

Using a Graphic Calculator in Teaching and Learning Mathematics

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An electronic calculator, invented over thirty years ago, has become an excellent device for performing calculations in almost all fields of science: astronomy, physics, aviation, architecture, economics ... and first of all in mathematics. In mathematics, it has become an appropriate tool for teaching and learning, offering both teachers and learners the great access to new branches of knowledge such as statistics, informatics. At the same time it has been developed from a simple machine performing only four mathematical operations into the modern one - a graphic calculator that solves equations, trigonometric functions, shades areas on graphs, draws lines, circles, displaying everything on a graph screen.

A graphic calculator is nowadays viewed as a vital part of a teacher's equipment highly motivating learners in classroom activities, offering them the most interesting and active role in process of learning mathematics. Math learners who are well motivated do significantly better than their peers; they frequently succeed in achieving mathematical goals, enjoyably carrying out their task. This natural willingness to mathematics builds a new picture of successful, creative, innovative and more independent Math learner - eager to experiment, solve problems and create new hypotheses. This phenomenon is fundamental to the learner's development.

In these days, in the light of a new Polish REFORMA, there is no doubt that a graphic calculator opens up a new dimension for teaching and learning mathematics, offering teachers and learners the opportunity to be creative and innovative. But there are still teachers who are reluctant to use a graphic calculator in their Math lessons and thus they continuously try to avoid using it. These are the teachers who are afraid of a new technology that inevitably enters the school.

I believe that there are good pedagogical and methodological reasons for using a graphic calculator in Math lessons since the learners will be more involved in the process of learning mathematics. That is why it is worth introducing them to a graphic calculator.

References

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