way to study. He believed that the recorded lectures meant that, when he got to make the decision to listen to the lecture, he really did purely listen rather than browse the internet or use social media, which all the other students admitted to doing during traditional in-class lectures.

> I feel that the flipped classroom is especially good when you are working […] it means I can use the evenings. Because if I'm in class during working hours, my mind is still at work, and I'm opening my e-mail and e-mailing people. So, if I was at a lecture, I would not really be taking anything in. Instead, I use the evenings, and, in the discussion groups, people are talking to you so you can't just 'hang out' behind the computer.

The other students in the 2017 focus group agreed in terms of the engagement in the in-class discussions, which required them to be present and alert in order to participate. This was, however, not the shared opinion of the 2018 focus group, as it admitted to not participating in the in-class activities.

One member of the 2018 focus group expressed a preference for traditional teaching methods, arguing that it is easy to become bored and lose concentration when listening to recordings. This is in stark contrast to the opinion of the 2017 focus group, in which the students claimed to have better focus when able to decide when and where to listen to a recording. However, it is not impossible that this particular 2018 student was put off by the flipped classroom experience on the whole, as problems with accessing the recordings at the beginning of the course might have led to unprepared students and thus problems with the active learning aspect of the in-class projects. In this specific situation, it may have seemed easier to receive the information by means of a traditional lecture.

Another downfall of the recordings was that the students had no opportunity to ask questions about the content in real time. The fact that the recordings could be paused and rewound when something was difficult to comprehend, however, was greatly appreciated and allowed for a deep approach to learning. Moreover, the smaller in-class groups allowed for much closer contact with the course teachers, which some students in the supportive 2017 focus group felt made up for not being able to ask questions in real time. Participants in the 2018 focus group, however, felt there was not enough time during the class sessions to ask questions, which left them feeling frustrated and annoyed. Overall, we saw that first impressions are important, the students with initial positive course experiences were able to maintain a positive mindset and were willing to stay involved, while this was much more difficult for the students with initial negative experiences. Students who did not listen to the recordings had several more questions to ask in class during a time that should have been devoted to the project and a deep learning approach. One participant described the situation as follows: "You are approaching Suðurgata street if you go stand in line." Therefore, when students do not

or are unable to listen to the recordings, they are unable to internalise the necessary information needed to support a deep learning approach during the in-class activities.

The aforementioned technological problems also reduced the level of trust among students in the 2018 group to a bare minimum, which further hindered a deep approach to learning. The 2018 focus group was, for instance, eager for teacher input on their work and had little faith in the opinion of their fellow students, because, as one student claimed: "You want to get feedback from the teacher not from fellow students, because you don't know how good they are, as they are just there like you there to learn." The students failed to see that the project work and discussions were supposed to help them apply the concepts presented in the recordings, while the teacher was only present to aid the discussions. Another participant expressed his frustration as follows: "Teaching is not talking to fellow students; that is not teaching." This opinion strengthens the belief that the students believed the emphasis of the in-class activity should have been on teaching rather than learning. In this way, they placed the responsibility of learning on the teacher rather than accepting their own responsibility in the learning process. These findings show that if students lacked information as well as their teachers' explanations through the recordings (the teaching), they are unlikely to be open to the active peer-to-peer (learning) aspect of the flipped classroom. Moreover, many of the 2018 focus group participants gave up on the recordings, even when the technological problems were resolved, and no longer regularly showed up for the in-class component of the class. They felt that there was nothing new to learn and they could get away with this behaviour. One student states that, "When you are not learning anything useful, why should you be ambitious?" And another student added," So you go through the course half-heartedly, but get a good grade." Altogether, this means that the possibility for deep learning within the classroom was, in essence, lost within the 2018 group. In the 2017 group, the constant availability of the recordings eliminated any form of excuse for their not preparing for class. These students were subsequently willing to actively participate and had less need for direct feedback from their teachers.

Student Engagement

In the 2017 focus group, students agreed that any course or study program should be demanding; they felt that a challenging course was a fair way in which to divide the motivated students from the less motivated ones. As one student said: "It's normal that it's hard work; if it was not hard everyone would be doing [the degree]." Another student added: "It would not be fair to those who want a real degree, to really learn something, if it was too easy. The degree needs to be worth something." However, it is interesting to note that many of these students had not planned, at the beginning of the course, to really make an effort in their studies, as many were working in professional jobs alongside their studies. However, once they became involved in the course, they felt determined to follow through, and, while on one hand, they would have been happy with just passing the course, once they started, they became ambitious and more willing to work for top grades. One student described the in-class sessions in the following manner:

> You are attending class and doing things like class projects and […] you learn much more. The class projects put a pressure on you to prepare for class, while if you were just attending to listen, then there is no pressure to prepare.

