Experiences of the Flipped Classroom Method—Does It Make Students More Motivated?

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Abstract. The aim of this paper is to highlight use of flipped classroom method, and how teachers perceive this teaching practice. More specific the research focus on whether the teachers' experiences the model leads to increased motivation in the students learning process. The background for the research is generated from qualitative interviews with teachers, and the empirical data obtained, is from semi-structured interviews with these informants. The results shows that the flipped classroom method increased participation and cooperation, which in turn generated motivation and willing students. The teachers got more time to guidance each student, which gave better knowledge of each student's academic level.

Keywords: *flipped classroom, video, learning processes, teaching strategy, communication*

1 Introduction

This paper aims to explore in which way teachers' experiences that use of flipped classroom method motivate students. The flipped classroom is gaining acceptance in higher education as an alternative to more traditional methods of teaching, and can be defined as: "…an educational technique that consist of two parts: interactive group learning activities inside the classroom, and direct computer-based individual instruction outside the classroom" [1]. Research [1, 2, 3, 4], claim that students are positive to the method, and teachers reported that the learning situation in the classroom became more active [2, 3]. More time available for the teacher in the classroom is the main goal of flipped classroom in the learning situation. However, does flipped classroom contribute to increased motivation among the students at the University? Motivation is a precondition for learning, and motivated students' lean better at school [5, 6]. Learning outcome relates to learning strategies. Based on that, this paper analyzes whether teachers meant that flipped classroom reinforced the students´ motivation so that their interest in further learning is stimulated. Many study plans state that the best learning outcome is achieved when students take an active part in the different forms of learning through the study. The teachers learning strategy affect their use of learning methods in the classroom. The study has the following research question: *In which way experience teachers extended motivation from students by using flipped classroom?*

2 Theoretical frame

Flipped classroom is also known as inverted classroom or flipped learning [7, 8, 9, 10]. The aim using flipped classroom is to make video available outside the classroom for the students, as a preparation for subsequent teaching session. This emphasizes time for discussion, group work, guidance, task-working etc. in the classroom [10]. Research shows that teachers find good learning outcome by the students when using video as a learning resource and use the classroom to provide guidance [11]. However, many resources to do flipped classroom are needed [9, 11].

Learning theories are abstract frameworks that describe how knowledge during the learning experience is receive and processed. Different learning theories can be link to flipped classroom. The overall goal in school is learning. Learning is a complex activity and there are various approaches to this. Within the pedagogy, there are different theories: behaviorism, cognitivism, constructivism and socio-culturalism. These theories follow a timeline from behaviorism that was the dominant learning view in the early 1900s, to a socio-cultural view of learning today. Behaviorism is associated with experiments with rats and dogs (Skinner and Pavlov). Behavioral learning vision describes knowledge as objective and quantitative [12]. Knowledge exists outside the individual. Learning is a change in behavior in that the individual responds to various stimuli. In other words, learning can be observed. In order for the learner to be able to learn, the knowledge is divide into sequences. Learning is done by the learner accumulating small pieces of knowledge step by step [12]. This was a dominant learning vision in the early 1900s. Behaviorism is described as the theoretical basis for traditional teaching and curriculum building in

most countries where students initially learn basic facts and only at a later stage do they expect them to be able to think, reflect and use what they learn [13].

Cognitivism see human being as fundamentally curious. This leads to a desire to gain more knowledge and put it into a system and context (Piaget). The key is how a person receives and processes information, and then puts it into his or her experiences and mindset, possibly changing his or her experiences and mindset. Cognitivism looks at a person as an active participant in his or her own learning, where knowledge is transferred, stored and processed.

Constructivism is based on theories of what knowledge is (John Dewey[1]). Knowledge becomes a tool for action based on each person's thoughts, own experiences and are therefore important. Students construct their own knowledge based on their own experience. Teachers and students work together to process the students' knowledge so they can develop an adequate understanding of concepts and subject-related knowledge [12, 13].

Socio-culturalism is based on theories (Vygotsky), and the learning view emphasizes that all learning takes place in a social context, a person cannot learn in a vacuum. The language is very central in all learning processes Learning and knowledge for all human are related in the context of culture, language and community. Learning takes place through an interaction between people and tools / artifacts in a cultural and historical context. This interaction causes people to change as individuals: both intellectual and linguistic / communicative, and the way of handling physical tools. Learning is basic social, happens everywhere and all the time, and especially when you are a part of a community. Learning is social because knowledge is distributed, and implies that different people can do different things.

