Functional mathematics - learning and success experiences in mathematics

You can learn math more than just books. Different materials, learning tools and activities help people of different ages to understand and learn mathematics. Functional methods gradually build math, gain experience and success.




Conceptualization tools can be used to explain one's own thinking and way of solving. Drawing math is also an important skill that can be used to solve math problems even without calculating. By drawing a task one can perceive it as understandable and at the end the joy of realization brings a sense of success.

Functional methods and tools give time for thinking. Almost any tool can be used for learning and teaching; buttons, beans, stones, grids, or you can get special tools designed for teaching math, such as colored rods, decimal system tools, dials, vibrating buttons, and tuition. The tools are used to learn the concepts of mathematics, numbers, basic calculations, percentages, calculating with fractions.



When you have first worked on a problem with mathematical tools, then it is easier to understand and solve the problem at the abstraction level. Part of functional mathematics is the mathematics of speech. While using tools to solve math problems, talk about one's own thinking and justify. In group work, ideas are shared and a sensible strategy for reaching a solution is considered, as well as what the possible outcome would be. Once the task has been completed, we will look at whether the assessment turned out to be right at all, and consider whether another method would have been more effective and what will be done differently next time.

By changing the school mathematics from a book-centric approach to a functional one, one must also change one's own use of time habits. It takes more time to learn by doing. But the students gets more ja deeper understanding. Studies have found that through activities, different learners can learn more. Both the weakest and the most gifted students benefit from the use of tools in learning mathematics.

Functional math also strengthens self-esteem because everyone can experience success in math. Functional tasks and the learner's math speech provide the teacher with information about the student's understanding of mathematics that mechanical tasks do not reveal. When a content area of mathematics is later deepened, it is easier to bring back to the student the math experience on which the new thing to be

learned is based. With the help of functional mathematics, it is possible to build a strong and solid house of mathematical competence.

My company name is Opikko. The name Opikko is a bit like a dialect word that encourages learning. I train teaching staff in functional mathematics, develop mathematics materials, and help children, adolescents, and adults with math difficulties. I strongly believe in interaction and doing things together and succeeding. Encouraging the learner is important and and appreciating the other person. By working together, everyone learns.

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