I **Dr. Md Mokter Hossain**, certify that I am fluent (conversant) in the English and Bangla languages, and that this document is an accurate but brief translation of the document attached entitled, “HeyMath: An Online Math Teaching Institute”.

**Signature**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Thank you!

**HeyMath: An Online Math Teaching Institute**

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Bangladesh Shiskha Samoiki (Bangla Periodical), 2(2), 57-60. Available online at:  <http://www.bafed.net/pdf/BDec6.pdf>

This paper briefly described the interactive features of HeyMath!- An Online Math Practice website available at: <http://www.heymath.com/index_row.jsp>

HeyMath! is a proven method that makes Math easy and enjoyable for every student. According to the paper, the HeyMath system claimed that they have been extensively field tested in Singapore - a country that has been ranked [#1 for math proficiency](http://www.nytimes.com/2007/11/14/education/14students.html?_r=1&ex=1352869200&en=2a0b04dbb5263177&ei=5088&partner=rssnyt&emc=rss&oref=slogin) globally in a study conducted by the American Institutes of Research, and consistently outperforms in TIMSS studies[Over half the highest performing students in Singapore used HeyMath!](http://www.heymath.com/main/sggceoexamstats08.html) as their core instructional technology resource for middle-high school math.

In the paper the author described how young students can be self-motivated using the HeyMath! Online System. HeyHamth! has animated graphics, and the real-life oriented problems and figures that seem to be very interesting to the young students. For instance, the parallel lines are demonstrated using train lines that are very familiar to the young students. The cost of using HeyMath is affordable and it varies from developing to developed countries. Moreover, this is an option of using its *Free Evaluation* version that allows limited access to its users. While using the Free Evaluation version, if a user find interested in it, can easily register with the system for having unlimited access and practice.

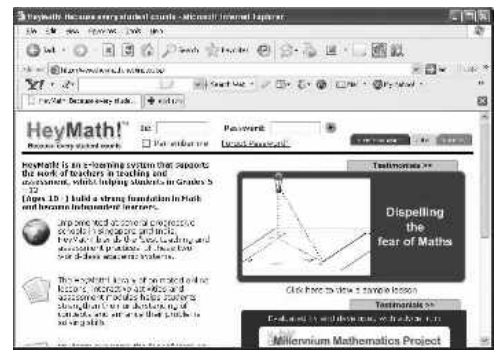


Figure: HeyMath! Index Page- <http://www.heymath.com/index_row.jsp>

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**Problems and Perspectives of the Proposed Unitrack Curriculum of Secondary Level (Grades IX-X) in Bangladesh**

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Available online at:  <http://www.bafed.net/pdf/BJune6.pdf>

Bangladesh has an old education system developed by the British Colonial and Pakistan governments. To reform the existing education system of Bangladesh in January 2003 the Bangladesh government formed an Education Commission, popularly known as Miah Commission. Following the recommendation of the commission, the government made a decision to introduce a new ‘unitrack curriculum’ instead of the existing multitrack curriculum for grades IX-X of the Secondary School Certificate (SSC) level from the academic year 2006. Under the proposed system all students of grades IX and X should study the same courses that would integrate disciplines of basic knowledge.

In the propose Unitrack Curriculum, all the secondary level students have to undergo a common curriculum. As per current practice, students choose among Science, Arts or Commerce groups for their SSC examination groups. But the proposed system will discontinue the existing humanities, science and commerce curriculum of classes IX and X, and will introduce the unitrack curriculum in class IX.

The paper briefly described the problems and perspectives of the proposed *Unitrack Curriculum* of Secondary Level (Grades IX-X) in Bangladesh. The study was conducted to meet the following objectives:

* to describe the perspectives of introducing the Unitrack curriculum proposal;
* to analyze the existing secondary education and curriculum system;
* to identify the weaknesses, limitations and advanced features of the existing multitrack and proposed unitrack curricula;
* to find out the appropriate curriculum based on the socio-economic condition of our country; and
* to make necessary recommendations for the improvement and acceptance of the proposed curriculum.

