Southeast Asian Ministers of Education Organization
Regional Centre for Technical Education Development
(SEAMEO TED)

2025

Achievements

Contents

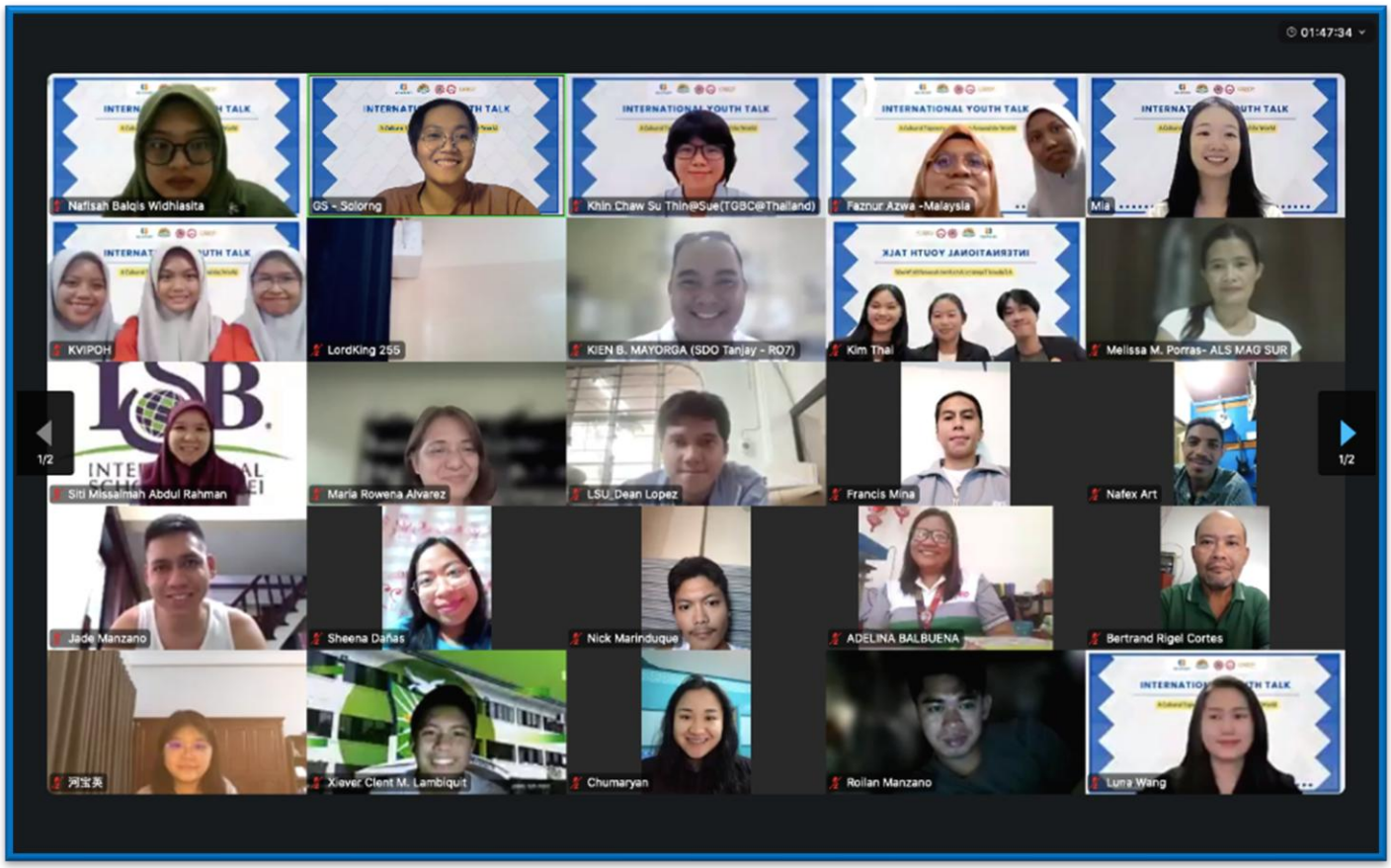
1. The International Conference on Applied Research in Education 2025 (ICARE) on January 9-11, 2025, in Nay Pyi Taw, Myanmar

Nay Pyi Taw, Myanmar: **Dr. Songheang Ai**, director of SEAMEO TED, has co-organized the International Conference on Applied Research in Education (ICARE 2025) to be held in Nay Pyi Taw on January 09-10, 2025 participated by over 2,000 participants from 14 countries consisting of Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, the Philippines, Thailand, Vietnam, Russia, Bangladesh, India, China, Japan, and South Korea. Some regional and international organization representatives also attended the conference. The theme focused on "Navigating the Future: Education, Science, and Technology for Brighter and More Prosperous Societies". Its objectives are (1) disseminating research findings related to applied research in education; (2) identifying educational challenges and proposing solutions; and (3) promoting collaboration and partnership. During the conference, **Dr. Songheang Ai**, delivered the keynote addresses focusing on his past experiences in research and development, and motiving participants to actively engaging in Q and A session for learning and sharing as the members of community of practice (CoP). **Dr. Ai** highlighted that "*Research is a critical factor to diagnose educational challenges and problems and propose recommendations as solutions to the challenges so that it needs to be scientific empirically*".

He also raised four purposes of research and development (R&D) consisting of (1) for informed decision-making; (2) for policy formulation; (3) for publication and sharing; and (4) for knowledge acquisition. He shared his research writing experience that he applied to present his manuscript at the 2nd International Conference on Multidisciplinary Academic Research in Bali, Indonesia in 2019 that his paper titled "Teamwork Skills Boils Over in Cambodia". After the presentation, his paper was awarded the No. 1 outstanding paper in education track, but if he reflects and compares its quality with the present status, his paper needs more improvement. Therefore, he encouraged all speakers to admit constructive feedback from the audience and improve some points for more scientific before publication.

Finally, as a co-organizer of ICARE 2025, **Dr. Ai** got a prestigous gift from deputy prime minister of Myanmar for his tremenous contribution and engegement in the conference as a representative of international organziation during a Gala Dinner on January 10, 2025.

2. The 1st International Youth Talk on A Cultural Tapestry: Music, Dance, and Art from Around the World on January 10, 2025 (Virtually)



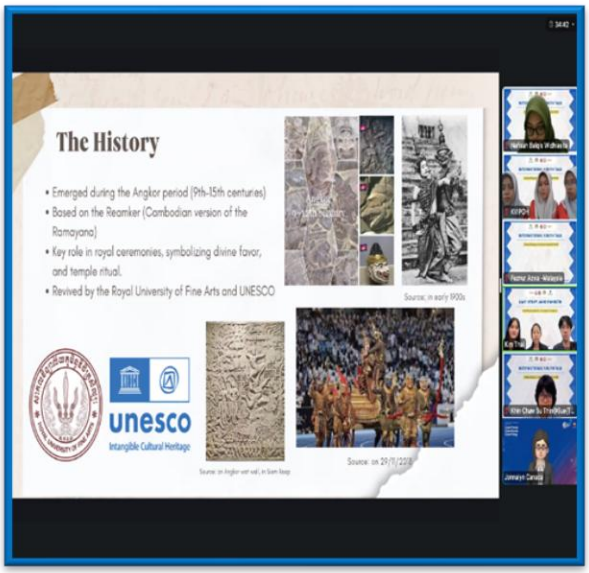
On January 10, 2025, SEAMEO TED, CATECP and International Youth Culture and Education (KEMG) and Go Study co-organized the 1st International Youth Talk on the theme: "A Cultural Tapestry: Music, Dance, and Art from Around the World" virtually. Speakers from Cambodia, Indonesia, Thailand, and Malaysia were invited to share and presents their country's cultural tapestry. This event accommodated 109 regional participants.

Mr. Voeun Ravy, Vice-Head of the Research and Development Division of SEAMEO TED, was invited to deliver the opening remarks. He emphasized the unifying power of arts, music, dance, and visual culture, highlighting their ability to convey both traditional and modern interpretations. He expressed his heartfelt gratitude to partners and participants, noting that their involvement would enhance the event and provide an opportunity to learn, share, and deepen our appreciation for the arts that enrich our lives.

Cambodia's Youth Team from East Asia Management University

Speakers: Chea MeyJing, Sok Liza, Te Kimthai

Topic: Lahkon Khol

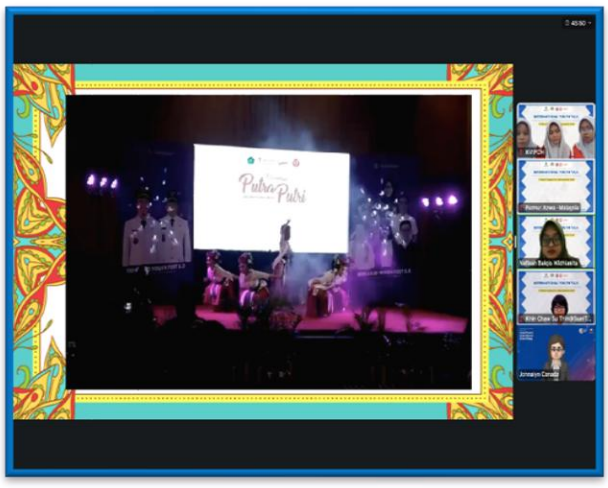


Cambodia's team started by introducing the audience to one of Cambodia's prominent traditional forms of theater performance called "Lakhon Khol." During the performance, the team highlighted the history, the significance, and the different elements of this theater performance. Lakhon Khol is a traditional Cambodian masked dance-drama, rooted in the country's history since the Angkor period (9th–15th centuries) and inspired by the Reamker, Cambodia's version of the Ramayana. Originally performed in royal ceremonies and temple rituals, it features an all-male cast with handcrafted masks, vibrant costumes, and stylized gestures, accompanied by a Pinpeat orchestra. Lakhon Khol serves as a vital cultural expression, preserving Khmer identity, passing moral lessons through storytelling, and fostering social cohesion. It also plays a key role in education, community bonding, and tourism, with ongoing efforts by artists and organizations to preserve this treasured heritage.

Indonesia's Youth Team from University of PGRI Adi Surabaya

Speakers: Nafisah Balqis Widhiasita

Topic: Unveiling the Beauty of Tari Jayandaru

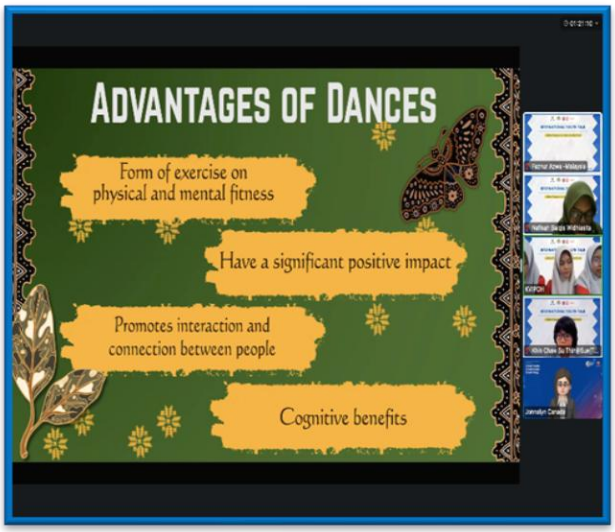


Tari Jayandaru is a traditional dance from Sidoarjo, East Java, created in 2021 by Muhammad Nur Muslimin and Hindar Krismalisa of the Jagad Pangestu Traditional Dance Studio. Inspired by the Jayandaru Monument, which symbolizes prosperity with its iconic shrimp and milkfish icons, the dance reflects the spirit of growth, harmony, and local aspirations for a peaceful life. It highlights the lives of farmers, fishermen, and entrepreneurs, serving as a welcoming dance that symbolizes progress, unity, and hospitality. With costumes symbolizing purity and bravery and movements representing cooperation, Tari Jayandaru celebrates Sidoarjo's identity, heritage, and the values of unity in diversity.

Malaysia's Youth Team from Kolej Vokasional Ipoh

Speakers: Adriana Qaseh Binti Ehsal Jesrin, Insyirah Binti Jaimehatta, Amy Ariana Binti Abdul Syahid

Topic: Malaysian Traditional Dances



The presentation of the "Malaysia's Traditional Dance" highlights the rich cultural tapestry of Malaysia, shaped by its native Malays, indigenous peoples, and the influences of Chinese, Indian, and Portuguese settlers. Traditional dances, music, and visual arts reflect the nation's history, beliefs, and artistic expression, performed during festivals, rituals, and social events. Notable elements include music forms like Kompang and Gamelan, dances such as Zapin and Mak Yong, and visual arts like Batik and Songket. Region-specific traditions, such as Johor's Gambus and Zapin, Kelantan's Tarian Mak Yong, and Sabah's Sumazau, emphasize Malaysia's diversity. Dance also serves as a form of exercise, fostering social bonding, interaction, and cognitive benefits.

Thailand's Youth from Thai Global Business Administration Technological College

Speaker: Khin Chaw Su Thin

Topic: Lacqerware in Mayanmar

Lacquerware is one of Myanmar's ten traditional arts. Historically significant during the Konbaung period, lacquerware held cultural and religious importance, often featuring Buddhist motifs and serving as symbols of status in religious ceremonies and royal gifts. Crafted from bamboo and wood coated with lacquer sap, its intricate production process involves weaving, multiple lacquer coatings, polishing, and detailed decoration, taking months to complete a single piece. While traditional techniques originated in Bagan and included luxurious embellishments like gold leaf, the art faces modern challenges from imported goods and resource scarcity. Despite these hurdles, efforts continue to preserve lacquerware as a valuable symbol of Myanmar's artistic heritage.

3. Closing Workshop on the Project "Developing Teachers to Raise One Health Awareness at General and Technical High Schools in Cambodia" January 31, 2025, Kampong Chhnang Province, Cambodia

Kampong Chhnang, 31 January 2025 – The Southeast Asian Ministers of Education Organization Regional Center for Technical Education Development (SEAMEO TED) and the Southeast Asia One Health University Network (SEAOHUN) co-organized the Closing Workshop for the project on "Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia" on January 31, 2025 at Preah Bat Samdach Preah Borom Neat Norodom Sihamoni General and Technical High School to conclude the project after the implementation for the past six months. In the workshop, certificates of completion were awarded to the nine national teacher trainers for successfully completing the training of teacher trainer for Project on "Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia" started on July 2, 2024 to January 31, 2025. In addition, **One Health Champion Awards** were also given to the teacher trainees of the three-target general and technical high schools, with the first place won by the teacher team of Preah Bat Samdach Preah Borom Neat Norodom Sihamoni General and Technical High School, and Kampong Chheu Teal Demonstration General and Technical High School, and Bavet General and Technical High School won the second and the third places subsequently. This project is fully funded by Chevron which strives to empower people around the world to improve their lives, achieve their ambitions and meet their full potential. This workshop was presided over by H.E prof. Dr. **Bo Chankoulika**, under-secretary of state, Ministry of Education, Youth and Sport, attracting over 50 participants including representatives of Chevron, Chevron Cambodia, SEAOHUN, and relevant departments, stakeholders and 10 general and technical high schools, teachers and students.

H.E prof. Dr. **Bo Chankoulika**, under-secretary of state, Ministry of Education, Youth and Sport (MoEYS), presided over the closing workshop, expressed her strong supports to scale up the project implementation of One Health Concepts to all 22 general and technical high schools, and other general school throughout the country. She also highlighted the importance of the project as it benefits students, teachers, and community members. She also stressed that One Health Awareness raising activities should be carried for MoEYS officials as she noticed that some of them should be educated or reminded about food safety and unhealthy habit of excessive alcohol consumption. She noted that the One Health concepts align with the key policy in the pentagonal strategy of the Royal Government of Cambodia and the Ministry of Education, Youth and Sport. Those policy actions include Students' Health through School Feeding Program and the regulation of the food quality sold within the schools. She also highlighted the importance

of mental health as it is one silent factor that has negative effects on many walks of life including the students. Therefore, she advocated on the inclusion of mental in the future One Health Project.

In her affirming note, she emphasized that she would look for ways to scale up this project to all 22 general and technical high schools, and other general schools throughout the country, including the possibility of integrating One Health concepts in other big projects of MoEYS.

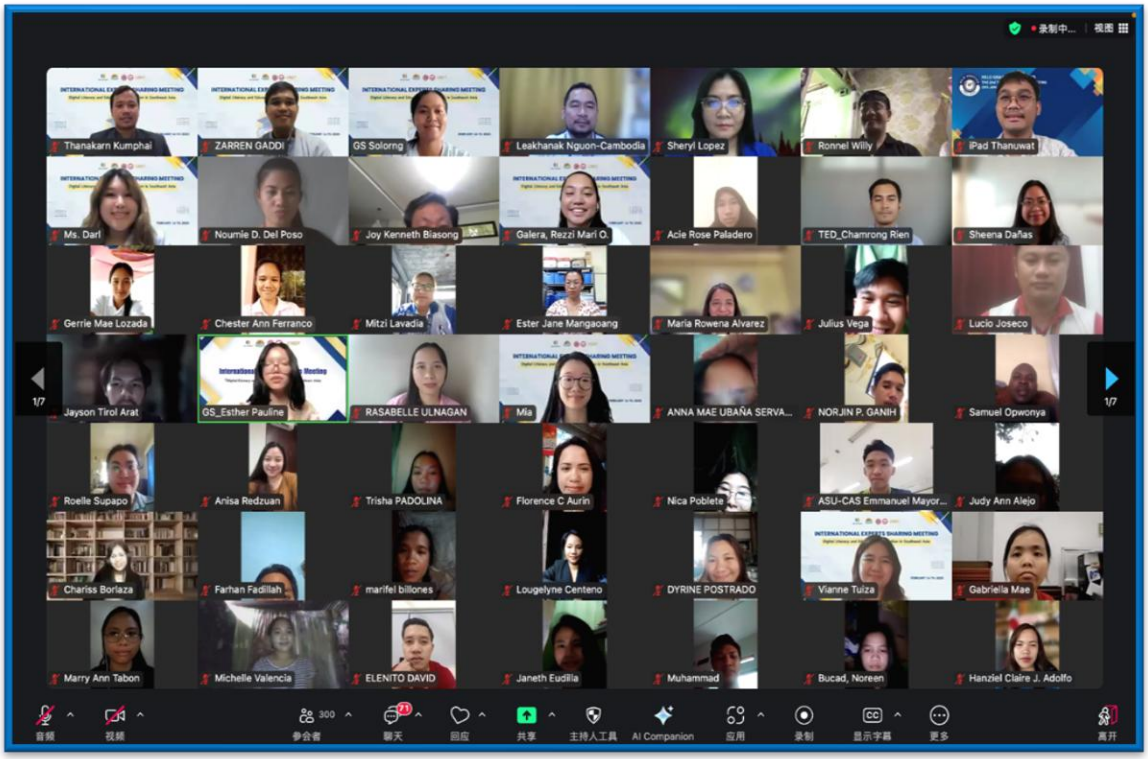
Dr. Songheang Ai, Center Director of SEAMEO TED, and Project Manager, in his recaps of progress, achievement, and the future direction of the project, he highlighted the success of the project based on the predominantly positive feedbacks from the evaluation of all 7 activities caried in the project namely the kick-off workshop of the project, three One Health Awareness Raising Activities with teachers and students and three One Health Awareness Raising Activities with communities of the three target schools. From this project, teachers, students and the communities learnt about One Health Concepts such as what One Health is, approach to food safety and zoonosis. In his concluding note, he appealed to Chevron and SEAOHUN to support the expansion of the One Health project to other general and technical schools.

