Implemented Teaching Methods Based on Interactive Learning Process in Order to Increase the Ability of Learning Foreign Language

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Abstract

Nowadays, the flipped classroom technology has become popular in the educational institutions of developed countries. However, in Russia this approach has not been widely practiced yet due to objective reasons. The purpose of this article is to analyze the effectiveness of using the flipped classroom technology in the system of higher education and specifically in foreign language courses. This article presents the results of the experiment on the implementation of some elements of flipped classroom technology in Kazan Federal University (Russia). The experiment was held with the students of the Law Faculty (60 people) through the course "Foreign language (French) in the sphere of jurisprudence". The idea of making the experiment came after getting very low students’ exam results at the end of the course. In this group traditional methods of SL teaching were used according to state educational standards such as reading professional texts and communication on professional topics. After thorough analysis of the results, the following reasons for unsatisfactory assessments were identified: systematic absence of the students at classes, systematic failure of completing homework assignments, and abuse of electronic translators. Thus, the need to use different teaching approaches became obvious. Taking into account the situation, the authors decided to use the flipped classroom technology to develop students’ core competencies and to improve their language skills.

Keywords: Flipped classroom; Flipped learning; Blended learning; Education; Teacher; Student; Critical thinking; Creativity; Quality of education.

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1. Introduction

Modern society is characterized by virtualization of social activities and interpersonal relations. Information and communication technologies are abundantly used in economic, management, medicine and cultural spheres. The implementation of digital technologies into learning process leads to the reconsideration of traditional methods and technologies of education. Teacher is far not the only source of information nowadays. Thus to improve the quality of education it is necessary to implement new learning approaches more adopted for the needs of students.

If previously the main aim of training was the mastery of a certain amount of knowledge, nowadays the development of thinking, mind and personal qualities of students by means of a specific training subject is at the forefront (Faina et al., 2017).

Foreign language as a subject plays an important role in this process. It gives a range of possibilities to develop moral and cultural personal qualities (Tikhonova et al., 2017).

Interpersonal communication, negotiation and teamwork skills, the ability to present personal opinion are very important now.

Teachers face a difficult task to choose the necessary methods and forms of teaching process within their educational institutions to gain the qualitatively high level of learning. Blended learning is widely practiced all over the world nowadays. It involves active using of distance learning elements, electronic learning resources, collaborative platforms, digital technologies and Internet. One of the latest tendencies of the world pedagogic science of the developed countries is flipped classroom technology, which is one of the forms of blended learning.

The purpose of this article is to analyze the effectiveness of using the flipped classroom technology to improve the quality of education of students of the Law faculty of Kazan Federal University through the course "Foreign language (French) in the sphere of jurisprudence".

According to the official definition, the quality of education is “a description of the educational activities and training of the student, expressing the degree of their compliance with federal state educational standards and the needs of the person in whose interests the educational activity is carried out” (Fajzrahmanova, 2014). In the simplest terms, this is the correlation of education and needs of the society and individuals.
In this article, under improvement of the quality of education, the authors understand the improvement of the following skills of students: mastering professional terminology in a foreign language, the ability to communicate on professional topics, to analyze professional literature, to make comparative analysis of Russian and French legal systems, to work in team, to think critically and formulate the attitude to the problem in a foreign language.

2. Methods

First of all, it should be noted that flipped classroom is a relatively new approach in terms of educational process. It is a part of a larger pedagogical movement that overlaps with blended learning, inquiry-based learning, and other instructional approaches and tools that are meant to be flexible, active, and more engaging for students.

In the flipped classroom model, valuable class time is devoted to higher cognitive, more active, project-based learning where students work together to solve local or global challenges - or other real world applications - to gain a deeper understanding of the subject. Rather than the instructor using class time to dispense information, that work is done by each student after class, and could take the form of watching video lectures, listening to podcasts, perusing enhanced e-book content, or collaborating with peers in online communities. Students access the online tools and resources any time they need them. Faculty can then devote more time to interacting with each individual (Johnson et al., 2016).

The English definition of the flipped classroom “lecture at home, and homework in the classroom” according to many French teachers, is too simplistic. M. Lebrun, one of the authors of the book “La pédagogie inversée”, writesthat flipped education is not really a new method, but rather represents a new way of thinking, whose goal is to optimize the work of students through extracurricular activities aimed at in-depth study of the subject (Dumont and Berthiaume, 2016).

