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## ASSESSMENT TECHNIQUES FOR THE FLIPPED CLASSROOM

The tech-driven 21st century is characterized by the intensive development of information and communication technology (ICT). Therefore, the effectiveness of the

educational process depends greatly on the information component and requires the modernization of higher education. In addition, there is a transition from the traditional paradigm of education to the humanitarian one, with the student in the center able not only to acquire "ready knowledge", but also "to discover it" [1, p. 33]. The target group of the higher education system are the representatives of the digital generation, or "generation *Z*", that requires creating new conditions for organizing information and learning environment. By implementing the flipped classroom, students have the opportunity to study theoretical material on their own, and to perform interactive tasks in the classroom that are aimed at developing competencies.

Despite the attempts to implement the flipped classroom and the availability of various online courses, the problem of effective assessment of students remains topical and requires detailed study.

The assessment of achievements is an integral part of the educational process. It is interpreted as "systematic collection and interpretation of facts, followed by the next stage – judgments about their value and appropriate planning for further actions" [2, p. 45]. Foreign and Ukrainian scientists distinguish three basic types of assessment: diagnostic assessment, formative assessment (in-process evaluation of students' comprehension, learning needs, and academic progress during a class or a course) and summative assessment (evaluation of students' progress or academic achievements).

Diagnostic assessment is usually performed at the outset of a particular discipline or at the beginning of the academic year in order to identify students' knowledge, skills and abilities in a particular discipline and reveal any gaps in knowledge. This type of the control serves as a tool to identify problems, and the purpose of such assessment is to collect information.

Formative assessment is an interactive assessment that is implemented through a long process, the purpose of which is to adjust the student's learning progress through critical remarks and pieces of advice in a verbal form (written response, oral comment, analysis of the students' activities in a dialogue with them) [3, p. 26]. Such assessment is performed during the study of a particular discipline/ course through constant monitoring and use of feedback between the teacher and the student. B. Cowie and B. Bell [4, p. 101]

consider formative assessment as "a two-way process between the teacher and the student to optimize learning", highlighting the aspect of cooperation, and B. Black considers it as "the activities of the teacher and the student which provide information that can be used as feedback to correlate the learning process" [5, p. 7], emphasizing the importance of the teacher's response to students' requests while learning. Thus, formative assessment is the feedback for students, which allows them to understand what measures should be taken to improve their results.

Summative assessment takes place after studying the discipline or at the end of the course, unit, module, etc. It is used to evaluate learning and is generally associated with grades, points, or percentages. The main purpose of such an assessment is to determine the level of students' progress and build a further strategy to correct their knowledge or generalize it. The examples of such assessment are writing a final written test at the end of a topic or discipline, writing a module test at the end of a module, creating a project, etc. If the purpose of formative assessment is to improve quality, then the purpose of summative assessment is to assess quality.

We support M. Kolozup's point of view that both diagnostic and summative assessments set the boundary of a certain stage of training, and the results are represented in the form of a grade, point or rating. At the same time, the critical response, which students receive while performing a communicative task is a typical example of formative assessment [3, p. 26].

In the flipped classroom, one can identify such types of assessment by its participants:

- the teacher evaluates the individual work of students;
- the teacher evaluates group work (e.g., a joint project);
- students' self-assessment of their activities;
- peer assessment.

Students' self-assessment of their activities and peer assessment increase their independence, responsibility and promote the development of social skills. However, it should be noted that at the initial stage, the teacher should give recommendations for such an assessment.

The flipped classroom is based on a student-centered approach. To support this approach in teaching and learning, the system of assessment has to be student-centered as well. In this case, we consider assessment as a constant process, but not just counting points after the topic is completed. The methods used in traditional assessment usually compare students with each other, creating the competition between them. In contrast, the purpose of assessment in a student-centered approach is to monitor the student's development in comparison with themselves and their previous level, determining their progress in learning. This assessment allows students to demonstrate whether they have achieved the planned learning outcomes.

The flipped classroom provides more opportunities for the interaction of the students with the teacher as well as the interaction among students. Mobile applications and online services (e.g., Kahoot, quizizz) are very useful tools to support this interaction in the form of a quiz to determine students' comprehension or a questionnaire to collect students' opinions on a particular issue. However, when talking about assessment, not only tests should be considered but also discussions with students while learning because they help to obtain a lot of information.

The purpose of so-called "developmental assessment" is to develop higher-order thinking skills by engaging students in learning. This method of assessment is not only about assessing students' works, but also a way to improve the competencies needed to teach them to learn. The teacher should assist in students' identifying their own weaknesses, planning further steps and taking responsibility for their implementation. Meanwhile, the teacher makes all the necessary changes, correcting and supplementing the learning process.

The following forms of assessment of student-centered learning are used in the flipped classroom: self-assessment (e.g., mind maps, checklists); evaluation by classmates, members of one team); evaluation of the project work, portfolio; articles, research. Such assessment is aimed at improving the quality of learning.

Checklists are used for comprehension check of the material that has been studied. Checklists can be created for your own purposes. It is also advisable to share them with students before the work so that they can see which aspects will be assessed and who will evaluate. Different types of assessment can be used simultaneously, as it can be useful to compare and discuss self-assessment with the assessment by the teacher or peers.

Checking the learning material can be carried out in the form of questionnaires, quizzes, created by means of web applications. They will involve even those students who are inactive when using other forms. The feedback is obtained from the whole group at the same time, so the teacher can clearly see how students have mastered the material and if it needs revising or more details. As it was mentioned above, Kahoot! is a great tool for making a quiz. In addition, online questionnaires and tests can be created using Google Forms, allowing the teacher to evaluate students' knowledge easily and get useful information about the effectiveness of learning.

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