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FLIPPED TEACHING AS ONE OF EMERGENT EDUCATIONAL METHODOLOGIES

Abstract. This article tackles the issues of Flipped teaching as one of the pedagogical models in which the traditional elements of the lesson taught by the teacher are transmitted outside of the classroom. The authors demonstrate how effective learning activities are applied in this model. The teachers use these activities to develop critical and analytical thinking of the high school students.

On the example of the course “Professionally oriented foreign language” and on one of its themes “Developmental psychology: Different theories of person’s development”, the authors show how traditional activities such as games, reaction sheets, case studies, think-pair-share and class discussions work in Flipped Classroom. In inverted classes teachers and students have more time for creativity. The teacher’s role is to guide the students, define the problems, misunderstandings and solve them immediately. Students find the in-class creative activities challenging but achievable, as they become the center of the learning process.

Keywords: flipped model, gamification, think-pair-share, peer assessment, learning activities.

Introduction. Few years ago, the world faced with a long period of isolation, where teachers were made to switch from traditional forms of teaching to online ones.

Most time the students had to work at home self-studying. The teachers started to use the emergent methods of teaching: gamification, collaborative learning, blended learning, flipped teaching and task-based teaching and learning.

Returning to university classes, the teachers along with traditional methods continued to use flipped teaching to save time for more productive and effective learning activities.

Jonathan Bergmann and Aaron Sams designed this pedagogical model in 2007. Its essence is in recording their educational materials and emailing them to the students who could not attend classes. Later they realized that their materials were used not only by the students who missed classes, but also by the students who wanted to revise the material of the lectures.

As J. Medina has noted that the students lose their concentration after the first 15 minutes of in class lecture, flipping the classroom keep them engaged the whole lesson [1].

J. Hattie considers that flipped classroom helps strong students to work through materials more quickly without waiting for their less gifted fellow students [2].

In their research report, A.D. Beesley and H.S. Aphthorp emphasize the role of instruction during the lesson. The teacher observes, interacts with students,

identifies the problems and misunderstandings and reacts at them immediately, giving their feedback [3].

B.K. Hamre and R.C. Pianta stress the importance of interpersonal interaction during the in-class components of the Flipped Classroom as it helps students achieve better learning outcomes [4].

Though Flipped model demands from the teacher a great investment of time and creativity for preparation, and some passive students find traditional lessons more convenient, the advantages of Flipped Classroom outweigh its shortcomings.

We are going to demonstrate how Flipped model works in our classes of professionally oriented foreign language. We use different learning activities, which proved to be productive and effective for high school students.

Terms and methods of research. Direct observation, questionnaires, review of relevant literature, interviews, assessments/surveys, records & report studies.

Research results.

We presented the results at a meeting of a scientific methodological seminar of “Practical foreign languages” Department and at virtual conference “Transition from Online to F2F Education: Bringing Distance Learning Strategies to the Classroom”, where the authors made a comparative analysis of students’ achievements in groups with and without flipped model.

Under the circumstances connected with the long period of online teaching and learning, some methods that got out of mind emerged again. Blended learning, gamification, task-based teaching and learning, collaborative learning etc. were updated and widely used. Flipped learning is among them as this model is the most appropriate in the mixture of traditional and online learning.

The principle of this approach is in reversing the material traditionally taught at the lesson to home, allowing more time for the students to develop critical thinking skills performing creative tasks in class. According to Bloom’s Taxonomy, at home, the student remembers, understands and applies. In the classroom s/he analyzes, evaluates, and creates.

We started our experiment with the workshop, where we explained the concept of Flipped learning and its main principles as well as the activities appropriate for university students. The teachers of our department got interested, marked the benefits of this strategy and decided to apply it in the teaching process.

However, for maintaining the experimental integrity, we asked our teachers to work in two groups: control group and experimental group. The control group worked traditionally, doing everything in class (reading, vocabulary work, listening, speaking and writing), while the experimental group of teachers used class time efficiently for creative tasks, giving students reading, vocabulary and writing to do at home.

Creative tasks include case studies, class discussions, problem solving, presentations, quizzes and games, project work.

Teachers noted that for general English students more motivating and engaging were quizzes and games. Professionally oriented foreign language students liked discussions, case studies and presentations.

Analyzing the results of the questionnaires, conducted at the end of the course we concluded that teachers of a control group had less time for creative tasks and as the result, the students were less motivated.

The results of the tests and assessment survey demonstrated higher achievements of students from experimental group.

The discussion of research results.

The article deals with the key approaches to flipped teaching through effective activities including case studies, class discussions, quizzes and games. Our aim is to help students to develop not only the language skills, but also analytical, creative and critical thinking skills.

We would like to describe how we implemented flipped classroom model at the professionally oriented foreign language (Psychology) lessons. The theme was “Developmental psychology: Different theories of person’s development”.

