OPTIMIZING EVALUATION PRACTICES THROUGH RECONSIDERATION OF STUDENT ASSESSMENT STRATEGIES IN THE HYBRID UNIVERSITY ENVIRONMENT

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Abstract: *The theoretical foundation of the research problem highlights both a series of choices and priorities of university trainers regarding the adoption of authentic assessing strategies enriched in the virtual environment, as well as certain limits, difficulties and costs entailed by computerized testing, some applications and electronic platforms, testing of new face-to-face assessment tools etc. The aim of the research was to identify those assessing strategies used by university trainers in the virtual environment, which have proven their effectiveness in the online assessment of students and which have been maintained and enriched to be applied in hybrid university training alongside other modern*

assessment techniques and tools. The research questions that guided the entire study were: What evaluative strategies did university trainers adopt in the virtual environment? What were the most effective assessment strategies adopted according to the specifics of the discipline, assessment objectives and competencies? How were hybrid assessment practices optimized by adopting the new distance assessment strategies? What preferences did students have in hybrid assessment? What advantages and disadvantages are highlighted in adopting such assessment practices? The research methodology brought together qualitative and quantitative research methods, techniques and tools. Main findings describe the particularities of the assessment at the end of the hybrid trainings, the specifics of the design of synchronous and asynchronous student evaluation tasks, the customization of assessment platforms used in electronic evaluation, the adoption of new assessment methods and the improvement of face-to-face assessment techniques and tools.

Keywords: *digital assessment; evaluative strategies; digital assessment competence; assessment methods and tools.*

I. INTRODUCTION

Post-Covid paradigm shifts in university education regarding the integration of digital tools into the teaching process in higher education have led teachers to new training experiences and, at the same time, to the adoption of flexible forms of teaching, learning and evaluation. An important task of teachers in terms of experiences in university education is the curricular integration of IT resources that innovate evaluative strategies (Romero-Ariza, Abril, Quesada, 2017).

In the research report '*The future of assessment: Five Principles, Five targets for 2025*', experts argue that universities should use digital technology to turn assessment into a genuine learning tool by establishing and following five guiding principles: authentic, accessible, appropriately automated, continuous and secure assessment (JISC, 2020). Technology can more easily capture learning evidence, provide formative feedback and record learning progress. At the same time, British experts believe that the annual summative assessment could be replaced by the on-demand assessment, through which the students can demonstrate their learning when they feel ready. Some researchers are optimistic about the possibilities offered by a

combination of artificial intelligence and the generous offer of learning to transform the way we evaluate learning. So artificial intelligence could be used to provide students with a personal learning assistant and help with professional development. British Professor Rose Luckin believes that artificial intelligence will be able in the near future not only to guide the students through the content to be learned but to help evecn understand the process of learning as such, the stages taken in learning and the motivation underlying learning (JISC, 2020).

Senge (2016) stresses the importance of assessments meant to beome part of learning, not those assessments used for criticism, ranking and certification. Assessment as part of the learning process supports autonomous and self-regulated learning, students can set clear goals based on evaluative data and monitor their own progress. Formative, learning-oriented assessment provide teachers important data on the entire learning and development process of students. The studies of Black and William (1998), Boud and Falchikov (2006) highlight the inclusive dimension of assessment, to orient students towards reaching their maximum potential in learning.

Siemens and its collaborators (2015) draw attention to the fact that students achieve better academic results in blended learning environments compared to online or face-to-face environments. Several studies on blended learning indicate the need for innovation in the design and implementation of teaching and assessment strategies. Researcher Cao (2023) draws the attention of teachers to take into account the needs of students and the characteristics of the learning environment when implementing the blended learning system.

Formative evaluative processes are designed to make students more aware of their level of competence, the way they solve tasks, their own strengths to strengthen them, as well as weaknesses to correct and improve them. This process of self-regulation is essential to shape students' lifelong learning skills. Formative assessment, oriented towards learning, is a complex process that requires active participation and involvement from students, and from teachers, resources and didactic skills that favour this process.