3 The Case

The case is a study of a 15-credit course for 23 students in the 2nd year bachelor at the social worker education at Norwegian higher education institution, in the fall semester of 2018. Tree teachers were involved. All information about the course: the organizing as flipped classroom and program to the students was posted in Canvas learning platform before the semester started. Organization of the course was as followed: Each week, a short video lecture was publish. This lecture was publish with different file formats for use on PC, Pad and Mobile. In addition, an audio file was posted. For the lecture, notes and/or foils that were central to the video lecture were publish. For each video lecture, an individual assignment/task also was posted. This was to be answered and delivered to the end of the week. One individual thesis was central and could be used as a basis for both work requirements and exams. The students were encouraged to work on this every week, and used groups to discuss topics before the tasks were solve. The mandatory individual task were given at the start of the course and had to be delivered by before examine. Every Wednesday, time was set for guidance, - both for the individual task and for the group work requirement. Prior to the guidance was to submit an e-mail with the theme the student or the group requesting feedback. The teaching is in both Norwegian and English. The students further, both in writing and orally, pointed out that this was a labor-intensive subject, which required a large degree of self-activity. By organizing the subject in this way, I want this to give more time for guidance, since learning is independent of time and place. Video lectures were intend as a brief introduction to various topics, and was always available to the students for repetition. As a student, they had to study the curriculum and theme more thoroughly. It would therefore be easier for each of the students to organize their own learning at their own tempo/pace. The tasks supported the learning objectives in the course. For me, as a responsible person, flipped classroom would give me good opportunities to be more active in the forefront of each student's learning process. In addition, this will give me the opportunity to check out the students' prior knowledge, and I therefore prepared individual assignments for each lecture. The students were encouraged to contact if they had questions or for other reasons wanted this.

4 Methodology

The study, flipped classroom, follows the hermeneutic and qualitative tradition in pedagogical and social work research [14, 15]. Qualitative method is characterized by direct contact between the researcher (teacher) and those studied (the students) [16, 17]. The empirical data were collected in the form of interview of three female teachers. The data collection followed the progress of the flipped classroom study, the semester start in autumn 2018. Interview as a method provide rich and descriptive information about how the teachers experience the flipped classroom method as a factor getting the student more motivated. In this study, I am the researcher who has collected and analyzed data, and this data forms the basis for the results that appear. Flipped classroom is new in the social work study program, so the teachers were key actors and contributors to this field in their subject. The number of teachers as informants gives a limited empirical selection and challenges with generalizability. The

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[1] https://no.wikipedia.org/wiki/John_Dewey

interviews was made face-to-face by using a semi-structured interview [18]. The teachers themselves decided time and place (own workplace) for the interview, in addition they were given the opportunity to make input regarding the scope of the interview. All interviews was transcribe. The study also includes analysis of significant amounts of archival data including notes and documentation related to planning and organizing the social study. The study has followed the standard related to research and ethics[2]. The methodological choices and assessments are explained to make the study reliable and accurate.

4.1 The interviews

The learning strategy in this course for all the teachers are socio-cultural learning. They, all was agree that motivation is a precondition to learn, and the introduction to the individual interviews had three focus related to students' motivation: video, activity at school, guidedance. The teachers point out that they both in the start and in the middle of the course, specifically had told the students that they had high expectations of each students.

Video
The teachers told that theory presented in videos before the guidance at school, was a factor that they meant increases the social work student motivation. They claim that motivation make the students meet prepared for the class. One teacher said: *«Using FC makes it easier to differentiate; students get more inductive and sociocultural learning. Students can watch the video as many times as they want, pause, rewind, and repeat the material whenever they want. They can ask for guidance on exactly the substance they want. This allows them to resume teaching in the absence. At the same time, I think the method is time consuming in terms of all the time it takes to make video clips. Students have constant access to the Internet and multiple social networks. They are even use to produce, share and publish video themselves. I have used problem-based learning to challenge students in relation to their own "virtual communities". The use of technology supports the process of production, sharing, access to information and as documentation of learning. I think this way of organizing teaching led to more time at school for guidance. »*

Another teacher said: *« I find that there are different motivations among students related to their ages.Those who are older clearly say that they want traditional classroom teaching, while those who are under 30 year want use of digital tools. The oldest students choke on the use of flipped classroom, and I find that strange. I have been conscious to make the videos in a way that every social students can understand. I believe that when every student can understand, they can experience more motivation. I experience and that the oldest students not are motivated to get guidance provided. I don't know why, and when I ask for feedback they don't say anything. Through good learning and videos, the students will have the best possible conditions to acquire the curriculum, theories and practice. I think this facilitation is fundamental for social work students and every other students to be able to understand the elementary and fundamental, and to be able to practice their subject in an optimal way. »*

All three teachers was agree that use of videos before the school made most of the student prepare for the guidance. One teacher said: *« My experience is that when the students come to school, they are more motivated and willing to learn. »*