Thus the role of self-studying of students significantly increases and especially in a non-linguistic university as teachers have no sufficient time to form lexical and grammatical skills of students (Vyushkina, 2008).

The task of the teacher is to motivate students to search for the materials outside the classroom. They should know how to check the reliability of the information, analyze it, critically comprehend, and to achieve an active intellectual reaction to the educational material, which is a necessary condition for mastering new knowledge. At the same time, the classroom time is used for interactive activities that develop critical thinking and creativity.

The use of the flipped classroom method in the higher education system has certain prerequisites. The philosophy of this approach goes back to Socrates and his method of stimulating thinking and establishing the truth, the art of getting the right answers among different opinions. The Socratic method was based on a dialogue between the two students, for whom the truth and knowledge are not given in a ready-made form, but represent a problem and suggest some research and require preliminary preparation for the lesson. Socrates saw his task in talking and posing more and more new questions, encouraging his disciples to find the truth themselves. Socratic debate, is a form of cooperative argumentative dialogue between individuals, based on asking and answering questions to stimulate critical thinking and to draw out ideas and underlying presumption (Vyushkina, 2008).

Despite the fact that the term "flipped classroom" is relatively recent, some of its principles have been used by teachers for a long time. In particular, E. Mazur, a physics teacher at Harvard University in the United States, gave the students the material of the lectures in advance so that they could come to the class prepared, at least acquainted with new concepts and terminology. At the beginning of the lesson, Mazur organized a small survey, the results of which were a signal for the teacher, how much information was learned, which questions need special attention. Further in-depth study of the material and problem solving took place in mini-groups. Unlike traditional lectures on physics, Mazur did not show how to solve similar problems, encouraging students to think and apply general principles and theories in various situations. The intermediate and final tests conducted by Mazur demonstrated a higher level of mastering of the teaching material in comparison with the traditional method of teaching (Sofronova, 2015).

The term “flipped classroom” was used for the first time in 2007 by two chemistry teachers in Colorado (USA) D. Bergman and A. Sams. The school in which Bergman and Sams worked was relatively rural school and many students often missed classes because of sports and activities. To save time and not to reteach lessons to students who missed class, teachers had the idea to record their live lessons using screen capture software. They posted their lectures online so their students could access them at home at a time convenient for them. “The absent students loved the recorded lectures. Students who missed class were able to learn what they had missed. Some students who were in class and heard the live lecture began to rewatch the videos. Some would watch them when reviewing for exams.” (Mazur, 1997). According to Bergman and Sam, as a result of the experiment, the number of underachieving students has significantly decreased. The success of the video lessons served as an impetus for further development and experimental testing of this idea in terms of finding ways to optimal transfer of knowledge.

This method became a small “revolution” in comparison with traditional education and the opportunity for professional development and self-improvement for progressive teachers who, without neglecting the process of transferring knowledge, directed their efforts to personal-oriented training and development of students' competencies.

Currently, several forms of flipped learning are distinguished. A classical model of flipped learning presupposes a preliminary acquaintance of the student with the theoretical material of the forthcoming lesson. Materials for preparation can be given both in the form of a supporting summary of lectures or a paragraph of the textbook, and in the form of slides, video and audio documents. In a classroom environment, the teacher organizes a discussion of the material, explains the difficult moments, answers questions and uses interactive teaching methods. It should be noted...
that in spite of the fact that the training is partially carried out remotely, this model continues to resemble the traditional education system and has a translational character: theories, concepts and models are studied first and then the ways of their practical application (Dumont and Berthiaume, 2016).

The next model of flipped learning, so called “advanced”, also provides two stages - an out-of-class and an auditory one and involves a gradual increase in the level of tasks and expansion of activities. In the course of preliminary preparation, students search independently for information on a given topic, read articles, watch videos in mini-groups or individually, prepare the theses to be presented in the classroom, questions for debates or round table discussions. They place the results of the work on a joint electronic platform, so that the teacher and other students have the opportunity to learn them in advance and prepare for the lesson in a better way. Thus, the self-guided work of each student is monitored. The presentation of the prepared abstracts, discussions of the materials, analysis of the work of each group, the creation of a general conceptual picture are based on opinions, comments, expressed judgments, or a mini colloquium in which one group makes a presentation and the other organizes a debate.