Feedback is a central element on which continuous forms of assessment are based. Hattie (2014) starts from the premise that teachers are aware of the importance of feedback and explains the importance of feedback provided by them in relation to the 3 levels: task, process and self-regulation. The most common type of feedback is the one offered at the level of the task called 'corrective feedback or feedback of knowledge of results' (p. 242), being given either through the questions of the teachers, or through the request for new, additional or different information, or through the observations made on the topic.

The second level is 'feedback on the methods used to achieve the result or complete the task. It can lead to offering alternative approaches, reducing cognitive tasks, supporting the development of learning strategies and identifying mistakes, providing clues for a more efficient information search, recognizing the relationship between ideas, and using task-centred approach'. (p. 244). The third level is focused on self-regulation or monitoring by the learner of their own learning process, and 'feed-back at this level can improve students' skills in self-assessment, provide greater confidence for further involvement in the task, support the student in requesting and accepting the feed-back, and increase their willingness to put effort into seeking and using the feed-back information'. (p. 245).

We strongly agree with Professor Cucoș C. (2021) on the idea that that 'the assessment problem must invite a responsible, multi-referential, multi-dimensional approach', since it was 'sometimes reduced to a formal and stereotypical procedure for processing individual assessments based on a normative reference system, agreed at system or institution level'. (p. 334) The authors of this study are interested in the operational decisions of the teachers in the Romanian academic environment regarding the assessment of the students, the forms and types of assessment adopted by them, the methods, techniques and tools for assessing the performance of learning used by teachers both face-to-face and/or at a distance, their coherence in relation to predetermined outcomes, the manner in which the results of the assessments are capitalized in the new learning processes.

II. RESEARCH METHODOLOGY

The research took the form of a fact-finding investigation, the aim of the research being that of identifying those assessing strategies used by university trainers in the virtual environment, which have proven their effectiveness in the online assessment of students and which have been maintained and enriched to be applied in hybrid university training alongside other modern assessment techniques and tools.

The objectives of the research:

O1. Aimed at highlighting the particularities of designing evaluative situations in the virtual environment, the assessment methods and tools used by university trainers in hybrid training, their adequacy with the assessment objectives and the targeted competencies.

O2. At the same time, the students' opinions were polled regarding the assessment strategies adopted by their trainers in the hybrid training in terms of advantages, disadvantages, the consonance of the methods and assessment tools applied with the specific competencies targeted by

completing some university subjects from the initial training plan of future teachers for primary and preschool education.

The participants in the research were 33 teachers from 6 university centres in Romania and 226 students from the University of Pitești (future teachers for primary and preschool education).

The research data was collected and measured through the survey on the basis of questionnaires. 2 questionnaires in format *Google Forms* were built by the authors. The questionnaires were applied electronically and the completion was voluntary. The study period was May-June 2023.

III. RESULTS AND DISCUSSIONS

The surveyed teachers (84.8%) state that they have been using distance assessment strategies since the Covid-19 pandemic and consider the most effective strategies for assessing the student learning outcomes that they have maintained at the present time (fig.1.) are: e-portfolio (45.5%), project-based assessment (42.4%) and hybrid assessment (30.3%). E-portfolios are valued as a powerful tool for feedback and assessment in teaching, as they help teachers track the learning process and foster students' lifelong self-regulation, metacognition and learning skills.
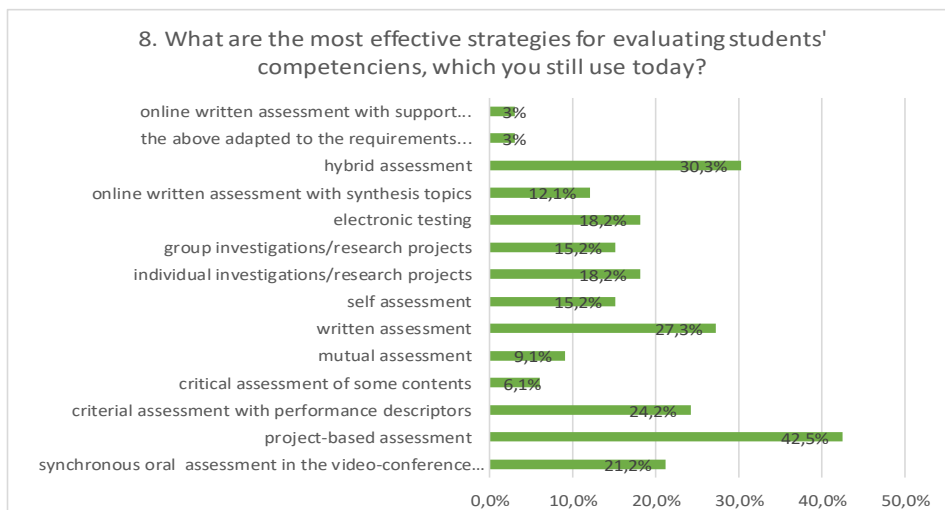