Ms. Teechawan Yanudom, Representative of Chevron, highlighted that Chevron had always been committed in being a partner of choice in societies and communities where it operated. Chevron recognized that prioritizing health, public health, and education is fundamental to improving the quality of life for people in the country, which is really important and leads to social and economic strengths. Therefore, it has continuously supported various public health and educational projects in the region and in Cambodia. “Today we celebrate the result of a journey that began with a shared vision: to raise One Health Awareness and promote a collaborative approach to achieving the best health outcomes for people, animals, plants and our shared environment”, **Ms. Teechawan** stated. She was proud to highlight the project achievement of a One Health Module tailored in the context of Cambodia. She believed SEAMEO TED and its partners would build upon the foundation established by this project and continue to seek collaboration, ensuring the sustainability and the expansion of One Health project in Cambodia and beyond. In her final note, she congratulated and extended her heartful thanks to all the participants for their contribution to the success of the project.

Ms. Juthamanee Areeya, Representative of SEAOHUN, extended her our deepest gratitude to SEAMEO TED for its strong leadership and dedication to promote One Health education. She also expressed her appreciation for the Ministry of Education, Youth and Sport of the Kingdom of Cambodia for its continued support and endorsement of this initiative. Its role in integrating One Health into the education system is crucial to fostering awareness and preparedness among future generations. She also thanked Chevron for its generous support in strengthening One Health education across Southeast Asia. Its investment in education and community empowerment has made a tangible difference, and she was truly grateful for this collaboration. In her final note, Ms. Areeya acknowledged the efforts of everyone involved—our project partners, school leaders,

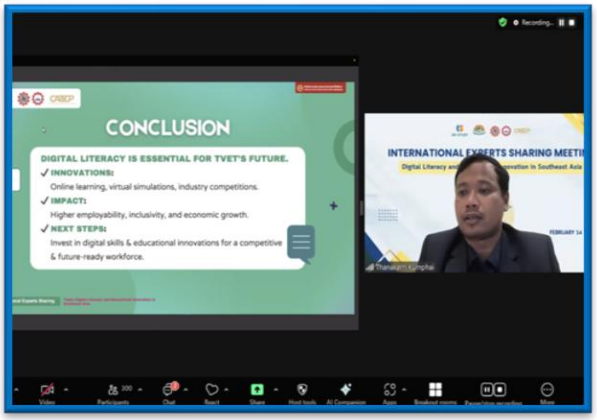
teachers, and students—who had actively contributed to making this initiative a success. Their passion and commitment would leave a lasting impact on education and public health.

4. Digital Literacy and Educational Innovation in Southeast Asia, on February 14th, 2025, at 14:00-15:30(GMT+7) ZOOM: 538 596 4216(passcode: 123)

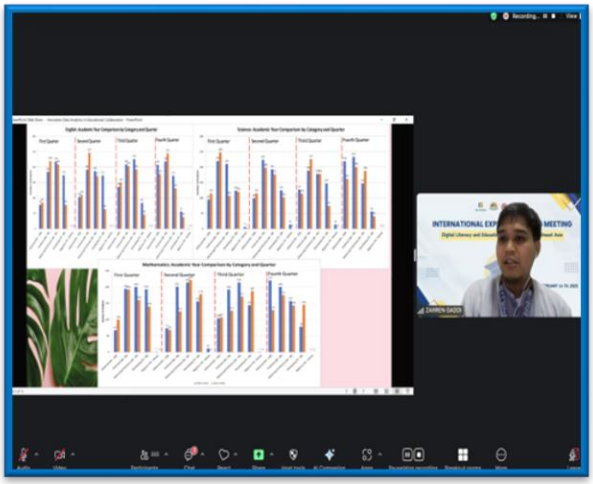


SEAMEO TED, CATECP, and the International Youth Culture and Education (KEMG), virtually co-hosted an International Experts Sharing Meeting on ***"Digital Literacy and Educational Innovation in Southeast Asia"*** successfully on 14 February 2025 at 14:00 (GMT+7). The meeting focused on the opportunities and challenges that education in Southeast Asia faces in the digital era. Experts from the Philippines and Thailand were invited to share their valuable experiences and unique insights on fostering digital literacy and driving educational innovation. 300 participants from different parts of the world participated in this event.

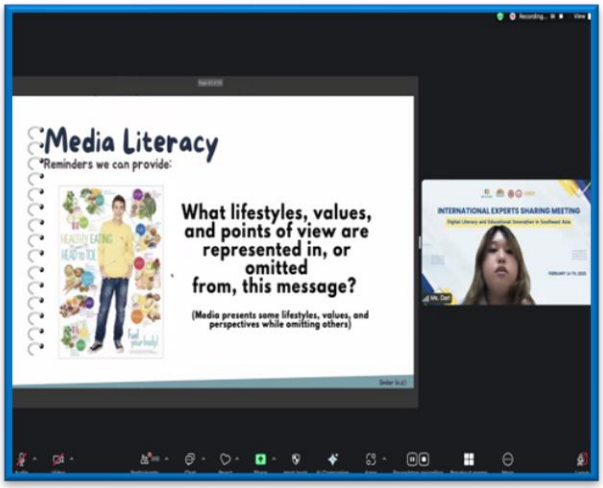
Ms. Cheng Chantola, Head of Administration and Finance Office of SEAMEO TED, was invited to deliver her Opening remarks. She emphasized that in the wave of digital transformation, we are at the forefront of educational reform. Southeast Asia, a region full of vitality and diversity, is experiencing unprecedented opportunities and challenges in its education system. **Ms. Cheng** encouraged participants to embrace diverse perspectives and spark innovation through meaningful discussions.



Mr. Thanakarn Khumphai, Lecturer at Chachoengsao Technical College, Thailand shared his topic on "*Inclusive TVET for a Green and Digital Future in Thailand: Adapting TVET for Sustainable Development and Digital Transformation"*. He focused on Thailand's Industry 4.0 agenda and addressing employment challenges. He highlighted that green and digital skills are highly aligned with Thailand's future economic development and the Thailand 4.0 vision. He also shared successful cases, such as the Dual Vocation (DVT) program, the China-Thailand vocational education cooperation, and "Smart Agriculture".

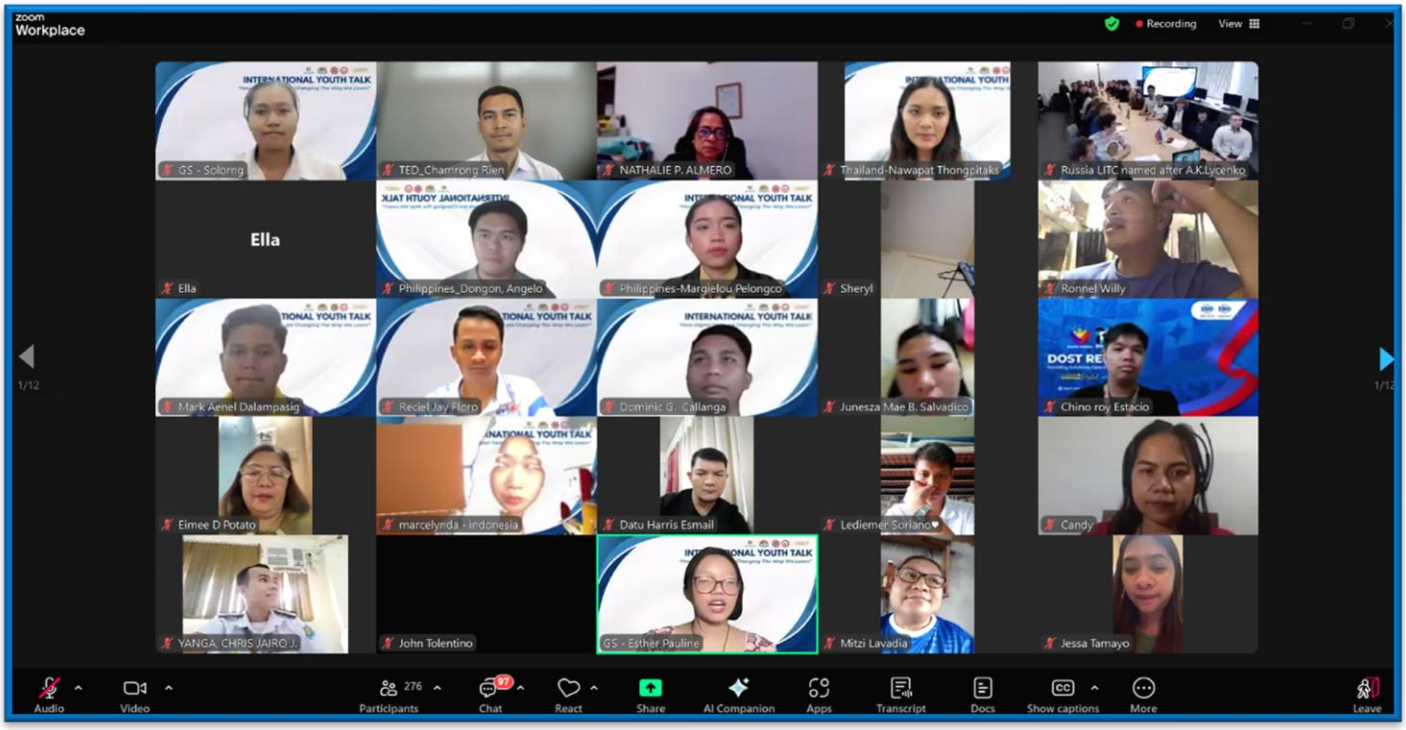


Dr. Zarren Aleta Gaddi, Lecturer at San Felipe Neri Catholic School and Jose Rizal University, The Philippines, presented her topic on *"The Utilization of Data Analytics through Professional Learning Communities"*. His presentation focused on Digital literacy, digital leadership, and data analytics literacy which are key drivers of educational development. He also introduced a case study from Cluster 3 schools under the Roman Catholic Archdiocese of Manila Education System, which established professional learning community activities through the "TAYO" project. He also addressed the challenges of educational reform such as data ethics concerns and the need for educators with relevant skills.



Ms. Darl Jacqueline M.Orillaza-Giray, Lecturer of Department of Educational Leadership and Management, De La Salle University, The Philippines, presented her topic on *"Promoting Safe and Appropriate Technology Use for Young Children"*. She focused on digital technological tools such as computers, tablets, cameras, software, and internet which offer numerous benefits to early childhood development, including facilitating high-quality interactions and supporting learning through digital tools, such as virtual field trips that expand children's perspectives. She insisted that parents and educators establish household digital usage plans with clear rules, ensuring appropriate privacy settings, content filtering, and restrictions.

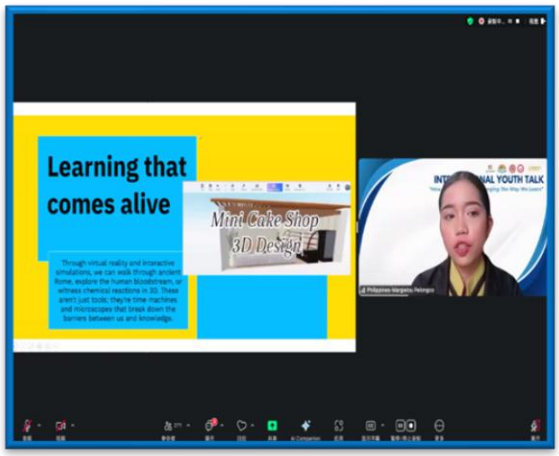
5. 2nd International Youth Talk on "How Digital Tools are Changing the Way We Learn" on February 28, 2025 at 14:00-15:30 Zoom: 538 596 4216 (Passcode:123)



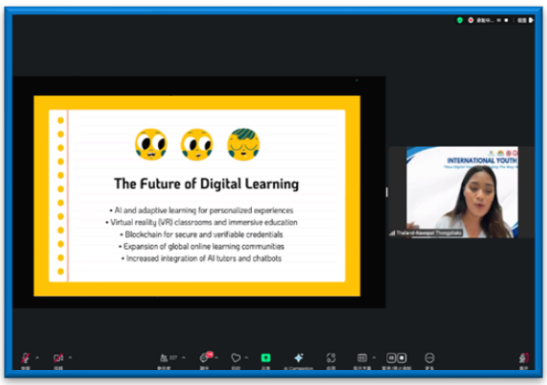
On February 28, 2025, SEAMEO TED and Go Study co-hosted the 2nd International Youth Talk on “How Digital Tools Are Changing the Way We Learn" as one flagship program of China-ASEAN Technical Education Cooperation (CATECP). This event was aimed to delve into how digital tools and technologies are transforming the education landscape and to explore how these innovations reshape traditional learning methods. Four teams of youth representatives from Russia, Indonesia, Thailand, and the Philippines were invited to engage in insightful discussions and share their perspectives to 275 participants from the region.

Mr. Sous Sovannarin, Vice Head of Public Relations and Partnership Division of SEAMEO TED, was invited to deliver the opening remarks. He emphasized that digital technology is transforming global education at an unprecedented pace, creating new opportunities for learning and innovation. He highlighted that youth are not only users of technology but also key drivers of educational progress, capable of leveraging digital tools to enhance learning experiences, promote knowledge sharing, and contribute to a more inclusive education system.

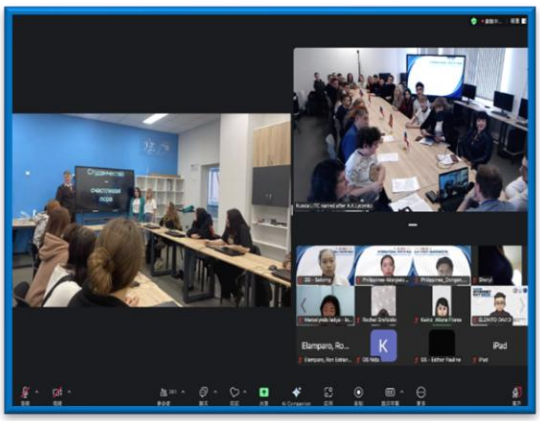
Sharing Session



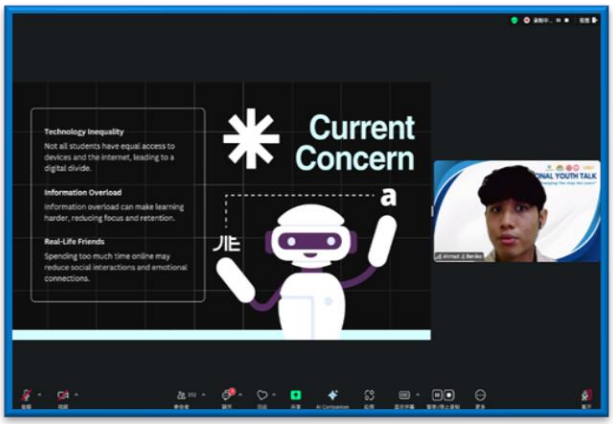
Youth team from **Capiz State University, The Philippines**, shared insights on the topic "Digital Tools and Modern Education: Beyond Textbooks." They emphasized that sustainable development relies on education, with information technology driving educational reform. Social media has become a valuable learning tool, breaking time and space limitations in information sharing while also creating opportunities for social interaction and employment. The shift to online learning during the pandemic highlighted the role of digital tools in enriching education, with teachers using feedback mechanisms for targeted guidance. Digital methods like PPT, videos, and online training are now widely applied.



Youth team from **King Mongkut's University of Technology North Bangkok, Thailand**, shared their views on how digital tools are shaping education today. They highlighted the benefits of digital learning, such as AI-powered personalized education and interactive learning platforms that break geographical barriers and allow flexible study schedules. Multimedia content enhances student engagement and provides valuable teaching data. However, challenges remain, including digital inequality due to limited internet access, screen fatigue from prolonged device use, reduced face-to-face interaction, and concerns over privacy and data security. Teachers also need to adapt to new tools while avoiding over-reliance on technology.

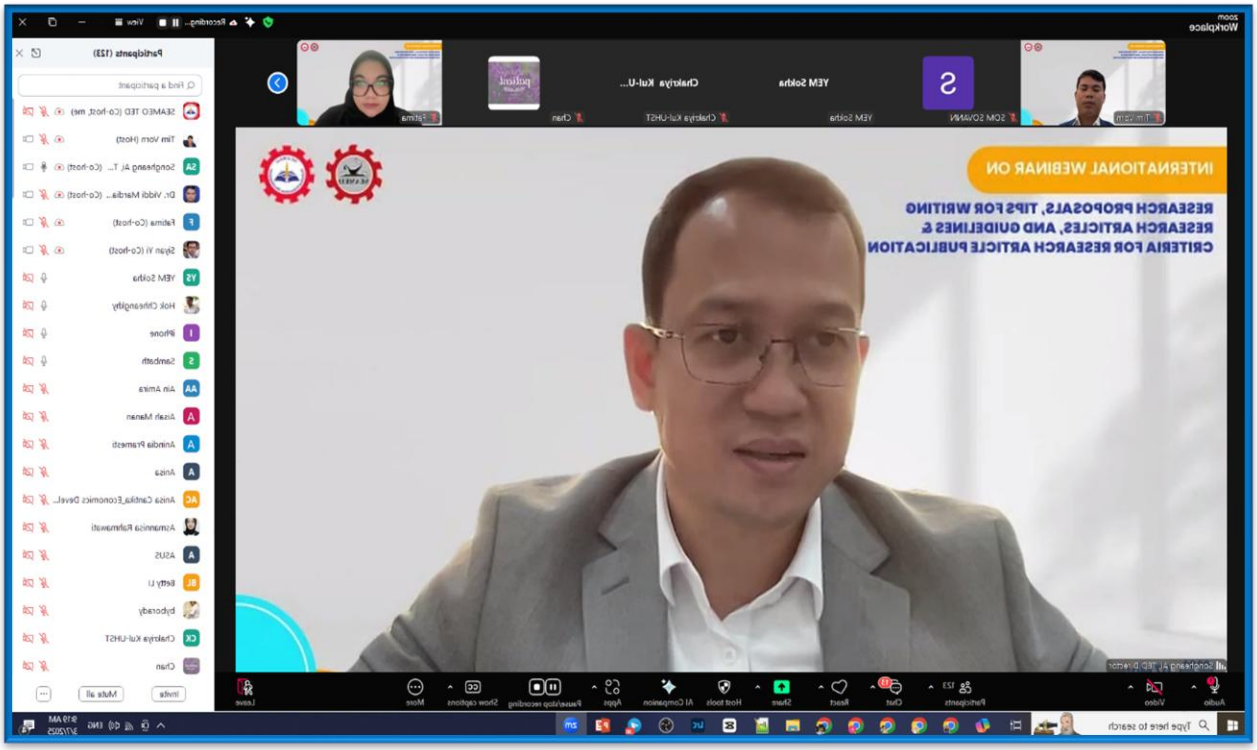


Youth students from **Liskinsky Industrial and Transport Technical College, Russia**, shared how digital tools are transforming education by offering personalized learning paths and promoting lifelong learning. The college's IT-Cube Center focuses on VR/AR education, training students in gaming and virtual learning through platforms like Varwin, Unity, and HTC Vive Pro. They also emphasize Java programming and robotics. While digital tools enhance learning through innovations like neural networks for note-taking and gamified teaching, challenges such as the digital divide remain. The speaker noted that digital tools can't replace teachers, and student interest and engagement are crucial for success. The college is using digital platforms to train versatile professionals for the future.



