# Using the Flipped Classroom and Learning Diary to Enhance Learning in Higher Education: Students' Experiences of Flipping the Basics of Law Course

Mikko Hyttinen Karelia University of Applied Sciences Jarkko Suhonen
University of
Eastern Finland

In this study involving blended learning in higher education, a Basics of Law (5 ECTS) course was implemented using a flipped classroom approach and a learning diary. Forty-six (N=46) students participated in a study that evaluated the students' experience of the course implementation. The specific objective of the study was to analyze students' opinions on how the flipped classroom, learning materials, and learning diary were experienced and how these could be developed. Quantitative and qualitative data were analyzed, and students felt the flipped classroom was a practical model for promoting learning in blended learning and legal courses. The flipped classroom and learning diary were expressed to promote students to reflect on learning and deepen their understanding of the subject. The flipped classroom encouraged students to take a more active role in their learning process and enhanced their self-directing skills. The learning diary allowed the whole learning process to be considered in the assessment, and it was suitable to be used instead of an exam. The importance of well-designed course materials and face-to-face classes emerged from the responses. For development purposes, the classroom activities should be carefully pre-planned to activate students for joint discussions and exchanging of ideas. As the main contribution, this study supports that the learning diary is effective in enhancing learning along with the flipped classroom and verifies that the use of these together can be recommended. This research also highlights that the instructor's inspiring and coaching attitude has a positive impact on students' learning motivation.

Many previous studies show that the flipped classroom can promote students' learning (Bishop & Verleger, 2013; Davis et al., 2013; Hung, 2015; Lage et al., 2000; Lemmer, 2013; Lihosit & Larrington, 2013; Love et al., 2014; Taylor, 2016 Zainuddin & Perera, 2019), and the use of this pedagogical model in blended learning courses have become a popular practice in higher education. The flipped classroom is one form of blended learning utilizing both face-to-face classroom teaching and online learning. The digital learning activities are used during classroom teaching, while the online learning materials are offered for students to work with outside of the classroom (Bliuc et al., 2010; Bower, 2015). Flipping means that the teaching process is turned upside down; before class or during online teaching, students study independently according to the given instructions (Educause, 2012; Lage et al., 2000). Lectures are recorded and shared beforehand, so time spent on lecturing during class is now used on discussions and understanding the dealt phenomena more profoundly. Teaching is focused to deepen the students' learning rather than just sharing information (Abeysekera & Dawson, 2015; Bishop & Verleger, 2013). There are many ways to implement flipped classrooms, and each teacher uses it in the way they have experienced to best promote learning (Ash, 2012).

A learning diary can be used to activate students to reflect on course content and their learning in general (Varner & Peck, 2003), regardless of course modality. With the help of the learning diary, besides the knowledge of the course content, the student's entire learning process can be considered in the evaluation of the course (Brown, 2004). While the flipped classroom

and the learning diary have been widely studied in previous studies, there has not much research available on using them together.

Karelia University of Applied Sciences is a higher education institution in Finland that offers a Basics of Law course (5 ECTS) in the Business Studies curriculum. The course aims that business students can learn the provisions of the law and interpret regulations essentially related to their profession. The content of the course includes inter alia, legal order, as well as basic concepts of law, contract law, and company law. Usually, the students don't have any previous studies of legislation or knowledge of the interpretation of the law. The content of the course has been found difficult to learn and many students have failed the course when the course has included only an exam as an assessment method. Also, the exam has not activated students for a deeper studying and reflection of course subjects.

In this study, the Basics of Law course was implemented utilizing the flipped classroom pedagogical model to address the challenges of previous implementations of the course. The purpose of this study was to analyze and reflect on the implementation of the flipped classroom and the use of a learning diary along with the model. The flipped classroom and the learning diary were initially considered to promote and activate students along their learning process. The learning diary was planned to use for course assessment instead of the exam. Students' opinions were inquired through an online survey, and the quantitative and qualitative data were analyzed to find out especially how the flipped classroom, used learning materials, and the learning diary were experienced among students. Concerning the

challenges found from the survey, it is discussed how the flipped classroom model can be developed further. The following research questions were defined for the study:

RQ1: Is the flipped classroom suitable for studying the law?

RQ2: How do the learning materials, learning diary, and face-to-face lessons support learning?

RQ3: How can the flipped classroom model enhanced with learning diary be further developed?

This research presents the course design and the used flipped classroom model enhanced with a learning diary in detail. The results offer useful practices and observed shortcomings of the model. These can be utilized in proving the course in the future. The study can assist other teachers in arranging their courses along with the flipped classroom and expand ideas of planning and implementation of their courses. Also, it is important to provide the best means of studying for students in the course and to increase their expertise in studying the subject. Based on the conducted research, it is finally presented whether the use of the flipped classroom and the learning diary in blended learning law courses can be recommended.

## **Background Literature**

#### **Blended Learning in Higher Education**

Blended learning has become increasingly used in higher education (Bliuc et al., 2010; Singh, 2006; Bonk et al., 2004), and there are many ways to understand it as it is flexible and context-dependent on the concept (Friesen, 2012). Bliuc et al., (2007) defined blended learning as integrating technology-mediated learning into other learning experiences. Besides face-to-face, blended learning also involves technologicallymediated interactions between students, teachers, and learning resources. Also, Friesen (2012) highlighted that blended learning includes the use of digital media teaching and the requirement for physical co-presence of teachers and students. According to Bonk and Graham (2006) blended learning occurs, for example, when students discuss ideas in an asynchronous forum, participate in a synchronous chat, or video conference when course meetings are conducted virtually rather than face-to-face. Blended learning can supplement course activities with online articles and simulations, as another example. Students can participate in lectures remotely or instructors can collaboratively teach a class from different locations.

Blended synchronous learning can offer a more inclusive learning experience for students who cannot participate physically in classes. Students can participate in classes with synchronous technologies such as video conferencing tools (Bower et al., 2015.). This enables the course to be delivered to a large section of students

(White et al., 2010), and online and campus students can be integrated in real-time in the same classroom (Cunningham, 2014). The synchronous environment can promote social interactions and live meetings encourage students to be active in discussions and foster meaningful collaboration (Park & Bonk, 2007).

Learning technologies play a key part in the facilitation of teaching in blended learning. Technology enables distance learning and sharing learning materials online. Löfström and Nevgi (2007) found that, generally, teachers use ICT for two basic functions in teaching. First, the ICT is used to distribute course material via the web, and second, to create interactive and collaborative learning opportunities for students. Bonk et al. (2006) discovered that the majority of teachers who had experience using web technologies in their teaching were also using blended learning in their teaching. It should be noted that technology may also divert students from actual learning activities and teachers must align the usage of the technological tools to the learning outcomes of a course (Minocha, 2009). According to Harris and colleagues (2009), "the technology should be subservient to the function of teaching and the desired learning outcomes" (p. 21). The main focus of blended learning should be on the learning and learning outcomes aspect and not so much on the technology aspect (Harris et al., 2009; Sloman, 2007). When implementing blended learning, the human behavioral factors cannot be ignored over content and technological selection (Mitchell & Honore, 2007). On the other hand, Bonk et al. (2006) pointed out that in addition to general trends of blended learning, it's good to focus on the pedagogy and technology used in blended learning environments.

Technology can be used to employ pedagogy of different learning theories in blended learning. The idea of constructivism is on constructing knowledge in a meaningful way and through active engagement (Jonassen et al.,1999). Meaning-making occurs when different parts of external information are conceptually woven together, or external information and the learner's previous knowledge are integrated to generate new knowledge (Lim et al., 2009). Constructivist learning theories such as activity theory, social constructivism, and situated learning can be empowered through the use of learning technology. The teacher acts as a facilitator of learning and the responsibility of learning is on the student (Ford & Lott, n.d.). For example, social software tools can be used to support a social constructivist approach engaging students in social networks and move e-learning beyond learning management systems (Dalsgaard, 2006). Integrating technologies into the learning environment enable students to access information, develop applications, and communicate with other students. Learning activities and multimedia can be used to enhance traditional teaching methods (Neo, 2007). Overall, the attitude and motivation of learners are very significant in virtual learning (Mitchell & Honore., 2007), and the importance of student motivation and its relationship to course outcomes (Klein et al., 2006) should be noticed in blended

Integrating technologies into learning environments imposes new requirements for the teacher to teach. Teachers have reported the biggest problems for students' learning are the lack of time management skills and deficiencies in the usability of the technology. Students have thought that one of the biggest obstacles is the lack of practical ICT usability (Löfström et al., 2007). Mastering technology and using pedagogical solutions simultaneously with distance and contact students can increase the cognitive load felt by teachers. The availability of teaching assistants could reduce the experienced load (Bower, 2015; Cunningham, 2014; Hyttinen & Hatakka, 2020). The implementation of a successful blended learning program requires alignment of institutional, faculty, and student goals (Moskal et al., 2012).