Figure. 1 The most effective assessment strategies adopted by the teachers participating in the study

The teachers participating in the study were also asked what changes they brought/would bring to improve the evaluative practices of the students (fig. 2). They mentioned that the evaluative practices of the students have changed by adopting those pedagogical strategies of

combining those methods, techniques and tools specific to distance assessment with those of face-to-face assessment, in relation to the pre-determined goals of each teacher, with the moments chosen for evaluation and with the frequency of use. The main changes regarding the evaluative practices of post-Covid students mentioned by the teachers participating in the study are the following: the use of the e-portfolio (48.5%), the creation of electronic tests on the University platform (42.4%) and the encouragement of mutual assessment of students (39.4%), followed by:
- 36,4 % use of Google tools in assessment;
- 24.2 % % introduction of reflection tools (electronic journal, KWL, etc.);
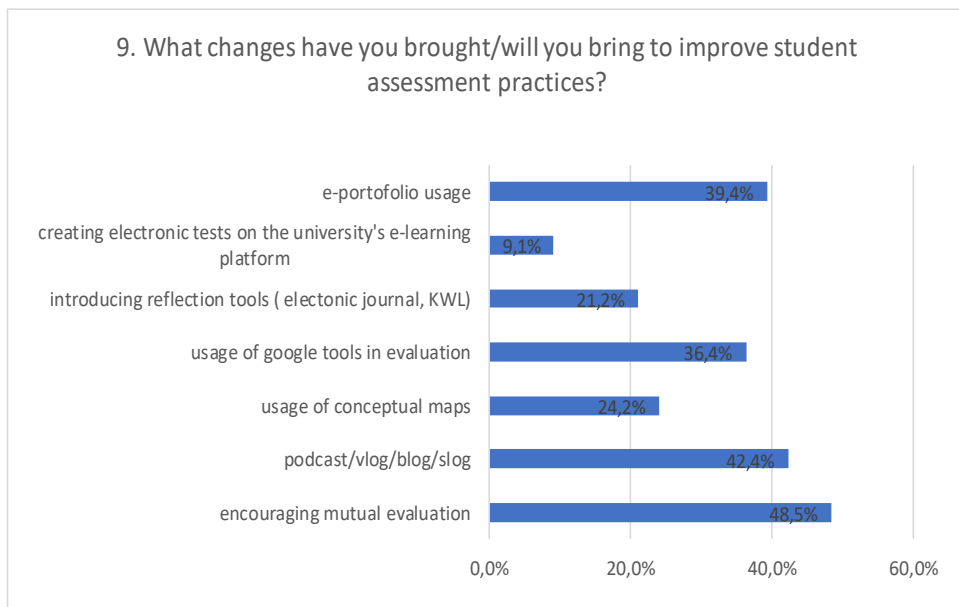- 21,2 % use of electronic concept maps;
- 9.1 % podcast/vlog/blog/slog.