Youth students from **University of Semarang, Indonesia**, discussed the transformation digital tools bring to learning, along with the challenges and future developments. They emphasized that digital tools have changed traditional learning methods by increasing student interest, curiosity, and learning outcomes. These tools allow students to connect with others globally, fostering cultural understanding and broadening perspectives. Mastering digital skills is essential for lifelong learning. However, issues like the digital divide, lack of resources, and information overload still hinder online learning.

6. Webinar on Research Proposals and Tips for Writing Research Articles, Guidelines, and Criteria for Research Article Publications on March 07, 2025, at 09:00-12:00



On March 7, 2025, the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED) hosted an international webinar on "Research Proposals and Tips for Writing Research Articles, Guidelines & Criteria for Research Article Publication." This event brought together 155 participants from SEAMEO member countries and featured distinguished speakers sharing insights on grant proposal writing, academic research writing, and research article publishing.

This webinar was honored to have **Dr. Songheang Ai**, Centre Director of SEAMEO TED, deliver the opening remarks, emphasizing the significance of well-structured research proposals and high-quality academic writing. He highlighted common challenges in publishing, the importance of ethical research standards, originality, and adherence to guidelines. **Dr. Ai** also underscored the necessity of collaboration and knowledge sharing to enhance research impact and publication success.

The first session of the webinar featured a presentation on "Grant Proposal Writing" by **Dr. Siyan Yi**, who provided a comprehensive guide to developing successful research grant proposals. He outlined the essential components of a grant proposal, including problem statements, goals, objectives, methodology, key personnel, and evaluation plans. The session stressed the importance of understanding funding calls, following guidelines meticulously, and demonstrating impact and sustainability. **Dr. Yi** also identified common pitfalls such as

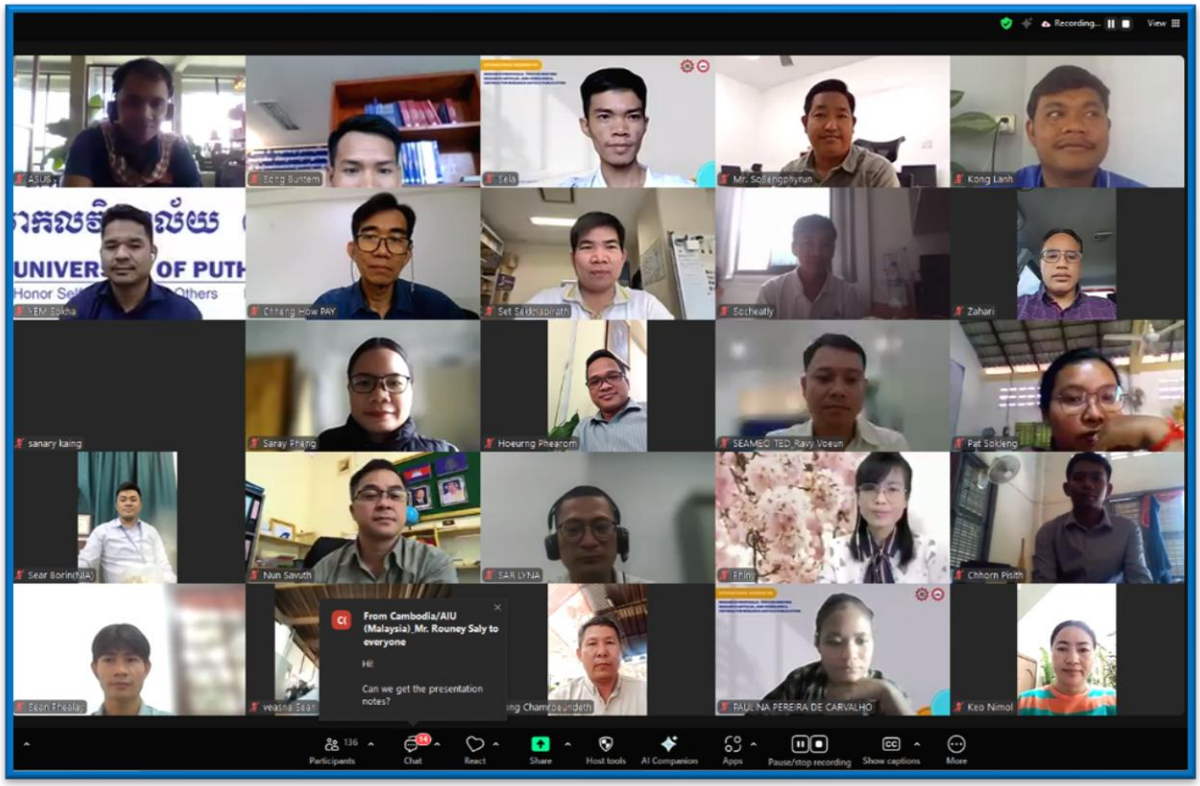
plagiarism, vague problem statements, and careless mistakes, encouraging participants to adopt a strategic and realistic approach to proposal writing.

Additionally, **Dr. Viddi Mardiansyah** further enriched the webinar with practical tips on writing high-quality research articles and getting published in reputable journals. He emphasized selecting the right journal, structuring articles using the IMRaD format, and ensuring clarity and coherence in writing. Key topics included crafting a compelling introduction, effectively presenting results, and meticulously addressing reviewer feedback. Ethical considerations, such as plagiarism and authorship integrity, were also highlighted. The session provided valuable insights into common pitfalls and best practices to enhance article writing as well as publication success.

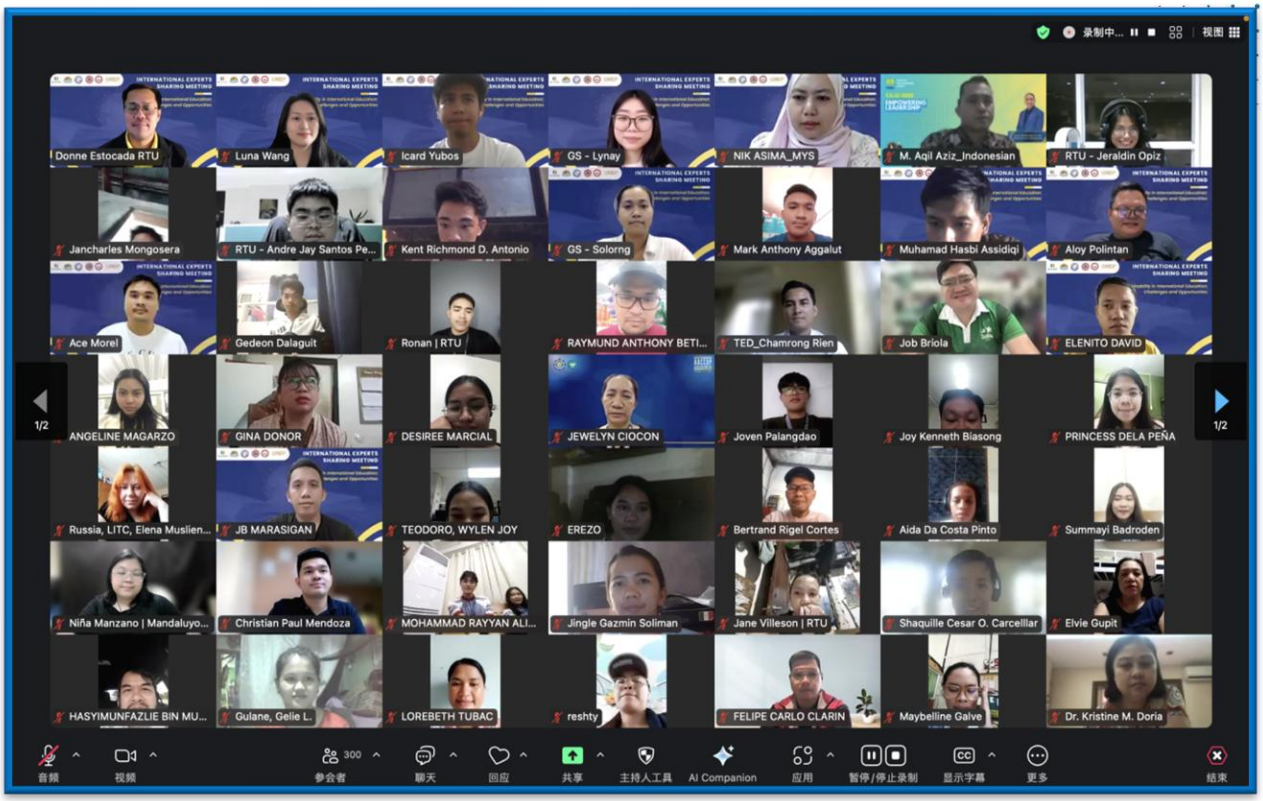
Finally, **Ms. Fatima Rahmah** presented the guidelines for research article publication, offering a structured approach for authors to publish their work effectively. The guidelines covered journal article types, selection criteria, and strategies to avoid predatory journals. The peer review process was discussed in detail, emphasizing single-blind, double-blind, and open review types. Ms. Rahmah also provided strategies to improve acceptance rates, such as refining research design, enhancing writing quality, and constructively addressing reviewer feedback. She recommended tools like Scopus, Web of Science, and DOAJ for journal selection and research tracking.

Overall, the webinar provided a valuable platform for researchers to enhance their grant proposal writing and academic publishing skills. By addressing key challenges and offering expert insights, the event contributed to strengthening research capacities and fostering a collaborative academic environment across Southeast Asia.

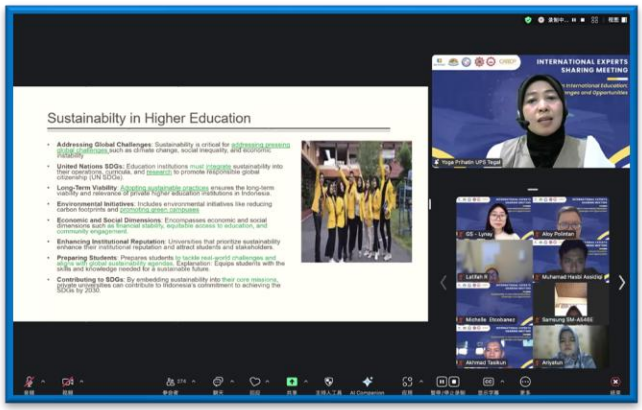
7. 2nd International Experts Sharing: Sustainability in International Education:Challenges and Opportunities on March 14, 2025 (14:00-15:30 GMT)



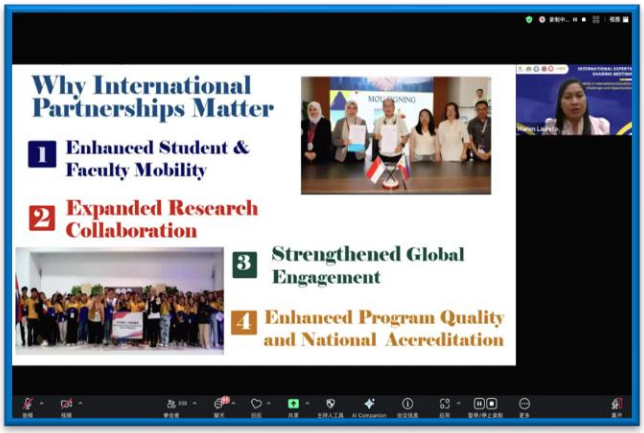
SEAMEO TED, CATECP, and the International Youth Culture and Education (KEMG), virtually co-hosted an International Experts Sharing Meeting on ***"Sustainability in International Education: Challenges and Opportunities"*** successfully on 14 March 2025 at 14:00 (GMT+7). This webinar was aimed to how to achieve sustainability in International Education and the challenges and opportunities that institutions in Southeast Asia faces in the digital era. Experts from the Philippines, Indonesia, and Malaysia gathered online to share their valuable experiences and unique insights on how their institute try to achieve sustainability the challenges and opportunities that each bring. The event provided participants with a thought-provoking intellectual exchange and attracted enthusiastic participation from over 300 attendees worldwide.



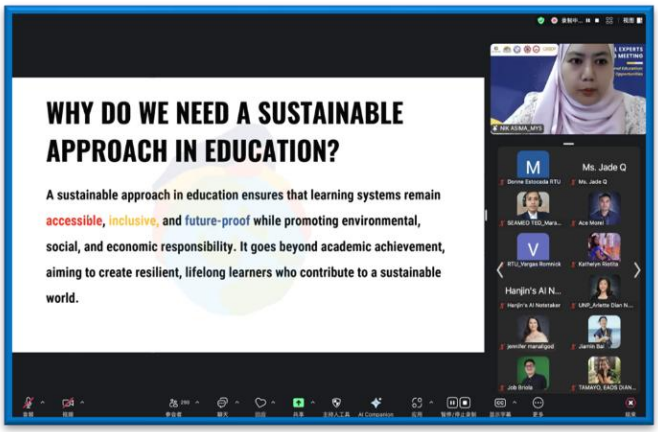
Mr. Pho Mara, Head of Technical Education and Training Division of SEAMEO TED, was invited to deliver his Opening Remarks. He emphasized on the importance of equipping learners with the tools and knowledge to address pressing global challenges has never been more critical. Education for Sustainable Development not only empowers individuals to think critically about environmental, social, and economic issues but also fosters a sense of responsibility and agency that transcends borders.



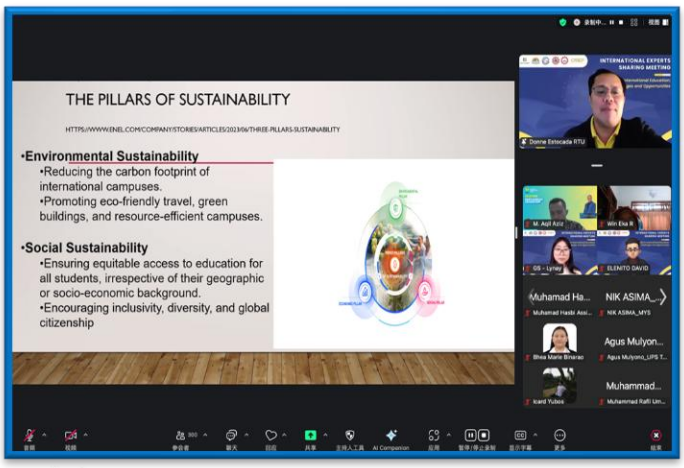
Dr. Yoga Prihatin, Dean of Teacher Training and Education Faculty, Universitas Pancasakti Tegal, Indonesia shared his topic on "*Sustainability Strategies for Private Higher Education in Indonesia: Challenges and Opportunities"***.** Dr. Yoga emphasizes the importance of sustainability strategies for Private Higher Education Institutions (PHEIs) in Indonesia, focusing on financial, social, and environmental challenges. She noted that financial sustainability is critical, as most PHEIs rely heavily on tuition fees (70-80% of revenue). She stressed on the need for curriculum alignment with industry demands to enhance the chance of getting employed, as well as the importance of scholarship programs to support students from lower-income backgrounds.



Dr. Marien Laureto, Associate Professor at Capiz State University, The Philippines, presented her topic on *"Strengthening International Partnerships for Sustainable Education"*. She emphasized the importance of internationalization and sustainability in higher education, particularly at Capiz State University (CapSU). She wants the audience to understand that international partnerships play a crucial role in enhancing academic quality, research opportunities, and global competitiveness. She highlighted key strategies for building sustainable partnerships, including establishing academic collaborations, enhancing student and faculty mobility programs, co-hosting international conferences, and integrating global perspectives into the curriculum.



Mrs. Nik Nor Asima Ariffin, Senior Lecturer at the Department of Civil Engineering at Politeknik Sultan Haji Ahmad Shah, Malaysia, presented her topic on *"Global Partnerships & Collaboration for Sustainable Education"*. She focused on the importance of global partnerships and collaboration in sustaining international education. She also pointed out that a sustainable approach to education goes beyond academic excellence—it must ensure accessibility, inclusivity, and long-term relevance while promoting environmental, social, and economic responsibility. She stressed the need for transnational education programs, student mobility and exchange programs, joint degree initiatives, and government-led policy efforts that encourage sustainability in education.



Dr. Donato Estocada, Director, International Affairs and Linkages Office at Rizal Technological University, The Philippines, presented his topic on *"Exploring the path forward in a rapidly evolving global landscape"*. He focused on the three pillars of sustainability—environmental, social, and economic. He insisted that policymakers play a key role in harmonizing visa policies, funding green initiatives, and ensuring equitable education policies. He believed that by integrating these strategies, the global education sector can become more inclusive, environmentally friendly, and financially sustainable.

8. Information Technology Purple International Conference on March 13-15, 2025, in Moscow City, Russia

Moscow: From March 13 to 15, 2025, **Dr. Ai Songheang**, Director of the SEAMEO Regional Centre for Technical Education Development, led the delegation of 18 ASEAN participants to participate in the IT Purple Conference 2025, held in Moscow City, Russian Federation. Organized by the Moscow Institute of Physics and Technology (MIPT), the conference brought together over 100 distinguished speakers and more than 3,000 participants, including senior leaders, researchers, educators, policymakers, technology professionals, and students.

This prestigious conference served as a platform for knowledge exchange, professional development, and networking with leading experts and technology companies. Discussions focused on seven key topics, namely: Mathematics, Machine Learning, Artificial Intelligence Development, Education, Research, and Career Opportunities.

During the event, **Dr. Ai Songheang** delivered a keynote presentation highlighting SEAMEO TED's achievements and the role of education technology in ASEAN countries. His session emphasized the centre's contributions and paved the way for establishing strategic collaborations. **Dr. Ai** focused on the critical role of education technology to support student learning according to the local contexts and needs.

As part of the conference, **Dr. Ai** signed a Memorandum of Understanding (MoU) between SEAMEO TED and Moscow Institute of Physics and Technology (MIPT), establishing a framework for cooperation in curriculum development, student and teacher exchange programs, conference organization, and research studies. The memorandum also promotes participation in international competitions, faculty and leadership exchange programs, and technical and vocational education and training (TVET). Furthermore, it facilitates the organization and participation in online and in-person workshops, training programs, and study visits, fostering a dynamic and sustainable partnership between the two institutions.

This partnership between SEAMEO TED and Moscow Institute of Physics and Technology (MIPT) signifies a strategic commitment to advancing education, research, and innovation in technical and vocational fields. By leveraging shared expertise and fostering cross-border collaboration, both institutions aim to enhance knowledge exchange, empower educators and students, and drive technological advancements. This MoU not only strengthens ASEAN-Russia relations in education and technology but also paves the way for future initiatives that will contribute to global progress in technical education and workforce development.

9. Capacity-Building Workshop on "Transformative Leadership and Instructional Technologies" for Policy Makers of Ministry of Labor and Vocational Training on March 17, 2025, in Phnom Penh, Cambodia

Phnom Penh: Southeast Asian Ministers of Education Regional Centre for Technical Education Development (SEAMEO TED), CODEUS Parent Company and Ministry of Labor and Vocational Training Co-organized a Capacity Building Workshop on «Transformative Leadership, Neuroscience in Education, and Innovative and Creative Technologies» at Anik Palace Hotel, Phnom Penh, March 17, 2025, participated by 31 participants (5 females) from various institutions of the Ministry of Labor and Vocational Training in Cambodia. This workshop concentrated on learning, teaching, and educational best practice distinguishing it from traditional skills-based on subject-oriented content.