## The Flipped Classroom

The flipped classroom or inverted classroom can be seen as one form of blended learning: "Inverting the classroom means that events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa" (Lage et al., 2000, p. 34). The flipped classroom is based on the concepts of active learning, student engagement, hybrid course design, and course podcasting. The value of flipped classrooms is in repurposing the classroom time into workshops and the teacher's role is to act as coaches and encourage students in the class (Educause, 2012).

There is no one right way to implement a flipped classroom model and flipping can take many forms. According to Bishop and Verleger (2013), the flipped classroom is a pedagogical method that utilizes video lectures, incorporates problem-based homework, and uses group activities face-to-face. The general idea is that learners access learning videos, interactive lessons, and other instructions in advance in an online learning environment, while classroom time is spent on practicing, working on ideas, clarifying complicated concepts, problem-solving, and analysis (Abeysekera & Dawson, 2015; Akçayır & Akçayır, 2018; Ash, 2012; Bergmann & Sams, 2012; Masland & Gizdarska, 2018; Munir et al., 2018; Taylor, 2016; Tucker, 2012). In addition, more time is allowed for one-on-one interaction with students in the classroom (Lage et al., 2000).

Students' perceptions about the flipped classroom are found to be generally positive. Students prefer interactive classroom activities over lectures and inperson lectures over video lectures. Studies show that students learning is improved compared to traditional

classroom teaching (Bishop & Verleger, 2013). It has also been argued that flipped approaches might improve student motivation and help manage cognitive load (Abeysekera & Dawson, 2015). According to Akçayır & Akçayır (2018), the most frequently reported advantage of the flipped classroom is the improvement of student learning performance, and the majority of the challenges are related to out-of-class activities, such as inadequate student preparation before class.

## The Flipped Classroom in Courses

Lage and colleagues (2000) used the flipped classroom in their economics course. They offered videotaped lectures, lectures in PowerPoint with sound, lecture handouts, and additional resources on the course homepage for students to prepare to discuss the materials in class. Students preferred the flipped classroom over a traditional lecture and they felt they had learned more than in a normal lecture. Students also liked the peer group work and most students enjoyed working in groups. Love and colleagues (2014) used a flipped classroom in a linear algebra course. They found that flipped classroom students had a more significant increase in sequential exams compared to the students in the traditional lectures, although their performance on the final exam was similar. Students felt the experience of the flipped classroom was very positive and particularly the collaboration between students and the instructional videos. Choi (2013) applied the inverted classroom concept to teach software engineering courses and compared it to the traditional instructor-led training. Inverted classroom students better understood the content of the subjects from teamwork and fast instructor feedback was found to facilitate learning.

Day and Foley (2006) used the flipped classroom and web lectures in an introductory human-computer interaction course. They used traditional lectures and web lectures in teaching and the web lecture section's grades were found significantly higher. Hsieh and colleagues (2017) utilized a flipped classroom model for learners of English to teach English idioms. They found that the participants' motivation was enhanced; students were also more active using idioms in class, and their idiomatic knowledge was significantly improved. Additionally, Hung (2015) integrated the flipped classroom into language teaching and discovered that structured and semi-structured flipped lessons are more effective than regular lessons. The flipped lessons helped students to achieve better learning outcomes and dedicate more effort to the learning process.

Zainuddin and Perera (2019) studied the differences between a flipped classroom and a non-flipped classroom instructional model. The findings indicated that flipped classroom students were more competent in handling online tasks and activities as well as controlling

their learning outcomes. The flipped classroom also fostered better peer interaction and independent learning skills among the students. Students were motivated by the video-recorded lectures, self-regulated learning environments, engagement in-class activities, and peer interaction.

There is also criticism towards the flipped classroom approach. The challenge can be the use of the model as an excuse to continue bad teaching without reflection. The teaching might cause problems for teachers who value interaction and spontaneity during lectures. Students are not able to get an immediate answer to their questions if lectures are viewed at home, and implementing the flipped classroom requires more time from the instructor. The more complex the lectures and learning objects are the more time is required (Arnold-Garza, 2014; Lage et al., 2000; Munir et al., 2018). Besides creating learning materials, there might be a need to get acquainted with new technologies. The model is beneficial for students who like to study in peace, but it may be detrimental to students who are unable to work independently and cannot manage their own time and studying. The flipped classroom model puts more of the responsibility for learning on the shoulders of students (Arnold-Garza, 2014; Ash, 2012; Educause, 2012).

#### The Flipped Classroom in Legal Courses

Lemmer (2013) studied the flipped classroom in a legal research course with international students enrolled in LL.M. programs in U.S. law school. The objective of the course was to develop students' ability to find, retrieve, analyze, and use legal information. Usually, the course included lectures; however, now the class time was repurposed into a learning lab where students tested their skills and acquired knowledge by researching a hypothetical situation. The flipped classroom model provided the opportunity to work in teams and apply knowledge to challenging research hypotheticals in a directed and guided environment. Students gave the flipped classroom relatively high marks in the anonymous student course evaluations, and Lemmer (2013) argued that the flipped classroom effectively prepares students for the practice of law and further scholarly work. The flipped classroom model responded to increasing calls to educate students in information technology, while the flipped classroom labs offered a possibility to prepare students for the practice of law in a digital environment. During the study, Lemmer noticed that student involvement in the class increased. The lab sessions provided instant feedback for the instructor of what was working, and as a result of the lab interactions, a deeper instructor-student relationship was developed. The flipped classroom provides an opportunity for students to work collaboratively and for faculty to

engage more closely with students. Furthermore, using the flipped classroom required a little financial investment (Lemmer, 2013).

In a different study, Castan and Hyams (2017) introduced a study where law teachers piloted a semiflipped series of short videos, supported by online and in-class activities with first-year law students. The aims were to provide the information and materials engagingly and appropriately and to use the class time on application and interactive activities. The length of the videos varied between 4 and 12 minutes and a series of short multiple-choice guizzes followed each video to support student learning. They found that there was no significant improvement in students' performance and the videos were the most positively perceived aspect. Students found the videos very useful for learning. Videos taught students skills such as basic legal language that supports their reading of the legal textbook. Students valued the ability to replay the videos, take notes, and learn the material at their own pace. Many students expressed that the length of the videos should have been shortened and the presenter should have spoken more slowly. Students preferred a video duration of 10 minutes or less. Students reported that quizzes reinforced what was learned from the videos and what was important information. Castan and Hyams (2017) concluded that a fully flipped is not preferred for their students, although students felt largely positive about the combination of online and in-class teaching.

DeAngelis (2017) used the flipped classroom for a large class of students. He used the four-step method: (a) deliver information, (b) use the information, (c) reexamine the information, and (d) assess the learning. Delivering information outside the class, he used an interactive text that included links to videos, websites, and blogs. Class time was used to work with the information in small discussion groups. After working, there was an early assessment, and the results were used in the second class to concentrate on concepts that showed poor results. Learning in every module was assessed through an online assessment. According to DeAngelis (2017), the student experiences of teaching were found overwhelmingly positive and students who commented otherwise have expressed not to be challenged to have to think during class.

Other researchers, Lihosit and Larrington (2013), presented in their research how to create a flipped class structure on the existing class syllabus. They used the flipped classroom in their Advanced Legal Research course; they argued that flipping can greatly benefit legal research instructions. They found that learning objectives were a critical element of flipping course material. The learning objectives should be written for each lesson; the learning videos should be short and must cover the most critical content of the course. They also found that students weren't very responsive to general questions, and they had to ask questions to get them to talk about their process. On the other hand, Taylor (2016) flipped several classes in her legal research course and found that flipping classes increased students' engagement. Resulting from literature and her experience, Taylor identified five reasons to flip a legal research class: (a) increase student engagement, (b) put research skills into practice, (c) create opportunities for formative assessment, (d) reach a wider range of students, and (e) encourage the development of "soft" skills.

