

STUDENTS' INVOLVEMENT IN MATHEMATICS ASSESSMENT

Leonor Santos and Jorge Pinto

Institute of Education of Lisbon University, Institute Polytechnic of Setúbal

It is expected that mathematics teachers' practices include summative and formative assessment practices, namely because formative assessment increase student performance (Santos & Cai, 2016). However the articulation between these two assessment practices is complex (Bennett, 2011), not consensual and still underexplored (Taras, 2005). In the context of a collaborative work, two mathematics teachers and two researchers (the authors of this communication) developed an articulation assessment process (AAP) that includes a cycle of three steps. It begins with a summative moment, a written test. Followed by a formative assessment moment, where students develop a set of questions similar to the ones included in the test, performed outside the class, and ends with a summative one. Each student has to answer only to the questions that they missed on the test. The mark of the first test can be changed. The objective of the study was to understand students' involvement in this APP. In particular, the research questions were: a) How students faced the process?; b) How many students were involved?; and c) Which reasons explained the involvement?

Following an interpretive methodological approach, this study uses quantitative and qualitative data. 168 students (37 of grade 7 and 131 of grade 8) of 7 classes participated. The data was collected through a questionnaire to all students and semi-structured interviews to nine students (with different level of mathematics achievement in the tests as well as participating or not participating in the process). Content analysis was the method to analyse qualitative data.

A large majority of students considers that the APP was useful and helps them to learn, although only 63% of them were involved in the APP. The most frequent negative feedback (11%) was that the process was time consuming. The results pointed that students had a positive perception to APP, but the dominant school culture based on summative logic explains why students that had a low possibility to obtain a positive mark on the test were not, in general, engaged in the process. APP creates tensions not only in teachers (Bennett, 2011), but also in students, through a cognitive dissonance.

References

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