

## A PASSION FOR MATHS



**MRS. AVA MOTHERSILL**  
**Head of the Mathematics Department - Wolmer's Girls' School**

Passion and Purity caught up with Mathematics Enthusiast Mrs. Ava Mothersill. She is the head of the Math Department at Wolmer's Girls' School for the past 11 years. She attended the St Georges Girls' Primary School, the Wolmer's Girls' High School and the University of the West Indies where she earned a BSc. in Mathematics and Chemistry and a Master's of Education degree in Mathematics Education. Prior to obtaining her Master's degree, she obtained her post graduate teaching diploma from The MICO University College.

When asked how she developed a passion for Mathematics, she said that from primary school when others were struggling with Math, she was just good at it and did not need any extra help or effort to excel at it. On the other hand, when others were excelling at English, she was struggling. When others were reading, she could not identify and pronounce words, whether simple, difficult, old or new. So in typical fashion, what one is good at, one does well to compensate for weaker areas, and that is how she believes she developed a passion for Mathematics.

She added that apart from being intrinsically motivated, she had good parental support throughout her education experience and this also greatly helped her to do well in school. Her love for Math was rewarded when she was a member of the team of fifth formers at Wolmer's which won the "Mathematical Association of Jamaica Mathematics Competition". Mrs. Mothersill was the top student on the team. Although medicine was her first career choice, she ended up teaching Mathematics and now loves what she does.

Mrs. Mothersill believes that there are numerous benefits to students studying Math, some of which are:

- It helps them to organize themselves, and because it is systematic, it encourages order.
- It is challenging and therefore helps them to develop patience, problem solving, reasoning, analytical and observation skills. These skills are beneficial to everyone regardless of career choice.
- It teaches students how to identify or recognize patterns and express themselves concisely.
- There are different strands of Mathematics and each is uniquely able to add value to students' educational development. For example Consumer Arithmetic has the ability to help individuals to be more efficient in handling basic calculations and measurements in their daily affairs. Algebra helps to generalize patterns in a concise manner.
- Qualification in Mathematics is required for higher learning.

When asked why students find the subject difficult, she said students sometimes find Math to be difficult because they see the subject as abstract and routine. Although there are set formulas, one has to read carefully and decide how to apply the formulas. It takes thought, time and patience to work through to the correct answer and in today's technological era when students

are prone to seek quick and instantaneous solutions, many find doing Math to be too taxing on the brain and time consuming. Math is not routine, it is about reasoning and practice which some students are unwilling to do. In Math, once the concept is grasped, repetition is important. In today's fast paced world, this is something students do not like to do and after two or three questions they believe they have it and that is enough. There are some educators today who do not advocate repetition, but repetition has its merits, especially as it relates to solidifying concepts and efficiency.

It has been said that the calculator has hindered students' performance in Math. Mrs. Mothersill believes that this is not true; the calculator is actually an asset to students, especially those in high school. Once students have mastered the concepts of addition, subtraction and so on, there is not much need for them to be burdened with the mundane task of calculating these algorithms when the calculator can do them efficiently.

When asked about what she believes could be done to help more students to appreciate and master the subject she said that it would help to have more specialist Math teachers in the primary schools, smaller classes and no less than five hours of Math classes per week in the high school. She believes that more guidance counselors are also needed in schools. Their role is critical in assisting students to cope with or overcome issues which distract them, and assisting them to discover their strengths, weaknesses and limitations.

### **Mrs. Mothersill's advice to students who are struggling with Math?**

- \*Understand your strengths, weaknesses and limitations as it relates to Mathematics. You need to build on your strengths and at the same time not use your weaknesses as an excuse not to succeed in the general and in the specific area of weakness.
- \*It is important for you to understand that whatever you do, you must do it to the best of their ability.
- \*Compete healthily with others but most importantly compete against yourself, your ability and potential.
- \*Set targets and a plan of action for yourself based on your strengths and weaknesses.
- \*Recognize and acknowledge that at times you will fail at some task. However, a failure is not a person who fails at a task, but one who fails to try again after failing at a task.
- \*Learn the concept and meaning behind formulas and where and how these came about and why they are important. What would life be like if we did not have formulas? In the same way that calculators make calculating easier, formulas are in fact tools to help make our lives easier. After understanding the origin and concept behind the formula, be able to use them effectively and efficiently by committing to practise, practise, practise.
- \*Know yourself, learn concepts, and study the formulas and time tables. Don't be afraid to ask for help especially from your peers who are good at the subject and practice.

Some of the careers for which Math proficiency is needed, these are:

- \* Teaching                      \* Auditing                      \* Medicine                      \* Statistician                      \* Financiai Anaylst
- \* Engineering Science   \* Pharmacology                      \* Math Teacher
- \* Actuarial Science       \*Accounting                      \* Pilot

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**Your value is not determined by your valuables- Rick Warren**