Finally, Davis et al. (2013) used the flipped classroom in teaching legal research to promote active learning. Students were introduced to course content before face-to-face meetings, and the classroom time was used for hands-on legal research exercises. They supported different learning styles by using print, audio, and video in pre-learning materials. The advantage of flipping the classroom was the shifted emphasis from gathering research sources to analysis and creation of research strategies. Students were more engaged, asked more complex questions, and missed fewer important sources of authority.

## **Learning Diary**

Learning diaries or learning journals have been widely used in learning. Learning diaries can be used in various ways and the term can have a different meaning for teachers. Some teachers use learning diaries only for reflection, while others may require more such as integrating experiences, observations, and readings. Common to all learning diaries is that students write and reflect on their experiences related to the course content (Boonyasana, 2020; Varner & Peck, 2003). The learning diary provides a means to assess students' ability to reflect. The learning diary helps students to think about new ideas, practical activities, or the way of they are studying; additionally, it stimulates the metacognitive capacity, to reflect upon their thinking capacities (Clipa et al., 2012).

The learning diary can be used to provide a unique insight into the students studying process and to capture, for example, the motivational difficulties in the learning process (Eckerlein et al., 2019). The learning diary can help the instructor better understand students. It shows the students' point of view from the classes and helps to find problems. With learning diaries, students can widen their scope of knowledge beyond what learned in class, and the results of the learning diary can be used to improve the course experiences (Boonyasana, 2020). Writing the learning diaries can be assisted with the help of computer programs, and the learning diaries can be published allowing learners to read and discuss their peers' diaries (Nückles et al., 2004). Varner and Peck (2003) have used several years of learning journals with

their adult learners in MBA studies. They have found that learning journals have accomplished the objectives to provide students a way to learn and practice the conceptual skills, effectively facilitated comprehension and retention of course material, and served as an effective means of assessing that comprehension.

The learning diary can be used for course assessment. Wallin and Adawi (2018) found that it can be used for formative assessment in self-regulated learning (SRL). They used reflective diaries to assess conceptions of learning and knowledge as well as strategies for monitoring and regulating. The formative assessment during a course can help students to better perform with a summative assessment of the course (Boonyasana, 2020). According to Brown (2004), the assessment should be learner-centered and part of the learning process. If students are asked to write a reflection, it provides a possibility for them to review experiences, describe the development of their study, reflect learning against literature, and express how they develop themselves in the future.

## The Design of the Flipped Classroom Pedagogical Model

The Basics of Law (5 ECTS) course is mandatory for the first-year Bachelor of Business Administration students (BBA) at Karelia University of Applied Sciences. The course is included in the blended learning curriculum. Most learners are adult learners who have been removed from their previous studies for a longer period of time. In blended learning studies, there are only a couple of face-to-face teaching days in a month. Otherwise, the teaching and learning occur out of the physical classroom online. Mostly, the blended learning courses have included online lecturing, learning materials for students to selfstudying with, and learning assessment with exams or reports. Moodle is used as the Virtual Learning Environment (VLE) for the courses; for online lecturing, the teachers use a variety of online meeting software such as Adobe Connect, Collaborate, Teams, or Skype.

Previously, the Basics of Law course has included lectures arranged either in a class or online. There has been limited time to ask questions during the lectures, and course assignments are done as homework after the classes. There has not been enough time to go through the learning tasks in detail or arrange deeper discussions of the difficult concepts. The lectures and course materials have prepared students for the course exam in which learning has been assessed. The problem with this structure has been that it has not developed the students' legal thinking and competence enough and success on the exam has been poor. The exam has not taken the whole learning process into account in the assessment. The learning outcomes and the core content of the course are presented in Appendix A.

Due to the above challenges, the course was redesigned in 2018 using the flipped classroom model. All the lectures were recorded and offered with other learning materials to students before face-to-face teaching. Instead of traditional lecturing, limited classroom time was used for reviewing and discussing deeper the course materials and learning assignments. Students had the opportunity to ask questions about difficult assignments and discuss the subjects that would need deeper understanding. For arranging meaningful learning, different pedagogical models such as collaborative discussions and small group work with teacher guidance were planned for face-to-face utilization. This way, the idea was to implement constructivist pedagogical theories of active and collaborative learning into the course. The objective of the learning diary was to use it to activate students in their learning process to reflect their learning, personal experiences, and the course concepts. The learning diary was designed to support students' independent working and for the course assessment. The evaluation criteria (Appendix B) were given to the students at the beginning of the course and were also intended to guide the writing of the learning diary.

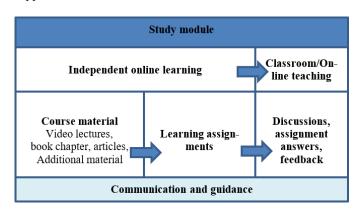
The content of the course was divided into six study modules. Every study module was an independent topic in Moodle. In addition to study modules, Moodle included topics for course instruction, a learning diary, and students' feedback. Every study module included self-studying and studying face-to-face with a teacher. Studying face-to-face with the teacher was organized either in a classroom or online (Figure 1). Every study module included a short introduction to the content: content materials such as video lectures, lecture slides, reading materials, additional materials (such as links, videos, legal articles, etc.); and the learning assignments.

Students were asked to submit the learning assignments in the given time and prepare to discuss and present their answers in face-to-face sessions. The teacher had time to check students' answers in advance and find if there were any difficulties or problems that should be discussed together. The students' participation in online and face-to-face sessions was followed and monitored. In face-to-face, the course assignments were discussed. and difficult course contents were analyzed deeper with teacher guidance. Also, small group work was held where students shared their knowledge and experiences about the subject. The groups presented their opinions and were finally conceived with the teacher to create a common understanding.

The course communication included asynchronous discussion forum in Moodle for students to present questions about the course and assignments during independent studying. Also, the possibility to ask a question via email or online meeting was offered for students. A timetable for course modules, including submission dates for assignments, was given to students. Otherwise, students could independently plan a studying schedule to meet their working and private life demands. In addition, course communication included weekly reminders and instructions for tasks for that week.

The course evaluation consisted of the creation of a learning diary, doing the course assignments, and active participation in the review of assignments. The course instruction and evaluation criteria for the course were reviewed at the beginning of the course and were visible in Moodle. This way the students were able to reflect on their learning and progress in the course by the evaluation criteria. The evaluation criteria (Appendix B) also guided the writing of the learning diary because students knew how it was assessed. After the course, the feedback for students was written about their learning based on the learning diaries and evaluation criteria. The grading scale for the course was 0-5.

Figure 1 The Implementation of the Flipped Classroom



#### Methods

A mixed-method was used, and the data was collected through a structured questionnaire given to students at the end of the course. In the last face-to-face classroom session, a short reflection discussion between the students and the teacher was arranged. The teacher's observations during the course have been utilized in the analysis. The research was conducted by the research ethical principles of the Finnish National Board on Research Integrity (TENK) and the dignity and rights of those the study involved were respected. There was a total of 46 (N=46) students that participated in the course. The questionnaire included open and multiplechoice questions. Answering was completely voluntary, and the students were told what purposes the survey and discourse were for. There were no penalties for nonresponse, no personal information was collected, and answering the survey was completely anonymous (TENK, 2019).

The questionnaire included eight (8) multiplechoice questions and ten (10) open-ended questions. The multiple-choice questions were implemented on a Likert scale of 1 to 5 (1 = fully disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = agreeing in some part, 5 = fully agree) and was answered by 30 (n=30, 65 %) students. The students' answers to open questions are analyzed in the results section and the answers are presented in quotations. The answers are coded and referred by questions (Q) and students (S) added by the sequence numbers (e.g., Q1S1 = question one, first student's answer). Students answered the questions in Finnish and the answers have been translated into English in this paper. The number of respondents to open-ended questions varied from 20 to 29. The research and open-ended questions are presented in Table 1 and multiple-choice questions in Table 2.

#### Results

### The Flipped Classroom in Basics of Law

Students found that the course materials supported flipped classroom learning (Table 2, Q3). In the flipped classroom, attention should be paid to prepare highquality course material; the course materials used in Basics of Law included recorded video lectures, lecture slides, book chapters regarding the subject, and additional materials such as articles or legal cases. Recorded lectures were found to support learning, but recordings might be not the best form of learning for everyone (Table 2, Q2). Some students prefer face-toface lectures and the quality, length, or depth of the lecture in the recorded video lecture might not satisfy the student.