According to the paper, the authors stated that before introducing this curriculum, we have to prepare our teachers. Otherwise, many of the things selected in the curriculum will not be possible to implement. And appropriate and intensive training of teachers is essential, as they are potential actors in the change process. They will have to know the teaching methods and assessment techniques, as most of the teachers are not at all aware of these. The government should take urgent measures to train requisite numbers of teachers as well as develop the necessary classroom infrastructure, particularly in the rural areas, without further delay.

The study revealed that the government and the unitrack curriculum committee has had a number of lack in preparing and proposing the unified curriculum. Without mastering the new curriculum materials and without sufficient training of teachers, hurried introduction of this unitrack curriculum will affect millions of students. There is also shortage of science and mathematics teachers in the country. This is the difficulty in introducing this sort of curriculum with effectiveness. Due to all these factors not only the science education, the whole education sector may be affected rather than benefited by this new system.

As the government, scholars, authors and publishers spent a lot of time, effort and money to ensure the function of proposed system, so at the eleventh hour of the project, there seems to have no turning back from updating the existing system as early as possible. Otherwise, the advances of education reforms, driven by past, present or future governments, will not be effective. It is the time to take the opportunity to properly utilize funds provided by ADB and other donor agencies to improve the existing education system of the country, otherwise the donors may withdraw their funding; as a result the education reform of the country may defer one or more decades.

In order to develop or renew or modify a curriculum, it is necessary to take the opinion of the education experts and stakeholders. Before taking the decision either to implement or reject it, there is definitely a need for seeking opinions from people--particularly from the noted educationists and others involved with education so that the unitrack system debates get a fair conclusion.

I **Dr. Md Mokter Hossain**, certify that I am fluent (conversant) in the English and Bangla languages, and that this document is an accurate but brief translation of the document attached entitled, “Computer Education in Grades IX-X in Bangladesh:  An Observation”.

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**Computer Education in Grades IX-X in Bangladesh:  An Observation**

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Since 1996 academic sessions, Computer Education had been included in the secondary level (Grades IX-X) as an optional subject in Bangladesh. During its inauguration, teachers, students, and parents showed their interest in teaching and learning computer science basics. However, due to shortage of qualified teachers and lack of computers and related teaching materials in the schools the teachers and students faced severe problems in teaching-learning computer education. The problems persisted severely in the rural areas, but where more the eighty percent of the students of the country are educated.

This paper presented results of a survey that demonstrated the status of computer education in grades IX-X in Bangladesh. Data were collected through a questionnaire survey among 400 secondary level students who took the computer science as an elective course, 40 computer science course teachers and the 40 head-teachers of the corresponding schools in four districts: Dhaka, Dinajpur, Nawgaon, and Jaypurhat. The survey also interviewed 15 computer science experts and curriculum developers who were dedicated to teach computer science in the college and university levels in Bangladesh and were well-known nationwide in Bangladesh.

The study revealed some revere lack of qualified teachers, computers, and teaching materials in the schools. The teachers themselves admitted that they were not given enough training to be prepared to teaching the computer science course in the schools. Most of the schools have had only one or two computer(s) to be used to teach and practice computer science topics. In most of the schools, 10-20 students had to share a single computer to use for practical purpose. Moreover, very often, the computers do not run or open properly. The teachers did not have sufficient knowledge to troubleshoot the computers and the schools did not have enough budget to fix the computers or to purchase new computers.

However, the study, fortunately, revealed that the teachers, students, and parents have tremendous interest in teaching and learning computer science in the secondary levels. They suggested that the government should make the computer science course as a compulsory subject nationwide; appoint qualified computer science teachers in the schools; and supply more computers and printers in their schools. The experts hoped that over time most of the problems will be resolved. Based on those suggestions, the authors presented a 10-point recommendation that could help the successful implementation of computer science study in Bangladesh.