Prior to the first lesson of the theme, we gave the students readings about developmental psychology theories. They also watched at home **videos** about Piaget and Sigmund Freud’s theories.

Educational videos, selected according to the topics of the syllabus, are also introduced into the language environment. Students listen to the explanation of the grammatical material and at the same time develop the skills of understanding foreign speech by ear. The visual range allows you to better understand and consolidate both factual information and linguistic features of speech in a specific context. After all, the visual support of the foreign-language sound range helps to more complete and accurate understanding of its meaning. At the same time, visual and auditory memory develops, attention is activated, horizons expand, which contributes to better assimilation of the material, as well as the development and improvement of listening and speaking skills. The duration of the video should last no longer than 15 minutes to be effective.

Game (Time on task: 10-15 minutes. Group size: 3 to 4)

In the class, after the revision of the key terms, students are offered *Nesting Circles* (a game), where were three circles with the names of Jean Piaget, Erik Erikson, Kohlberg. Students chose the psychologist to speak about.

The game serves as an excellent stimulus for work: quizzes, grouping of words, role-plays introduces students to a foreign language environment and promotes learning in a fun way. At the same time, the game teaches students, entertains and challenges them and involves them into active learning process.

Next step was **categorizing**. This kind of work develops students’ critical thinking skills. They were to categorize stages of person’s development according to the theories and then defining the age each stage referred to.

For example, the sensorimotor stage refers to Piaget’s theory of cognitive development and corresponds to age from birth to two, while industry versus inferiority corresponds to stage 4 of Erik Erickson’s socio-psychological development theory. Students worked in teams and were motivated to finish the first.

To make students deeper understand the theories we used reaction sheets.

Reaction Sheets (Time on task: 20-30 minutes. Group size: 4 to 6)

We gave each group of students different developmental theories to describe. Then each group prepared posters where they wrote down their ideas on a theory. After finishing this step, they went to another group’s poster, studied it and added their comments. Next step was connected with analyzing and reviewing additional comments on their poster. Finally, the groups summarized all the comments on their theory for the rest of the class.

Further, after studying each developmental theory in more detail, students were given cases to study, based on Piaget’s theory of cognitive development.

A case study is one of the most beneficial flipped classroom activities for high school students. A teacher gives students cases related to the topic they learned about at home. It is best if the case studies are realistic and relatively short to avoid lesson time being wasted.

Case Study (Time on task: 20-30 minutes. Group size: 3 to 4)

At home, before the lesson, they filled in the table “Stages of cognitive development”, based on the readings about Piaget’s theory. While filling in the table, students learn to systemize the material and concentrate on key concepts.

In class, they discuss short situations and in groups, they decide at which stage of cognitive development the child is. For instance:

Erlan knows that he has a sister, but it would never come to his mind that his sister has a brother. His mother can still trick him into drinking more milk by pouring it into a smaller cup, and telling him, he has less to drink, though he saw her pouring the milk into a smaller cup. It is a Preoperational stage.

Think-Pair-Share technique is often used at our lessons.

It consists of three phases: think phase, pair phase, and share phase. At the first phase, students work on their own to formulate and write down their ideas. Then, they discuss their ideas with a partner. Finally, the teacher asks several pairs to share their ideas with the class before moving to whole class discussion.

The Think-Pair-Share strategy, developed by Frank Lyman, is mainly for differentiating instruction and giving students time to think individually on a given topic. During this period, they have an opportunity to formulate their ideas and then share their ideas with a partner. When pairs brainstorm together, they improve their vocabulary along with speaking and listening skills. This strategy is useful for shy students, because the Think-Pair-Share activity gives them the opportunity to feel more comfortable sharing their thoughts.

Teachers can apply this strategy for brainstorming, concept reviewing, discussion questions, topic development, etc. Students develop conceptual understanding of a topic, filter information, draw conclusions, and learn to respect other points of view.

Think-pair-share (Time on task: 10 to 20 minutes. Group size: 2)

At the final stage of working on the theme “Developmental psychology theories”, students were given the task to watch the film “My Name is Kozha” at home. This film serves as a basic platform for development students’ psychological skills as well as their moral education.

In class, they were to draw a psychological portrait of two main characters Kozha and Sultan. Using their knowledge of the theories, they first defined individually at what stage of psychological development Kozha and Sultan are according to different psychologists. Then they shared their ideas with their partner in pairs and finally, we discussed the issued as a whole class.

Class discussion(Time on task: 10 to 20 minutes. The whole class)

Class discussion is another effective activity that teachers can use within a flipped classroom. With this approach, teachers guide the discussion and students share their different opinions and points of view. After long arguments students came to the conclusion that Kozha, being younger, is morally at a higher stage of development than Sultan.

We would like to show how our students defined Kozha’s development:

The subject is Kozha. According to Erickson, he is at Stage 4: Industry vs. Inferiority and the question he wants to answer is ‘Am I successful or worthless?’ as for Piaget’s cognitive development theory, Kozha is at Stage 3: Concrete operations, Kohlberg would describe the state of his moral development as conventional, because Kozha knows that it is illegal to steal. His grandmother and mothers’ parenting style is not overprotective.

