

# Flipped Classroom in Legal Education: Achievements and Challenges of Innovating the Teaching of a Basic Law Course

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**Abstract**—Unlike the traditional method of teaching, new educational trends focus on transforming learning environments into spaces where the teacher is a guide and not the provider of information. This article presents a proposal for a flipped classroom approach to teaching an entry level undergraduate law course. The implementation of the flipped approach, which was supported by ICT-based virtual learning environment, took place at the University of the Andes (Bogotá, Colombia). The qualitative and quantitative results of this methodology show its positive contribution to promoting student autonomy in the learning process, collaborative work and articulation between theory and practice (learning by doing) while strengthening lawyering skills.

**Index Terms**—flipped classroom, legal educational, instructional strategy, collaborative learning

## I. INTRODUCTION

In recent years, a flipped classroom methodology was implemented to teaching the ‘Law of Obligations’ course in the basic cycle of the Law program, and it was supported with ICT tools. Its final implementation was achieved in 2014 and is still in place. “Obligations” fulfills a formative purpose of major importance for the students as future lawyers as it provides fundamental concepts and a set of values that must govern legal relationships among individuals. It also provides the principles and basic rules of contract law and civil liability for damages, just to mention two relevant fields of law. In the course “Obligations”, students prepare themselves to correctly apply what they have learned about the theory of solving these types of legal problems to their professional practice. This is why, as part of the innovation process, various pedagogical strategies aim at connecting theory and practice [1].

This document describes the process of creating and implementing this innovation in one of the four modules of the course as a pilot project, the one related to the “Transmission of Obligations” as part of a general

redesign of this course, as flipping can be total or partial [2].

The other three modules were designed using other active learning methods such as Problem Based Learning (PBL), role play and case discussions, seeking a combination of instructional strategies. At the end of the text we will reflect on the results obtained, centered on the students’ perceptions of their learning process after the implementation of this methodology.

In order to better understand the objectives and scope of this methodological proposal, it is worth mentioning some relevant background in the teaching practices in the School of Law and at the university. Since its creation in 1968, The University of the Andes Law School has fostered active learning methodologies in which students play a central role in their learning process [3]. From the adoption of the Socratic method in the 1970s to that of PBL in the late 90’s, along with the implementation of the discussion of cases and doing role plays, both of which demand research, argumentation and communication skills, law professors at the institution have eagerly used alternatives to the traditional lecture format in teaching Law so popular in Colombia and in other countries with a similar legal tradition.

In the Faculty of Law, the ‘Socrates Program’, in charge of the pedagogic projects, has provided ongoing support to professors in the design of their courses. Through the implementation of active learning methodologies and teacher training and support, the Program has led debates on legal education in the Faculty of Law. As Montoya mentions [4], in this effort active teaching methods have been favored over the simple transmission of information. Efforts have focused on prioritizing the active participation of the students in their learning process, placing the responsibility for learning on them, having students develop reasoning, interpretation and critical thinking skills, and on developing study materials that combine theory and practice by using diverse active methods [5].

In addition, in the last twenty years, the University has reinforced its commitment to improving education through the incorporation of pedagogical innovations and

the massive use of new information technologies due to their importance in educational processes. To this end, the University created the Center for Innovation in Technology and Education (Conecta-TE), which seeks to support professors and students in pedagogical innovation processes involving ICT.

The learning objectives of the “Obligations” course were revised as a whole to align them with the skills required by today’s lawyers: to think as a lawyer by means of cognitive skills; to act as a lawyer, through practical skills; and to act as a lawyer, by reflecting on values and attitudes of the legal profession. In turn, the activities and assessments were designed in line with the pedagogic skills. FCM targets higher-level thinking skills, as explained by Bloom’s taxonomy [6], [7].

Our research question for this study can be phrased as follows: Does the Flipped Class Model (FCM) enhance student autonomy, teamwork and the articulation between theory and practice?

## II. THE FLIPPED CLASS MODEL (FCM)

The flipped classroom is a pedagogical model which turns the learning process around placing the responsibility on the students. Also known as a “scale-up” pedagogy [8] it emphasizes on active and experiential learning. In the traditional methods, the teacher explains the basic concepts in class, and the students practice or apply them in tasks that they do after class.