The Opening Ceremony of the training course on Technical Drawing was presided over by **H.E Dr. Hing Sideth**, Director General of Directorate General of Technical and Vocational Education and Training. In his opening remarks he extends him sincere gratitude to Mr. Amit Cohen, Managing Partner of CODEUS parent company, **Mr. Tony Brandenburg**, Director of Education at CODEUS, Mr. Brad Ker, Advisor to CODEUS and Director of Digital Learning at Labtech International, **Dr. Ai Songheang**, Director of SEAMEO TED and distinguished guests, respected colleagues, esteemed partners from CODEUS and SEAMEO TED. It is an absolute honor and privilege to welcome you all to this important capacity building workshop on «Transformative Leadership, Neuroscience in Education, and Innovative and Creative Technologies» for Senior Education Staff under the Directorate General of Technical Vocational Education and Training (DGTVET). On behalf of the Ministry of Labor and Vocational Training (MLVT), He extend his deepest appreciation to CODEUS and SEAMEO TED, in collaboration with the MLVT, for organizing this capacity-building workshop. It is an initiative that reflects a strong commitment to enhancing the quality, relevance, and effectiveness of TVET Sector in Cambodia.

This workshop was presented by four experts, **Dr. Songhean Ai**, Center Director of SEAMEO TED, **Mr. Tony Brandenburg**, Director of Education at CODEUS, Ms. **Alyona Datsenko Volodina**, General Manager CODEUS, and **Mr. Brad Ker,** Advisor to CODEUS and Director of Digital Learning at Labtech International from Australia, which focus on four topics first Leadership, Transformative Leadership, Neuroscience in education, and Innovative and creative technologies, including Adaptive leaning Technologies.

His Excellency mentioned that we are gathered here today not just as manager, director, administrators, or trainers, but as leaders of change—individuals with the power and responsibility to shape the future of Cambodia's workforce. In an era defined by rapid technological advancements, digital transformation, and

evolving labor market demands, the traditional approaches to education are no longer sufficient. We must rethink, reimagine, and innovate. He also highlighted the workshop lies a critical theme: transformative leadership. As leaders in the TVET sector, we must go beyond administration and embrace a vision that is forward-thinking, adaptable, and innovative. Our educators are not merely instructors; they are mentors, facilitators, and catalysts for lifelong learning. It is our duty to empower them with the right tools, methodologies, and technologies to prepare students for the realities of the modern workforce.

Lastly, **H.E Dr. Hing Sideth** had expressed his sincere gratitude to CODEUS and SEAMEO TED, for bringing this initiative to Cambodia. He also commended each of participants for the dedication to strengthening the foundation of Cambodia's education sector. By the end of the workshop, he looks forward to an engaging and productive workshop, and he was confident that our collective efforts will lead to transformative changes that benefit our directors, trainers, students, and the nation.

10. Capacity-Building Workshop on "Transformative Leadership, Modern Teaching Methodology, and Cutting-Edge Technology" for Policy Makers of Ministry of Education, Youth and Sport on March 18, 2025, in Phnom Penh, Cambodia

(H.E. Om Romny, Secretary of State Opening the Workshop)

Phnom Penh: Southeast Asian Ministers of Education Regional Centre for Technical Education Development (SEAMEO TED) of the Ministry of Education Youth, and Sports organized a Workshop on "**Transformative Leadership, Modern Teaching Methodology, and Cutting-Edge Technology** ″ at Anik Palace Hotel in Phnom Penh, March 18, 2025, participated by 28 participants (6 Females) from Ministry of Education Youth and Sports in Cambodia. The Workshop course aimed at building capacity for the participants on Transformative Leadership, Modern Teaching Methodology, and Cutting-Edge Technology with a significant step in strengthening Cambodia's education sector by equipping educators with the skills to drive meaningful change.

The Opening Ceremony of the Workshop on "Transformative Leadership, Modern Teaching Methodology, and Cutting-Edge Technology ″ was presided over by His Excellency **H.E. Dr. Om Romny**, Secretary of State, Ministry of Education, Youth and Sport. In his opening remarks, he extends his sincere gratitude to CODEUS for their dedication to advancing educational excellence and to all of you, our esteemed senior education staff, for your participation. Your commitment to lifelong learning and professional development is instrumental in shaping the future of Cambodia's education sector.

His Excellency **H.E. Dr. Om Romny**, also this workshop is more than just a training session; it is a milestone in our journey toward educational excellence. By the end of today's discussions, I hope each of you will feel empowered and inspired to bring transformative practices back to your institutions. Together, we can cultivate a student-centered education system that nurtures critical thinking, creativity, and lifelong learning. His Excellency would like to extend him deepest appreciation to CODEUS for their steadfast commitment to strengthening our education sector. I also commend each of you for your dedication to professional growth and excellence in education. Your unwavering commitment to learning and improving will shape the future of Cambodian students and, ultimately, the future of our nation.

11. Training Course on "Technical Drawing" for Technical Education Teachers of Electricity and Electronics on March 20-21, 2025, in Siem Reap, Cambodia

Siem Reap Province: Southeast Asian Ministers of Education Regional Centre for Technical Education Development (SEAMEO TED) of the Ministry of Education Youth and Sports organized a training course on "Technical Drawing" at Puok General and Technical High School in Siem Reap Province, participated by 42 participants (2 Females) from 15 General and Technical High Schools and one New Generation School in Cambodia. The training course aimed at building capacity for the participants on Technical Drawing with an emphasis of using AUTOCAD program and strengthening the implementation of the Electricity and Electronics curriculum more effectively.

The Opening Ceremony of the training course on Technical Drawing was presided over by **Dr. Songheang Ai**, director of the SEAMEO TED. In his opening remarks, he congratulated **Mr. Nhek Sokun**, Deputy Director of Siem Reap Provincial Department of Education, Youth and Sport regarding some of its achievements that he highlighted, particularly the overwhelmingly remarkable passing rate of the high school and junior high school graduates in the preceding academic year accounting for over 86% and 90% respectively. He also thanked him for the insightful remarks of the participants during the opening ceremony.

Dr. Ai also stressed the importance of TVET sector as indicated by the government's various policies. TVET is a school-to-work approach which provides youth with a faster alternative path to enter the world of work and be productive in the labor market. He also noted that this training course is a response to the training need assessment to train technical education teachers on Technical Drawing as it is very important for the teachers of Electricity and Electronic trades to know this subject to be able to implement technical curriculum of these two trades successfully. In addition, he emphasized the importance of peer learning in enhancing skills development among teachers. He encouraged the teachers who participated in this training or other capacity development training to share what they learned and best practices to their colleagues.

This training was taught by two Chinese experts of SEAMEO TED—**Ms. Zhao Peili**, Professor of Guangxi Polytechnic of Construction, as the core trainer, and **Mr. Wei Qinghua**, Senior Engineer of Guangxi Vocational College of Water Resources and Electric Power, as the assistant trainer. The training covered five topics with a balance of theory and practices: Basics of Technical Drawing, Development of Technical Drawing, Reading of Construction Engineering Drawings, and Introduction to AutoCAD Program and (5) Technical Drawing Practice.

Ms. Zhao Peili, the core trainer, was able to engage all the participants in the training. Overall, the training was really engaging and participants were active. They were eager to carry out tasks assigned by the core trainer, one of which is to draw floor plans of a building using AutoCAD. Almost all the students were able to complete the tasks on their own with help from their follow-up participants.

12. Capacity-Building Workshop on AI and Digital Transformation in TVET for 25 ASEAN TVET Teachers on March 24-25, 2025, in Jeju Island, South Korea

On March 23-25, 2025, **Dr. Songheang Ai**, director of SEAMEO TED has led 28 ASEAN TVET teachers and policy makers to join the capacity-building workshop on AI in education at Cheju Halla University, South Korea for purposes (1) to provide ASEAN TVET teachers with the comprehensive understanding of AI application and digital technologies; (2) to equip ASEAN TVET teachers with digital skills for incorporating AI tools and digital platforms into existing TVET curricula; (3) to explore innovative teaching methodologies using AI application and digital platforms that can improve students' learning outcomes; (4) to enhance the teaching skills and methodologies of vocational education teachers using AI as an assisting teaching aid; (5) to build the foundational bridge between ASEAN TVET institutions and Korean institutions for future cooperation projects; and (6) to strengthen educational relationship between TVET institutions in ASEAN and Korean institutions in terms of best practice sharing. The workshop was participated by 28 ASEAN TVET teachers and policy makers from 7 ASEAN countries consisting of Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam including 2 participants from China.

During the workshop, SEAMEO TED led by **Dr. Songheang Ai** and CHU led by **Prof. Dr. Sung-Hun Kim** has signed MoU to start cooperation between South Korea and ASEAN for TVET development.

During the opening ceremony of the workshop, **Dr. Boyoun Lee**, vice director of office of international affairs, delivered her welcome remarks focusing on the importance of the workshop that focuses on AI in education during the AI era. She encouraged all participants to learn from each other and share best practices with their colleagues upon going back to their home countries.

Dr. Songheang Ai, director of SEAMEO TED, delivered his remarks stressing the AI era requiring teachers to be upskilled and reskilled to catch up with the digital transformation. Globally, the percentage of internet users rose from 16% in 2005 to 66% in 2022. Technology has made a wide range of informal learning opportunities accessible. He mentioned that since 1990s, the number of education policies has increased by 13 times in high-income countries, 9 times in upper-middle income countries, and 5 times in low and lower-middle income countries. Dr. Ai encouraged all participants to be attentively learn AI tools and platforms from the Korean experts and make plans to implement them at their own work settings.

Prof. Dr. Sung-Hun Kim, president of Cheju Halla University (CHU) delivered the opening remarks highlighting the cooperative points of action such as curriculum development, and AI tool design and development that the university can cooperate with ASEAN participants to co-develop the programs. **Dr. Kim** noted the importance of collaboration between South Korea and ASEAN for TVET development. He hoped that participants would learn and experience AI tools productively.

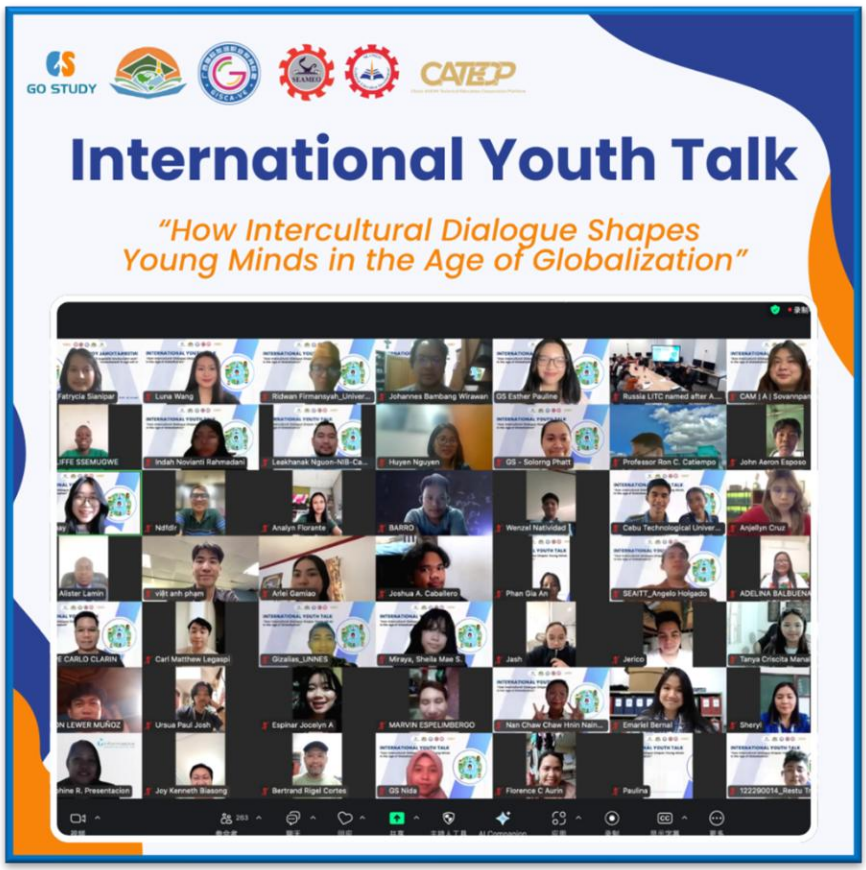
Some main modules that participant learned were AI/Digital Transformation in Education, Empowering Vocational Education Through Digital Tools and Analytics, Understanding the Natural Resources and Tourism Industry of Jeju. During the workshop, the participants visited the CHU Horse Science Department's Practice Ranch, and Marine Leisure Sports Center.

During his closing remarks, **Dr. Kim** raised some proposals for ASEAN participants' consideration upon returning to their work settings consisting of joint development of AI-Based Metaverse university, joint development of Digital Twin Education Environment, Joint development of AI-Based Education Curriculum, joint development of Domain Database, and Online and offline Joint Education Programs.

On March 26, 2025, **Dr. Songheang Ai**, has paid an official visit to Hangang Media High School and Korea Association of Secondary Vocational Education (KASVE) to seek cooperation and partnership for TVET development between South Korea and ASEAN. **Dr. Ai** and the management of Hangang Media High School has come out with some common points of cooperation such as student and teacher exchange programs online and offline, cultural visits, student internship, skill competition, etc.

Dr. Ai and **Mr. Kim Chong Kwan**, president of Korea Association of Secondary Vocational Education (KASVE) has come out with some common points of cooperation such as applying project proposal for Mekong-ROK Cooperation Fund for project implementation between South Korea and ASEAN, MoU signing between SEAMEO TED and KASVE for resource sharing and cooperation, capacity-building programs for school management, TVET teachers, and policy makers, applying for ODA projects from KOICA, etc.

13. International Youth Talk on "How Intercultural Dialogue Shapes Young Minds in the Age of Globalization" on March 28, 2025 (14:00-15:30) Zoom:538 596 4216 (Passcode:123)



March 28, 2025: The online youth exchange event was jointly co-organized by the China-ASEAN Technical Education Cooperation Platform (CATECP), the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), Go Study Global Education and other organizations focusing on the theme "How Intercultural Dialogue Shapes Young Minds in the Age of Globalization,". The event brought together college youth representatives from Russia, Cambodia, Indonesia, Thailand, and the Philippines. 300 participants from around the world engaged in in-depth discussions on the profound impact of intercultural exchange on young people's thinking, cognition, and actions in the context of globalization.

Mr. Pho Mara, Head of Technical Education and Training Division of SEAMEO TED, delivered the opening remarks. He emphasized that globalization brings both opportunities and challenges, making intercultural dialogue crucial for shaping young minds and fostering personal growth. He encouraged participants to share their experiences and insights, highlighting how intercultural exchange broadens perspectives and deepens understanding of diverse values. He expressed confidence that this event would inspire meaningful discussions, promote regional education and cultural exchange, and contribute to a more harmonious world.

Young students from Cebu Technological University, the Philippines shared:

Youth representatives from the Philippines shared that the modern world has become a closely connected "global village," where intercultural dialogue is crucial for seizing opportunities and personal growth. They highlighted various ways to foster intercultural understanding and personal development, such as academic exchanges, English as a second language, and debate activities. Digital tools like DISCORD and language exchange platforms also help expand global networks, breaking geographical barriers. They concluded, "The 'global village' is not just a village, but a global, interdependent society."

Young students from Guiyang University, China shared:

A Cambodian student from Guiyang University shared on "Empowering Intercultural Dialogue through Multilingualism." The speaker emphasized that language is not just a communication tool but a bridge to understanding different cultures. Reflecting on their own experience in China, they highlighted how multilingualism helped overcome cultural misunderstandings and build trust. They concluded, “Mastering multiple languages is to embrace the world and the future.”

Young students from Universitas Negeri Semarang, Indonesia shared

Youth representatives from Indonesia discussed how intercultural communication shapes young people's thinking and actions, helping them connect with others globally. They highlighted the importance of intercultural dialogue in promoting personal growth and social awareness. Addressing challenges like language barriers, stereotypes, and cultural misunderstandings, they suggested improving language skills, cultural awareness, and active listening. The representative encouraged youth to engage in international exchanges, use social media, and join community projects to broaden their perspectives. They concluded that embracing cultural diversity creates opportunities for learning, collaboration, and making a global impact.

Young students from Liskinsky Industrial and Transport Technical College in Voronezh, Russia shared:

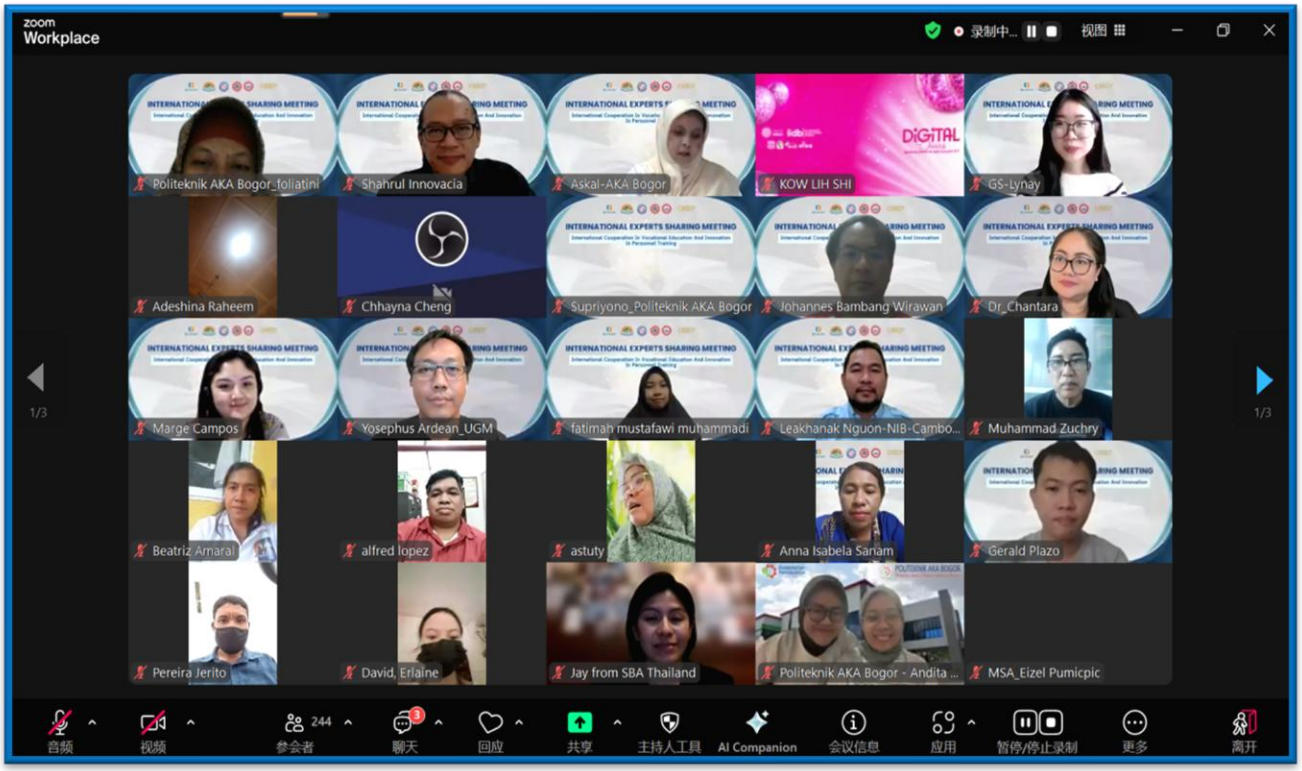
Youth representatives from Russia shared thoughts on shaping the cultural worldview of contemporary youth. They emphasized that, in the age of globalization, young people deepen their understanding of different

cultures, traditions, and customs through learning foreign languages and interacting with overseas friends. They also noted that culture evolves with time. The speaker highlighted that intercultural dialogue broadens perspectives and promotes a deeper understanding of global diversity, while another student stressed that it's not only about language but also about understanding and respecting cultural differences. They concluded that breaking barriers and eliminating stereotypes is key to building a more harmonious and inclusive society.

