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Commonwealth Educational Media Centre for Asia

SPECIAL ADDRESS

## ARTIFICIAL INTELLIGENCE (AI) FOR TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)

By

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### A TWO-WEEK TRAINING PROGRAMME ON ARTIFICIAL INTELLIGENCE IN TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (AI IN TVET)

Organised by

Commonwealth Educational Media Centre for Asia (COL-CEMCA), New Delhi  
and  
National Institute of Technical Teachers Training and Research, Chennai

Valedictory Function

19 April, 2025

02:00 PM IST

Commonwealth Educational Media Centre for Asia (CEMCA)

7/8 Sarva Priya Vihar,  
New Delhi, 110016  
India



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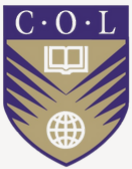
Dear Professor Usha Natesan, Director, NITTTR, Chennai, TVET educators from Bangladesh, Brunei, India, Malaysia, Maldives and Singapore, sixty of whom have registered to participate in this Faculty Development Programme on AI in TVET, all our trainers from NITTTR-C, especially, Dr Balasubramaniam and Dr Sasirekha and my own colleague, Ms Nabeela Ata, who has coordinated on behalf of the Commonwealth Educational Media Centre for Asia (CEMCA), the Asian Regional Centre of Commonwealth of Learning!

We have had a very fruitful journey over the last two weeks, starting on 7 April until this evening, co-learning for over 60 hours in online tutorials, self-learning, accessing the training material, reflecting on the learning and also participating in assessments. For some of you, this was on and above the job of being TVET educators and administrators. You have fared well, and I must appreciate each one of you on your active participation and engagement. On behalf of NITTTR, Chennai, and the Commonwealth of Learning, let me congratulate, and welcome you to our alumni network.

I wish to acknowledge the rich deliberations conducted by Dr E. Balasubramanian, Dr S. Sasirekha, Dr P Malliga, Dr G Janardhanan, Dr K S Giridharan, Dr S Saravana Perumal, Dr M Sutaarson, Dr Uma Shankar Sahu, Dr P Seshu Babu, Dr T Subha, Dr M Anil Kumar, Dr G Kulanthaivel, Dr V Shanmuganeethi, Dr S Renuka Devi and Dr V Siva Kumar. You have been marvelous in engaging with the learners in each of your sessions.

I was there in Malaysia meeting up with the Minister of Higher Education (MOHE), **Dato' Seri Diraja Dr Zambry Abd Kadir** to explore the way Commonwealth of Learning and his ministry may engage in the next decade. The Malaysian blueprint 2025-35, which is likely to be released any moment, proposes numerous disruptions in the field of education and the interface between education and skills. In this initiative that COL and NITTTRC are engaged in exploring the role of AI in TVET, he had gladly agreed to have this item as a part of the four pillars of collaboration between COL and MOHE, Malaysia.

Similarly, we are hopeful that our conversation with Dr Mona Alimin of the Ministry of Education, Brunei, shall bring forth the opportunity towards using cutting edge technologies in TVET. We are organising a national level consultation in Dhaka bringing the Bangladesh stakeholders together for a



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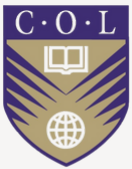
meeting to discuss if and how Blended TVET can be introduced in their nation that envisions a new era for TVET.

In Asia, there are three major issues facing TVET. First, it continues to live through the stigma as though TVET is a second chance or second choice education rather than the first choice, and even less preferred by women and girls. Secondly, the takers of TVET education need to progress in their career and academic ladder, and the credit and qualification frameworks of each of these nations should accommodate and allow TVET graduates to enter the tertiary education, leading to obtaining their PhDs, also. Thirdly, the proportion of students opting for TVET is far less than the demand in the industry, notwithstanding the fact that the public systems are not able to scale up TVET education. Here is where we see the role of blended TVET and a variety of other technologies at play, including the role of AI, ML and Data Analytics on one hand scaling up TVET education and, on the other, enhancing the quality of TVET education where one's aim is to give the learners a rich learning experience, leading to employability and entrepreneurship. We need to also promote a start-up culture within TVET institutions and inculcate the idea of enterprise and entrepreneurship not only during their current learning journey, but also in their lifelong learning journey.

In Bangladesh, TVET programmes cover a wide range of trades, including electrical works, electronics, dressmaking, IT, ceramics, civil drafting, aquaculture, automotive, and more. Diploma programmes in engineering are popular. We can leapfrog to the next level.

In India, there is an ambition to bring 600-900 million workers into lifelong learning and with the informal sector being stubborn, there are opportunities to make skilling more flexible, catering to also the informal learning paradigms. The role of AI is of paramount importance, but bringing and placing AI-enabled tools in the hands of micro- and mini-enterprises and their workers is of greater challenge.

In the Maldives, we need to see the two main tracks – institution-based training and employer-based training (EBT) – coming together. On-the-job training constitutes a significant portion (at least 50%) of most programmes. We need to see the role of emerging technologies here.



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In Malaysia, innovations such as stackable degrees and uberisation of education so also the idea of juke-box for skilling is likely to become popular in days to come.

Brunei Vision 2035 emphasises the development of a skilled and entrepreneurial workforce through TVET. The Institute of Brunei Technical Education (IBTE) and Politeknik Brunei are the main public post-secondary TVET providers. We need to see a stronger convergence of regulators in the nation while also encouraging non-formal TVET to also be normalised through IBTE. The TVET academy looks very promising too, transitioning the technical education into one that has relevance, access, quality and one that ensures lifelong learning skills imparted among all citizens.

Finally, the world class leading TVET system in Singapore can demonstrate to the rest of Asia its model of bringing non-formal and formal TVET together within the SkillsFuture Singapore umbrella. I am looking forward to working with the Institute of Technical Education (ITE) and the five polytechnics in Singapore.

With this beginning made, at COL, we look forward to invigorating our collaboration with each of our member countries and with institutions such as NITTTTR-C for making a significant contribution to the TVET sector.