

7 Countries That Have Smart Mathematics Students

by Steffen Carter - Friday, January 18, 2019

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Mathematics is an interesting subject and it is a fundamental part of school curriculum. It is an instrument for the development of all other sciences because sciences (especially physics) builds on mathematics. We are using mathematics in every facets of life; it is all around us. From taking a look at the speed we are driving at on the road, to looking at a price tag for our favourite piece of clothing, mathematics is manifested in everything and without it, everything is impossible. However, majority of students across the world dislike mathematics for many reasons. The main reasons that students have for disliking mathematics includes the fact that they find it difficult to understand the subject, maybe poor instructions, not being taught well (maybe being taught in a very conventional and boring way), the demand for more time to grasp concepts and understand how the concepts apply in the real world, etc.

In other words, liking of mathematics is associated with more positive factors like an innate interest and curiosity for the subject, positive expectations, higher self-efficacy and personal values towards math, whereas the dislike for mathematics is associated with feelings of boredom, low self-efficacy, fear and negative experiences.

Nonetheless, there are some amazing Mathematicians around the world who have had an inclination for the subject, chose to specialise in it and be the best at it. So, let's take a look at 7 countries that have the smart Mathematicians and we'll look in to what had made them as such.

#1: SINGAPORE

According to an international benchmarking study, Singapore ranked as the #1 country to have students performing their best in Mathematics and Science. The study assessed Primary 4 and Secondary 2 pupils in 64 education systems. It found that students in Singapore had a strong mastery in both subjects, and were able to apply their knowledge and conceptual understanding to solve problems. Not only are Singapore students scoring well in those subjects, they also have a much more positive attitude towards learning and students are naturally immersed in conducive learning environments, which is an important reason for their good performance.

The findings also showed that over the years, Singapore students made improvement, particularly in higher-order thinking skills. This is attributed to that fact that the Ministry of Education (MOE) made an active effort to revise the syllabus to modify the way students are being taught. Also, the tuition industry in Singapore has been an immense help for students by providing a structured support system, ensuring that beyond the school hours, student get the customised help that they need to excel in Mathematics.

#2: AUSTRALIA

Taking a look at history, there are many field medallists who have put the rest of the world to awe with their talent and passion; Akshay Venkatesh is one such person. He is an Australian mathematician and first became a professor at [Stanford University](#) and currently is a professor at the [Institute for Advanced Study](#). His research interests are in the fields of representation theory and number theory. In 2018, he was awarded the [Fields Medal](#).

#3: RUSSIA

Contrary to the lack of quality talent in mathematics in the Soviet era (due to caste discrimination), in this day and age, due to the excellent tutors in the country, many young mathematicians are emerging. As a testament to that, Andrei Yuryevich Okounkov is a Russian mathematician and he received a Fields Medal for his contributions to bridging probability, representation theory and algebraic geometry.

#4: IRAN

As a slap in the face to many people's stereotypical mindset, [Maryam Mirzakhani](#), was an Iranian mathematician and a professor of mathematics at Stanford University. She was honoured with the Fields Medal, and was the first Iranian woman to have achieved that.

#5: JAPAN

Japan recognized the benefits of teaching students how to invent solutions. Teachers encourage students

to learn about the joys and importance of the journey of arriving at an answer and rather than being stressed about getting the right answer on paper. The objective is to engage students through *hatsumon* (question addressing a concept) which enables students see the connections between what they're learning and real-life situations. Teachers also give each other feedback to continue honing their teaching skills to give their students their best.

#6: CHINA

Interestingly enough, the culture plays a pivotal role in students performing well in Mathematics. A child's focus, dedication and personal effort is unfathomable. Other factors like China's standardised curriculum and teaching, the exam system, the [one child policy](#) which created [big expectations](#) for students, have also played an important part.

#7: INDIA

It is a known fact that there are so many Indians working at NASA and that is a testament to the fact that India has many intelligent Mathematicians. Looking back at history, India has made significant contributions in the evolution of mathematics. Aryabhata, Brahmagupta and Bhaskara II are some of the many famous mathematicians from ancient India. Even the concept of zero and the decimal system came from India.

Apart from the historical reason, other factors like socio-economic reasons, the rigour of math, the computer-industry's boom have given rise to great talents!

Ultimately, it is the passion, drive and strong support that has produced the greatest Mathematicians!

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