Activity at school
During interview, the teachers were ask about the students' activity in the classroom at school. Even though the teachers had pointed out their expectations of each student's motivation, they experience different activity from the students at school. One teacher said: *« I am not really sure about if all the students are more active. I experience that they generally don't read so much anymore, and I wondering if it is more pleasant to get theory presented in videos. We have to make the videos so interesting, so they want to read more. »*

One of the other teacher said: *« As a teacher we do know that mostly everyone learn best by being activity. Of course, some students are active; ask more questions, because they meet prepared for the class. However, perhaps not the time in the classroom helps to make the students more active and motivated at all. Maby I as a teacher make the whole difference by how I organize the time at school, the guidance, the tasks etc…My experience is that telling the students what I expect from them motivate the students».*

The third teacher said: *« Some students find the activity at school as little too much work. I know, because they say so. However, some students find it comfortable that the time at school starts with the teacher talking.. ».*

Guidance
One of the teacher pointed out that guidance was an important part of flipped classroom, and said: *« It has happened that students say they do not understand what is being taught in the videos, and therefore cannot read the theory because it is experienced difficult. Those students most often asks for individual guidance. »*

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[2] Norwegian Social Science Data Service (NSD)

The oldest teacher said: «*I think maybe it is more about the students coming prepared to school and therefore being more motivated. I see clearly that they both ask for and get closer guidance/follow-up. I think this leads to increased motivation. By this, the teaching becomes more student-centered, which in turn will give more motivation.* »

Another teacher said: «*I think it is important that the students can build knowledge themselves, and assist and interact with each other. The times I have put together groups, it has been challenging to put together groups where the students have not been on the same academic level. This is because I want the students to assist each other in using the nearest development zone. However, this requires that I know the students and the academic and social level they have, before the group work take place.* »

All the three teachers experiences motivation as an important factor for learning, and point out flipped classroom as an factor for making more motivation students.

5 Analyzing and Discussion

Learning from a sociocultural perspective focuses on how knowledge is created and shaped by students. However, this knowledge then affects individuals and the community. Both in their learning, motivation and learning strategy, students are different. The teachers pointed out that they specifically had told the students that they had high expectations of each students. It is important to see that different learning theories in many ways complement and complement each other, and together provide insight into the complex phenomenon of learning [5, 6, 13]. The students studied the video before they came to the school. The teachers emphasize that the students come prepared for the lessons as a factor for them being more motivated in the learning situation at school. This shows that knowledge of different learning strategies is important and can give teachers a foundation in pedagogical practices that benefit students[5,6]. The results shows that it is a prerequisite for many students motivation and how they can create ownership of their own education, and gradually become more conscious learning students who see the connection between their own learning processes and their own learning outcomes [4,6]. One of the teachers meant that the students motivation for using technology in teaching can be implemented at any level of facilitation. By connecting practice and theory, students became aware of some of the possibilities and limitations of technology. NOKUT[3], claim that there are a connection between experiencing high expectations of students and their motivation. Students become more motivated by having clear expectations and motivation means that they spend more time on their studies, which is important to get results. Small group sizes of studies contribute to the students' experience of high expectations. It makes it easier to be clearer about what expectations three are for the students, both from the stat and through the study. The teachers focus on good learning activities, gave the students the best possible conditions for acquiring syllabus, theories and practice. Such organizing of classroom activities is fundamental for the students to be able to understand the basic, and to be able to practice their subject in an optimal way. The time is central to the classroom. The focus is on collaboration between students, active learning and guidance. At the same time, it is emphasized that student-centered teaching creates motivation; something that flipped classroom is based on. One of the teacher specific pointed out that telling the students what I expect from them motivate the students in the classroom. By creating good learning environment and situations that stimulate increased participation, motivation is created in the student [13]. Use of video and participation in a group show that the cognitive and sociocultural view of motivation can complement each other. Flipped classroom facilitates this and feedback from the informants shows that the method helps to increase the motivation among the students [4]. Language is central to learning, and students' interaction with others is the starting point for learning and development of higher mental functions, which is in line with Vygotsky´s view of learnig [13]. Use of flipped classroom facilitates more time for students to communicate with each other and the teacher. According to Vygotskij the importance of language is then central to these learning and development processes. Motivation is central of learning [13].

6 Concluding remarks

This study shows in which way teachers experience extended motivation from students by using flipped classroom. Use of flipped classroom changes from teacher to students centered teaching. By this, the teaching changes both for teachers and for students. This strategy build on sociocultural learning perspective. In this study, the teachers created good learning environment and situations that increased participation and cooperation, which in turn generated motivation and willing students. Teachers perceive video of theory in advance of the teaching session as motivated the students, and gave better knowledge of each student's academic level.

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[3]https://www.nokut.no/

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