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(IN)FORMATIVE ASSESSMENT TECHNIQUES IN BLENDED AND E-LEARNING ENVIRONMENTS

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Abstract: *The paper analyses the role of formative, constructive assessment techniques in higher education taking into account the teaching-learning process in the context of the blended and e-learning environments. It also considers the strong relationship between universities and the competitive job market due to the fact that all the beneficiaries of the education system need to be aware of what skills and competences are built and evaluated in higher education and how assessment is conducted in order to obtain relevant results. In this respect, assessment is viewed both as formative and informative. The case study presents some formative techniques that have been applied in a Business Communication course to assess students' skills when communicating for business purposes.*

Keywords: *formative assessment, blended/ e-learning, higher education*

I. DEFINING (IN)FORMATIVE ASSESSMENT

Assessment has traditionally revolved around the students' individual capacity to pass or fail a standard test that was meant to give everybody the same chance to prove that they acquired certain knowledge. Most teachers, trainers and educators used to consider it a means to end a course and not necessarily to start a new one, although the concept of "lifelong learning" has been circulated in literature for a long time. Due to the fact that e-learning captured a lot of attention in the 1990s, teachers began to re-examine key concepts such as teaching and learning, thus reaching the conclusion that assessment played a part that was too important to be left aside. At the beginning of the 21st century, blended learning seemed to be a more useful concept, as it combined face-to-face interactions with "the appropriate use of technology" [1]. However, this broad definition of the concept has been considered "somewhat loose", as it is possible to "be applied to any course involving a bricks and mortar classroom where technology is employed" [2]. That is why researchers and theoreticians have been searching for new concepts that can be included in the definitions of the online and blended learning environments in order to make them more specific. Formative assessment proved to be a concept that functions well within e-learning and blended learning environments, taking various shapes which are identified and analyzed in the present paper. In fact, operative *online formative assessment* has become one of the essential elements in the developments of learner-centered communities which are further linked to a real working environment where students may apply the acquired skills or knowledge. Thus, a hands-on approach to ongoing and reliable formative assessment is necessary.

Paul Black and Dylan Wiliam provide a definition of formative assessment which has been used extensively since 1998 when they published their study: "the term 'assessment' refers to all those activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are

engaged” [3]. The goal of this type of assessment is to discover, determine and appreciate correctly instead of marking and reporting which is the goal of summative assessment. It is focused more on students as they are the main beneficiaries of the higher education system and the knowledge and skills they acquire are part of the lifelong learning process, especially since information society changes and makes discoveries at a rapid pace.

Technology has had a major impact on assessment. In blended and e-learning environments, assessment take less time, and it can be used for student learning, for university evaluations or for improvement in various other areas. As Black and Wiliam underline “for assessment to function formatively, the results have to be used to adjust teaching and learning” [4]. We could also add that it can be used to adjust the learning environment so that it simulates the future working environment of the students who are prospective employees.

Thus, the notion of *informative assessment* arises and it is strongly related to all the beneficiaries of the education system: students, teachers and the future employers. Assessment becomes informative when all the involved parties are aware of the skills and competences which are built and evaluated in higher education. At the same time they are understand how assessment is conducted in order to obtain relevant results that can be used for feedback and stored. In an ideal environment, the results of informative assessments can be accessed even when students are employed so that training courses should meet their needs and not repeat what they have already acquired.

The role of informative assessment may become increasingly significant if we take into consideration the fierce competition for jobs with good career prospects. Technology could be used to provide employers with the results of formative and informative assessments.

1.1. Types of (in)formative assessment techniques

(In)Formative assessment is conducted by the teacher, by the individual and by peers. It offers continuous feedback and it can be used for grading, although, most of the times, summative assessment is regarded as being more suitable for this type of activity.

Some of the tools used to provide students with real-time feedback are: e-portfolios, discussion forums, one-to-one discussions with students, self-tests, one-minute essays, debriefing or one-sentence summaries, simulations. They can all be used to understand the students’ level of prior knowledge or skills and to continue improving the students’ skills based on that feedback. Comments from the teacher or from the student need to be recorded, so most of the activities listed may become time-consuming. However, as Douglas Wren observes “many teachers found that the process of composing comments caused them to think as well; they began reassessing assignments and modified activities to eliminate tasks that did not involve higher-order thinking” [5].

