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AN ESP FLIPPED CLASSROOM TEACHING MODEL: A STUDY OF CIVIL ENGINEERING STUDENTS AT PRYDNIPROVSKA STATE ACADEMY OF CIVIL ENGINEERING AND ARCHITECTURE

Degtyariova Yuliya, Ph. D. (Pedagogy), Assoc. Prof.; **Levytska Svitlana**, EFL Practitioner; **Sinicina Svitlana**, Ph. D. (Pedagogy)
State Higher Education Institution
"Prydniprovska State Academy of Civil Engineering and Architecture"

Problem statement. An issue of having inactive students in class, time pressure and students' complaints about having too much homework are some of the main challenges that almost every lecturer or practitioner has to deal with on a daily basis. With the advances in online learning, flipped teaching/learning model (FM) has increased in popularity as innovative learning practices for supporting higher education. As a new norm of blended learning and computer-aided learning (CAL), the FM reverses traditional teaching, and reorganizes the teaching time to provide more class time for students to learn, which has facilitated the adoption of innovative approaches in higher education helping to promote collaborative learning and research in online networked learning environments. A flipped classroom model is a flexible pedagogy [1] housed in the blended learning umbrella of online, or e-learning. Flipped Learning can be defined as "a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space" [2], and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. Group space is defined as when students are face to face with their instructor. Individual space is defined as when students are working independently, typically at home. Flipping the class is reforming the way in teaching; the events that have traditionally taken place inside the classroom, now take place outside the classroom and vice versa. The reason why it may be complimented and advocated so much is that after the preparation before class (e.g. watching videos, reading texts), students provide meaningful talk and discussion during class. Besides, the students feel more enjoyable and confident when they are able to lead and control their own learning [2].

This is even more true during COVID-19 restrictive circumstances for tertiary institutions such as universities or colleges, where a wide variety of classroom components, namely lectures, tutorials, or workshops, have been adapted to the global pandemic. Obviously, this completely has changed the educational landscape, which includes not only teaching modes but also individual and collective practices on how to proceed [2; 3]. In planning for the 2020−21 academic year, it was critical to consider certain constraints due to the evolution of the pandemic that has involved measures such as limiting classroom capacity and reducing face-to-face interactions. The restrictions introduced have even led to the suspension of classes and workshops in certain faculties or for specific groups of university students at some point during 2020 and 2021. Regardless of the challenges, it is imperative that university programs continue to provide effective educational services [4].

For English as a foreign language (EFL) with an ultimate goal of language learning through communication, the FM can allow more time for students to learn English during in-class and out-of-class activities. Under the guidance of the instructors, feedback can be given, knowledge exchange or remedial support can be provided for students' meaningful learning during in-class activities [5]. Taking advantage of the FM, students may participate in writing activities and improve their speaking skills through discussion forums and chat rooms. In

addition, FM can make it easier for students to learn grammar rules and structures by providing them with access to different learning resources.

Purpose of the study. As well as learning the students' opinion of the implementation of flipped language learning in Prydniprovska State Academy of Civil Engineering and Architecture, the goals of this study were to research how flipped teaching with computer-aided language learning (CALL) takes place in ESP class and to elaborate on how flipped teaching with CALL affects learner autonomy.

Main results. A group of 18 third year Civil Engineering students enrolled in an English course entitled "English for Specific Purposes" at Prydniprovska State Academy of Civil Engineering and Architecture were selected to experience learning in a flipped classroom. The participants in this study were 8 male and 10 female students, aged between 19 and 21. Almost all these students were upper intermediate (CEFR level B2) learners of English. We adopted a three-stage model proposed by Estes, Ingram and Liu [5] to flip the classroom: the pre-class (modeling, pre-assessment), in-class (clarifying concepts, solving problems) and post-class (assessment, application, transfer) stages.

Pre-class sessions aim to help students explore knowledge through educational technology. Constructing knowledge or learning the new content was done at home before the in-class session. Students were required to watch instructional video clips and answer questions or do short quizzes about the content in Google classroom which was employed as an online platform for learning. These clips taught about grammatical structures, vocabulary and language usage.

At in-class stage, class time was spent more on activities. Group activities increased peer interaction, focusing more intensely on higher cognitive and group-based learning including small group discussion, problem solving, interview, role-play and peer review on writing tasks.

The post-class stage aimed to provide students with opportunities to apply what they had learned including exercises, games, and quizzes in writing assignments. Additionally, they were required to evaluate their learning performance on tasks, assignments, and activities.

The students were asked to rate how much they benefitted from the flipped classroom on 10 items in a form of five-rating scales. The findings revealed that all items were rated at high levels. The three items with highest mean scores included being more responsible (mean = 4.34), becoming more engaged with the activities (mean = 4.18), and increasing motivation to learn English (mean = 4.23), and becoming active learners. The average perception of learner autonomy also increased from 3.28 to 4.31, which means the learning process of flipping the classroom had an impact on their autonomy perceptions. This is probably because the flipped classroom allows for more independence in learning than the traditional classroom. The knowledge is not only the main goal to reach, but how to learn is another important thing they should know. They had more chances to manage their own learning. It can be concluded that students agreed to have more responsibility for independent learning.

Conclusion. FM can result in large learning achievements and a positive self-change in enhancing students' performance in learning. The findings indicated a positive feedback towards the implementation of flipped ESP model among these Civil Engineering students and could be implemented in all learning subjects as it is aligned with netizen needs and favours. Thus, educators have to plan and face the challenges that emerge along the process of teaching and learning such as well-planned activities for the three stages; before, during, and after the flipped classroom to facilitate students' motivation and maximize their learning outcomes. The findings continue to illustrate how students build critical thinking skills and increases focus on high order thinking skills (blooms taxonomy). When respondents invest

efforts in their learning, they are motivated to succeed and are engaged in the process. This will make the students to be more accountable and responsible for their own learning.

References

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