Young students from Universitas Sumatera Utara, Indonesia shared:

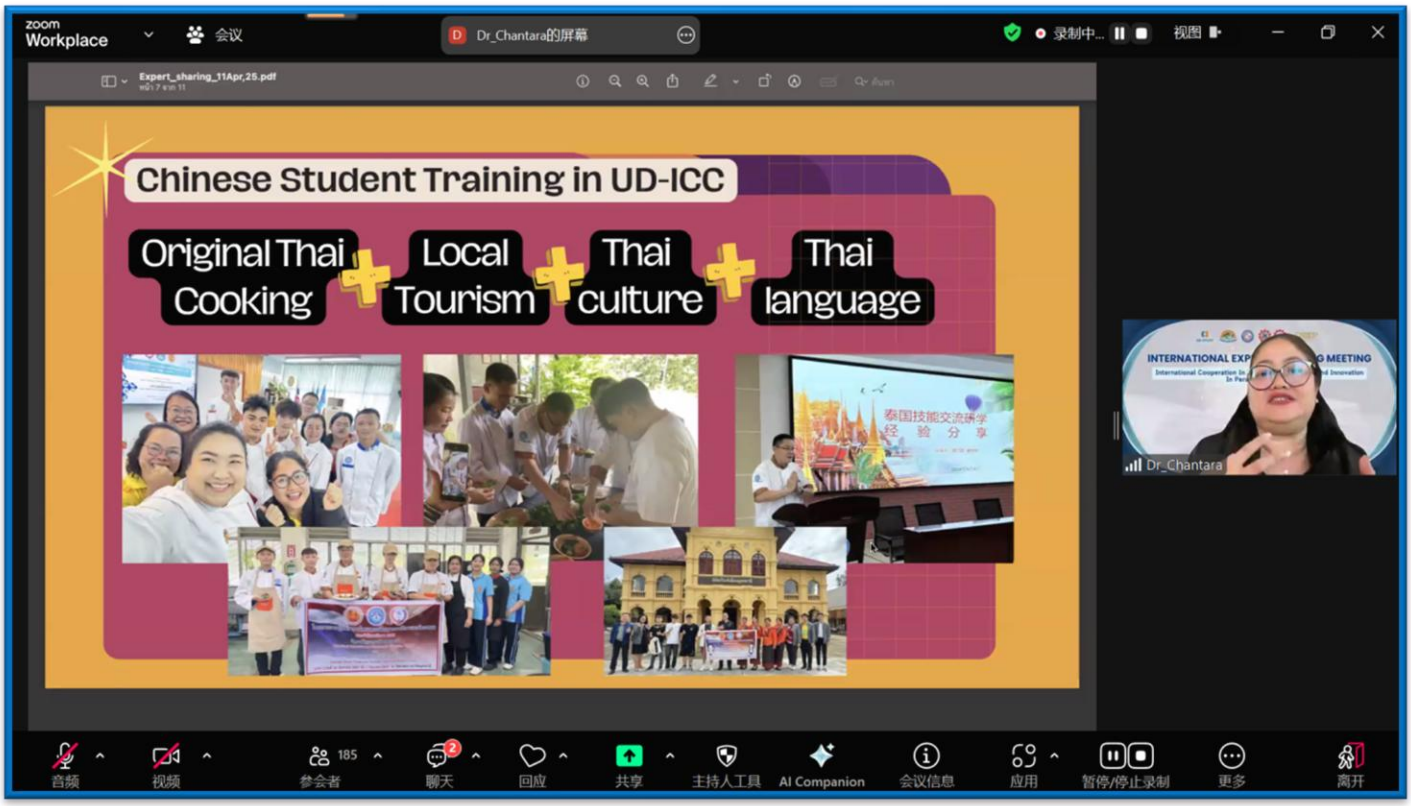
Youth representatives from Indonesia shared about the "Medan Book Club: Fostering Multicultural Awareness and Embracing Cultural Differences." They introduced Medan, a multicultural city in North Sumatra, where different ethnic groups coexist harmoniously. The speaker highlighted how the government integrates respect for diversity into youth education and how the MBP Reading Community promotes inclusivity by discussing topics like prejudice, language differences, and minority integration. They emphasized that cultural diversity is an asset and urged youth to engage in intercultural dialogue to build a harmonious future.

14. International Expert Sharing Meeting on “International Cooperation on Vocational Education and Innovation inn Personnel Training” on April 11, 2025 (Virtually)



On April 11, 2025, the third International Experts Sharing Meeting of the year, hosted by CATECP, SEAMEO TED, and the International Youth Culture and Education (KEMG), successfully concluded. With the theme ***"International Cooperation* on *Vocational Education and Innovation In Personnel Training"*** the event focused on different international cooperation initiatives in promoting vocational education and personnel training in Southeast Asia. Experts from Thailand, Indonesia, and Malaysia gathered online to share their valuable experiences and unique insights on initiatives by their respective institutions on how to drive educational innovation. The event provided participants with a thought-provoking intellectual exchange and attracted enthusiastic participation from over 200 attendees worldwide.

The opening speech was delivered by **Mr. Tim Vorn**, Head of Head of Research and Development Division of SEAMEO TED. He emphasized the importance of international collaboration in strengthening vocational education and advancing innovative practices. This helps to train young skill professionals in a rapidly changing world. He also mentioned how partnership and innovation is the key to developing human capital, making the future more adaptable and inclusive. **Mr. Tim Vorn** encouraged participants to engage in the discussion with our esteemed experts as they specialize in the topics that they choose to present.

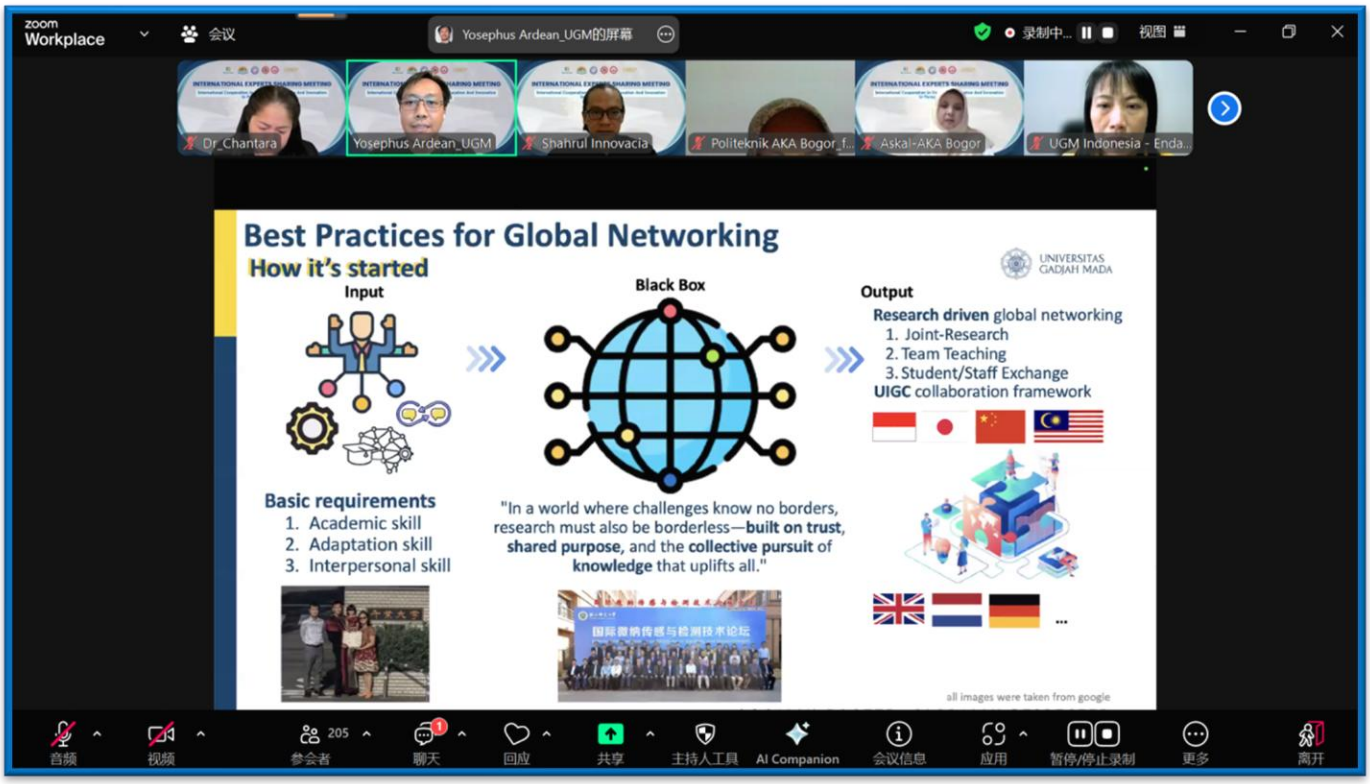


Topic: From Exchange to Innovation: The Thai Chinese Journey of Innovative Collaborative Approaches

Speaker: Dr. Soontornpathai Chantara, President of Udonthani Industrial and Community Education College, Thailand

Dr. Soontornpathai Chantara highlights the evolving collaboration between Thailand and China in vocational education, particularly through the efforts of UD-ICC and its partnership with INTERVEC since 2020. What began as a basic exchange program has grown into a comprehensive collaboration involving both online and onsite training courses, particularly in Electric Vehicle (EV) teacher training. These initiatives have laid the foundation for mutual knowledge sharing and skill development between the two countries. She mentioned how the Thai Chinese collaboration has progressed from traditional exchange models toward more innovative

and practical applications, such as e-commerce for EV cooking, and integrated projects focusing on local tourism, Thai gastronomy, and the cultural arts of Thai wellness. The partnership promotes a "GLOCAL" mindset—acting locally while thinking globally—by combining Thai cultural strengths with advanced Chinese technologies and educational strategies. As part of the expanding vision, the collaboration includes reciprocal training opportunities: Chinese teachers and students are trained in Thailand, while Thai educators benefit from training in China. Future projects under discussion include incorporating AI in tourism business applications, further enriching vocational curricula with cutting-edge digital skills and entrepreneurship. Finally, **Dr. Chantara** presented key recommendations to strengthen future collaboration, calling for sustained exchange of teachers and students, joint program development, and deeper cultural integration to shape the next generation of innovative TVET (Technical and Vocational Education and Training). This initiative serves as a model for international cooperation, combining cultural diplomacy with educational innovation to prepare a globally competitive workforce.



Topic: Bridging Continents: Leveraging International Collaborations for Advancements in Multiphase Flow Measurement Techniques

Speaker: Dr. Yosephus Ardean, Head of Research Department & Assistant Professor in Mechanical Engineering at Universitas Gadjah Mada, Indonesia

Dr. Yosephus core message emphasizes that modern scientific challenges transcend national borders, necessitating global, trust-based partnerships rooted in shared purpose and mutual benefit. He outlines three fundamental skills for researchers aiming to join international networks: strong academic capability, adaptability, and interpersonal competence. The presentation centers around best practices for global

networking, using the University-Industry-Government-Community (UIGC) model as a framework for impactful collaboration. Key initiatives include joint research, team teaching, and exchange programs, all aimed at strengthening ties across institutions and countries. **Dr. Yosephus** presents the Fablab Jogja case as a success story—an innovation hub that supports prototyping, local manufacturing, food processing, and agri-tech development. The FabLab concept connects communities, customers, designers, and engineers to bring practical solutions to life through digital fabrication and localized entrepreneurship. He also shares the UGM-NUAA collaboration (with Nanjing University of Aeronautics and Astronautics, China) as an example of sustained academic partnership. Since 2021, this alliance has resulted in multiple international journal publications, over 20 joint seminars, and dozens of online academic lectures. These collaborative efforts showcase the power of bilateral cooperation in mechanical and electrical engineering, contributing to capacity-building and scientific progress in both Indonesia and China. He concludes the presentation by stressing three key takeaways: First, global collaboration accelerates innovation, especially in complex technical fields like multiphase flow. Second, international knowledge exchange strengthens local research ecosystems, empowering institutions like UGM to lead in regional development. Lastly, the future of scientific advancement lies in collaboration, where interdisciplinary and intercultural teamwork becomes the norm for addressing global challenges related to energy, environment, and technology.

Topic: Partnering for Prosperity: Empowering Future-Ready Workforce for Industrial Growth through Vocational Education and Industrial Collaboration
Speaker: Prof. Dr. Askal Maimulyanti, M.Si., Director of Politeknik AKA Bogor, Indonesia

In this topic presentation, **Prof. Dr. Askal Maimulyanti** puts a firm emphasis the vital role of workforce readiness in driving industrial development and economic growth in Indonesia. It highlights how vocational education bridges the gap between academic learning and practical skills, offering industry-aligned, hands-on experience. Politeknik AKA Bogor, under the Ministry of Industry, exemplifies this through its strategic development of globally competitive STEM-based diploma programs, including unique offerings like the Diploma IV in Food Nanotechnology. The institution also provides specialized certifications in areas such as analytical chemistry, food safety, environmental management, and nanotechnology, aligning graduate competencies with industry needs. Collaboration with industries is central to this model, providing mutual benefits such as tailored training, knowledge sharing, and workforce development. Successful partnerships include internships and recruitment programs with both local and international companies, as well as international initiatives like the Korean Study and Career Center and a management trainee program in China. Research collaborations and lecturer apprenticeships further strengthen academic-industry ties. Looking forward, Politeknik AKA Bogor seeks to expand its partnerships through international internships, academic exchanges, joint research, and the development of industrial classes. The presentation concludes by affirming the critical role of vocational education in sustainable industrial progress and the institution's commitment to long-term collaborative success.

Topic: Offering Affordable Construction Digital Solutions and Training through Open Global Partnerships

Speaker: Ir. Shahrul Nizar Shaari, Director of Innovacia Sdn Bhd, Malaysia

Ir. Shahrul Nizar Shaari highlights efforts to transform the construction industry through accessible digital solutions and collaborative training initiatives. Innovacia's core mission is to democratize access to construction technology and knowledge, particularly in developing countries, by forming open global partnerships that promote innovation in vocational education and training. He also emphasizes the importance of providing affordable and practical digital tools tailored to the needs of the construction sector. Innovacia focuses on leveraging open-source platforms and cloud technologies to reduce barriers to entry for small and medium-sized enterprises (SMEs). A major part of their strategy involves building capacity in Technical and Vocational Education and Training (TVET) institutions, ensuring that the workforce is equipped with the skills needed to thrive in the digital economy and Industry 4.0 era. To illustrate the effectiveness of this approach, he includes case studies from both local and international partnerships. These cases demonstrate the successful integration of tools like Building Information Modelling (BIM) and digital project management platforms into vocational training programs. Through these projects, Innovacia supports real-world applications of digital construction methods, enhancing productivity and sustainability in the sector. Ultimately, the initiative aims to create a global network of collaborations that enables knowledge sharing, promotes digital inclusion, and builds a skilled construction workforce capable of navigating the challenges of modernization. The outcomes are not only beneficial for workforce development but also contribute to broader goals of innovation, cost efficiency, and international cooperation in the construction and education sectors.

15. Chinese Frontier Mechanical Lecture Step Shaft Turning (Online) 22 April 2025 3:00-4:30 pm (GMT+8)

Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), Go Study Global Education, and Xinxiang Vocational & Technical College co-organized a Chinese Frontier Mechanical Lecture on "**Step Shaft Turning**" which was participated by over 140 participants from thirteen different countries consisting of **Cambodia, Indonesia, the Philippines**, **Malaysia**, **Brunei Darussalam**, **India**, **Sri Lanka**, **Vietnam**, **Pakistan, Serbia, Uganda, Nigeria, and Timor-Leste**. The Webinar was held from 3:00 pm to 4:30 pm (GMT+8), every conservative day on April 22 (live lecture), 2025 for the purpose of sharing knowledge and expertise of Step Shaft Turning by a Chinese expert **Mr. PEI Jianjun**, Special Government Allowances of State Council and Henan Province (Fruitful teaching experiences in CNC Milling: Machining Process Programming and Operation and CNC Machining Technology, Provincial Distinguished Teacher of Vocational Colleges, Henan Province, Technical Expert and Technical Model Worker of Henan Province, and Specialties: Mechanical Product Design and CAD/CAM Manufacturing).

In each session, the lecturer delivered the important contents of the step shaft turning such as feature of a stepped shaft, the function of design, components of stepped shafts, and application of stepped shafts. The participants were aware of the core concepts of step shaft turning, learn the high-end technology from the expert. Finally, interaction and communication, as part of Q & A session, were encouraged in terms of answering participants' questions, concerns or comments.

This workshop builds up a good relationship among participants as students, teachers and school management from different countries by sharing their common practices of Shaft Turning and raising comments and questions.

16. Webinar on Chinese Frontier Mechanical Lecture: Identification and Interpretation of Shaft Components on April 23, 2025, at 3:00-4:30 pm (GMT+8) Zoom:5385964216 (PW:123)

Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), Xinxiang Vocational and Technical College, and Go Study Global Education China co-organized the training on "**Identification and Interpretation of Shaft Components**" participated by over 120 participants with 94 females. The participants are from fourteen countries consisting of Cambodia, India, Vietnam, Thailand, Philippines, Nigeria, Malaysia, Indonesia, Uganda, Pakistan, BHARAT, Timor-Leste, Brunei Darussalam and Sri Lanka.

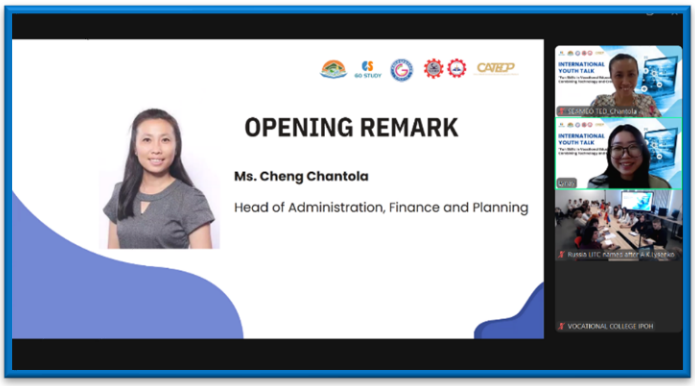
The training was held from 15:00 pm to 16:30 pm (GMT+8) on April 23, 2025. The training is designed and aimed to build technical skills and promote knowledge exchange in the field of mechanical engineering shared by the Chinese lecturer named Ms. Wang Yujie.

In the whole session, the Chinese lecturer delivered several important topics including The Concept of Cuts, Classification of Cuts, Precautions for Drawing cut Views, The Marking of Cuts and Partial Enlarged view. The course enables students to explore and become familiar with the basic components of Shaft design that are the main part of mechanical engineering. Moreover, the course also provides both theoretical knowledge and practical expertise in mechanical technologies. Finally, interaction and communication, as part of Q & A session, were encouraged in terms of answering participants' questions, concerns or comments.

In conclusion, the training course combines theory with hands-on practice, helping participants gain useful skills for today's manufacturing environment. It also builds up a good relationship among participants and students in the ASEAN region and other orders of the world.