According to participants, the learning assignments and learning diaries helped deepen their learning (Table 2, Q4) as it forced students to reflect on their learning to prior and new-found knowledge. Course communication and scheduling were found to support learning (Table 2, Q6). Communication between students and teachers is essential in the flipped classroom, and the students were kept up to date by sending weekly instruction messages from the learning environment (Moodle). Students were instructed to use email or Moodle's discussion forum for questions during independent studying. The flipped classroom was felt to increase students' self-direction in the course (Table 2, Q7). Previous research (Arnold-Garza, 2014; Ash, 2012; Educause, 2012) indicated that the flipped classroom transfers responsibility for learning more to the student, and it is beneficial for students who are capable to study independently. In this study, students had to become acquainted with the subject prepared learning assignments and independently. Students also needed to be prepared for the classroom activities; this required independent working and self-direction skills from students. Some students were not as capable of doing independent work as others and needed more teacher guidance. This might cause that even if flipping was perceived to be functional and useful, students may find it challenging. As the results show, half of all the respondents found the flipped classroom challenging and almost the same amount did not (Table 2, Q8). This gives valuable insight into how diverse the challenge of the model can be felt among students.

## The Suitability of the Flipped Classroom for Studying the Law

#### Students' Experiences

The flipped classroom was found to be very suitable for studying law and it was experienced positively among students. Students experienced getting more out of the foreign topic if they get acquainted with it before the class: "Well. When a topic is foreign, I think you get more when you first get acquainted with the topic and then get to deepen it in a classroom" (Q1S9). The words "well", "very well", "worked well", "suited me well" were repeated often when asked about the suitability of the flipped classroom to law studies. Law studies are mostly knowledge-based studies that require knowing the regulations, related literature, and interpreting the provisions in a particular individual case. The flipped classroom is suitable especially for law studies because students need to seek and reflect on information which in turn promotes learning, which was reflected in students' comments:

Table 1 The Research and Open-ended Survey Questions

Research question	Open-ended questions	Responses (n)
RQ1: Is the flipped classroom suitable for studying the law?	Q1: How was flipped classroom teaching suitable for studying the law?	27
	Q2: What were the challenges associated with flipped classroom teaching?	26
	Q3: What was good about flipped classroom teaching?	25
RQ2: How do the learning materials, learning diary, and face-to-face lessons support learning?	Q4: How did course materials, recorded lectures, learning assignments, and a learning diary help independent learning?	29
	Q5: How did the face-to-face lessons support flipped classroom learning?	28
	Q6: How did the learning environment Moodle and other technologies support learning?	28
	Q7. How did course communication and scheduling support learning?	28
RQ3: How can the flipped classroom model, enhanced with learning diary, be further developed?	Q8: How well do you feel you learned in flipped classroom teaching compared to traditional teacherled lecture teaching?	27
	Q9: How could the teaching and used method be developed?	26
	Q10: What else do you want to tell?	20

- "Fits me well because I like to search and reflect on information" (Q1S2).
- "I think well because that is how information retrieval and legal interpretation can be practiced" (Q1S7).
- "It is easier to internalize matters because you have to work and find answers to questions about topics and tasks" (Q1S20).

Merely reading the regulations in a lecture might be frustrating for some students. As one student wrote, "I think it works well because the law is so logical. You can study these things yourself and look for the law. It might be frustrating to read laws together in lessons" (Q1S19). The implementation of the course and suitability of the flipped classroom was experienced so well that the model was also desired to be used for subsequent law courses: "The implementation of the course was good. -- Hopefully, other law courses will also be conducted using the same method" (Q10S10). Although the flipped classroom implementation was perceived to be suitable for law studies, it was also recognized that it may not be suitable for everyone: "This was a pretty good way but may not be suitable for all students" (Q1S21).

The flipped classroom was perceived as a good way to study, especially in blended learning studies:

- "Works well in blended learning (Q3S4).
- "Especially functional in blended learning..." (O3S9).
- "Extensively suitable for blended learning studies..." (Q3S18).

Additionally, the whole course was found to be well organized:

- "Overall a very well-organized course" (Q10S11).
- "The whole course was well planned & executed" (Q10S3),
- "...The whole course was very well prepared" (Q4S17).

In this case, blended learning studies meant technologically integrated studies that included only a few face-to-face lessons in a month. Significant digital material was used in the course, and the learning environment helped to distribute this material to students. The student was responsible for learning and processing the shared materials. As one student concluded, "Unlimited amounts of digital learning material are available online, and listening to lectures,

Table 2 Results of Multiple Choice-Questions

	1	2	3	4	5	Count	Average	Confidence Interval	Mdn	Standard Deviation
Q1. The face-to-face lessons helped deepen the learning.	1	5	3	12	9	30	3.77	3.35-4.18	4	1.16
Q2. The recorded lectures supported flipped classroom learning.	0	1	4	9	15	29	4.31	4.00-4.62	5	0.85
Q3. Course material supported flipped classroom learning.	0	0	0	15	14	29	4.48	4.30-4.67	4	0.50
Q4. Learning assignments and a learning diary helped deepen learning.	0	0	0	13	15	28	4.54	4.35-4.72	5	0.50
Q5. Flipped classroom teaching is suitable for studying law.	0	1	4	9	15	29	4.31	4.00-4.62	5	0.85
Q6. Course communication and scheduling supported flipped classroom learning.	0	0	2	9	17	28	4.54	4.30-4.77	5	0.63
Q7. Flipped classroom teaching increases self-direction.	0	1	1	8	17	27	4.52	4.23-4.80	5	0.75
Q8. Flipped classroom learning is challenging for the student.	6	6	3	11	4	30	3.03	2.53-3.53	3.5	1.40

for example, at home, makes sense. The priority is to be able to utilize, filter, and retrieve information from the right sources. Very good and recommended form of study" (Q6S20).

The flipped classroom was found to deepen students learning: "Teaching the face-to-face and going through the assignments deepened the learning after getting to know subjects in advance..." (Q3S13). Studying with a flipped classroom model was found to be much more indepth and the topics of the course were well covered: "The studying was much more in-depth; the topic was well covered and they were also chewed in their free time" (Q4S1). One student described, "I learned to understand things better because I have to think things through more. Studying is practical" (Q3S21).

The flipped classroom model forced students to find information and to study subjects independently. This was found to increase students' interest - "Forces to find the information vourself that increases interest in the topic" (Q3S6) - and the memorability - "The student has to think and find out for himself. At least that's how I feel that the subject is more memorable" -(Q3S23) of the topic. Also, when subjects were clarified before class, the lesson could be followed better: "Things had already been clarified by the time the class came and the teaching could be followed well" (Q3S10).

The emphasis in the flipped classroom is on independent studying, and the model works for students if they have enough time to concentrate on their studies. One student noted, "Emphasizes own independent study. Works if you have time to search for information for hours. It takes a lot of time for this" (Q1S8). Students' activity during the course was found to be very crucial: "Own activity is crucial. If, for example, you are not present during the lessons and ask if you have answered differently, you don't know if there is a problem with your answer" (Q10S6). The students need to take initiative and work hard to search for the right legislation and relevant cases, which takes time. As such, for some students, the flipped classroom is not necessarily found to be the most effective way to study: "Requires a lot of initiative from the student to seek information on legislation and case studies. Not necessarily the most effective way to study" (Q1S11).

Free scheduling of studying was perceived as a good side of the model in many responses: "I was able to schedule according to my own going and desires" (Q3S2); "In my peace, I got to get acquainted with things and choose the pace" (Q3S7); and "Free scheduling, tasks could be done when they suited you best" (Q3S24). The model offered students an opportunity to accomplish their studies at their own pace and the flipped classroom was perceived as a stress-free type of learning. As one student expressed, "Got in peace to make a schedule for my own doing and complete the course in my peace. Stress-free learning" (Q3S1). Free scheduling allowed students to study and delve into topics when it best suited them. However, students needed to adhere to a certain course schedule within which they could decide when to study.