And, finally, the system or combined model of the flipped classroom assumes, as its name implies, the combination of the first two models. The essence of this model is to rearrange the key components of the learning process. The traditional sequence of the involved competencies is changing (memorization, understanding, application, analysis, synthesis, evaluation). First the practical application of the theory or model comes and only then its theoretical justification. In the context of increasing practical orientation of the educational process, this model of flipped classroom is the pedagogical approach closest to reality, as in everyday and professional life one has to make decisions in conditions of uncertainty or risk, especially in the economic sphere. At a remote stage, students work with a task or a situation in mini-groups and try to evaluate it, search for and analyze information necessary for an objective assessment of events and finding solutions. The information is presented to the audience under the guidance of the teacher. Students analyze the problem, and compare the advantages and disadvantages of each of the proposed solutions. After that, the remote stage follows again, during which students study the theoretical basis of the issue and the experience of solving it. At the final stage, the audience summarizes and consolidates all the material studied on the topic, analyzes the applicability of this model or theory to other situations (Moffett, 2015).

Thus, with this approach the nature of knowledge changes. In traditional pedagogy knowledge is given in a ready-made form, structured, logically aligned. The flipped classroom technology requires the active participation of a student in his findings, understanding them, applying for further use and it stimulates interest in the subject and stimulates the independent thinking. The role of the teacher also changes. The teacher becomes a consultant, organizer of various activities of a student, research supervisor, manager and coach.

The technology of the flipped classroom significantly changes the process of traditional evaluation based on the reproduction of knowledge and their application in a clearly defined academic situation. Different models of the flipped classroom allow using a wider arsenal of forms of control of students’ knowledge depending on the tasks that students faced. In the case when the information was not presented by the teacher, but the students themselves had to find it, the approaches used to look for information are evaluated, as well as the quality of the information itself. If a student had the task to inform the group about the information received and organize the discussion, the quality of discussions within the group, the contribution of each to collective knowledge and the effectiveness of mutual learning are assessed. The evaluation of peers, as well as self-esteem are also very important.

It is necessary to emphasize that flipped learning is not an absolutely new method, it intersects with various approaches, such as personal-oriented learning, problem training, competence-based approach and system-activity approach (Hodkinson, 2015; Hughes, 2007; McGlynn, 2007; McKeeney and Reeves, 2018; Stringer et al., 2009).

3. Results and Discussion

The experiment with the students of the Law Faculty consisted of using elements of flipped learning in foreign language classes in order to improve the quality of mastering program materials. To increase the motivation of students it was necessary to make more attractive content, more interactive learning process, individualize training and to take into account the level of complexity of assignments depending on the level of foreign language proficiency, to use such kind of home tasks, the failure of which would greatly complicate the work in the classroom, to conduct oral input control for the performance of the homework and to develop creative tasks and diversify forms of control.

At the same time, teachers faced a difficult task of developing content for self-study and for classroom activities. Considering the cliché of modern youth thinking, we decided to prepare material for self-study in the form of slides, actively using diagrams, pictures, simple definitions to visualize the educational material.

For example, a presentation on the topic “Branches of law” consisted of key vocabulary, basic scheme and definitions. As a homework assignment, students had to study materials, vocabulary and basic definitions and answer a number of questions to stimulate critical comprehension of the material. For example: Do you think the proposed classification is correct? What other branches of law do you know? What do they regulate? It should be emphasized that the relevant material was familiar to the students from other university subjects, and they were aware of the benefits and the possibilities of using the knowledge gained from other disciplines (Burns and Gibbons, 2013; Hughes, 2007; McGlynn, 2004; Slavin et al., 2003; Stringer et al., 2009).
This homework allowed using the classroom time to discuss the given definitions and practical exercises. Students worked mostly in mini-groups in order to involve all the participants of experimental group into the discussion.

It should be noted that the greatest difficulties for students were caused by notions and lexical units with no equivalents in Russian. Therefore, sometimes the homework was to search for the information from Russian sources as the judicial system of France is very different from the Russian one. For example, in Russian legal proceedings there are no such notions as "tribunal d'instance", "tribunal de grande instance", "conseil des prud'hommes" and so on.

Midpoint assessment of acquisition of knowledge was carried out in the form of competitions and business games. And often questions for quizzes were invented by the students themselves. When assessing such homework assignments, not only the correct formulation of questions was taken into account, but also their originality, as well as work with additional sources. Periodically, as a homework assignment, students received a video and after watching it they had to answer some questions.

At the beginning and at the end of the experiment the students were estimated according to 5 factors:
1) assessment of professional terminology in a foreign language,
2) ability to understand and analyze professional literature,
3) ability to make comparative analysis of Russian and foreign legal systems,
4) ability to think critically and express the ideas in a foreign language,
5) ability to work in a team and communicate constructively with peers.