17.The 4th International Youth Talk on Fun Skills in Vocational Education: Combining Technology and Creativity (Online) on April 25, 2025

On April 25, 2025: The 4th session of the International Youth Talk on "Fun Skills in Vocational Education: Combining Technology and Creativity," and it brought together youth representatives from universities in Cambodia, Indonesia, Vietnam, and Russia. Participants engaged in discussions on how the integration of technology and creativity can inspire innovation and vitality in vocational education, while nurturing future talent equipped with diverse skills.

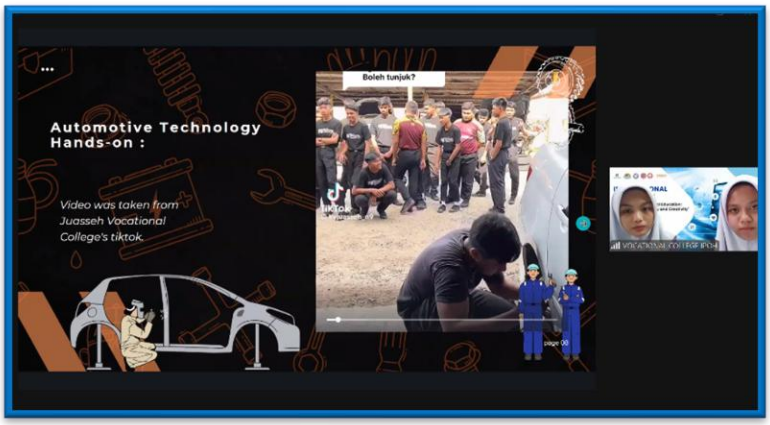


The opening speech of the event was delivered by **Ms. Cheng Chantola**, Head of Administration, Finance, and Planning at SEAMEO TED. She highlighted the importance of vocational education in modern society; especially how combining technology and creativity can make learning more engaging and effective. She encouraged all 143 attendees to explore how this integration could shape the future of vocational education and create new directions for student development. She concluded by warmly welcoming the guests and expressing her hope for insightful discussions during the event.

Ivanushin Dmitry and Nikivorova Anastasiya from **Jakarta State Polytechnic in Indonesia** discussed the importance of vocational education in developed countries, highlighting its role in boosting economic productivity, solving labor market skill gaps, and fostering entrepreneurship. They shared three projects: eco-friendly packaging solutions (biodegradable cups, active packaging, and edible packaging) to reduce plastic waste and extend food shelf life; a bridge monitoring system (SIMON BATAPA) using sensors to monitor structural health; and eco-paving bricks made

from mussel shell waste to solve local waste issues and improve road conditions. These projects demonstrate how vocational education fosters problem-solving, innovation, and sustainable development. Additionally, they emphasized how practical, hands-on projects like these enhance students' skills and prepare them for real-world challenges, making vocational education a vital tool for both personal and community growth.

Duong Van Sinl, a student from **Saigon University in Vietnam**, shared how Generative AI can be integrated with technology and creativity in vocational education. He explained that generative AI creates new content and fosters innovation in creative industries, while traditional AI focuses on pattern recognition and classification. In vocational education, generative AI enhances learning efficiency and creates engaging, interactive methods. Tools like chatbots and agent AI can help students understand complex technical concepts through realistic interactions. However, this technology brings ethical concerns and security risks, so it must be used cautiously. Overall, generative AI offers great creative potential and promotes the integration of technology and creativity in vocational education.



Adriana Qaseh Binti Ehsal Jesrin and Insyirah Binti Jaimehatta, students from **Ipoh Vocational College in Malaysia**, shared how integrating technology and creativity provides students with engaging learning experiences. They introduced the college's innovative methods, where students develop technical skills and creativity through hands-on projects, such as designing eco-friendly packaging and smart transportation prototypes. This approach enhances their technical abilities while sparking passion for creativity and problem-solving. By combining technical knowledge with artistic design, students gain practical skills that prepare them for future careers. These experiences also encourage teamwork and collaborative problem-solving. Additionally, the integration of real-world challenges into projects equips students with the skills necessary to thrive in a rapidly evolving job market.

Students Ivanushin Dmitry and Nikivorova Anastasiya from **Liskinsky Industrial and Transport Technical College in Voronezh in Russia**, shared how integrating technology and creativity into vocational education enhances engagement and effectiveness. They emphasized that vocational education should not only focus on technical skills but also foster creativity and make learning enjoyable, boosting student motivation. Virtual reality (VR) technology sparks curiosity, helping students grasp complex concepts interactively and improve memory. Gamified learning, using points and badges, merging fun with education, increasing participation. Involvement in real-world projects is also crucial, enhancing self-development and sparking innovative thinking. The college uses CAD and Compass 3D to develop professional skills and incorporates VR and AR for practical training. Overall, the integration of technology and creativity boosts the appeal of vocational education and provides students with more practical learning experiences.

Students Christian Giery and Nazillah Wahidyah from **Institut Teknologi Nasional Bandung in Indonesia** explored the widespread use of technology in daily life, discussing how it transforms theoretical knowledge into practical tools to solve real-world problems. Technology bridges geographical distances, creates opportunities, improves communication, and addresses practical issues. However, to fully harness its potential, additional skills are necessary. They highlighted the importance of soft skills like critical thinking, adaptability, teamwork, creativity, and determination (C.A.T.C.H.), which are essential in navigating the changing technological landscape. The speakers emphasized that technology is not just about hardware but how we use these tools to transform our lives and work. By fostering C.A.T.C.H. skills, students will be better equipped to tackle future challenges and seize opportunities.

18. Webinar on Chinese Frontier Mechanical Lecture: CNC Milling Programming and Machining Technology on May 08, 2025, at 10:00-11:30 am (GMT+8) Zoom: 868 4100 8869 (PW:123)

Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), Xinxiang Vocational and Technical College, and Go Study Global Education China co-organized the training on "**CNC Milling Programming and Machining Technology**" participated by over 150 participants with 19 females. The participants are from thirteen countries consisting of Cambodia, India, Vietnam, Thailand, Philippines, Nigeria, Malaysia, Indonesia, Uganda, Pakistan, Timor-Leste, Brunei Darussalam, and Sri Lanka.

The training was held from 10:00 am to 11:30 am (GMT+8) on May 8, 2025. The training is designed and aimed to build technical skills and promote knowledge exchange in the field of mechanical engineering shared by a Chinese lecturer named Mr. QIAO Weihong.

In the whole session, Mr. QIAO delivered several important topics including Brief Introduction to CNC Machining Center, Categories of CNC Machining Center, Components of CNC Machining Center and Application of CNC Machining Center. The course enables students to know briefly about the CNC Machining Center equipped with an automatic indexing rotary worktable or a spindle box that can automatically swing angles, enabling the workpiece to automatically complete multiple processes such as milling, boring, drilling, reaming, and tapping in multiple planes and angles after one clamping. CNC Machining Center is the most developed and a powerful tool in CNC machining of mechanical engineering. Moreover, the course also provides both theoretical knowledge and practical expertise in mechanical technologies. Finally, the interaction during the Q & A session enhanced further understanding of the participants.

In conclusion, the training course combines theory with visual illustration, enabling participants to gain useful skills for today's manufacturing environment. It also builds up a good relationship among participants and students in the ASEAN region and beyond.

19.2nd ASEAN-China Partnership Workshop on May 12-13, 2025, in Phnom Penh, Cambodia

Aiming to bring together experts, educators, policymakers, and industry leaders to discuss the internationalization of digital technologies in TVET, SEAMEO TED, together with its Chinese partner, Go Study Global Education, initiated the 2nd China-SEA Partnership Workshop in Phnom Penh on 12-13 May 2025. This workshop was organized to promote educational cooperation between China and Southeast Asian countries, allowing Chinese institutions to showcase their expertise in vocational education and facilitating knowledge exchange with educational partners in Southeast Asia. Partner institutions from China and SEA countries were invited to share the opportunities, challenges, and best practices in incorporating digital tools, platforms, and curricula to enhance the quality of vocational training across countries in the Southeast Asia (SEA) region. The two main sessions of the workshop are (1) Collaboration Between Industry and TVET Providers for Digital Skills Development and (2) Adopting Industry 4.0 Technologies in TVET Training with thirteen topics presented by thirteen experts who specialize in technical education. In addition, all participants were coordinated to join Industrial Visit to Phnom Penh Special Economic Zone (RGPPSEZ) on 12 May 2025 as a part of learning and investigation of the production line and skills needed production at some factories and companies.

The workshop was participated by 134 people from China, 9 Southeast Asia countries (Cambodia, Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam), and Russian Federation from 48 schools/institutes. Among them, 56 Chinese participants are from 24 Chinese schools/institutes; 31 Cambodian participants are from 31 schools/institutes; 25 Southeast Asia participants from 15 schools/institutes. And two participants are from Moscow Institute of Physics and Technology in Russian Federation.

In Welcoming Remarks, **Dr. Songheang Ai**, Center Director of SEAMEO TED, stated that the workshop would pave new paths for cooperation and partnerships between China and Southeast Asia in the fields of digital technology and the transformation of TVET. He said: *"China and Southeast Asia have long maintained a friendly and cooperative relationship in strengthening TVET"*. As an example, he highlighted the China-ASEAN Technical Education Cooperation Platform (CATECP), which hosts many online course-sharing projects from China to ASEAN. He shared some key data, mentioning that in 2024, a total of 41 Chinese schools shared over 300 courses on CATECP. Through various channels, these courses reached all ASEAN countries, engaging 256,672 students. In just the first five months of 2025, more than 100 Chinese schools

from 14 provinces had already joined the project collaborations with education ministries in Southeast Asia such as in Thailand, Malaysia, Indonesia, Vietnam, Brunei, and others have helped promote CATECP to over 200 higher education institutions across the region. He added that as of April, the platform had reached over 400,000 users, already surpassing the total number from the entire year of 2024.

In Impressive Remarks, **Dr. ZHANG Xufeng**, Deputy Director-General of Education Department of Guangxi Zhuang Autonomous Region, China, highlighted Guangxi's active role in promoting vocational education collaboration with ASEAN countries, including developing shared resources, establishing 17 Modern Craftsman Colleges, and hosting a number of trainings and exchange programs. She noted strong ties with Cambodia and emphasized Guangxi's efforts to attract more ASEAN students. She proposed three initiatives: strengthening government cooperation to build a China-ASEAN vocational education community, using AI to empower bilateral education, and deepening cultural exchanges to enhance mutual understanding among youth.

In Congratulating Remarks, **Dr. Riam Chau Mai**, Director of Community and Industry Collaboration Division, Department of Polytechnic and Community College Education, Ministry of Higher Education, Malaysia, gave special acknowledgments to Dr. Songheang Ai, Centre Director of SEAMEO TED for his visionary leadership in advancing TVET excellence in Southeast Asia. She highlighted that Malaysia is making strides in integrating digital solutions in education through online learning platforms and advanced assessments, as well collaboration with industry leaders like IBM and AWS is enhancing the digital skills of students and educators to meet the needs of Industry 4. 0. She marked that the workshop fosters regional collaboration, allowing experts to share insights and develop joint initiatives in areas like curriculum and teacher training. She urged continued efforts to create a resilient and innovative TVET environment for the region.

His Excellency Dr. Kolpheng Vaddhana, Under-Secretary of State representing **H.E Dr. Hang Chuon Naron**, Deputy Prime Minister, Minister of Education, Youth and Sport, Kingdom of Cambodia, and SEAMEO Council Member, presided over the opening ceremony of this important international workshop. In his opening remarks, he emphasized the importance of strengthening cooperation between China and ASEAN in advancing digital TVET (Technical and Vocational Education and Training). Speaking on behalf of Cambodia's Ministry of Education, he highlighted the critical need for educators to possess a core set of skills including communication, problem-solving, adaptability, teamwork, emotional intelligence, strategic

thinking, and decision-making. Dr. Vaddhana stressed the significance of continuous skills development, lifelong learning, and collaborative efforts among governments, businesses, and educational institutions to meet the demands of a rapidly evolving digital world. He concluded: *"To truly enhance the quality of life of every citizen, we must cultivate a passion for lifelong learning through education enriched by technology advancement."*

Key Outcomes of Workshop

- **Industrial and Cultural visit**

  All participants were invited to join Industrial Visit to Phnom Penh Special Economic Zone (RGPPSEZ) and they are also invited to join cultural visit at Royal Palace, National Museum and a local market on 12 May 2025 (one day prior to the workshop) as a part of learning and investigation of the production line and skills needed production at some factories/companies and also exploring local cultures of Cambodia.

Session I: Collaboration Between Industry and TVET Providers for Digital Skills Development

Key takeaways have been emphasized and discussed by five eminent speakers as follows:

- Strong industry-TVET linkages ensure relevant and future-ready skillsets
- Digital skills are essential for global competitiveness and workforce readiness.
- Brunei's model highlights sustainability and responsiveness in digital training
- Future focus: expanding digital courses and growing partnerships for emerging tech skills
- Proposed China-UMC Collaboration such as "Chinese + Skills" Program: Mandarin + IoT maintenance courses, Joint R&D: Low-cost sensors for tropical aquaculture, and SEAMEO TED Funding: Grants for pilot projects.
- IoT gaps today are tomorrow's joint ventures
- Digital Technology is important for logistics and supply chain in Cambodia-ASYCUDA World, GPS, Telematics, National Single Window Apply, CDC Master List Online, ASEAN Single Window Integration, and Transportation Management Systems (TMS).
- Modernizing vocational education in construction and new energy and developing shared curricula, training programs, and mutual standards, while establishing industrial colleges and research centers
  - Integrating education with industry, promote digital innovation, and support inclusive development across the region
- Equipping workforce with digital competencies to meet national and global demands
- It is essential to close the skills gap between education and real-world job requirements.
- Enabling curriculum relevance, work-based learning, and enhanced student employability.

Session II: Adopting Industry 4.0 Technologies in TVET Training

Seven eminent speakers have shared and discussed some key outlines including:

- Challenges in TVET should be resolved by Public-private partnerships (PPP) for funding, Teacher training programs and Compliance to International Standards.
- Collaboration pathways such as regional Industry 4.0 skill standards for TVET, joint research initiatives between China and SEA institutions, industry-sponsored labs/equipment donations should be called to actions.
- Phased deployment strategy starting with pilot labs before scaling successful models, Strategic MOUs with industry leaders (such as Microsoft, Lenovo, AMD) ensure curriculum stays current with market demands, and Comprehensive instructor training programs with industry certifications and mentorship should be the solutions to challenges such as High Implementation Costs, Maintaining Industry Relevance, and Faculty Upskilling Needs.
- A call to action for advancing tech-driven TVET, urging training institutions to start pilot projects, partner early with industry, and invest in instructor development. Policymakers are encouraged to boost funding, create supportive policies, and offer industry incentives. Industry partners are asked to share technology, provide internships, and help shape curricula.
- Industry 4.0 is essential in TVET due to the rapid transformation of industries, increasing demand for intelligent technologies, and the need to equip learners with future-ready, adaptable skills.
- The MIPT School of Physics and Mathematics emphasizes high-quality training in math, physics, modeling, and computer science using advanced methods. It involves industry and scientific experts aligning education with labor market demands and continually updates its programs to reflect current trends. Courses are tailored to each student's goals and required skills.
- Continuously deepen cooperation with eastern enterprises specializing in large artificial intelligence models and build a local computing power foundation and a large model platform.
- New strategies for talent cultivation, emphasizing education-industry integration to create a shared future between schools and enterprises, leveraging digital tools to develop an "intelligence skill" system, and fostering international cooperation to build a global vocational education ecosystem.
- Continuously deepen cooperation with enterprises specializing in large artificial intelligence models, and build a local computing power foundation and a large model platform
- Chinese institution is willing to equip with 5-axis CNC machining tools, to build intelligent manufacturing platforms based on Industry 4.0, to establish KUKA, ABB robot demonstration platforms. Using skill competitions as a bridge for ASEAN mechanical and electrical talent exchange, provide technical interaction windows for teachers and students, and promote regional intelligent equipment development and ASEAN smart manufacturing talent training and technical cooperation.
- Rapid transformation of industrial sectors, Demand for intelligent systems, automation, and data, and Need for future-ready skills and adaptability are the reasons behind the need of Industry 4.0 in TVET.

- Strategic recommendations to strengthen TVET in such as public-private partnerships, curriculum modernization, upskilling of trainers, and pilot project and awareness

Networking Session

Networking Session was conducted in three phases:

- **Phase 1**

All participants were invited to complete a quick survey for their comments/suggestions on Regional Collaboration with three questions. Participants accessed to the three questions by scanning QR code which was provided at their table. It took 15 minutes for them to finish their responses.

Q1: What programs will your institutions intend to have collaboration on? (Please choose the most needed only 3)

Q 2: What are the challenges that your institutions encounter in order to extend cooperation?

Q 3: Please share with us the most effective strategies for enhancing proposed program cooperation.

Q 4: What programs/events do you want SEAMEO TED/Go Study to coordinate for your institutions?

Summary of responses from participants:

Three key cooperation programs: student/staff exchanges, digital/AI education (including teacher training), and green education/sustainability modules were raised by participants. However, each institution is facing some challenges such as limited facilities, budget constraints, government red tape, language barriers, and difficulties in finding suitable partners. To enhance cooperation, participants recommended some strategies like forming strong committees, increasing visibility through conferences and online meetings, securing matching grants, fostering industry partnerships, and creating win-win collaborations through workshops. They seek SEAMEO TED and GO STUDY's support in coordinating research collaborations, student exchanges, teacher training, TVET curriculum development, green education initiatives, and policy dialogues, with particular interest in AI, digital agriculture, and hybrid workshops.

- **Phase 2**

All participants are encouraged to raise your suggestions, proposal, innovative, and call for collaboration.

Summary of outcome of phase 2:

Key opportunities include internship programs with Thai schools offering free accommodation, scholarships from Indonesian institutions for Southeast Asian students, and professional development through SEAMEO TED's Training Academies to promote best practices in TVET. Additionally, some institutions are looking for partnerships in cooperative programs, human capital development initiatives, and joint research projects to advance education and workforce readiness across the region.

- **Phase 3**

All participants invited to freely walk around and explore for partners collaboration and share their contact with their counterparts in 15 minutes.

MoU Signing Ceremony

There were also 13 MoU Signing among 14 schools from China, SEA countries, and Russia for their further cooperations.