Figure. 2 Types of changes adopted/proposed by teachers to improve student assessments

In the opinion of the respondent teachers, the main advantages (fig.3) of the adoption of hybrid evaluative strategies are primarily the possibility to provide quick, personalized, constructive feedback (66.7%), but also the transparency of assessment criteria and procedures (48.5%), material resources saved (48.5%) „the possibility to easily store the evaluation evidence (48.5%)", digital skills development (48.5%), time saved (45.5%), automatic correction and fast ranking (39.4%), formative capitalization of the feedback received

(33.3%), followed by the advantages of audio-video recording of the assessment and the possibility of simulation of electronic testing.
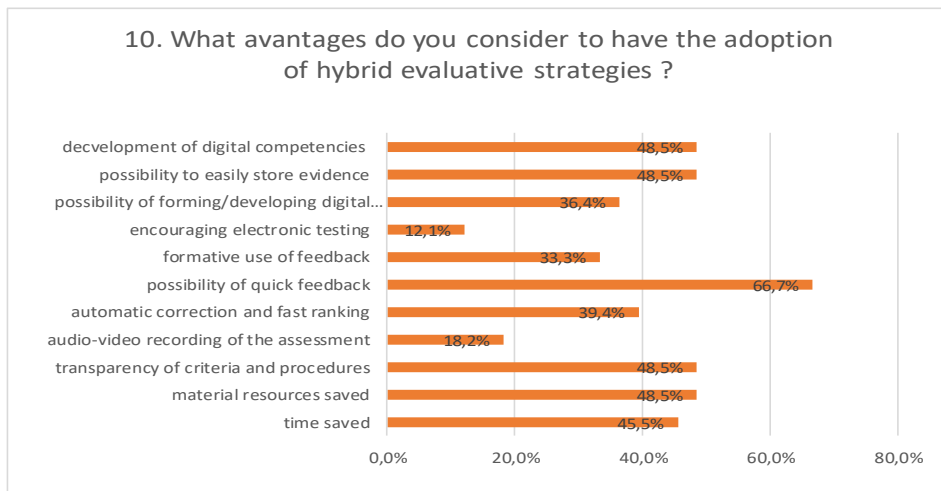

Figure.3. The main advantages of adopting hybrid evaluative strategies

Among the disadvantages, the respondent teachers identify primarily technical problems (78.8%) that may occur in the distance assessment, but also the risk of exam fraud (72.7%), psychological stress (18.2%) and even cyber-bulling (12.1%).
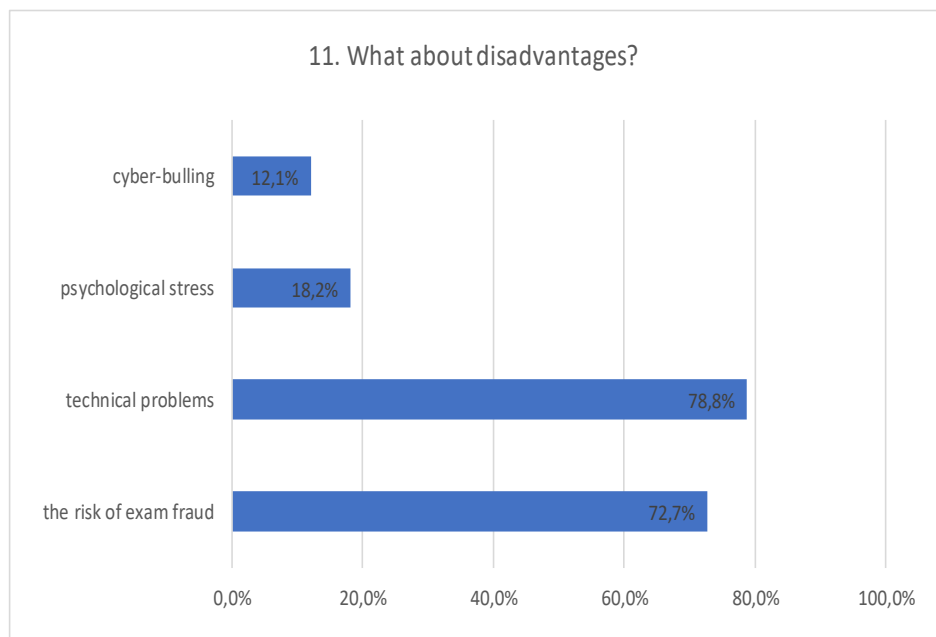