The following criteria were used to estimate the results:
5 points – high level of competences, students did the entire task without teacher’s help;
4 points – good level, the consultations with teacher were necessary to complete the task at the final stage;
3 points – satisfactory level, the task was made with the help of some additional information sources and teacher’s guidance;
2 points – low level, the students couldn’t find all the necessary materials themselves;
1 point – very low level, the students couldn’t find and understand all the necessary materials themselves.

The results of the final section of knowledge demonstrated the positive effect of using the technology of the flipped classroom in the experimental group in comparison with control group. For all five criteria, the indicators have improved (Tab.1). Consequently, the quality of education has increased.

Table 1. Comparative results in control and experimental groups

|                  | Control | Experimental |
|------------------|---------|--------------|
| Professional     | 3       | 4            |
| Comparative      | 2       | 3            |
| Critical thinking| 5       | 5            |
| Team work        | 1       | 2            |

4. Summary
The experiment has revealed that the biggest problem of the modern students is the inability and unwillingness to do the homework assignments. It especially concerns those students who had a low level of school trainings.

Some of the students cannot work with scientific literature and are unable to identify the main ideas and to understand the content. At the same time flipped learning methodology supposes the increase of self-education time for students, which leads to high motivation, personal autonomy, consciousness, active participation in the learning process. Students are not always ready to meet such changes and teachers can probably face their tough resistance against the innovations.

Bishop J.L. the professor of Utah University (the USA) and the proponent of flipped learning notes that in an experimental group there are always a few participants who are skeptical about the idea itself and about such changes (Hodkinson, 2015; Mtika and Gates, 2011; Taylor et al., 2006).

We consider that to stimulate the out-of-school work of the students it is necessary to organize the learning process in a different way. Students should realize the utility of the performed work and implement the results into the learning process. In experimental group in the classroom we used the activities which required the preliminary preparations at home: writing thesis for the presentation in class, interview questions, searching for the materials for the group discussions, preparing the task for the role plays or debates.

The major obstacle to the implementing of flipped classroom technology at Russian universities is a large additional work for teachers. To prepare high-quality materials for out-of-class work of students, the instructor must not only process a considerable amount of information, but also organize everything in an appropriate way. Often
teachers do not have sufficient knowledge in the field of application of information technology. If this work is not supported by management, few teachers will agree to radically change their style of work. This requires technical and administrative support and financial costs.

The students of experimental group were supplied with electronic presentations for better perception, structuring and visualizing of the materials to learn. Thus students with lack of necessary knowledge took part in group discussions as they could use the mentioned above presentations on their devices and this was substantial advantage. This involved the additional work for teachers as they had to prepare a set of special tasks with lowe level of difficulty for such students despite the above mentioned problems flipped learning technology in teaching foreign languages showed better results comparing to the traditional education system.

Proceeding from the fact that the quality of education is determined, first of all, by the quality of the knowledge of the teacher, flipped education is an effective method of quality improvement, motivating teachers to professional development, improving working methods, expanding strategies and introducing new educational technologies. The advantage of the method lies in its flexibility and in the ability of each teacher to use in each specific situation the option that best suits his purposes. This is an opportunity to get rid of the traditional sounding of lecture texts and use classroom lessons for creativity, discussion of practical problems and the results of joint projects. The use of active forms of work during classroom time promotes the development of emotional relationships between all participants in the learning process, creates conditions for strengthening the intellectual and creative component of teaching and improving the quality of the educational process. Effectively organized out-of-class work encourages students to independence, initiative, self-discipline and social responsibility.

5. Conclusion

Flipped learning allows increasing gradually the volume and complexity of assignments taking into consideration the level of students and due to information technologies to organize control at each stage of out-of-class work. If to take into account the fact that the information that students need to learn becomes wider, flipped learning becomes an effective way of achieving goals, since with equal quantity of classroom hours, a student, provided he has a high-quality self-guided work, gets much more theoretical information and practical skills. Moreover, students can revise or reread the teaching materials for several times, can work in a convenient schedule, in a comfortable place, can send questions to their teacher. It is necessary to emphasize that implementation of flipped learning technology into the educational process complicates the work of teachers, requires mastering new pedagogical methods, studying the specifics or the specialty of the future graduates, preparing new materials, creating multimedia content but it will lead to improvement of the quality of the education.

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