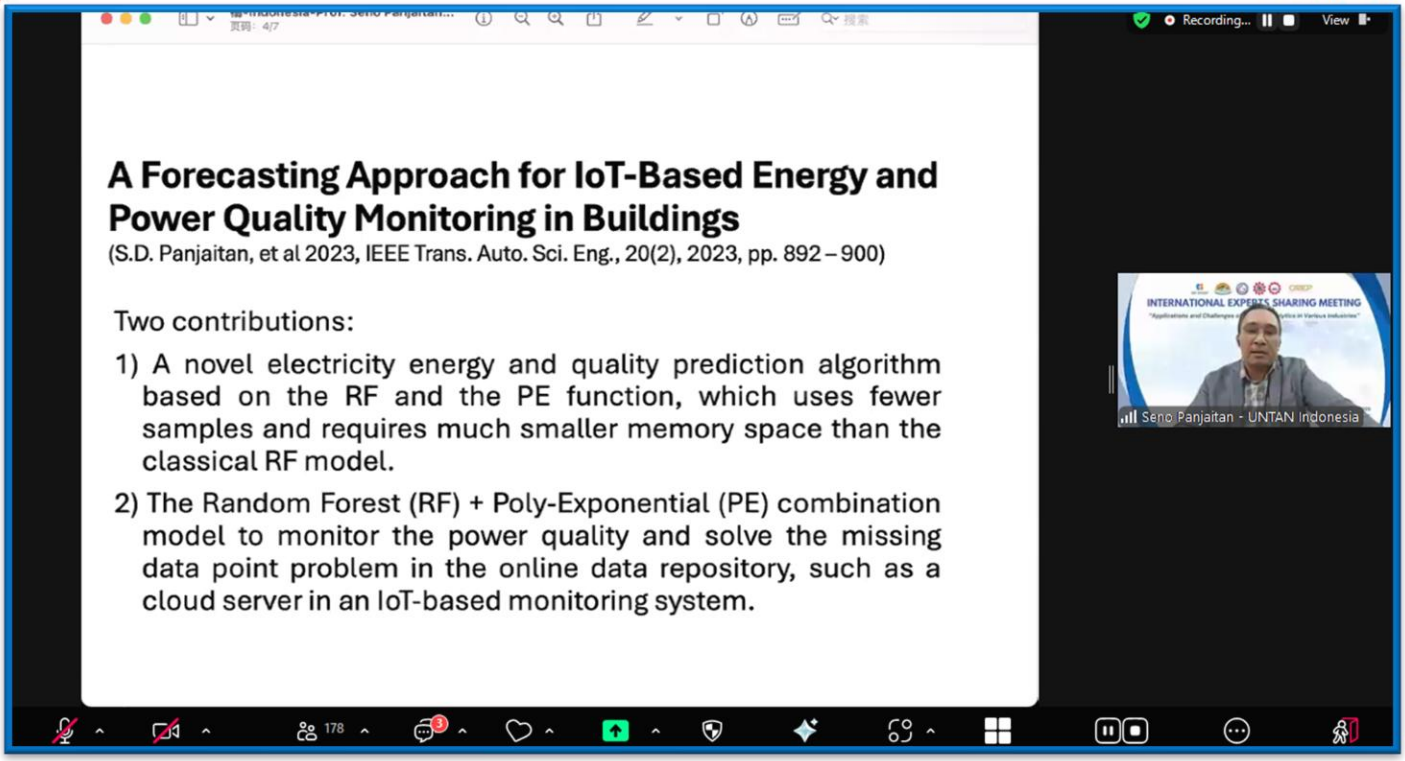
Mr. Laksasak Yangsaman, Director of International Strategy and External Relations Division, Bureau of Policy and Planning, Office of Vocational Education Commission (OVEC), Thailand, was invited to deliver his impressive remarks.He thanked SEAMEO TED for the invitation and highlighted the event's role in fostering dialogue and collaboration. He emphasized the transformative impact of digital technologies on TVET systems and the need for international cooperation to align with global standards and equity. He acknowledged the contributions of participants and partners, urging continued commitment to inclusive and future-oriented strategies for digital transformation. He concluded by wishing everyone success and safe travels, expressing hope for future collaborations.

Dr. Songheang Ai, Director of SEAMEO TED, delivered his closing remarks by giving his special thanks to eminent speakers and all participants who have actively contributed in making the workshop a success with fruitful results. He said that this workshop has reflected another millstone of partnership and cooperation between China and SEA countries in term of TVET. He elaborately wrapped up all sessions by highlighting the key outcomes of each one. He hopes everyone will keep in touch and have closer relations in strengthening and promoting TVET.

20. International Expert Sharing Forum on “Application and Challenges of Big Data Analytics in Various Industries on May 16, 2025 (Virtually)

In today's rapidly advancing technological era, digital technologies are reshaping the world at an unprecedented pace. The fourth session of the 2025 "International Experts Sharing Meeting" seminar, which was successfully themed "Applications and Challenges of Big Data Analytics in Various Industries" successfully held on May 16, 2025, accommodating 178 participants. This seminar brought together top experts from China, Indonesia, Cambodia, Malaysia, and other countries. Through a hybrid format combining online and offline participation, the event offered a vibrant platform for intellectual exchange among audiences from diverse nations. It attracted numerous professionals from education, technology, culture, and other fields to jointly explore how digital technologies empower industrial upgrading and drive social progress.

Mr. Mara Pho, Head of Technical Education and Training Division, SEAMEO TED delivered the opening remarks. He highlighted that amid the wave of digital transformation; big data analytics has become the core engine for innovation and development across industries. Centered on the theme of “Applications and Challenges of Big Data Analytics in Various Industries,” the event aimed to build a cross-border, cross-sector knowledge-sharing platform. Mr. Mara Pho emphasized that Southeast Asia must seize the opportunities brought by big data by deepening cooperation in talent cultivation, technology standards, and data security, collaboratively meeting the challenges of the digital era and harnessing the benefits of digitalization.



Topic: ***IoT-Enabled Data Analysis and Forecasting in Energy Systems: Applications and Key Challenges***
Expert: Prof. Seno D. Panjaitan, Professor of Electrical Engineering at Universitas Tanjungpura, Indonesia

Prof. Seno explained how the Internet of Things (IoT) uses sensors, network connectivity, and data platforms to enable real-time data collection and control in energy systems. IoT applications span smart grids, building energy management, and industrial energy systems. Data generated from smart meters and meteorological sensors are transmitted via cloud computing and analyzed using AI and machine learning models for visualization and decision-making to enhance energy efficiency. Forecasting in energy systems includes load, price, and renewable energy predictions across short-, medium-, and long-term horizons using statistical and machine learning methods such as Random Forest (RF) and Polynomial Exponential (PE) models. In a case study of a building in Indonesia, a combined RF+PE algorithm achieved high accuracy in predicting energy consumption and power quality. Challenges remain in data quality, security, privacy, scalability, and model adaptability. Prof. Seno emphasized the need for optimized machine learning data processing and standardized, highly secure solutions to address the “big data” challenges brought by IoT scale-up, driving energy systems toward intelligence and sustainability. While IoT and machine learning offer a promising technological pathway, their implementation requires balancing accuracy, cost, and security. Future progress will depend on cross-disciplinary collaboration and standard setting to unlock IoT’s full potential in energy data.

Topic: ***Digital Technology in Water Management***

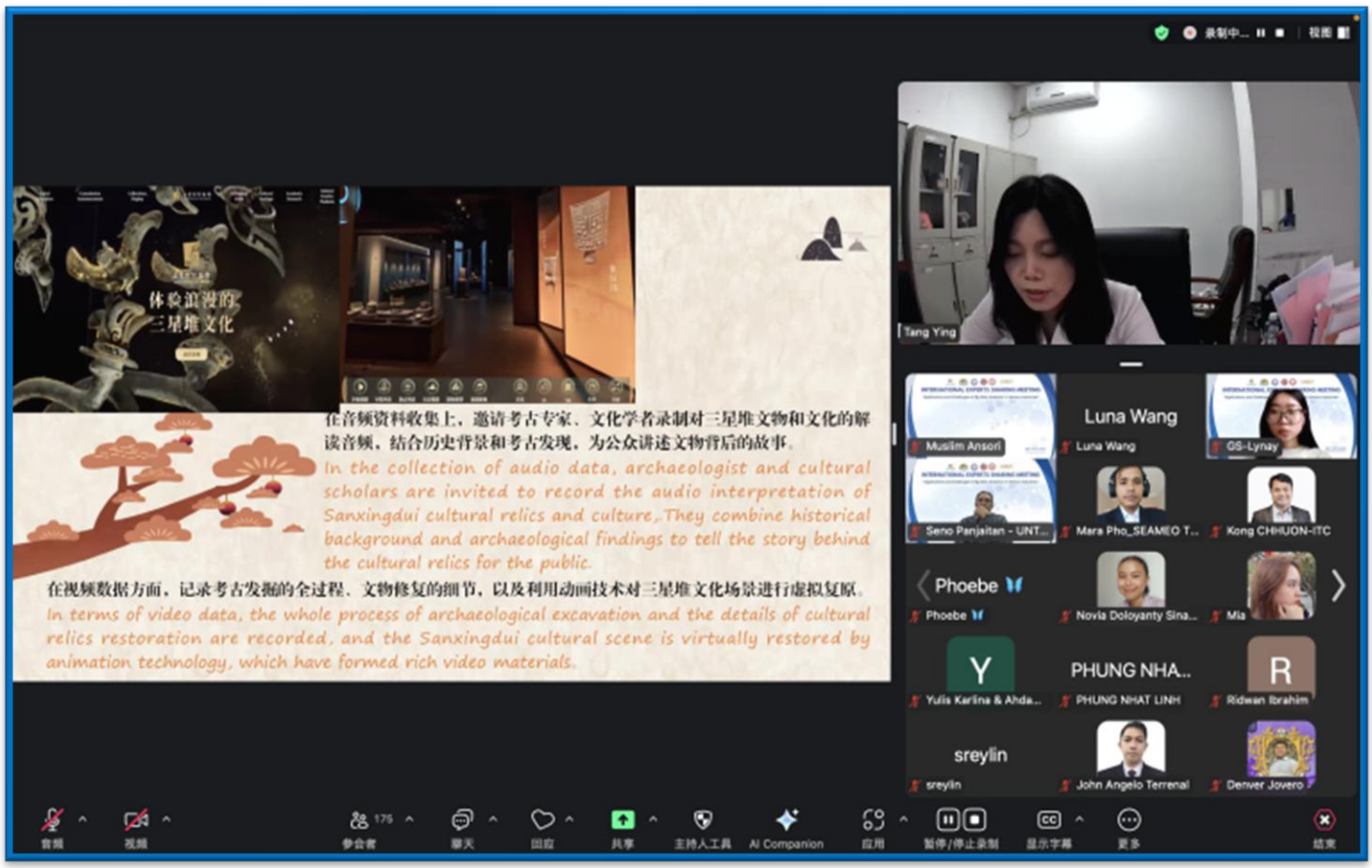
Expert: Dr. Chhuon Kong, Dean of Faculty of Hydrology and Water Resources Engineering, Institute of Technology of Cambodia

Dr. Chhuon Kong discussed how the growing global water crisis has accelerated the adoption of digital technologies in water resource management and disaster risk reduction. He introduced various solutions including blockchain, IoT sensors, machine learning, and Geographic Information Systems (GIS). Digital technologies also play critical roles in flood detection, disaster prediction, and resource allocation. Their integration has improved the efficiency and sustainability of water management but faces challenges such as data privacy, high costs, and a shortage of specialized personnel, which require policy support, funding, and cross-sector collaboration. Dr. Chhuon presented Cambodian case studies showing how combining local research with digital tools — including smart rain gauge networks, dynamic groundwater management platforms, and community mobile warning systems — effectively mitigates the dual pressures of flooding in rainy seasons and drought in dry seasons. Moving forward, implementing digital water strategies, promoting public-private partnerships, sharing data infrastructure, and localizing advanced algorithms and hardware will accelerate sustainable water resource governance in Cambodia and the broader region.

Topic: ***Integration of Multimodal Data and Construction of Museum Communication Knowledge Graph***

Expert: Ms. Tang Ying, Vice President of the School of Cultural Relics and Museology, Sichuan Vocational College of Cultural Industries, China

Ms. Tang Ying explained how museums are evolving from static repositories into smart institutions driven by data and knowledge dissemination. She highlighted that multimodal data integration and knowledge graph construction are key to deepening artifact interpretation and enhancing visitor experience. Multimodal data includes diverse formats such as text, high-resolution images, 3D scans, immersive videos, and expert audio commentary, which enrich the semantic nodes and relational edges of knowledge graphs. Using the Sanxingdui Museum as an example, the institution employs high-precision imaging to restore bronze artifact patterns and supplements historical context with archaeological documentaries and scholar interviews. These heterogeneous data are mapped into a knowledge graph and presented interactively through semantic search and cross-platform visualization, allowing visitors immersive exploration via AR, VR, and mobile apps. This model significantly enhances knowledge dissemination and opens new avenues for education, tourism, and cultural innovation. However, the expert also cautioned that with the increasing scale and intelligence of data, museums must address challenges such as data security and privacy, knowledge graph update mechanisms, and interdisciplinary talent development to ensure sustainable digital transformation.



Topic: ***Application and Challenges of Big Data Analytics in Food Industries***

Expert: Ts. Mohd Syafarim Md Ishak, Head of Technology Development Unit - Center of Food Science and Technology (CFOST), Politeknik Sultan Haji Ahmad Shah, Malaysia

Mr. Syafarim discussed big data analytics applications in the food sector. These include real-time tracking of ingredient sources, transport temperatures, and inventory via IoT sensors and blockchain; predictive maintenance and contamination risk analysis on production lines through machine learning models; mining consumer preferences, purchasing behavior, and health trends from social media, e-commerce, and reviews; and optimizing agricultural production to reduce water and fertilizer use. Key challenges are data format heterogeneity and insufficient real-time capabilities, leading to high integration costs; small and medium enterprises often lack investment and data analytics talent to deploy advanced big data platforms; and the absence of unified data-sharing standards and cross-enterprise collaboration causes severe data silos along the supply chain. Ts. Mohd Syafarim suggested future improvements through edge computing, 5G, and augmented reality to enhance data collection and real-time analysis; government and industry initiatives to promote data standards and shared platforms; and driving the food industry toward low-carbon, zero-waste goals by optimizing packaging and demand forecasting to reduce food spoilage.

21. Kickoff Workshop for the Project on "Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia" Phase II (Virtually) on May 16, 2025

Phnom Penh, 16 May 2025 – The Southeast Asian Ministers of Education Organization Regional Center for Technical Education Development (SEAMEO TED) and the Southeast Asia One Health University Network (SEAOHUN) co-organized the online Kickoff Workshop for the Project on "Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia" Phase II Online, May 16, 2025 to implement the project on "Developing a Pool of Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia".

The main objectives of the event are as follows: (1) to inform and seek support from teachers and principals concerning general and technical high schools about the implementation of OH project Phase II.; (2) to inform and seek support from ministry leaders, and officials of relevant departments about the implementation of OH project Phase II. The workshop aims to get buy-in from stakeholders such as the management of the Ministry of Education, Youth and Sport, relevant departments, and general and technical high schools. The workshop was participated by 50 people from relevant organizations.

H.E. DR. KOLPHENG VADDHANA, under-secretary of state, Ministry of Education, Youth and Sport (MoEYS), presided over the opening workshop, expressed that at the conclusion of the One Health Project Phase I, there were overwhelming calls by various stakeholders such as implementing general and technical high schools (GTHSs), and other GTHSs, school trainers, teachers, students and the community members for the expansion of this project to other General and Technical High Schools and communities throughout the country. Again, He would like to extend his heartful thank to SEAOHUN for its technical support and Chevron for financial support of One Health Project Phase II. This is a testament of their commitment to prioritizing health, public health, and education which is fundamental to improving the quality of life for people in Cambodia and beyond.

Promoting school health is still a challenge, food safety has not been taken seriously by people, vendors and students as it should be. For instance, many students still have unhealthy habits of consuming energy drinks, and high level of sugar intake, and are not aware of the negative impacts these have on their health.

He also points out that the workshop marks a major milestone as we launch the project "Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia" Phase II to three more target schools. This project seeks to develop nine new national teacher trainers from the 3 target schools. This expansion aims to deepen understanding of One Health, promote sustainable practices in agriculture, animal husbandry, and food processing, and address global health challenges related to zoonoses. The project will help build a knowledgeable network of educators and communities, strengthening Cambodia's capacity to manage health risks at the human-animal-environment interface. One Health concepts align with the key

policy in the pentagonal strategy of the Royal Government of Cambodia and the Ministry of Education, Youth and Sport. These policy actions set out to enhance public educational institutions including Paying High Attention to Students' Health through feeding nutritious food to children and regulating the food quality sold within the schools.

This project is a very important addition to the school health endeavor which the Ministry of Education, Youth and Sport has prioritized. Thus far, the Ministry of Education, Youth and Sport has put forward regulations and guidelines for schools such as school food delivery programs, primary health care programs, student medical check-up, tap water and sanitation enhancement programs, healthy food promotion, school health subject instruction, etc.

School health is a complex matter particularly for school management, teachers, and students. It is crucial for students to be healthy to succeed academically. According to research, school health has a positive effect on the learning outcomes of students of technical education. Studentsns that students with good health from eating nutritious food with sufficient vitamins receive better grades.

This project is of great importance as it will benefit students, teachers, and community members through One Health education and outreach. He strongly believes that this collaborative project to raise One Health Awareness at these target schools will achieve the best health outcomes for people, animals, plants and our shared environment.

He hoped that the kickoff workshop will pay the way for a successful project implementation. To ensure the successful implementation of this project, he requested that all participants who are school management, teachers, and representatives of relevant technical department endorse and provide necessary support it needs.

At the end of his remark, **H.E. DR. KOLPHENG VADDHANA** had announced the official launch of the Project on "Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia" Phase II from this moment on.

Dr. Songheang Ai, Center Director of SEAMEO TED, and Project Manager, pay his high respect to Excellency Dr. KOLPHENG VADDHANA, under-secretary of state

Ministry of Education Youth and Sport that always support and help in extending the network and activities that we have done regionally nationally and internationally and high respect to Dr. Tongkorn Meeyam, Executive Director of SEAOHUN, who always support in extending the project for Phase 2 and has facilitated with Chevron, the partner in order to work cooperatively to enhance our one health activity and awareness in Cambodia last one let, and high respect as well to Miss Techawan Janudom, representative of Chevron that always supports as well even though financially technically to guide us to come up with the

project proposal 2 and to all representatives, who cooperatively and closely work with the project for Phase 2 of one health awareness raising activity today. He also highlighted the key objective of the workshop, the first one was to gather the support and coordination from teacher, school management, TVET students and education provincial department management to engage our stakeholders to work actively to disseminate one health concept in their target community school and locality. He hope that the activity will be enlarged not only just to get school province and locality, but further than the project in 3 general and technical high schools from phase 1 to other 3 GTHS for phase 2 consisting of Preah Norodom Sihamoni General and Technical High School in Kampot province , Community Development Institute, Chea Sim University of Kamchaymea, Prey Veng province, and Hun Sen Peamchikorng High School in Kampong Cham province. He also said that we have another city province to engage in our project implementation to ensure that the active participation of our stakeholder will be in hands and work smoothly for the face to project and benefit the communities as in large for the project implementation during this time. At last, He would like to give the profound thanks to Chevron and SEAOHUN for the consistent support to make face the reality today as a starting not only finishing just starting and ensure that the project will work productively smoothly from the beginning today the end.