Figure.4. The main disadvantages of adopting distance evaluative strategies

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Regarding the knowledge of students' preferences in assessment (fig.5), the teachers participating in the study mentioned that most of the students (72.7%) prefer to be assessed based on the e-portfolio (33.3%), other students prefer to present orally individual or group project (33.3%), and other students express their preference for electronic testing (33.3%). The arguments are given by the students themselves when asked '*Why do you prefer the strategies you chose? Argue briefly!*'

On the project-based oral assessment, the arguments of the students participating in the study were as follows: '*they can see everyone's work, and the teacher can also ask additional, clarifying questions; develop communication skills and teamwork; involvement is greater in the learning process having the opportunity to analyse, research and discover the knowledge ourselves, to form ourselves some skills of intellectual work and not only; involves creativity, synthesis capacity and individual contribution; teaches you to learn and trains you.*

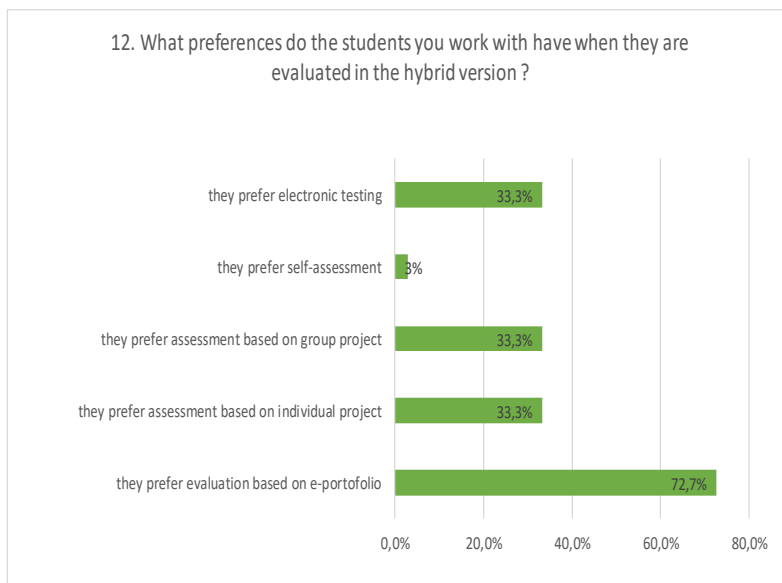On electronic testing, students argue that it '*helps in self-assessment and allows managing emotions more easily*'.

Figure. 5. Student preferences for different assessment strategies

Students were asked which assessment strategies they most prefer for obtaining valuable feedback, understanding the importance of assessment for improving learning and acquiring skills. 30.1% of the respondent students mention as preferred evaluative strategies are