This meant that, given their preparation, the students of the 2017 focus group thought it was worthwhile to attend class; they seemed to think there was no other way in which to engage in this course than being present and active. There were also indications that the students were, at times, irritated that not everyone was taking the class seriously, indicating that not all the students in the 2017 class were able to approach the course in a deep way. Furthermore, the students seemed quite aware that there were two very different ways to approach their learning. As one student described: "It's all down to the people: Even if you had forced some students to listen to the recordings, they would still have received the same grade; they were just not working."

Although the 2018 focus group also called for a demanding course, most of them did not experience the course as such, arguably because they never became sufficiently involved in the subject matter to reach the level of deep learning. One student described the course as "a walk in the park." Having taken a qualitative course at the undergraduate level, some felt bored and unchallenged and did not feel any urge to participate in the in-class activities. As these voices were quite dominant during the focus groups, it is not unlikely that they also influenced the opinion of their fellow students during the course. It confused some students in the 2018 group that not applying a deep-learning approach but instead imitating other students' work methods could lead to passing grades. The 2018 focus group participants felt this confirmed their view that the course did not challenge them. The students, based on information from former students, expected to learn the subject through the more challenging deep learning approach but merely replicated classmates' work without understanding the content.

While the students in the 2018 group did not find the course demanding, they also did not feel the urge to use the recordings available to them throughout the semester. They postponed watching the recordings until faced with having to use the information expressed within (e.g., how to form interview questions based on a research question) during the deadline rush at the end of the semester. In terms of the in-class activities, the students further felt they needed more direct input from the teacher, as they rejected the notion that they could learn from their fellow students. Their learning approach during the semester seemed to align with the surface approach to learning in their being unwilling or unable to explore the topic through-problem solving and discussions during in-class sessions. However, towards the end of the semester, some students panicked and asked their fellow students for advice on how to write the final report. Here, we can see that the 2018 students finally created a semi-active learning environment as the deadline loomed. One male student described the final rush as follows: "You just try to imitate the others, get a super grade, but you feel you haven't gotten command of the subject. You just solve the assignment. Do what others are doing rather than trying to understand what you are doing." This is interesting, as during the in-class activities, the students could have gained hands-on experience and feedback through their active engagement. These students were, however, unprepared for the in-class activities and spent their time discussing topics other than qualitative research while waiting for the teachers to answer their specific questions. The above quote further indicates the student realised that, even if he got a good grade, he only used a surface approach. While a situation like this in which students put off learning until the end of the course is not optimal for the learning experience, the flipped classroom design ensured that the relevant resources the students needed for the final research project (the recorded lectures and their co-students) were available to them when they were finally ready to learn.

Overall, the learning approaches applied by the students were not completely clear-cut between the focus groups, with contradictions in the way in which students talked about the work they completed. The students in the 2017 focus group felt that the shorter intensive in-class sessions were more efficient in terms of their use of time than the longer mixed lecture and discussion classes, and, this, along with the feeling that they were benefitting from meeting with each other, meant they were more likely to attend class. However, they complained that the in-class sessions did not last long enough, as they felt they were too short to facilitate deep discussions. The same critique was even more present in the 2018 focus group: The in-class sessions were too short and boring, and there was little opportunity to facilitate deep discussions. However, they admitted that when they were supposed to discuss a particular topic in smaller groups, they usually went off-topic, which was most likely a consequence of only a few students coming to the lessons prepared. This vicious cycle meant that some of the students stopped showing up because they did not recognize the value of the class sessions. One student in the critical 2018 group mentioned the following: "The atmosphere in this course was much less academic than in other courses." Meanwhile, other students commented that the teachers' attitudes during the in-class sessions were at times discouraging rather than encouraging. The students provide valuable feedback here, showing that the teachers' role and attitude remains crucial within the flipped classroom not in the least place to create a positive learning environment.

Discussion and Conclusion

This study examined the importance of student preparation in terms of their ability to fully engage in a deep learning approach within a flipped classroom setting. We specifically focused on the out-of-classroom element of instruction in the form of online course instruction recordings to obtain a better understanding of the learning approaches of the male students in the flipped classroom. The decision to only examine male students was based on previous indications that they spend less time watching recordings (Heijstra & Sigurdardottir, 2018) and view the flipped classroom less positively than their female counterparts (Chen et al., 2015).

