ED TECH: FOR AN EFFECTIVE MATHEMATICS TEACHING AND LEARNING

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Technology has become part of the educational process, but too often it is not integrated into the learning experience. Studies revealed that most math teachers do not use educational technology to teach mathematics even though educational technology motivates students to better learn the subject. Problems in learning math are rooted from several factors such as:

- Lack of Motivation- The nature in teaching math through classical methods causes lack of motivation among learners because they tend to memorize nerve-wracking formulas and never-ending math problems and worksheets.
- Learners fail to solve math in real life situations.-Most teachers fail to use real life examples, solving math problems could not define their learning in math but they should learn concepts and problem solving skills which they can use in real life situations to better understand the significance of learning the subject.
- Low-value given to math- Learning math is a burden for most students, they study for the sake of passing the subject thus teachers should teach their students how to appreciate and understand the value of mathematics and how they can use math in different areas.
- Math Anxiety- a feeling of tension while solving math problems is very evident among learners, teachers should think of strategies on how they can make the students realize that math is a subject to be loved and enjoyed and not a subject to be endured.

These problems became a matter of concern in many countries especially in the Philippines. However, one way to eliminate these problems is to incorporate educational technology in teaching math in today’s technology based society. However, revision and changes in mathematics curriculum including the use of technology should be implemented first. If only teachers will provide educational technology activities, math will come in different colors and it will serve as an efficient tool which will help the way students learn mathematics; teachers should also learn to be fond of using computers in order to bring their classroom up-to-date technologically. Learning mathematics is about both knowing and doing but in traditional method, students tend to memorize
and reproduce learned procedures which are contrasted with mathematical practices endorsed by modern curriculum such as justifying and generalizing.

As stated by Farrell, 1996; Makar & Confrey, 2006, “Technology can change the nature of school mathematics by engaging students in more active mathematical practices such as experimenting, investigating and problem solving that bring depth to their learning and encourage them to ask questions rather than only looking for answers”. By providing learning activities through the use of technology, mathematical knowledge and mathematical practices may emerge, learners can apply what they have learned in a more meaningful and exciting way. Technology is a partner when it provides access to new kinds of tasks such as a replacement for pen and paper calculations to develop understanding in mathematical discussion. It takes more than just learning math and the use of computers, there are many ways in which technology can transform mathematical practices and help students to enjoy and love the subject.

References:

“How Technology is Integrated into Math Education” by Aytekin Isman and Huseyin Yaratan

“Endorsement of Technology in Mathematics: Secondary Educational Perspective” by Dr. Babitha Ann Joseph