written assessment, e-portfolio (20.4%) and assessment based on individual project, which leads us to the conclusion that these strategies are often used by their teachers depending on the specifics of the respective academic subjects, the objectives and competences of the assessment and are well known by the students. From these student preferences, teachers can go into analysis and debate to improve academic assessment practices.
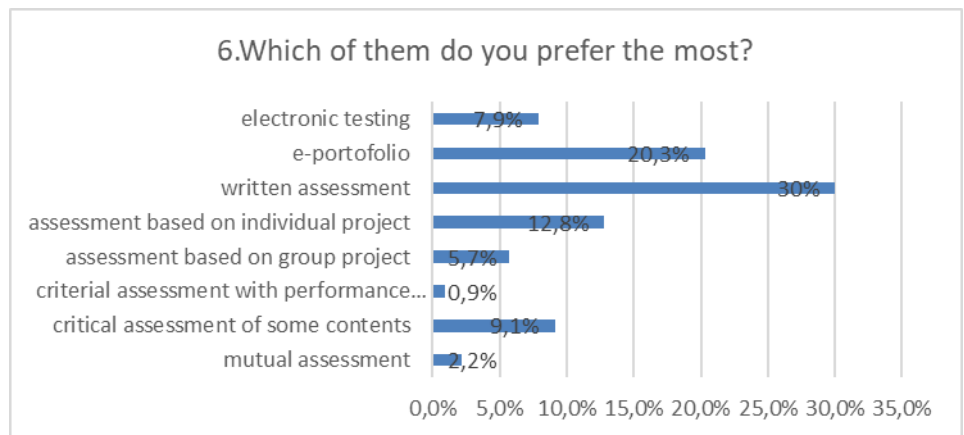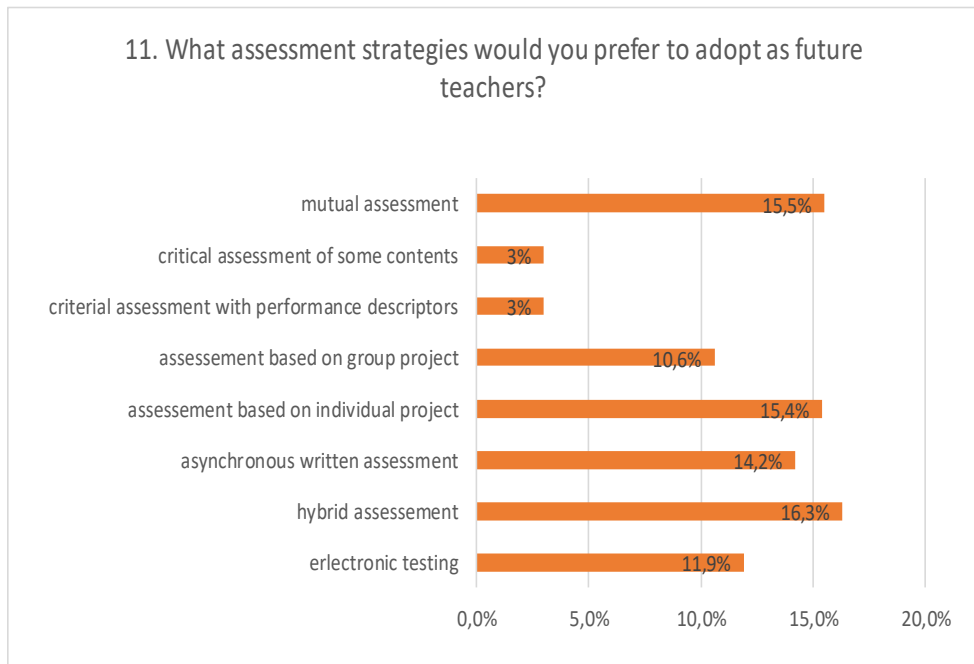

Figure.6. Assessment strategies preferred by students-future teachers

At the same time, the students were also asked what assessment strategies would they prefer as future teachers (fig. 8). It is interesting that 16.4% of the respondent students mention the critical assessment of some contents, followed by the assessment based on individual project (15.5%) and the criterial assessment with performance descriptors (11.5%), which leads us to the conclusion that only the project-based assessment is the strategy valued after the completion of academic studies and considered effective to be applied in the classroom as future teachers along with other assessment strategies that carefully, objectively and constantly monitor learning outcomes.

11. What assessment strategies would you prefer to adopt as future teachers?

Category	Value
mutual assessment	15,5%
critical assessment of some contents	3%
criterial assessment with performance descriptors	3%
assessement based on group project	10,6%
assessement based on individual project	15,4%
asynchronous written assessment	14,2%
hybrid assessement	16,3%
erlectronic testing	11,9%

