

The Role of Mathematics and Computer Science in Developing Countries

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Abstract

This presentation reiterates the stand of the academicians in the World Class University Conferences held at Shanghai that success of developing countries in facing challenge and competition of the 21st century will largely depend upon their ability to create world class universities. Now that horizon of every branch of science has been increasing, newer and newer branches are being added to the knowledge, the world needs many more knowledge workers than ever before. There has been an unfortunate trend of good science students continuing education in other branches implying that there will be lesser knowledge workers to push the boundaries of science and technology. This will necessitate popularizing STEM subjects among young students. Many developing countries are yet to appreciate importance of investing the prescribed 6% of GDP in education or 20% of budget allocation. For over populated countries like Bangladesh this may not be possible to increase allocation immediately. However, our initiative of Mathematics, Informatics, Physics, Chemistry and science Olympiads throughout the country, massive participation of students and guardians alike and winning medals from international events by our students do indicate that introduction of healthy Olympiad competitions may encourage young students to continue with science subjects and earn excellence. Academicians should also find ways and means of popularizing science not only among science students and faculty members but also among people of other walks of life through introduction of cost effective events like Olympiads. In fact we are looking for days when IMO, IOI, IPhO, IChO champions will be considered as superstars in a scale of Wimbledon champions or golden boot winners at least by science students and faculty members. Since developing countries are short of resources and infrastructures they must initiate innovative events to mobilize infinite energy and spirit of young people towards learning science and technology, and divert them from trivial pursuits. Ever increasing power of computers has created opportunity for tackling mathematical problems that are yet to be resolved. Revolutionary progress of computer science has created a great opportunity for developing countries to change their fate by harvesting benefits of this versatile technology that can ensure optimal utilization of their scarce resources and minimize wastage.