The flipped model usually involves the common theme of delivery of content outside of the classroom with time in class for what was traditionally done at home [9]-[11]. By flipping roles and spaces, the teacher introduces the key concepts virtually (or by other means) before class.

Students spend time individually, outside of class reviewing readings, videos, listening to audios, and other explanatory materials in order to understand the basics. In turn, with the guidance of the teacher, face-to-face time in class is used to do tasks, exercises and activities that allow the group to strengthen their knowledge of the concepts collaboratively by applying what has been learned to cases, problems, debates, role playing, etc. [12], [13]. Thus, the environment shifts in focus from teacher-centered to learner-centered [9].

Recent literature refers to a great number of educational experiences where this model has been used, not only in the school level, but mostly in higher education around the world covering a big range of fields of knowledge: engineering, mathematics, chemistry, nursing, medicine, pharmacy, nutrition, economics, accounting, design, history, education, information systems, management and social work, among others [14].

The use of the FCM in legal education is still scarce or at least there are few reports on this matter.

## III. CONTEXT OF THE INNOVATION

University of the Andes School of Law’s undergraduate program offers the Obligations course as an introductory course in the 4th semester. It is open to students who are starting the core of their legal studies, and –as already explained- it has enormous importance in

the construction and analysis of basic legal categories that will be used in more advanced courses of the major.

The Obligations course is taught face-to-face every semester and has had an active methodology component for several years, mainly problem-based learning (PBL). To make the active methodology viable, the course has special characteristics: a low number of students and an above average workload both in and outside of class. (It has just 25 students, whereas a typical class has an average of 45). There are two weekly sessions of 1 hour and 50 minutes each, while ordinarily twice-a-week courses take one hour and 20 minutes. In addition, Obligations has 5 credits, which mean that students must spend at least 5 hours preparing for each face-to-face session.

For about 10 years, the subject has been supported by the virtual platform of the University of the Andes (Blackboard) where it hosts, among other tools, the ‘Legal Hypertext’, a database built by Professor Marcela Castro, coauthor of this paper, to support teaching and learning in this course. The hypertext has concept maps that illustrate the fundamental topics, their subdivisions, hierarchy and the relation between them. These maps are linked to Wikis, and each of these Wikis refers to a basic course concept and develops it in a schematic way. It is linked to other materials such as statutes, court decisions, news, videos and other resources. Each Wiki is divided into the following sections: a) definition; b) requirements and effects; c) questions and problems; d) links to documents of interest, and e) basic bibliography.

As of 2012, the entire course was subject of an in-depth curricular review including objectives, activities and evaluation. This led to the redesign of several activities incorporating the intensive use of ICTs. In 2014, flipping was added to a module of the course called Transmission of Obligations.

The following actors participated in the design and development of the pedagogical innovation:

(i) Undergraduate students during two semesters; (ii) the professor of the face-to-face sessions who plays the role of content expert; (iii) assistant professors who support the lead teacher in the development of educational activities; (iv) the pedagogical adviser, in charge of validating and monitoring the pedagogical strategy; (v) the technological advisor, responsible for facilitating the use of ICT in the pedagogical proposal; (vi) the evaluation adviser, in charge of verifying the impact of the techno-pedagogical design.

The pedagogical innovation based on the flipped classroom is divided in three phases: design, development and implementation (carried out during the periods: 2014-II, 2015-II, 2016-I, 2017-I. FCM is still in place). The quantitative and qualitative data of this study were collected in the implementation phase where the pedagogical strategy was monitored.

## IV. DESIGN AND DEVELOPMENT PHASES: METHODOLOGIC ISSUES

The ‘transmission of obligations’ module was designed by using the ‘flipped classroom’ method. In this module,

we start with the most elementary and simple concepts and then move to the most complex mechanisms of transmission of obligations, which are usually scattered throughout Colombian legislation. Thus, it is necessary to try to articulate and integrate these legal institutions and apply them to problem solutions, in accordance with the objective of supporting the students to integrate theory and practice, substantive and procedural aspects, as presented by the program. This is achieved through the formulation of cases and problems that are hosted in the hypertext, which was, to some extent, underutilized before the innovation. Hence, the student may understand that the concepts that he/she learn are indispensable tools for problem solving and this will be evident when it comes to professional practice.