Regarding the knowledge of the assessment criteria (fig.7), 47.8% of students mention that to a large extent they were presented to them by teachers, only 14.2% mentioned that they know them to some extent, which leads us to the conclusion that there are teachers who do not insist on explaining the assessment criteria as there are also students who do not attach much importance to the assessment criteria in the study of a subject.
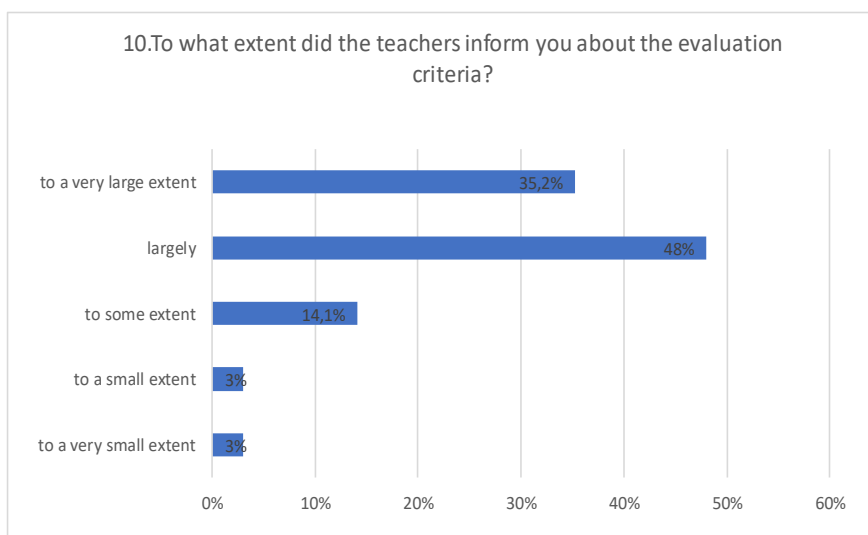
10.To what extent did the teachers inform you about the evaluation criteria?

Category	Value
to a very large extent	35,2%
largely	48%
to some extent	14,1%
to a small extent	3%
to a very small extent	3%

Figure.7. Share of briefings on assessment criteria

IV. CONCLUSIONS

In order to capture the most comprehensive picture of the performance and progress of the students participating in the study, respondent teachers design and apply effective assessment strategies both face-to-face and at a distance, using a variety of assessment methods, techniques and tools. Electronic assessments, although they were a great challenge for most teachers during the Covid-19 pandemic, are still used today for efficiency, objectivity, inclusiveness, authenticity and validity through which quality requirements are ensured in the assessment. Electronic testing although at first it proved difficult and even generated problems such as academic honesty, plagiarism, fairness is still practiced today in some academic subjects, even if only for simulations or in continuous assessments.

Several students mentioned some barriers in distance assessment, related to: lack of a performing device for using the necessary platforms and applications, lack of internet connection, lack of access to the necessary software and applications, but also lack of digital skills necessary to use these platforms. Therefore, the complexity of course design, technical difficulties and increased objectivity of assessment, problems of internet connectivity or low digital skills still remain obstacles for teachers to pass. It is essential that universities ensure that students have all the equipment and conditions necessary for assessment also at distance, not just face-to-face. Students felt the lack of feedback from teachers on the implementation of the projects, which were subsequently subject to assessment.

For quantitative and qualitative monitoring of the teaching activities carried out, with automated display of the results and to monitor the level of understanding of the learning contents by students, for constant feedback and to be able to resume certain aspects less understood by the majority of students teachers and students prefer online formative assessment tools, continue.

Optimising assessment practices in academic environment involves a well-planned approach to ensure that the assessment process is efficient, fair and relevant to the academic context. The clear communication of expectations and evaluation criteria to all students is essential, as well as the exchange of best practices between teachers for the constant improvement of the assessment process. The following conclusions are drawn from the study:

The successful integration of technology into the academic teaching process and the adoption of complex and varied assessment tools leading to long-term learning must be an objective assumed by each teacher to develop critical thinking, metacognition and autonomy and responsibility skills of students;

The need for a greater focus on authentic, formative, systematic and analytical assessment, adapted to the educational needs of students, which would actively involve them in the evaluative processes and contribute to the formation of their capacity for self-regulation of learning and the improvement of their professional competences;

Refining progress-oriented formative assessment practices to produce learning, in which learning and assessment are built together, in a coherent manner, where formative feedback is a priority;

Encouraging peer evaluations to provide opportunities for students to learn from each other, interact and understand assessment criteria and standards, use them in peer assessments, and provide real feedback to peers;

Greater encouragement of self-assessment practices, reflective processes following self-assessments and assessments conducted in varied contexts, including hybrid, to develop students' critical thinking, value judgments and drive the improvement of sustainable learning.

The need for increased engagement of students in metacognitive processes, which include self-monitoring and self-assessment to enhance reflection and self-regulation of learning.

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