All the activities mentioned can be used in online and blended environments as they focus on specific goals. For example, on-to-one discussions allow students and teachers to check the level of understanding a concept and ask for clarifications. One-minute essays and one-sentence summaries students have the opportunity to meditate on concepts, to make connections with pervious acquired knowledge and to note down questions. E-portfolios are the extensively used in e-learning and blended environments, due to the fact that they are easily stored and accessed by students and teachers and are used for future reference. If they are well-designed, e-portfolios include relevant students’ work with teachers’ comments and students’ feedback. They are records of how students’ progress and may even contain information on how they would be interested to continue to develop on the received feedback. In addition, they can be related to self-testing: students analyze their own learning strategies, the needs and expectations and they also define their targets and, finally, list their achievements.

Peer assessment may “enter the assignment in the form of both intra-group and inter-group assessment” [6]. As Derek Stimel suggests “the intra-group peer assessment” implies that each student reflects on how the group has worked together and how the individual performance has become part of the group. The inter-group peer assessment involves students scoring and commenting on the other groups. Due to the fact that this type of assessment is common practice in real working environments, it is practical to introduce it, especially in higher education, so that they become accustomed to assessing team members. “This requires learners to develop an understanding of the performance

criteria and standards, and helping them do so is a crucial aspect of formative assessment. That is, learners should know what aspects of performance should be assessed (criteria) and what constitutes poor, average, good or excellent performance on those aspects” [7].

1.2. Use of informative assessment techniques in higher education in Romania

Some of the listed techniques of formative and informative assessment have already been put into practice in the higher education system, in Romania and abroad. Obviously, the main step, although not necessarily the least difficult, was to have the assessment online. Once teachers and students become familiar with the technology involved, this allowed automate scoring, making comments, tracking mistakes and sending feedback. Reference materials are also available online and there are courses that can be accessed on the Internet.

Nevertheless, students’ assessment of the learning environment, of their own learning strategies and of the teachers ability to provide clear guidance and feedback is far from happening in many universities in Romania. Most teachers are reluctant to introducing peer-assessment as part of a formative assessment used for grading, and the most common explanation is that the ethical code of the university forbids it. Yet, it is a widely used technique in universities all over the world, especially since it is followed by practice in a working environment.

II. INFORMATIVE ASSESSMENT IN A SIMULATED ENVIRONMENT

The second chapter focuses on a Business Communication course that I have been teaching for two years to university students and on the formative and informative assessment techniques that I have managed to integrate. They are part of the final mark that students receive at the end of the course.

Due to the fact that tertiary students are more attracted to courses that provide information through real-life situations or a combination of circumstances that they are likely to encounter in their future jobs, the most appealing technique is that of simulation in a blended learning environment. Thus, twenty students were divided in two groups working in a simulated enterprise in different departments. They were given the possibility to choose the department and a head of department in a face-to-face meeting, and the rest of the decisions were taken in their online discussions or in their e-correspondence. The teacher assisted the face-to-face meeting, and had access to their discussion forums in order to provide feedback when necessary or to offer guidelines to those who were not familiar to the use of technology. Surprisingly, the students preferred to use e-mails more than discussion forums, in order to improve their written communication skills, so the teacher had access to their e-mail exchanges and made suggestions both on their use of the English language and on their business skills. The simulated enterprise had an Accounts Department, an Advertising Department, a Human Resources department and a Logistics Department. Students were allowed to find a tutor outside the course (a member of the teaching staff), they had access to all the materials on-line and, more importantly, they had the opportunity to meet an accountant, a Human Resources Manager, and members of the Logistics Department and Advertising Department from real companies who could help them achieve the task they were given in the first place. They were asked to make the virtual enterprise work as a team, to identify weaknesses and threats and to define the opportunities and strengths in the S.W.O.T. analysis at the end of the course.

After four months spent in this virtual enterprise, the majority of the students agreed that they managed to build a community based on shared goals and commitment, similar to a real working environment. They were not worried about assessment, as they all had feedback on their actions. However, they were anxious to see what peer-assessment meant, as they had not done it before. Students were asked to comment on different members of the teams, to assess the others’ behavior and also their own ability to respond to pressure and to meeting deadlines. They were also asked to identify aspects they would have changed if they had been leaders. Finally, both the students and the teacher wrote a one-sentence summary for the whole course that was shared with everybody else.

Unfortunately, it was not possible to include peer-assessment into the final mark, due to outside factors that I have already mentioned. The advantage noticed by students is that the results obtained are still available on the Internet, together with their work and teacher's and fellow students' feedback.

III. CONCLUSIONS

The techniques used in formative assessment are meant to enhance student learning in tertiary education. Feedback is an essential element, regardless of the technique. It is compulsory to have feedback from the teacher, from the students, and, if possible, from a person actively working in the field, so that the process of teaching and learning may be connected to the job market. Blended and e-learning environments provide the opportunity to have instant feedback and to have access to the experiences within a virtual community years after they have taken place.

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