It is essential for students to see the relevant materials (written and online) through an individual revision and/or visualization prior to class, and to verify their understanding of these materials by applying the concepts learned through answering questions and solving cases and problems. Although posting videos is popular in the FCM, there is a need that future lawyers keep the reading habit, so the activities before class always include some suggested printed material that must be read by the students. In addition, an important raw material for this process is provided by the legal hypertext, which, through the flipped class methodology can provide additional benefits and fulfill a pedagogical function that helps to achieve the learning objectives.

The module "Transmission of Obligations" combines several subjects related to the change of individuals or entities that participate in an obligatory relation (debtor and creditor; the parties). The topics are very numerous and, as mentioned above, are dispersed in Colombian legislation. That is why this module constitutes an effort to integrate and systematize various mechanisms for the transmission of obligations in Colombian law.

Before adopting the flipped classroom modality, the module was developed as follows:

- Before attending class, students read the assigned materials (as usual);
- During the face-to-face session, the teacher gave an initial explanation of the fundamental concepts and then cases and problems related to these topics that had been presented in the hypertext were solved through collaborative work.

In the FC model, some subjects that the students were supposed to read before class were repeated by the teacher in the face-to-face session, in which only a few students participated voluntarily in the resolution of the cases.

Adopting the flipped classroom modality, the module follows these five steps:

- Step 1: Prior to class (virtually): The student explores the theoretical material based on the questions and cases proposed in the hypertext autonomously.  
Resources: Hypertext using CMapTools (hosted readings and questions). Skills: Autonomy.

- Step 2: During class: The teacher makes an introduction to the main topics of the session. A panel of experts is organized as follows: groups of students are organized, and each group must discuss one or more of the questions posted in the hypertext. The teacher and the teaching assistant support the students' discussion in their respective groups. During the plenary session, group discussion results are encouraged, and students formulate their main concerns related with the problems and readings. The teacher collects the students' questions and summarizes the main conclusions on the addressed subject.  
Resources: Activity guidelines (to be presented orally and hosted in Blackboard for students to review them when they need it); Hypertext. Skills: Teamwork and Articulation of theory and practice (learning by doing).
- Step 3: After class: (virtually). Each group is the reporter for a session. Members of the reporting group will meet again to expand their response based on the face-to-face discussion they had with other classmates. They publish the main conclusions obtained after working on the question in a forum. Contributions to the forum will be additional materials for students to review and prepare for the exam. Prior to the following class, the teacher uses the virtual forum to provide feedback to the corresponding reporter. All students can post observations or comments they consider relevant according to the exchange on the forum.  
Resources: Activity Guidelines, hypertext, forum threads for each question. Skills: Autonomy and Teamwork.
- Step 4: During class, at the beginning: the teacher summarizes the main aspects discussed in the forum and invites students to identify the main concepts learned during the discussion.  
Resources: Forum, class notes. Skills: learning by doing and Teamwork.
- Step 5: After the last session: Students explore a video created by the teacher as a synthesis of the subject and study for the assessment of the module.  
Resources: Video, hypertext, class notes. Skills: Autonomy.

## V. RESULTS AND STUDENT'S PERCEPTIONS

Class observation, focus groups, and perception survey were carried out while the implementation of the FCM was being held and no control group was used. As explained, the previous method was, in most part, a traditional lecture with some active ingredients, but not aimed at fostering self-regulation, teamwork and learning by doing. Both quantitative data and qualitative information collected are presented as results of this research. The innovation has been implemented from 2014-II to present. However, for the purposes of this research, the results of the most recent periods (2016-I and 2017-I) are presented.

The data obtained address the following elements: self-regulated learning, teamwork, the impact the activities and resources on the learning process, especially those aimed at linking theoretical concepts and practice. In addition, data on student satisfaction are presented. Surveys were voluntary.

