

## CLASSROOM ASSESSMENT AND DYNAMIC GEOMETRY

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Mathematics classroom assessment is the gathering of information to feedback and improve the teaching and learning of Mathematics. To have an effective assessment it should be an integral part of the teaching methodology and not a separate issue (Flores and Gómez, 2009). Defined in this way, assessment should be a continuous process and it could be used to give a note to the student.

In the teaching model, *Learning Mathematics, Doing Mathematics* (Flores, 2010) the classroom is the place where a community with the common goal of learning mathematics gets together. In this context, classroom assessment is the process that will tell us at which extent that goal is been achieved. Thus, it is necessary to have the appropriate tools to assess the whole process, and not only at certain points of it like the end of a teaching unit or course. From this perspective, tests and questionnaires –for instances school tests or exams- take a secondary place as knowledge gauge or meter; in some cases they could be eliminated from the process without lessening the assessment. As alternative tools we propose the use of rubrics, checking lists, results matrices, and didactical maps, among others.

In any teaching model it is crucial the use of computer and information technology: *Learning Mathematics, Doing Mathematics* is not an exception. We claim that the use of technology, mainly the one designed for the teaching and learning of mathematics as DG software, is essential in the development of the Mathematical Thinking and the ability to solve problems (Flores 2010).

With the use of technology in the teaching of mathematics people rises the question on how to have an assessment that takes into account the technological aspect of process. We claim that it is not necessary to be concerned about this: the aforementioned tools could serve to that goal. The relevant issue on the use of technology, besides its capacity to foster problem-solving skills and to develop the mathematical thinking, is its potential use as an assessment tool itself. That is, technology, particularly mathematics teaching technology, could be a window toward student's knowledge and attitudes in the sense of Hoyles and Noss (1996).

The working group will discuss assessment and DG software in this context and the objective would be to jump into some preliminary conclusions and lay the basis for further discussions.

Some of the questions that will trigger the discussions are:

Are the alternative assessment tools suitable to assess technology activities? What kind of knowledge fosters the use of DG software? How can we observe the knowledge that a student puts into play when is using DG software in mathematical tasks?

### References

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