### Requirements for Teachers

The flipped classroom requires that teachers have an encouraging attitude and coaching approach in teaching: "The inspiring attitude of the teacher was Plus! Flipped classroom teaching also requires the teacher to have the right and encouraging attitude, the so-called coaching approach. It succeeded in this course" (Q10S17). The instructor's role in the course was more like a facilitator and activator of students than a normal lecturer. The instructor was actively facilitating the studying, helped students when needed, and ensured that the schedule was adhered to: "The teacher is active in ensuring that the schedule is adhered to and the sub-areas were divided into smart packages. Facilitated study" (Q3S18). The teaching was perceived to be good even though the topic of the course was found to be quite heavy: "Good teaching, even though the topic of the course was quite heavy" (Q10S14); "...teaching was also of high quality..." (Q10S10).

#### **Challenges**

There were also challenges that students experienced during studying. The requirement of selfdirection - "The only challenge was self-direction and self-employment" (Q2S5) - adhering to the course schedule - "Timetables" (Q2S6) - motivation to seek information - "Motivation to seek information independently from different sources" (Q2S11) - and the fact that the studying took more time - "The fact that it takes a lot more time to study when you have to look up all the information yourself and borrow books and the like" (Q2S8) were all perceived to be challenging.

The studying in the course was largely independent studying with course materials, so naturally, the above mentioned was perceived as a challenge. The abovementioned challenges were generally related to completing the course. Besides those, there were also challenges related to learning the course content: "The interpretation of the legal text was challenging for me

and it took time to understand and comprehend it correctly" (Q2S7).

One challenge of the flipped classroom, which is discussed also in previous studies, was that students needed to manage themselves and they can't get an immediate answer to their questions like in face-to-face lectures (Arnold-Garza 2014; Lage et al. 2000). In this regard, one student (Q2S13) wrote, "I had to find out for myself, and I couldn't ask the teacher directly during the lectures." Another student added that the challenge is to "Get reassurance that you have understood things correctly-- The student has a responsibility to ask but does not always understand" (Q2S17). Also, one student expressed this: "The student has to figure out the information him/herself and this way can come across things you are not quite sure about. (Q2S24). While it was possible to ask questions during independent studying, not only during the face-to-face teaching, everyone may not have realized this. It was also possible to contact the instructor via Moodle and by email during independent studying. Enough time must be allowed for self-studying and assignments, but this time shouldn't be too long: "There was a long time between going through the tasks and submitting so I forgot what subjects contained" (Q2S21). During independent studying, there were no collaborative assignments, and this was noticed as one challenge: "Discussion with other students remained meager" (Q2S25).

As a summary of the section, the students experienced that the flipped classroom was suitable for studying law and they can get more out of a foreign topic if they get acquainted with it before class. The flipped classroom was found to deepen students learning. The studying was found to be much more in-depth because of the need to seek and reflect on information. The flipped classroom was perceived as a good model to study in blended learning studies. The model requires substantial independent studying, and it works for students if they have enough time to concentrate on their studies. Independent studying was also perceived as a challenge in some responses; it was noticed that the flipped classroom model might not be suitable for every student. Free scheduling was perceived to support independent studying and helped students to arrange studying to match their private schedules. The encouraging attitude and coaching approach of the teacher was noticed as an important aspect in students' learning and motivation.

# The Learning Materials, Learning Diary, and Faceto-face Lessons in Support Learning

# Learning Materials

The learning materials, learning diary, and face-toface lessons were found to enhance and deepen the learning. As one student wrote, "The materials helped with doing the learning assignments, the lectures provided information and the learning diary deepened the learning" (Q4S4). Another student answered that "Supported studying, the lectures provided basic information and the learning was deepened with assignments and materials, focusing on the sources" (Q4S8). The purpose of the recorded lectures was to provide theoretical information, then apply the received knowledge in learning assignments, and finally to process and deepen the learning more in the learning diary. The learning assignments were used to assist students in understanding the topics and to learn how to apply their knowledge in practice: "Learning assignments helped to outline my competence and forced me to seek information on the topic. The materials mainly dealt with the topics covered and the learning diary was used to unpack my knowledge" (Q4S12). The length of the video recordings was a maximum of half an hour, which was found to be a suitable length for students. In addition, being able to watch the recordings whenever wanted was expressed to be a good thing: "The recorded lectures were of suitable length and were good when they were allowed to watch at their own pace" (Q4S13); "After all, it's a different matter to study with recorded material that can be browsed as needed" (Q4S15).

The learning materials "were comprehensive" (Q4S26), "provided a lot of information" (Q4S2), and "facilitated the acquisition of information" (Q4S3). The relevant learning materials and instructions for course modules were directly and easily available in Moodle. The search for more information was facilitated by providing additional material such as articles and book chapters that addressed the topic in more detail. The learning materials were found to be well prepared: "The materials were well prepared as well as the recorded lectures..." (Q4S17). Furthermore, it was perceived as positive that both a recorded lecture and lecture slides were found on Moodle: "I think the flipped classroom teaching worked very well in studying law. This was probably because the Study Material was well prepared. On the positive side, both a recorded lecture and slides were found on the topic" (Q1S16).

## **Learning Diary**

The learning diary was used to reflect learning and to evaluate expertise in the matter, which was noticed in students' answers: "...In the learning diary, I got to reflect on my learning and topics" (Q4S26). The learning diary was found to support learning and to deepen the learning in many answers: "The learning diary and assignments deepened my learning and thinking" (Q4S13); "the learning diary deepened the learning" (Q4S4); "learning diary supported learning well (Q4S10); "the learning diary was used to unpack my knowledge" (O4S12). The learning diary was also found to be a better way to study law than taking an exam. This was expressed in one student's response: "A learning diary was a much better way to study law than taking an exam. Learning was deeper and the law was learned to apply and interpret. There is no need to memorize the law, so a learning diary was a good implementation...' (Q1S12). Although some students did not necessarily like writing a learning diary, they still found it useful: "Ok. I don't like learning diaries, but this time it worked" (Q4S25).

#### **Face-to-face Lessons**

In many answers, students felt that the face-to-face lessons helped deepen their learning: "got to deepen learning" (Q5S3); "Going through the assignments faceto-face deepened my learning" (Q1S12); "Learning deepened. It was a better way to get to know things first in advance and then go through things together" (Q5S13). During face-to-face meetings, students were able to verify that they had learned the subjects and if they had done assignments correctly: "In the face-toface, I was able to review the assignments and found out the correct answers if there were errors in my tasks" (Q5S5), and "You noticed if you had done things right or wrong" (Q5S8). Students also had a chance to evaluate their answers against others and discuss their answers with other students: "In the face-to-face, the answers to the assignments were reviewed, so that you could evaluate your answers to others and get an answer to the questions concerned" (Q5S21). In the face-to-face lesson, students were able to ask questions on other topics and to gain confidence that everything had been understood correctly: "Students can ask and refine their learning and gain confidence that they have understood the idea of the assignments and the learning diary correctly" (Q5S18). The instructor's guidance on unclear topics was expressed to be very important in the face-toface lesson. Overall, face-to-face lessons were considered to be very important and contact teaching is needed in the flipped classroom, as two students expressed: "Teacher guidance on unclear issues was important. I think contact teaching is needed, it would not make sense to do the course entirely in Moodle" (Q5S20), and "The importance of face-to-face lessons is very significant" (Q5S9).

As a summary of the section, the learning materials, learning diary, and face-to-face lessons were found to enhance and deepen the students' learning. As described, the materials helped with the assignments, the lectures provided information, and the learning diary deepened the learning. Overall, students emphasized the importance of the quality of learning materials in flipped classroom courses. The video lectures should be concise, and half-hour recorded lectures were felt to be of appropriate length. The learning diary enabled students to reflect on their learning and was found to support and deepen the learning. Additionally, the learning diary was expressed to be a better way to study law than taking an exam. With the learning diary, the law was learned to apply and interpret. The face-to-face lessons were found important because students were able to verify what they had learned and if they had done the assignments correctly. The instructor's guidance during face-to-face lessons was expressed to be essential.

### **Technology, Communication and Other Aspects**

#### **Technology-Supported Learning**

When asked how the learning environment (Moodle) and other technologies supported learning, the most common answer was "well" and "worked well". For example, one student wrote that "Learning environments worked well. Moodle's course platform was clear and functional" (Q6S12). Moodle was used for student guidance, information sharing, and submission of learning assignments. The structure of the modules in Moodle was planned as clear as possible. Moodle was perceived to be the most important and integral part of learning in blended learning and a place for sharing information and for submission of assignments as two students commented: "The most important way to learn in blended learning" (Q6S1), and "Moodle is a good platform for storing information and submission tasks" (Q6S13). Furthermore, the learning environment facilitated remote learning: "Moodle and online lectures supported learning well and facilitated learning at home" (O6S7).

