INTERNATIONAL WORKSHOP
ON
‘POLICY MAKING FOR
TRANSFORMING SILO-BASED
EDUCATION TO STEM EDUCATION’

COLOMBO, SRI LANKA
10-12 JUNE 2020
# INTERNATIONAL WORKSHOP

**ON**

**POLICY MAKING FOR TRANSFORMING SILO-BASED EDUCATION TO STEM EDUCATION**

**COLOMBO, SRI LANKA**

**10-12 JUNE 2020**

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**ORGANISED BY**

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<th>Centre for Science &amp; Technology of the Non-Aligned and Other Developing Countries (NAM S&amp;T Centre) New Delhi, India</th>
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<td>Ministry of Higher Education, Technology and Innovation SRI LANKA</td>
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<td>National Science Foundation (NSF) COLOMBO, SRI LANKA</td>
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INTRODUCTION

Science Technology Engineering and Mathematics (STEM) related subjects are taught in silos at schools and it requires modern methods of integrated learning to change the mindset of learners. The real-life solutions are seen possible and arise due to the integrated thinking habits. The curricular of Science, Technology and Mathematics carry many opportunities that could delve deep into the STEM integrated learning process and requires developing pedagogies for teaching.

Therefore, STEM approach to education is aimed at revolutionizing transformation of silo-based education of science and math by incorporating technology and engineering into regular curriculum and creating “meta-discipline system”. STEM Education attempts to transform the typical teacher-centered classroom by encouraging a curriculum that is driven by problem-solving, discovery, exploratory learning, and require students to actively engage in a situation to find its solutions to the problems. The major impact of STEM education on country economy will be the production of a workforce ready for the future challenges that arise globally on Science and Technology sector.

In order to address the above mentioned issues in the education system, the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), Ministry of Higher Education, Technology and Innovation, Sri Lanka and the National Science Foundation (NSF), Sri Lanka jointly announce the organization of an International Workshop on “Policy making for transforming silo-based education to STEM Education” in Colombo, Sri Lanka during 10-12 June, 2020.

OBJECTIVES

The Workshop aims to –

1. Assess the current status of STEM education in developing countries and the global scenarios pertaining to STEM education.
2. Identify relevant education policies and special needs of policy interventions in the implementation of STEM education in developing countries.
3. Promote international cooperation in policy making for STEM education.
4. Ascertain gaps in knowledge and identify and develop a research agenda to address relevant gaps in syllabuses, implementation programmes, etc. relevant to STEM education in developing countries.

TOPICS TO BE COVERED

1. The current status and shortcomings of STEM (or Science) education in developing countries.
2. Need for transforming Silo-based education to STEM education.
3. Strategies and policy changes to implement STEM education
4. Concerns and analytical frameworks relating to STEM education

EXPECTED OUTCOME

1. An evaluation will be carried out on the current situation and shortcomings of the curricula education system in developing countries.
2. Pros and cons of current approaches and how to assess these problems.
3. Future fundamental approaches and how the use of STEM-based education will help students to achieve better future.
4. A set of recommendations will be made on the policy changes required for transforming silo-based education to STEM education system.
PROGRAMME

A tentative programme of the event is given below:

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<th>Date</th>
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<tr>
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<td>09.00-10.30</td>
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<tr>
<td>09 June 2020</td>
<td>Arrival of Delegates in Colombo</td>
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<td>10 June 2020</td>
<td>Inauguration</td>
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<td>Technical Sessions</td>
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<td>11 June 2020</td>
<td>Technical Session</td>
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<td>Technical Sessions</td>
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<td>12 June 2020</td>
<td>Discussion and adoption of Resolution</td>
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<td>Concluding Session - Feedback and Distribution of Certificates</td>
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<td>Visit</td>
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<td>13 June 2020</td>
<td>Departure of Delegates</td>
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A detailed Session-wise Programme with names of speakers and titles of the papers will be made available before the event.

VENUE

The Workshop would be organized in Colombo, Sri Lanka

ABOUT THE ORGANISERS

NAM S&T Centre

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre; www.namstct.org) is an inter-governmental organisation with a membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set up in 1989 in New Delhi, India to undertake a variety of programmes, including organisation of workshops, symposiums and training courses and implementation of collaborative projects. It also offers short-term Research Fellowships to scientists from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out technical books and other scientific publications in different subjects of interest to developing countries. The Centre’s activities provide opportunity for scientist-to-scientist contact and interactions; familiarizing participants on the latest developments and techniques in the subject areas; identification of the requirements of training and expert assistance; locating technologies for transfer between the members and other developing countries, and dissemination of S&T information etc. In addition, the Centre encourages Academic-R&D-Industry interactions in the developing countries through its NAM S&T-Industry Network.
National Science Foundation (NSF), Sri Lanka

The National Science Foundation (NSF) was established in 1998 by Act No. 11 of 1994 as the successor to the Natural Resources Energy & Science Authority of Sri Lanka (NARESA). NARESA was established in 1981 as the successor to the National Science Council set up in 1968. The National Science Foundation (NSF) is a state funded institution under the Ministry of Higher Education, Technology and Innovation.

The NSF is mandated to functions as specified to initiate, facilitate and support basic and applied scientific research by universities, science and technology institutions and scientists, with a view to:

- Strengthening scientific research potential, including research in the social science, scientific education programmes,
- Developing the natural resources of Sri Lanka.
- Promoting the welfare of the people of Sri Lanka and
- Training research personal in science and technology
- To foster the interchange of scientific information among scientists in Sri Lanka and abroad.
- To awards scholarships and fellowships for scientific study or scientific work at recognized science and technology institution
- To maintain a current register of scientific and technical personal, and in other ways to provide a central clearing house for the collection, interpretation and analysis of data, on the availability of, and the current and projected need for, scientific and technical resources in Sri Lanka, and to provide a source of information for policy formulation on science, technology and other fields;
- To popularize science amongst the people

PARTICIPANTS

Senior scientists, engineers, researchers, government officials, academicians, stakeholders and policy makers on education are welcome to apply. The combination of participants from various developing countries will allow for exchange of knowledge, ideas and experiences as well as opportunities for networking and collaboration.

The selection of participants will be strictly based on merit and relevance of their current responsibilities to the subject of the Workshop as well as the quality of the extended abstract of the paper submitted by them along with the completed nomination form.

For registration and more information visit https://form.jotform.com/200221745802040 -

CONTACT

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