

Embedded assessment in Higher Education: a case study

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1. INTRODUCTION

Research on assessment shows that forms of assessment are evolving and have different purposes, including assessment of, for and as learning. Assessment should be seen as a strategic process through which university students can actively improve their learning, rather than a standardized practice through which teachers merely verify and measure the knowledge that students have learned at the end of the course [1]. Therefore, in order for students to play an active role in the assessment process, there is a need to rethink assessment methods and practices by evaluating the role and use of feedback in the learning process [2]. Promoting the active role of students in the construction of the competences, required in a lifelong learning perspective, is taken into account in the "sustainable assessment" approach [3,4]. While research proposes the need to move towards sustainable assessment, the real willingness of secondary teachers to activate the pathways in this direction is very difficult to achieve. Particularly, in the Italian context [5], the difficulty lies in moving assessment from the assessment of knowledge, as a result of a learning pathway, to the assessment of the competences matured, using all the categories proposed by the 2005 Dublin descriptors. The difficulties experienced by university teachers can be understood as a consequence of the demand to assess elements such as 21st century competencies, which are by definition transferable to different contexts and visible in processes rather than in products.

A possible response could be "embedded assessment", an assessment that analyses the process and not only the product and, above all, that is carried out with various types of evidence in order to examine different perspectives and promote different attitudes [6,7]. It does not take place at the end of a learning process to somehow "close" a cycle and evaluate its products but is a continuous and pervasive pathway that is articulated throughout the learning action, analysing the processes activated and contributing to the construction of knowledge.

2. METHODOLOGY

Given the urgency to rethink and innovate assessment methods, especially at university level, in the academic years 2022-23 and 2023-34, we experimented with a new form of assessment in a first-year course of Master's Degree in Primary Education at the University of Macerata. We therefore designed an embedded assessment to support students' learning as they progress through the course and to encourage reflective thinking and awareness of their learning processes. The course entitled "Foundations of Teaching and Learning" consisted of 48 hours of lectures (with free attendance) and 20 hours of workshops (with compulsory attendance), which took place during the second semester of the first year. Each lecture was designed to follow approximately the same structure: 1. review of the previous lecture; 2. overview of the daily programme; 3. explanation of new arguments; 4. question and answer session; 5. small group or pair activities and plenary reflection/feedback; 6. individual reflection on the lesson by filling in a form (One Minute Papers - OMP) [8]. The workshop meetings were designed based on the framework of the lessons, but presented some differences related to the different scope and organization of the workshop: 1. overview of the daily programme; 2. recall of the arguments addressed in class and/or introduction to new concepts and tools; 3. modeling activities led by the tutors; 4. question and answer session; 5. micro-groups activities (video-analysis); 6. macro-group feedback from tutors and collective reflection.

Based on the course programme, which is divided into four modules, we decided to design three written midterm tests, to be administered at the end of the first three modules, in order to adequately alternate teaching and assessment sessions and support and guide students' study. All these tests were optional. As for the workshop, it concluded with a final individual exam based on a video analysis, like those carried out in the previous meetings. At the end of lectures and workshop, students have to take a final oral exam on the concepts related to module 4 and the key concepts of the course (if they have already passed all three midterm tests). Moreover, on the day of the oral exam, students who have not yet completed the workshop exam may take it in the same way. To reduce correction time, all written tests were computer-based and

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administered via Google Forms. The final grade of the course was thus determined by the results of the various assessment components: three midterm tests (optional); the workshop exam (compulsory); the final oral exam (compulsory). In line with the Dublin descriptors, we have designed the overall assessment of the course trying to balance and give sufficient importance/weight to each of them.

3. RESULTS AND CONCLUSIONS

To assess the impact of this embedded assessment, we first collected data on students' participation in the midterm tests. The participation of students in each academic year was really surprising and promising, considering that the tests were optional. Indeed, in 2022/23 a.y. almost all students took the three tests and also in 2023/24 a.y. the majority of students decided to participate. Another relevant outcome was the students' participation in the first session of the workshop exam. In both years, almost all students attended and completed the exam. Placing tests throughout the course encourages students to study the dense programme regularly, step by step, rather than all at once at the end of all lectures, as is often the case. They can discuss the results with the teacher, become more aware of their strengths and weaknesses, reflect on their study methods and deepen the arguments of a particular module that has proved more challenging. These aspects reflect the real essence of assessment as a learning perspective, as the assessment activity becomes an opportunity to learn and to autoregulate one's own learning, focusing more on the process than on the product. Furthermore, the decision of almost all students to take the workshop exam in the first session could be interpreted as a good confidence in their preparation after attending the workshop meetings.

Regarding the final exam, we decided to compare the data on student participation from our course (Course 1) with those from another first-year course (Course 2), conducted in the same semester. The assessment in Course 2 consisted only of a final oral exam and didn't include any midterm tests. Comparing the data collected from the first exam session for each year, Course 1 achieved a higher number of students who enrolled and passed the final exam than Course 2 in both academic years. This higher participation may be related to the different structure of the courses, which in Course 1 encouraged and enabled students to regularly study the topics covered in the lectures and thus to arrive at the final exam with a greater confidence and preparation. Finally, the regular compilation of the OMPs also showed a positive impact. Feedback from OMPs can be valuable for both teacher and student, promoting self-regulation processes and dialogical feedback [9, 10, 11].

To sum up the design of the course structure and assessment proved to be valuable. The regular use of reflection forms, filled in by the students at the end of each lecture allowed them to review what had been covered and to request follow-up or clarifications. The alternation between modules, activities and midterm tests encouraged regular and gradual study, dialogue feedback, and constant reflection on one's own learning path leading to a greater self-confidence. The many opportunities for discussion and reflection in plenary and in small groups enabled the students to develop and train their professional vision.

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