#### **Course Communication**

Active communication in the course motivated students to study. As one student simply stated, "Motivated to study" (Q7S6). Communication and teacher guidance in the course helped students to stay on schedule and up to date on what needed to be done. The communication kept the course in good rhythm and assignment submissions were timely as students pointed out: "Helped keep course completion in a good rhythm" (O7S1), and "The best thing is the scheduling, so you stay in the rhythm and you can't miss work. That's the way I think you learn best. And a weekly reminder of the work to be done is, I think, a good thing" (Q7S19). Reminding students of what is needed to be done, what is coming next, and when are the submission deadlines was done regularly. Regular communication and the logical and clear structure of the course were found to support studying:

- "Supported well when every week came a message about where to go and what to do"
- "I especially liked the teacher's way of periodizing and scheduling assignments, and I always got a reminder message about where we were going" (Q7S14).
- "The tasks were divided into weeks" (Q7S4).

Fitting the course schedule to students' timetables was considered important and many of the students were working while studying: "It was good to have a schedule and to be able to add the course to your schedule" (Q7S10).

# Traditional Lecturing vs. Flipped Classroom

When compared to traditional teacher-led lecture teaching, the flipped classroom was perceived as a better way to study: "The lectures paved the way for the topic and the student did the final work by reading the course material and doing assignments. This requires the student more effort and familiarizing with the subject, which does better support learning than just lecturing" (Q1S27). The flipped classroom was found a less stressful way to study than traditional teacher-led lecturing; as one student noted, "A much more stressfree, freer, and more comfortable way to understand information and internalize it" (Q8S1). It was also perceived as a more meaningful and inclusive way to learn because of its variability: "The flipped classroom teaching was more meaningful and inclusive learning due to variability than teacher-led lecture teaching" (Q8S5). Students also felt they learned better than normal lecturing. The knowledge was processed and remembered better when it was reflected. One student wrote, "I feel like I learned better. Knowledge was better processed in the way of flipped learning and things were better remembered when reflected in own life" (Q8S12).

The learning was also found deeper with the flipped classroom. One student expressed that he/she learned "more, deeply, more practically" (Q8S9) with the flipped classroom model. The flipped classroom was also perceived to be a better way to learn because the studying could be done at students' own pace, learning and subjects were needed to be reflected, subjects had to be clarified independently, and subjects had to be covered in more depth and more work had to be done for learning:

- "Much better! The reason for this is that the tasks were allowed to be done at their own pace" (Q8S16).
- "I feel like I learned better. Knowledge was better processed in the way of flipped learning and things were better remembered when reflected in own life" (Q8S12).
- "I feel I learned better because I had to research

- and look for things myself" (Q8S25).
- "Better because things got more in-depth and had to work" (Q8S19).

In traditional lecturing, students may not focus properly, and a flipped classroom model requires concentration from students: "Actually, with this, you could learn a little better when you had to think and figure things out for yourself. In lecture teaching you do not necessarily focus so properly all the time" (Q8S21). For some, traditional lecturing is a better way of learning. As one student noted, "I would learn better in teacher-led teaching" (Q8S8). It was noteworthy that the difference between the flipped classroom and traditional lecturing may not be noticed at all: "I don't notice the difference" (Q8S14). This might be because the lectures are the same as in traditional lecturing but are recordings. Some students may need teacher-led instruction and difficult topics may be such where teacher-led studying can be found effective: "In some places, the topics were such that there was a need for face-to-face lectures and discussion/discussion among the class" (Q8S27).

# **Development of the Flipped Classroom Model**

Regarding the development of the flipped classroom model and the course, the amount of online and face-toface teaching could be added: "more online meetings" (Q9S3) and "More contact teaching..."(Q9S7). The content of the lectures and materials can be developed further and diversified: "materials and lectures can always be diversified and renewed" (Q9S2). The correct answer to assignments should be available and shared with students in Moodle. According to one student, "Perhaps the correct answers to the tasks could be available if, for example, you were out of class, there was no idea what was right and what was not" (Q9S8), leaving perhaps more time for discussion face-to-face: "More discussion could take place face-to-face. The answers to the tasks could have been added in Moodle and left to be checked, leaving more time for discussion" (Q9S15). In this implementation, the correct answer to the assignments was only reviewed at lessons (online or face-to-face).

Students also wanted there to be more assignments that require students' collaboration and exchange of ideas, such as discussion assignments in Moodle. One student responded, "Could it be possible to add a discussion assignment in Moodle to the course? Students would discuss each other on a given topic. This would give everyone new perspectives" (Q9S25). Also, independent tasks from which would be possible to get immediate feedback, such as games, etc. were proposed as development ideas: "There could be independent tasks from which it would be possible to get immediate feedback. For example, game type, etc." (O9S18). The learning diary was instructed at the first face-to-face

lesson, and it was also discussed during the course; however, it could be instructed in more detail because it is a new acquaintance for many students in first your studies: "The schedule could be slightly relaxed and it would be better to go through the issues related to making a study diary at the beginning of the course" (O9S19).

As a summary of this section, the technology worked well to enhance students' learning. Moodle was used as the main learning environment, and it was found clear and functional for flipped classroom courses. Active communication of the instructor motivated students to study, kept the course in a good rhythm, and ensured that the students' submissions were done on time. Overall, the flipped classroom was perceived as a better way to study than traditional lecturing. The flipped classroom required more effort and concentration from students, which supported learning more than lecturing. When developing ideas for the implemented model, the amount of online and face-to-face lessons should be increased. The learning materials could be more interactive and updated, the correct answers to the assignments should be shared with students, and more activating discussions should take place at face-to-face meetings.

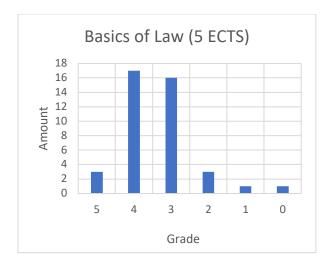
#### **Discussion**

The flipped classroom and learning diary were successfully implemented in the Basics of Law course. Students' performance in the course was at a very good level and they took an active role in their learning. Forty (40/46) students passed the course. One student failed the course because the learning diary didn't meet the requirements, and five left out the course at the beginning (Figure 2). Most course grades were a 3 or 4. Overall, the learning diaries were generally carefully drafted, and they included reflection on the course topics and learning. In the learning diaries, the students were best able to reflect on learning, but the weakness was legal reflection.

## RQ1: Is the flipped classroom suitable for studying the law?

This study confirms what has been previously studied in the flipped classroom. The flipped classroom was experienced better compared to normal lecturebased courses (Bishop & Verleger, 2013). The model increased student engagement (Davis et al., 2013; Taylor, 2016), and more students passed the course compared to the implementation with traditional lecturing and exam. Learning was found deeper when topics were explored in advance before discussing them with the instructor. Students' wrong perceptions of dealt topics could be discussed with the instructor and students

Figure 2 Course Grade Distribution



were able to reflect their thinking to the views of other students. The model was found to be useful especially in blended learning studies when there is no opportunity to arrange a lot of contact teaching. The flipped classroom was found to be very suitable for law studies.

Previous studies argued that the flipped classroom might improve student motivation and help manage cognitive load (Abeysekera & Dawson, 2015). This research shows that besides the flipped classroom, the instructor's active communication and coaching approach can also have a positive effect on students' motivation to learn. The model was especially suitable for students who liked to work in their peace and the model placed the responsibility of learning more on the student (Arnold-Garza, 2014; Ash, 2012; Educause,

Matching the course schedule to every student's life is a challenge. The flipped classroom model enabled organizing coursework along with students' schedules. Students could complete the course at their own pace, which promoted stress-free learning. The course schedule provided enough time for studying the materials and preparing the learning tasks.

# **RQ2:** How did the learning materials, learning diary, and face-to-face lessons support learning?

The learning diary was an appropriate tool for deepening the learning along with the flipped classroom. The learning diary supports constructive learning when students are reflecting their learning into their previous knowledge (Ford & Lott, n.d.; Jonassen et al., 1999; Lim et al., 2009). With a learning diary, a student's entire learning process became visible and the instructor could also utilize this in the course evaluation. The learning diary was suitable to be used for course assessment and

was found a good alternative for an exam. Hence, it should be made clear to students what is required of the learning diary and how it is assessed.