Table 1

Psychological portrait

Subject	Erickson's theory	Piaget's cognitive development theory	Kohlberg's moral development theory	Parents' parenting style	From Erickson's list what problems he is facing
Kozha	Stage 4 Industry vs Inferiority	Stage 3 Concrete operations	Conventional (it's illegal to steal)	Not overprotecting	Am I successful or worthless

As for Sultan, according to Kohlberg's moral development theory, he is at Pre-moral stage, because for him it is Ok to steal, if you are not punished. He wants to know who he is, and his parents' parenting style is overprotective.

Thus, using Flipped-learning model, we saved the time for more creative work at the lessons, where students could analyze, evaluate and create, studying cases, solving problems and drawing psychological portraits.

Conclusion. In this article, we tried to show how we, together with the academic staff of our department, implement Flipped teaching in our classes. During the spring term, we were engaged in the experiment connected with the usage of this educational model. The benefits of this model are evident:

- The students have the ability to review material provided by the teacher at home. They also determine their own learning pace;
- The above-mentioned learning activities help students work on some important life skills: verbal communication, problem-solving, creative and critical thinking skills and the use of technology;
- Flipping the class strengthens team and collaborative work.

Though this approach is time-consuming for the teacher and demands preparation of a great amount of materials, it gives teachers freedom for creative work and instruction.

References

1. Medina, J. (2008). Brain rules: 12 principles for surviving and thriving at work, home, and school. Pear Press.
2. Hattie, J. (2013). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
3. Beesley, A.D., & Apthorp, H.S. (2010). Classroom Instruction that Works: Research Report. McREL.
4. Hamre, B.K. & Pianta, R.C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? ChildDevelopment.

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ИНВЕРТТЕЛГЕН ОҚЫТУ ЖАҢА БІЛІМ БЕРУ ӘДІСТЕМЕЛЕРІНІҢ БІРІ РЕТІНДЕ

Аңдатпа. Бұл мақалада мұғалім өткізетін сабақтың дәстүрлі элементтері сыныптан тыс өткізілетін педагогикалық модельдердің бірі ретінде инверттелген

оқыту мәселелері қарастырылады. Авторлар осы модельде тиімді оқу әрекеті қалай қолданылатын көрсетеді. Оқытушылар бұл сабақтарды студенттердің сыни және аналитикалық ойлауын дамыту үшін пайдаланады.

"Кәсіби бағытталған шет тілі" курсының және оның "даму психологиясы: жеке тұлғаны дамытудың әртүрлі теориялары" тақырыптарының мысалында авторлар Ойындар, жауап парақтары, кейстер, ойлау-талқылау-бөлісу технологиясы және сыныптағы пікірталастар сияқты дәстүрлі іс-шаралар қалай жұмыс істейтінін көрсетеді. Flipped Classroom. Төңкерілген сыныптарда мұғалімдер мен студенттер шығармашылыққа көбірек уақыт бөледі. Мұғалімнің рөлі-студенттерге бағыт беру, проблемаларды, түсінбеушіліктерді анықтау және оларды дереу шешу. Студенттер сыныпта шығармашылық белсенділікті қиын, бірақ қол жетімді деп санайды, өйткені олар оқу процесінің орталығына айналады.

Тірек сөздер: инверттелген модель, гамификация, "ойлан-талқыла-бөліс" технологиясы, өзара бағалау, оқу қызметі.

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ПЕРЕВЕРНУТОЕ ОБУЧЕНИЕ КАК ОДНА ИЗ НОВЫХ ОБРАЗОВАТЕЛЬНЫХ МЕТОДОЛОГИЙ

Аннотация. В данной статье рассматриваются вопросы перевернутого обучения как одной из педагогических моделей, в которой традиционные элементы занятия, проводимого учителем, передаются за пределы класса. Авторы демонстрируют, как эффективная учебная деятельность применяется в этой модели. Преподаватели используют эти занятия для развития критического и аналитического мышления студентов.

На примере курса «Профессионально-ориентированный иностранный язык» и одной из его тем «Психология развития: различные теории развития личности» авторы показывают, как традиционные виды деятельности, такие как игры, листы реагирования, кейсы, технология «думай-обсуждай-делись» и обсуждения в классе работают в Flipped Classroom. В перевернутых классах преподаватели и студенты имеют больше времени для творчества. Роль преподавателя состоит в том, чтобы направлять обучаемых, определять проблемы, недопонимание и немедленно решать их. Студенты находят творческую деятельность в классе сложной, но достижимой, поскольку они становятся центром учебного процесса.

Ключевые слова: перевернутая модель, геймификация, технология «думай-обсуждай-делись», самооценка, учебная деятельность.