The results about students' perceptions about autonomous learning are shown in Fig. 1. Most of the students indicated that the activities carried out in the module allowed them to learn at their own pace by encouraging responsibility for their own processes. Likewise, more than 63% of students in both periods reported that the module allowed them to set clear learning goals.

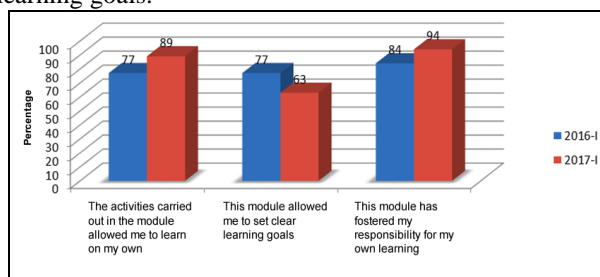


Figure 1. Results concerning autonomous learning in the task transmission module.

On the other hand, when asked to what extent the activities carried out in the module allowed them to develop their teamwork skills, students responded positively. The answers obtained are presented in Fig. 2.

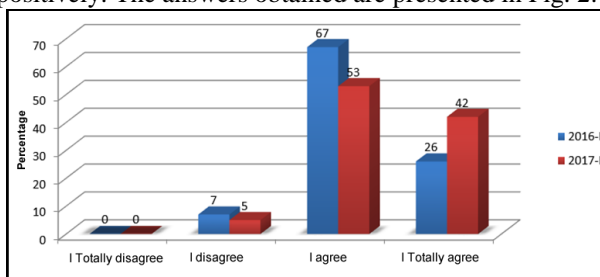


Figure 2. Results concerning teamwork in the transmission of obligations module.

Regarding the students' perception of the impact of the activities on the learning process, the students identified the assigned readings and the group discussions as the elements that contributed most to the achievement of the objectives as is shown in Fig. 3.

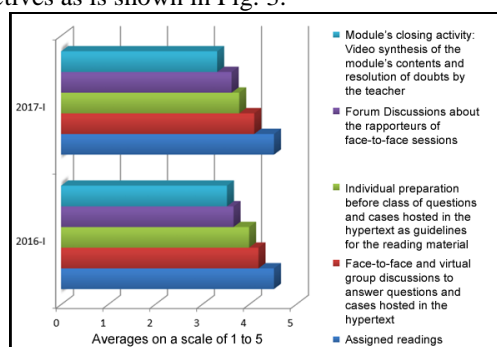


Figure 3. Results on the contribution of conducted activities to the learning process of the students in the transmission of obligations module

Regarding the activities, these are some of the students' suggestions:

- Having a final session to review what was studied, to answer questions and check if everything that was to be learned was really learned, would be helpful.
- Given the length of some readings, it is necessary to have discussions in a traditional fashion.
- I think the idea of learning from cases is good, as long as there are good foundations that help one to deal with them.
- Some cases are especially interesting since they also include things that have been dealt with earlier in the course and this forces us to review and synthesize several issues in a single case. Other cases, on the other hand, are confusing and even the explanations in class do not make them completely clear.
- To have more feedback from the teacher to answer questions.

## VI. REFLECTIONS AND CONCLUSIONS

The pedagogical experience that is described in this article aims to report on the challenges of adopting the flipped classroom methodology in an introductory course in an undergraduate program at the School of Law at the University of the Andes (Bogotá, Colombia). In addressing our research question, students' perceptions indicate that in fact flipped classroom in the module where it was implemented fostered autonomy of the students in the learning process, collaborative work and articulation of theory and practice, while strengthening lawyering skills. A number of authors suggest that flipped classroom in legal education lead to improve learning experiences [15]-[17], [2] and fosters critical thinking [17].

The flipped classroom methodology has advantages over traditional methodologies in that it focuses on the student; it gives him or her greater autonomy and responsibility in the learning process and promotes a culture of 'learning how to learn'. Likewise, it is allowing for classroom time to be used for meaningful activities that require participation of all students in a collaborative environment and not that of few members of the class, as is often the case in traditional methodologies. In the face-to-face class, through specially designed hands-on activities, the teacher ensures that the concepts have been understood applied correctly, analyzed, contrasted and integrated, targeting the higher cognitive competences.