Writing a learning diary requires special writing skills and it has to be noticed that students have very different levels of writing skills. Students need to express themselves and reflect on their learning in written format, and for some students, this is very challenging. In addition to the learning diary, the courses should also use other assessment methods such as learning assignments or group assignments. Students' lack of time was one challenge for writing the learning diaries. If students do not have enough time to invest in writing a learning diary, it does not fulfill its idea as a learning tool and the learning then remains superficial.

Studying independently emphasizes the importance of learning materials. Well-prepared materials such as video lectures and learning assignments provided a foundation for learning and supported the writing of a learning diary. The learning materials, such as the learning videos (Castan & Hyams, 2017), were very positively perceived among students. The recorded lectures supported learning (Table 2, Q2), but recordings might be not the best form of learning for everyone; students may prefer traditional face-to-face lectures over recorded lectures (Bishop & Verleger, 2013). The faceto-face and online lessons were found to be very important, and they provided an opportunity to deepen knowledge. Most of the students were well prepared and actively participated in the joint discussions, but some stayed on the side and listened to others.

## RQ3: How can the used flipped classroom model, enhanced with learning diary, be further developed?

The development of the flipped classroom model should focus on especially how the course assignments are reviewed in a way that the learning is effective and meaningful. It should be carefully pre-planned how the students are activated for collaborative learning, for example in the form of discussions. The flipped classroom required students to have independent knowledge acquisition and learning skills, and the flipped classroom fostered these skills further (Zainuddin & Perera, 2019). Independent learning might be challenging for some students; therefore, learning should be supported not only face-to-face but also during independent studying.

Learning diaries should be implemented using digital learning technologies, such as blogs or documents, shared with the instructor. This way the instructor could monitor and comment on students' progress during the course. Efforts must be made to ensure that the right topics are learned and students stay on course. The online and face-to-face lessons should be recorded and shared with students after the class. This

allows students to learn even if they are unable to attend the classes.

The preparation of the flipped course took more time than preparing the traditional lecture-based course (Arnold-Garza, 2014; Lage et al., 2000). Preparing the video lectures takes a surprising amount of time, but recordings can be used in the following course implementation. This will reduce the workload in the future. When using the flipped classroom, the instructor should have the required pedagogical skills and an encouraging and coaching attitude. Students should be activated to discussions and share their opinions with other students through a variety of discussion-driven learning tasks.

#### Conclusion

Based on the study the flipped classroom and learning diary used together in blended learning courses is an effective way to foster learning. The use of these can be recommended in higher education and law studies. The learning diary boosts the flipped classroom method, and when used together, supports the student's learning process more than when used alone. The learning diary should be included as part of the course evaluation. This way the student's learning process can be also taken into account in the course evaluation to enable a more constructivist approach in the assessment. The active and inspiring attitude of the instructor plays an important role in motivating students in the flipped classroom. Besides developing pedagogical models, schools should also invest in developing the instructor's pedagogical abilities, such as coaching skills. An interesting topic for further research would be to utilize learning analytics in the flipped classroom course to find challenges in studying in real-time and to further the role of the instructor more proactive.

#### Recommendations

In conclusion, a five-step guide for teachers who considering using flipped classrooms and learning diaries in their courses follows:

- 1. Plan your course with flipped classroom approach and prepare learning materials such as recorded lecture videos.
- 2. Prepare instructions for writing a learning diary and consider taking advantage of the learning diary in the course evaluation.
- 3. Ensure that students are activated during the course (face-to-face and online).
- Take care of active communication and students' guidance also during independent studying.
- 5. Pay attention to the teacher's active and coaching role during the course.

#### References

- Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. Higher Education Development, 34(1), Research https://doi.org/10.1080/07294360.2014.934336
- Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. Computers & Education, 126, 334-345. https://doi.org/10.1016/j.compedu.2018.07.021
- Arnold-Garza, S. (2014). The flipped classroom teaching model and its use for information literacy instruction. Communications information Literacy, 7-22. https://doi.org/10.15760/comminfolit.2014.8.1.161
- Ash, K. (2012). Educators evaluate 'Flipped Classrooms'. Education Week. https://www.edweek.org/teachinglearning/educators-evaluate-flippedclassrooms/2012/08
- Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. International Society for Technology in Education.
- Bishop, J. L., & Verleger, M. A. (2013). The Flipped Classroom: A survey of the research. 120th ASEE Annual Conference & Exposition, Frankly, We Do Give A D\*mn. Paper ID #6219.
- Bliuc, A., Goodyear, P., & Ellis, R. (2010). Blended learning in higher education: How students perceive integration of face-to-face and online learning experiences in a foreign policy course. Research and Development in Higher Education: Reshaping Higher Education, 33, 73–81.
- Bliuc, A. M., Goodyear, P., & Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. The Internet and Higher Education, 10(4), 231–244.
- Bonk, C. J., & Graham, C. R. (Eds.). (2006). Future directions of blended learning in higher education and workplace learning settings. Handbook of blended learning: Global perspectives, local designs. Pfeiffer Publishing.
- Boonyasana, K. (2020). Learning diary student outcomes assessment: Experimental research in education. Journal of Critical Reviews, 7(17), 1867-1873.
- Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J. W., & Kenney, J. (2015). Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis. Computers & Education, 86. 1-17.https://doi.org/10.1016/j.compedu.2015.03.006
- Brown, S. (2004). Assessment for learning. Learning and Teaching in Higher Education, 1, 81–89.

- Castan, M., & Hyams, R. (2017). Blended learning in the law classroom: Design, implementation and evaluation of an intervention in the first year curriculum. Legal Education Review, 27(1), 13. Available SSRN: https://ssrn.com/abstract=3117113
- Choi, E. M. (2013). Applying inverted classroom to software engineering education. International Journal of e-Education, e-Business, Management and e-Learning, 3(2), 121-125.
- Clipa, O., Ignata, A. A., & Stanciu, M. (2012). Learning diary as a tool for metacognitive strategies development. Procedia - Social and Behavioral Sciences, 33, 905–909.
- Cunningham, U. (2014). Teaching the disembodied: othering and activity systems in a blended synchronous learning situation. The International Review of Research in Open and Distance Learning, https://doi.org/10.19173/irrodl.v15i6.1793
- Dalsgaard, C. (2006). Social software: E-learning beyond learning management systems. The European Journal of Open, Distance and E-Learning, 9.
- Davis, L., Neary, M., & Vaughn, S. (2013). Teaching advanced legal research in a Flipped Classroom. Perspectives: Teaching Legal Research and Writing, 22(1), 13-19.https://lawdigitalcommons.bc.edu/cgi/viewcontent .cgi?article=1722&context=lsfp
- Day, J. A., & Foley, J. D. (2006). Evaluating a web lecture intervention in a human-computer interaction course. IEEE**Transactions** onEducation, 49(4), 420-431, doi: 10.1109/TE.2006.879792
- DeAngelis, M. (2017). Flipped Classroom for the large class. Legal Studies Classroom. http://legalstudiesclassroom.blogspot.com/2017/0 5/flipped-classroom-for-large-class.html
- Eckerlein, N., Roth, A., Engelschalk, T., Steuer, G., Schmitz, B., & Dresel, M. (2019). The role of motivational regulation in exam preparation: Results from a standardized diary study. Frontiers Psychology, *10*. https://www.frontiersin.org/articles/10.3389/fpsyg .2019.00081
- Educause. (2012). 7 things you should know about Flipped Classrooms. https://library.educause.edu/-/media/files/library/2012/2/eli7081-pdf.pdf
- Ford, K., & Lott, L. (n.d.). The impact of technology on constructivist pedagogies. Theories of educational technology. Retrieved April 16, 2021, https://sites.google.com/a/boisestate.edu/edtechth eories/the-impact-of-technology-on-