One of the main themes in the supportive 2017 focus group was the time-based efficiency of the flipped classroom, which is in alignment with the findings of Bouwmeester et al. (2019), who found that students in a flipped classroom spent less time preparing for exams but produced results comparable to those of students in classes that had not been flipped. The students in our study emphasised the effective use of time. They could listen to the recordings during otherwise "lost time" and listen to them at double speed. Listening to the recordings on double speed may partially explain why male students have been found to spend less time listening to recordings than female students (Heijstra & Sigurdardottir, 2018). Moreover, the surface approach the students applied to the recordings (e.g., listening while on a hike) seemed to act as a stepping stone for their applying a deep learning approach within the flipped classroom. As the activities in the classroom were based on information presented in the recordings, the students did not necessarily need to approach the recordings in a deep way to apply their knowledge in the active learning aspect of the course. However, the in-class activities were little beneficial to those students who did not prepare. The students in the supportive 2017 focus group had not planned to spend much time on the course; yet, they ended up doing so, indicating they had been guided to a deep approach. Meanwhile, those in the critical 2018 group who were not prepared for the in-class sessions seemed to apply a surface approach to the entire class. The findings indicate

that the students seemed to mix the two approaches within the flipped classroom, applying the surface approach as they listened to the recordings and the deep approach as they fully engaged in the active in-class learning assignments. Although this contradicts the idea that students use a single approach across all platforms (Ellis et al., 2008), it is in line with Matsushita (2018) that they need to internalise certain knowledge in order to participate in active deep learning. The lack of preparation might, in a way, explain Awidi and Paynters' (2019) findings that students did not find the in-class activities of the flipped classroom enjoyable, as they did not prepare and thus did not have the information they needed to actively participate.

Much research has been conducted on the flipped classroom for math-based subjects (e.g., Braun et al., 2014; Chen et al., 2015; Naccarato & Karakok, 2015; Steen-Utheim & Foldnes, 2018; Strayer, 2007), yet less focus has been placed on the subject of qualitative research. As teachers of qualitative research, we know that many students struggle with the context dependency of this subject (Roulston et al., 2003), making it an interesting subject through which to study the flipped classroom. While Steen-Utheim and Foldnes (2018) found that a safe space in which students feel recognised by and committed to their peers (McCollum et al., 2017) is one of the positive aspects of the flipped classroom, we argue that, based on our study, this safe space cannot be created unless the technical aspects of the flipped or blended classroom work. Students also need to be convinced they will receive all the support they need to take on the challenges that accompany qualitative research (Heijstra & Sigurdardottir, 2018). Subsequently, we found that if this particular strength of the flipped classroom cannot be created, students miss out on valuable experiences related to active learning and, potentially, the deep approach to learning.

This study is not without limitations. First, the research was limited to two male focus groups. Also, the technological problems that occurred at the beginning of the second year unintentionally helped shed light on the crucial role that technology plays in making the flipped classroom a successful learning experience in which students can use a mixed approach to learning. Thus, the course's design does not automatically lead to a positive learning experience, but well-functioning technology is key to the success of the flipped classroom experience. We further believe our study provided insights regarding the ways in which male students interact with the flipped classroom, how they incorporate it into their daily lives, and how it encourages a mixed approach to learning. The findings are promising in terms of highlighting that students who get over the first hurdle of listening to the recordings are more likely to have positive experiences in the flipped classroom and, subsequently, engage in a mixed learning approach as long as the support they receive is adequate and the tools handed to them are functioning properly. To conclude, in this study, we observed students initially planning to use a surface learning approach switch to using a mixed learning approach. The findings further suggest that students must be made aware of the importance of preparation before the in-class component of the flipped classroom. For students not ready to embrace the responsibility of the flipped classroom, online quizzes on the recording topics that must be finished before class, might be helpful in ensuring that the students present in class are able to actively participate in the in-class activities.

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Appendix

Focus group: Flipped classroom

Introduction

- Students introduce themselves and explain what study program they come from and why they enrolled in the course.

Qualitative research in general

- What are your views on qualitative research (focus on the content of the course not the learning environment)?
    - Did you have prior beliefs about qualitative research?
    - Did conducting qualitative research appeal to you? If not, why not?
    - Do you find qualitative research easier or harder than the curriculum in general?
    - What challenges did you face in conducting qualitative research?

Conducting qualitative research during the course

- How prepared were you to conduct a qualitative research project within the course?
    - How ambitious would you say you are in your studies?
    - Project work
        - Can you reflect on how well you did as an interviewer?
        - Can you reflect on how well you did during the interview analysis process?

Flipped classroom

- Can you tell us about your experience in the flipped classroom?
    - What did you think of the in-class activities?
    - What did you think of the recordings?
        - What recordings did you listen to?
        - When/where did you listen to the recordings?
        - Why did you listen to the recordings?
        - If you did not listen to the recordings, did you think it had an effect on your work during the course?
        - Did your co-worker in the research project watch the recordings?

    - How do you think your fellow students felt about the flipped classroom?

- Do you have any suggestions for how the flipped classroom could be improved?