

# Encouraging math curiosity essay sample



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Research in the teaching order proves that when students are engaged in fun activities along with general instructions of Mathematics, they tend to learn and retain more, leading them to create a logical and an understanding towards their studies. As George Polya, states that

“ A teacher of mathematics has a great opportunity. If he fills his allotted time with drilling his students in routine operations, he kills their interest, hampers their intellectual development, and misuses his opportunity. But if he challenges the curiosity of his students by setting them problems proportionate to their knowledge, and helps them to solve their problems with stimulating questions, he may give them a taste for, and some means of, independent thinking.” (Polya, 2004)

The most important thing in developing a child’s interest in the subject is by taking it beyond the horizons of the classroom and teaching it in away, which is innovative and separate from the traditional ways of teaching. One of the basic and fundamental aspects that a classroom could adapt would be by providing a white board, a marker, and an eraser to each student. Then the teacher should ask questions from the students and prompt them to write their answers on the white boards, providing them ample time to comprehend it and then raise the boards for the teacher to see.

(Posamentier, 2005)

This method is effective in making students think of math effectively in a quicker manner, and lets them participate; negating the shyness, they might have in answering a question in the doubt of being proven wrong. In addition, those who are weaker in math, and belong to multicultural

societies, would also create their own response. Through this effective method, the teacher would also get to analyze the progress of the entire class, and identify those who were lacking behind and the excelling students.

The second strategy, which a teacher could adopt, is effective study through pair sharing. The instructor should give a problem to the students, and give them enough time to jot their solution on their own notebooks, then she could form pairs of students who would share their findings with each other, and after a few minutes, they should be randomly called up to provide share their answers with the class. ( *Clark* , 1999) This would help the child rehearse his response before narrating, giving him a greater confidence with his partner at his side. The teacher could also couple bright students with weaker ones, so that they could learn more effectively.

Thirdly, a very effective approach towards mathematics is by teaching it through problem solving, “ helping students construct a deep understanding of mathematical ideas and processes by engaging them in doing mathematics: creating, conjecturing, exploring, testing, and verifying.” (Lester, 1994). This could be employed by giving children real life situations, using their names in the problems, allowing them to generalize and interpret the environment on their own. The teacher should encourage all form of answers and grade them generously.

Lastly, a very important aspect that the teachers should bring in their methodology is by enhancing their subject at a wider level, showing its importance in their career and life in the future. This would help the children relate to why they are studying the subject; while its importance could be

gained by bringing in real life personalities working in the fields of mathematics and engineering in the class and letting the children interact with them. This would boost their confidence and give a direction to their goals.

The important factor that teachers of Mathematics should understand is that they need to prompt long-term interest of their students in the subject, which would encourage them towards their career, and would continue to impact over their life; rather than building a situational interest, which builds no platform for its existence. Thus, it is a teacher's ability to generate a child's situational interest first in the subject, by sparking their curiosity and then slowly modeling it towards its long-term effects.

## References

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