constructivist-pedagogies-1

- Friesen, N. (2012). Report: Defining blended learning. https://www.normfriesen.info/papers/Defining Ble nded Learning NF.pdf
- Harris, P., Connolly J. F, & Feeney, L. (2009). Blended learning: Overview and recommendations for successful implementation. Industrial Commercial Training, 41(3), 155–163.
- Hsieh, J. S. C, Wu, W. C. V., & Marek, M. W. (2017). Using the Flipped Classroom to enhance EFL learning. Computer Assisted Language Learning, *30*(1–2), 1–21.
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning, Computer Assisted Language Learning, 28(1), 81-96.
- Hyttinen, M., & Hatakka, O. (2020). The challenges and opportunities of using 360-degree video technology in online lecturing: A case study in higher education business studies. Seminar. Net, 16(1), 16.
- Jonassen, D. H., Peck, K. L., & Wilson, B. G. (1999). Learning with technology: A constructivist perspective. Prentice Hall.
- Klein, H. J., Noe, R. A., & Chongwei, W. (2006). Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceived barriers and enablers. Personnel Psychology, 59(3), 665-702.
- Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. The Journal of Economic Education. 31, 30-43.
- Lemmer, C. (2013). A view from the flip side: Using the "Inverted Classroom" to enhance the legal research information literacy of the international LL.M. Law Library Journal. student. 105(4). https://www.aallnet.org/wpcontent/uploads/2018/01/Vol-105-no-4-2013-25.pdf
- Lihosit. J., & Larrington, J. (2013). Flipping the legal research classroom. Perspectives: Teaching Legal Research and Writing, https://www.researchgate.net/publication/2603642 93 Flipping the Legal Research Classroom
- Lim, K. Y., Woo Lee, H., & Grabowski, B. (2009). Does concept-mapping strategy work for everyone? The levels of generativity and learners' self-regulated learning skills. British Journal of Educational Technology, 40(4), 606-618.
- Löfström, E., & Nevgi, A. (2007). From strategic planning to meaningful learning: perspectives on the development of web-based teaching and learning in higher education. British Journal of Educational Technology, 38(2), 312-
- Love, B., Hodge, A., Grandgenett, N., & Swift, A. W. (2014). Student learning and perceptions in a flipped

- linear algebra course. International Journal of Mathematical Education in Science and Technology, 45(3), 317-324. https://doi.org/10.1080/0020739X.2013.822582
- Masland, L., & Gizdarska, S. (2018). "Then what am I paying you for?" Student attitudes regarding preclass activities for the flipped classroom. International Journal of Teaching and Learning in Higher Education, 30(2), 234-244.
- Minocha, S. (2009). Case study-based investigation of students' experiences with social software tools. New Review of Hypermedia and Multimedia, 15(3), 245-265.
- Mitchell, A., & Honore, S. (2007). Criteria for successful blended learning. Industrial and Commercial *Training*, 39(3), 143–149.
- Moskal, P., Dziuban, C., & Hartman, J. (2012). Blended learning: A dangerous idea?. Internet and Higher Education, 18, https://doi.org/10.1016/j.iheduc.2012.12.001
- Munir, M. T., Baroutiana, S., Younga, B. R., & Carter, S. (2018). Flipped classroom with cooperative learning as a cornerstone. Education for Chemical 25-33. Engineers, 23, https://doi.org/10.1016/j.ece.2018.05.001.
- Neo, M. (2007). Learning with multimedia: Engaging students in constructivist learning. International Journal of Instructional Media, 34(2), 149–159.
- Nückles, M., Schwonke, R., Berthold, K., & Renkl, A. (2004). The use of public learning diaries in blended learning. Journal of **Educational** Media, 29(1), 49-66.
- Park, Y. J., & Bonk, C. J. (2007). Is online life a breeze? A case study for promoting synchronous learning in a blended graduate course. MERLOT Journal of Learning and Teaching, *3*(3). https://jolt.merlot.org/vol3no3/park.pdf
- Sloman, M. (2007). Making sense of blended learning. Industrial and Commercial Training, 39(6), 315-
- Taylor, L. (2016). Five flippin' good reasons to flip your legal research class. Perspectives: Teaching Legal Research and Writing, https://info.legalsolutions.thomsonreuters.com/pdf/ perspec/2016-fall/2016-fall-5.pdf
- TENK. (2019). The ethical principles of research with human participants and ethical review in the human sciences in Finland. Finnish National Board on Research Integrity TENK guidelines 2019. Publications of the Finnish National Board on Research Integrity TENK.
- Tucker, B. (2012). The flipped classroom. Online instruction at home frees class time for learning. Education Next. https://www.educationnext.org/the-flippedclassroom/

- Varner, D., & Peck, S.R. (2003). Learning from learning iournals: The benefits and challenges of using learning journal assignments. Journal of Education, 52. Management 27(1), https://doi.org/10.1177/1052562902239248
- Wallin, P., & Adawi, T. (2018). The reflective diary as a method for the formative assessment of selfregulated learning. European Journal Engineering Education, 43(4), 507–521.
- White, C. P., Ramirez, R., Smith, J. G., & Plonowski, L. (2010). Simultaneous delivery of a F2F course to on-campus and remote off-campus students. TechTrends, 54(4), 34-40.
- Zainuddin, Z., & Perera, C. (2019). Exploring students' competence, autonomy and relatedness in the flipped classroom pedagogical model. Journal of Further and Higher Education, 43(1), 115–126. http://dx.doi.org/10.1080/0309877X.2017.1356916

MIKKO HYTTINEN, M.Sc., M.Sc. (Admin.) is a Lecturer in the Business Economics School at Karelia University of Applied Sciences in Finland. His teaching is focused on law and computing studies. He is a doctoral candidate at the University of Eastern Finland and his research focuses on educational technology, blended learning, and pedagogical practices in higher education. His recent publications include the use of 360-degree video in online lecturing and a basics of employment law textbook. The current project includes the development of new learning environments with immersive technologies and pedagogical practices.

JARKKO SUHONEN, Ph.D. holds a research manager position at the School of Computing, University of Eastern Finland. Dr. Suhonen has published over 110 peer-reviewed articles in scientific journals, conferences, workshops, and chapters of books. Jarkko's research interests include online and blended learning, design science research in educational technology, computing education, and ICT for development. He has acted as a reviewer in several scientific journals and international conferences.

## Appendix A

## Learning Outcomes and the Core Content

#### Learning outcomes Core content After completing the course, the student: Introduction to law can tell what a law is and what its significance Legal order and basic concepts of law is in society Fundamentals of contract law and can obtain legal information from various representation sources Practicing business and company law understands the importance of EU law for the Marketing regulation Finnish legal system Debt and debt collateral understand the key regulations of contract law, consumer law, and commercial law from the perspective of both individuals and companies know the key regulations related to different types of companies understand the legal differences between different types of companies understand the key regulations related to debt and collateral can apply the learned knowledge to example situations

can prepare contract and company law

documents

# Appendix B

# The Evaluation Criteria of Basics of law Course

Grade 5:	In the learning diary, the student shows a critical and analytical reflection on the topics of the course and his/her learning. The reflection on legal matters is expert, comparative and evaluative. The student consistently uses legal sources as well as legal concepts to support reflections. In the learning diary, the student presents his/her views and experiences and considers and justifies them from the perspective of law. The written text is consistent, understandable, and correct. The report prepared complies with the given report guidelines and has been submitted in time. The student has carefully prepared and completed all the learning assignments and participation in the course and review of the assignments has been active.
Grade 3-4:	In the learning diary, the student shows reflection on the topics in the course and on his/her learning. The reflection on legal matters is expert and relevant. The student uses legal sources as well as legal concepts to support reflections. In the learning diary, the student presents his/her views and considers and justifies them from the perspective of law. The written text is understandable and correct. The report prepared largely complies with the given report guidelines and has been submitted in time. The student has completed the learning assignments and participated in the course and review of assignments.
Grade 1-2:	In the learning diary, the student shows reflection on the topics in the course and on his/her learning. The reflection on legal issues is mostly referencing to correct subject. The student can use legal sources and legal concepts to support reflections. In the learning diary, the student presents his/her views and considers them from the perspective of law. The written text is understandable. The report prepared complies mostly with the given report guidelines and has been submitted in time. The student has completed most of the learning tasks, and participation in the course and review of assignments has been weak.
Grade 0:	The student has not submitted the learning diary. A learning diary is just a reference to lectures or a book. The learning diary does not contain students' reflections of course content or learning. The learning diary does not follow the given report guidelines and the text is very hard to understand. The student has not participated in the course or review of assignments at all. The student has not done any learning assignments.