



News Release

22 December 2016

IBM, Kenan and Policymakers Join Forces to Drive STEM Towards Thailand 4.0

IBM Thailand Co., Ltd. and Kenan Institute Asia (Kenan) hosted a panel discussion on “Strengthening STEM Workforce for Thailand 4.0.” The event continues on-going dialogues around policies for Science, Technology, Engineering and Mathematics (STEM) as it relates workforce development, brought key stakeholders from the public, private, and civil society sectors together to share their vision and plans to support the upgrading of human resources in STEM fields and in support of "Thailand 4.0" – a new model that aims to fuel Thailand’s global competitiveness by transforming the nation to a digital and innovation-based economy. Leading government officials, educators, and students, as well as members of the general public interested in STEM, joined the discussion held at IBM’s Bangkok headquarters.

Queen Sirikit National Convention Center
2nd Floor, Zone D, Room 201/2 60 New Ratchadapisek
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Klongtoey, Bangkok 10110

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201/2 เลขที่ 60
ถนนรัชดาภิเษกตัดใหม่ แขวงคลองเตย เขต
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At the event, representatives from the Ministry of Education, the Ministry of Labour, and the Ministry of Science and Technology, the governmental bodies that oversee STEM policy and implementation, detailed their current initiatives and discussed the challenges related to STEM workforce development in Thailand. IBM, representing the private sector, provided an overview of the skills and capabilities they require of their employees. For its part, Kenan articulated the importance of building strong public-private partnerships and improving teaching pedagogies to support STEM initiatives.

Dr. Sirichai Kittivarapong, Director of National Science and Technology Development Agency (NSTDA) of the Ministry of Science and Technology, addressed the policies of STEM promotion that lead to innovation creation that “*NSTDA has planned to continuously promote STEM learning and creativity among Thai teachers and students. Many STEM workshops relating to latest advanced technologies were held in the past*

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months to stimulate participants' inspiration. Currently, the agency's policies aim to encourage Thai teachers to find STEM lessons that match with local settings. Teachers are encouraged to coordinate with local businesses to produce their own STEM educational resources to meet the individual needs of their local community. When students relate STEM to their daily life, they will find learning through this approach to be more stimulating."

Dr. Pichet Jubjitt, the Deputy Director of Bureau of Academic Affairs and Educational Standards, Office of Basic Education Committee (OBEC), talked about the Ministry of Education's current STEM education strategy that seeks to ensure that all students graduate with the skills that meet workforce demands. *"The Ministry of Education considers STEM an important part of the foundation for developing the capacity of Thai youth to fuel Thailand's global competitiveness. STEM education now forms a part of the Thai basic curriculum, from kindergarten to high school. Thailand's newly-developed STEM education model focuses on building students' knowledge, skills, and thought*

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processing, all important ingredients for innovation creation. Learning activities will centre on learning by doing, group assignment, communication, and innovation creation. Most importantly, students will be able to apply what they have learned to their real life and future careers." he said.

Mrs. Kanyanat Sawadsawang, Assistant President of the Institute of Promotion of Science and Technology (IPST) added more on the Ministry of Education's current STEM education strategy that *"IPST aims to inspire Thai teachers and students to be eager to learn about STEM. New educational resources focus on STEM knowledge integration that will arouse students' attention to go onto further education and pursue careers in STEM fields. Furthermore, the new curriculum aims to allow Thai youth to self-innovate, which can develop entrepreneurship in the future. STEM education is not complicated for Thai teachers. They just slightly adapt teaching methods to help students effectively apply the knowledge gained to their life.*



Mr. Wirat Kansorn, the Inspector of Department of Skill Development, Ministry of Labour, described the challenges of improving Thai workers' STEM capabilities and ensuring workers have access to training in STEM fields to keep them competitive in the workforce. He said that *"STEM knowledge and skills of Thai workers differ greatly from poor to very high education. Consequently, to support 'Thailand 4.0', our STEM workforce development policies were divided into four, five-year periods. The first period is used for laying a strong foundation for low to medium educated workers, equipping them with STEM knowledge, attitude, and practices. The second period focuses on developing an innovative workforce. The third period develops Thai workers' creativity and innovation. Lastly, in the fourth period, Thai workers are expected to use their innovation to increase their income."*

As a STEM industry leader, Ms. Pawasut Seewirot, Country Manager - Marketing & Communication from IBM Thailand, emphasized the importance of having a strong STEM background



and the advancement of the technology in the new era. *“We’re entering the cognitive computing era where computers have ability to understand, reason and learn by engaging with data and human. In order to maximize the technologies in this new era productively, next generation workforce is required both new set of skills and mindset. Over the next 5 years, new careers will arise from this transformation. IBM believes that STEM knowledge is now playing a vital role in developing the competitiveness of Thai youth as well as accelerating industry and economic development.”*

Mr. Sawai Seesai, Senior Consultant - Innovative Education of Kenan Institute Asia concluded that *“Strengthening Thailand’s workforce is central to increasing our competitiveness and growth. Collaboration between companies and civil society to support the government and education sector will help tackle present and future challenges. At this time, Kenan is joining hands with IBM Thailand in developing STEM educational resources that are more diverse, practical and suitable for the Thai education*

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curriculum. Importantly, we have also developed Thai teachers' capability so that they can use the provided resources and be part of Thailand's education reform”.

This event was part of the IBM Thai Teachers TryScience project that IBM (Thailand) and Kenan have been implementing over the past two years. The project is promoting new pedagogies in STEM education in Thailand using project-based learning. The project has translated and localized IBM's STEM-related, technology-based education resources from the international Teachers TryScience website and introduced them to the Thai education system. For more than 64 years, IBM has made significant contributions to improving education in Thailand, and remains steadfast in its commitment to this cause.

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Caption

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A panel discussion on *“Strengthening STEM Workforce for Thailand 4.0.”* The panelists are as follows; (from left)

- **Mr. Wirat Kansorn**, the Inspector of Department of Skill Development, Ministry of Labour
- **Dr. Pichet Jubjitt**, the Deputy Director of Bureau of Academic Affairs and Educational Standards, Office of Basic Education Committee (OBEC), Ministry of Education
- **Mrs. Kanyanat Sawadsawang**, Assistant President of the Institute of Promotion of Science and Technology (IPST), Ministry of Education
- **Dr. Sirichai Kittivarapong**, Director of National Science and Technology Development Agency (NSTDA) of the Ministry of Science and Technology
- **Ms. Pawasut Seewirot**, Country Manager - Marketing & Communication, IBM Thailand Co., Ltd.



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- **Ms. Pawasut Seewirot**, Country Manager - Marketing & Communication, IBM Thailand Co., Ltd.
- **Ms. Sunandavadee Uthayo**, Moderator



A panel discussion on “*Strengthening STEM Workforce for Thailand 4.0.*” at IBM Thailand

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STEM projects of students from schools participating in the IBM Thai Teachers TryScience project

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