The adoption of the flipped classroom methodology should be part of a holistic pedagogical strategy in which the teacher permanently reviews the results and the performance of the students with respect to the pedagogical objectives that have been established. It is highly recommended that prior to implementing this system students receive a clear explanation of what the FCM is about, what is its purpose, what are the expected benefits and difficulties and what will be their role and the role of the instructor. This prepares students to pass

from passive to active in their learning process [18]. There were, however, many challenges on the way. Changing traditional teaching even when students are used to active methods is not an easy task. A constant issue was to make sure that legal concepts were fully understood for the long term and that students were able to integrate ideas and to see the whole picture and not only isolated problems. Another concern was to engage all students to fully prepare for the class and to participate in the face-to-face sessions. This requires an additional effort to follow-up individually with students that are having trouble with their assignments. Finally, a major challenge is to design evaluations that can effectively show the progress and weaknesses of every member of the class. The strategy to cope with these challenges requires permanent review by the teacher and feedback by the students to assure that they meet the academic objectives of the course.

Slomanson [19] points out the best a teacher can do is assess and reassess his / her understanding of how students learn and what constitutes effective teaching. It should be clear that ICT is a means, not an end to learning. Technological resources which today are so abundant and varied are very valuable to successfully design and implement pedagogical innovations: students nowadays are digital natives [20].

Technology facilitates self-study and fosters autonomy by allowing each student to learn at his/her own pace. It is important for students to seek the right moment to learn for them and to be aware of the relevance of the work they do outside of class. However, it should be emphasized that flipping is not about just making videos available to learners; what really matters in this methodology is what is done in class with the active participation of the students.

On the other hand, when we mention that classes should not focus merely on the transmission of content, we do not mean that the contents of the subject are irrelevant. What should be avoided is a unilateral flow of information from teacher to students, a dynamic which usually means that students must memorize and then repeat the concepts taught. The contents are very important, but the flipped classroom as an active methodology seeks to ensure that the concepts are both understood and applied in an educational environment. This allows students to develop their academic competencies and their intellectual potential in order to solidify their understanding of concepts such that they can be applied more effectively to practical cases and problems specific to the practice of law.

A point that has been detected in the experience with Obligations is the need for the teacher to provide a closure to a given topic at the right time since this lends a logical structure to what has been learned. The students need to see the big picture and identify the connection between all the different elements. If they do not, they might think the process lacks cohesion. It is necessary to relate concepts and integrate elements of theory and practice in order for learning to be effective in the long term.

Feedback is a fundamental element in the pedagogical process and therefore is a priority in the flipped classroom methodology. Students require permanent interaction with the instructor, especially when they have faced difficulties in the activities that require them to apply the concepts learned. Only then will the teacher and the students have information that allows them to know which objectives have been achieved and which require further exploration in a timely manner. Effective feedback requires the teacher to quickly review students' work and comment on it, even if they do not formally assign a grade.

In the flipped class, the face-to-face component must be well balanced with the out of class individual one (whether virtual or not) to avoid gaps in the learning process and to make the process fluid and continuous [21]-[24].

Finally, teachers in general, and law professors in particular, should be aware of the best teaching practices, starting by clearly defining the pedagogical objectives and then adopting a strategy, plan and proceed to implement activities that work towards these goals. The flipped classroom methodology is an interesting and flexible alternative to explore [2].

In the module transmission of obligations, where flipping was used, the results are encouraging since it has effectively fostered students' self-regulation in their learning process, teamwork and the integration between theory and practice, an indispensable component in the training of lawyers. Comments and suggestions from the students will be fundamental to improving the pedagogical experience in this and other courses that adopt this methodology in the future.

#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

#### AUTHOR CONTRIBUTIONS

Marcela Castro conducted the research and wrote the paper. Sandra Aguirre supported the research of literature on flipped model and technology, analyzed the data, and prepared the tables and figures. Both authors approved the final version.

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