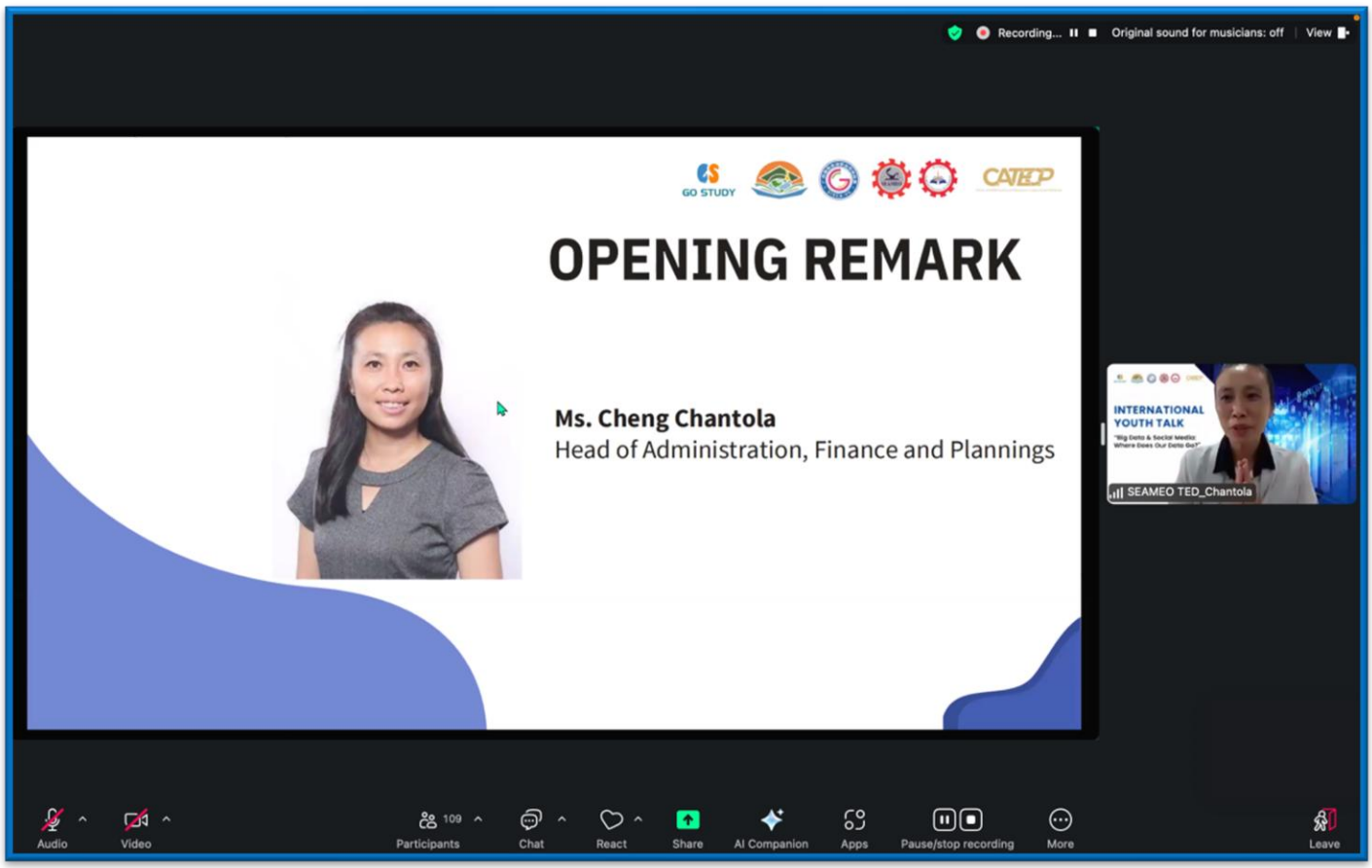
Ms. Teechawan Yanudom, Representative of Chevron, she is very delighted to meet you all today even though it is a virtually to celebrate the remarkable achievement of our one Health initiative in Cambodia over the past months. She has witnessed this program become an essential educational tool, enabling educators and teacher in Cambodia to incorporate essential one health concept into the curriculum and classroom. As a Chevron representative, she is truly proud to support this project and hopes this collaboration and commitment that have defined our journey will enable our partner to continue making a positive impact on your country. Early this year She think it's probably in January, she had visited the implementing school and the community and has learned that beside the National School trainer who will continue to advocate for this foundation sharing their knowledge and experiences with peers and students our program effort also extended into community impacting many community members through awareness raising activity. These interactions have already begun to shift the attitude, and practices showcase the tangible effect of our collaborative actions as we move into Phase 2 of the program, she's very thrilled and very excited about what's ahead we have achieved so much already so setting a strong foundation for even greater success to come and let's keep the momentum going on. She eagerly anticipate seeing the profile impact on even more beneficiary as we continue to expand our effort She would like to pass her gratitude and congratulation to our great partner SEAMEO TED, SEAOHUN, CAMBOHUN, the Ministry of Education, Youth and Sport and also all involved school educators and community members with your support and dedication to one health we are set to reach a new milestone and create lasting change the passion and commitment from everyone involved inspire every day and she is so confident together that we will continue to foster healthier more resilient communities together. We can make a better outcome and as Chevron representative it is very

honored to be part of this remarkable journey. In her final note, she congratulated and extended her heartful thanks to all the participants for their contribution to the success of the project.

Dr. Tongkorn Meeyam, Executive Director of SEAOHUN, acknowledged the success of Phase 1 and congratulated SEAMEO TED team, all committed teachers, students, CAMBOHUN trainers and all stakeholders for their dedication, hard work, and belief in the power of education. She emphasized the importance of the One Health approach, which integrates human, animal, and environmental health sectors to address health threats that cross borders. The project aligns SEAOHUN's mission by equipping high school and technical schoolteachers with the knowledge and resources to educate students about One Health principles. She also thanked Chevron for its continuous support and investment, which has helped make the project possible and impactful. Phase 2 aims to build on the achievements of the first phase by refining tools, enhancing training availability, and reinforcing systems to ensure long-term success. Dr. Tongkorn noted that the project's benefits will extend beyond Cambodian schools and could serve as a model for other countries in the region. In closing, she expressed SEAOHUN's appreciation for the ongoing collaboration, trust, and shared vision among all partners.

22. International Youth Talk on “Big Data and Social Media: Where Does our Data Go” on May 30, 2025 (Virtually)

On the afternoon of May 30, 2025, the fifth session of the International Youth Talk successfully concluded online for 109 participants. Centered on the theme "***Big Data and Social Media: Where Does Our Data Go?***", the event brought together young representatives from universities in Indonesia, Malaysia, the Philippines, and other countries. Participants engaged in discussions on how youth can navigate the global digital wave by balancing the “sharing culture” of social media with personal data security, enhancing data literacy, and becoming responsible digital citizens.

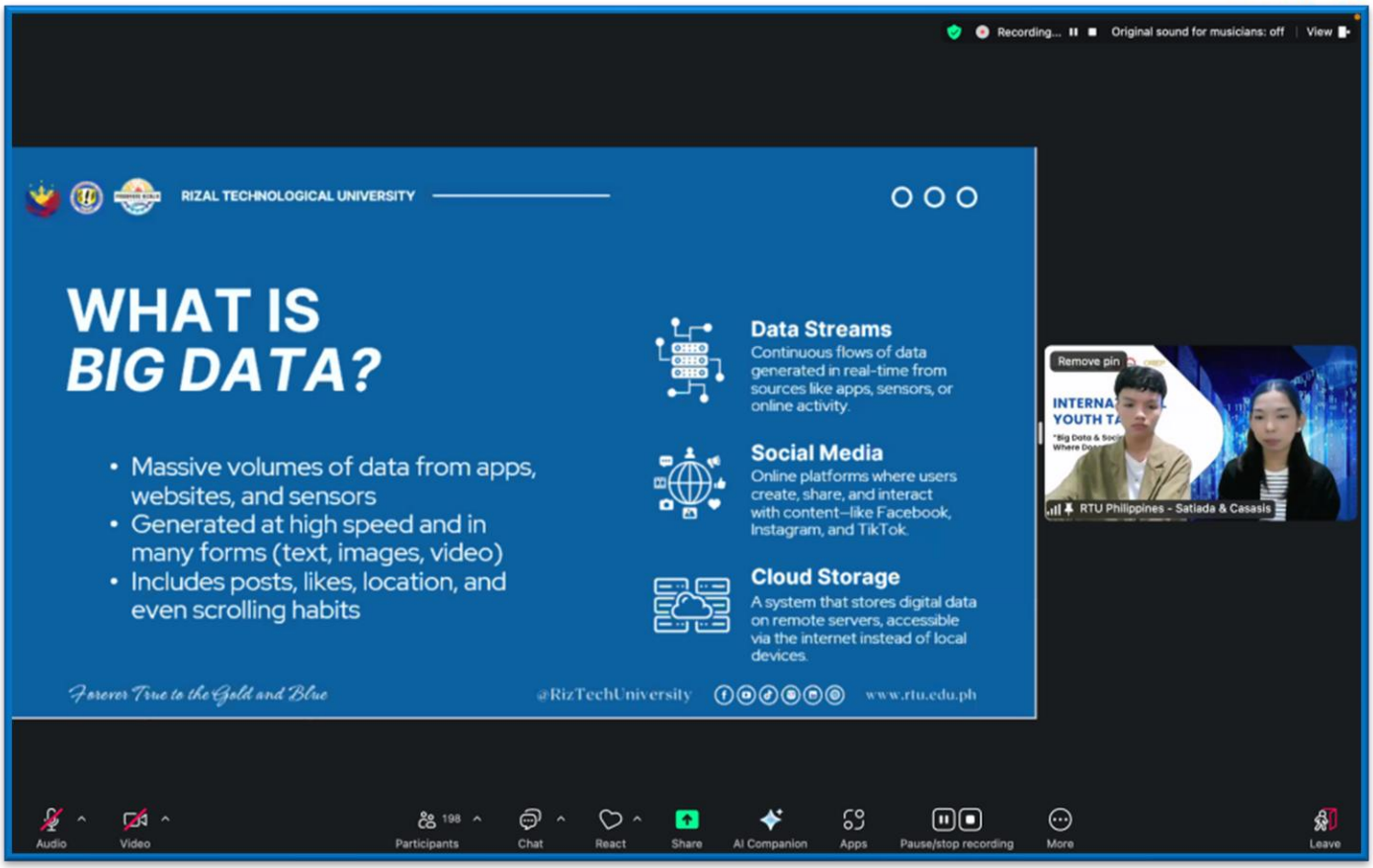


The opening speech of the event was delivered by Ms. Cheng Chantola, Head of Administration, Finance and Plannings of SEAMEO TED. She pointed out that with the advancement of technology, our digital lives are generating an unprecedented volume of data. Every click, like, share, and comment on social media becomes part of what we call "Big Data." Questions such as who collects this data, how it is used, and what rights we have over it deserve thoughtful consideration. She emphasized that understanding the relationship between big data and social media is not merely a technical issue—it is also deeply connected to our awareness of privacy and our level of digital literacy. In the digital age, only by grasping the logic behind data can we consciously engage in the online world and strengthen our ability to meet future challenges.

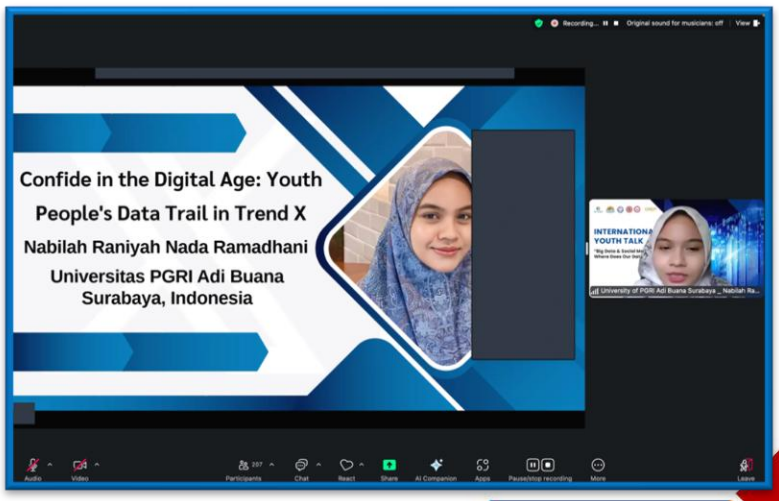
Dewi Yasmin and Yossi Carmel Rahawarin from the University of Merdeka Malang in Indonesia explored the tension between privacy protection and the pursuit of popularity in the age of social media, highlighting the severe challenges facing personal data security. They analyzed this social phenomenon through four key dimensions: First, they pointed out that Indonesian youth tend to overshare personal information due to their desire for social recognition, the influence of influencer culture, and a general lack of digital literacy. Second, they detailed the risks arising from such behavior, including identity theft, digital fraud, and cyberbullying. Third, they introduced the core content of Indonesia's 2022 Personal Data Protection Law, covering user data rights and legal penalties for violations. Finally, they offered practical suggestions for personal data protection, such as setting private accounts and enabling two-factor authentication. This research not only revealed the mechanisms through which social media culture erodes personal privacy but also emphasized the urgent need to build a digital security barrier from both legal and individual perspectives, providing a practical path to balance social media engagement with privacy protection.

Muhammad Ariel Bin Harun and Afrina Nayli Binti Mohd Muzafar from Kerian Vocational College in Malaysia explored the flow of data in the era of big data and social media, highlighting key issues related to data collection, usage, and security. Their analysis covered four core dimensions: First, using Malaysian practices as examples, they explained how big data is collected in real time through user clicks, location tracking, and social behaviors, and how it is applied in crisis response—such as the "safe check-in" feature on social media during the 2017 Penang floods. Second, they demonstrated how tagging campaigns and apps during the pandemic leveraged big data to connect relief resources, manage vaccinations, and support decision-making. Third, they pointed out the risks of data breaches and emphasized the regulatory role of Malaysia's 2010 Personal Data Protection Act (PDPA) in protecting sensitive data such as IC numbers and location information. Finally, they called on the public to become "responsible digital citizens," advocating for rights protection through reading terms of service and monitoring corporate data usage while enjoying the convenience of data. This study not only showcased the innovative value of big data in public services but also warned about balancing data power and personal privacy, providing a practical framework for building digital citizenship in the information age.

Mark Anthony D. Casasis and Ariane T. Satiada from Rizal Technological University in the Philippines explored the flow of data in the era of big data and social media, highlighting key issues related to data collection, usage, and ethical challenges. Their analysis focused on three core dimensions: First, they explained the fundamental characteristics of big data, including real-time data streams, cloud storage mechanisms, and comprehensive collection of user behaviors on social media platforms such as likes, location, and browsing habits. Second, they illustrated how mainstream platforms commercialize user data through cases such as fines for social media data misuse, cross-platform tracking, and Google history storage. Finally, they proposed the concept of "youth data empowerment," calling for rebuilding data sovereignty through innovative solutions and ethical awareness. This study not only revealed the widespread commodification of personal data in the digital economy but also provided an action framework for youth to transform from "data file subjects" into "agents of data ethics reform," emphasizing the importance of turning data security awareness into popular culture.

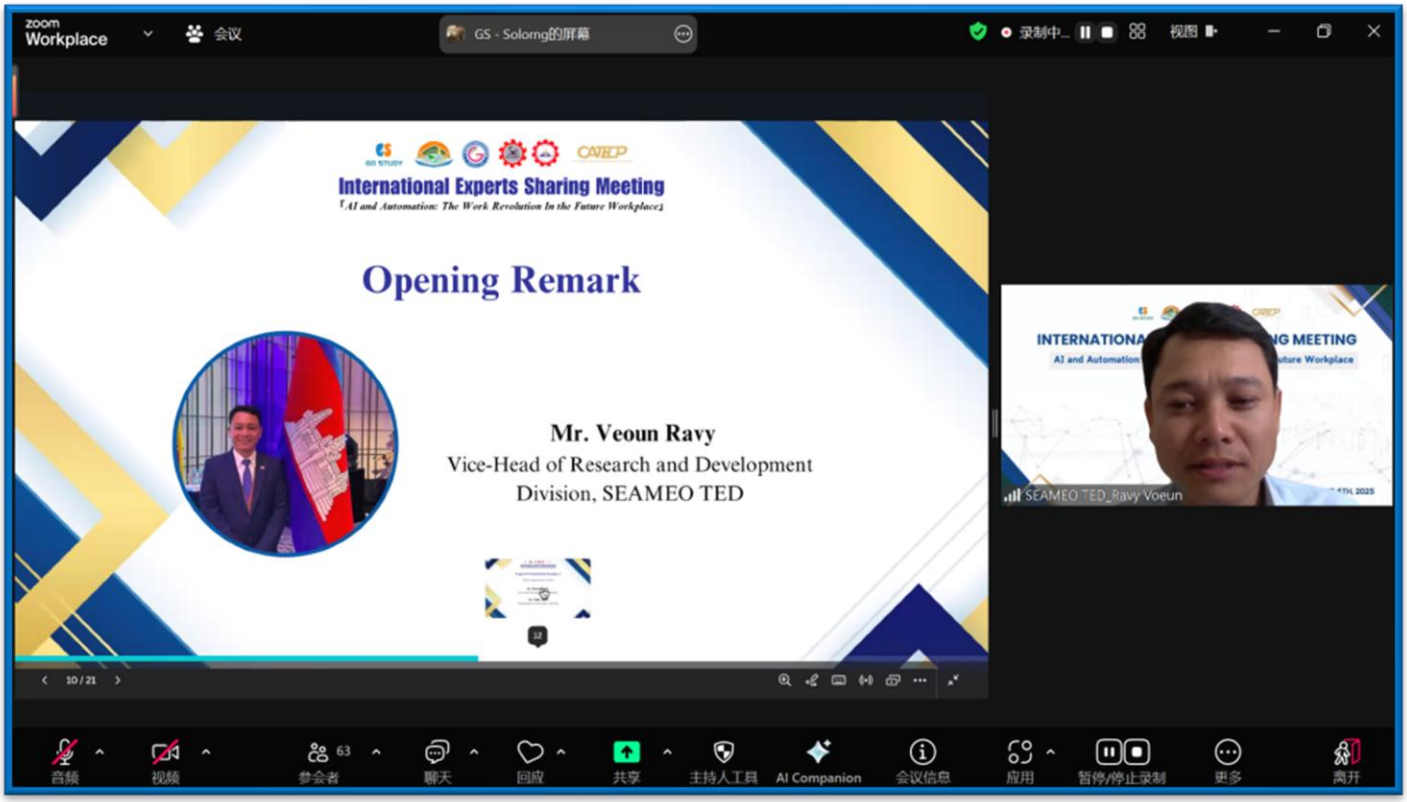


Nabilah Raniyah Nada Ramadhani from Universitas PGRI Adi Buana Surabaya in Indonesia explored the data footprints and security challenges faced by youth on social media platforms in the digital age. The study analyzed the issue through three core dimensions: First, statistical data showed that 70% of Indonesian youth actively use social media platforms, engaging primarily in activities such as accessing news (entertainment, politics, disasters, etc.), participating in global discussions (e.g., #ClimateChange), content creation and exchange, and expressing mental health concerns. Second, the study revealed platform risks, noting that even anonymous use leaves permanent digital footprints that may be exploited by malicious actors. Finally, the research proposed a "Five-Dimensional Digital Citizenship Literacy Framework" (digital ethics, privacy protection, data responsibility, reputation management, and healthy balance), emphasizing that youth should maintain self-expression while building security defenses through strategies like "think before you post" and "data sovereignty awareness." This study not only acknowledged the value of social media as a space for emotional release and global dialogue for youth but also warned of the dangers of excessive personal data exposure, providing practical guidance for digital natives on balancing freedom of expression with data security.



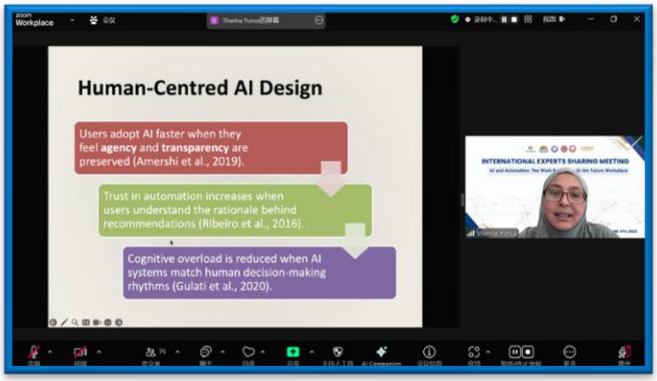
23. Webinar on AI and Automation: The Work Revolution in the Future Workplace on June 6, 2025 (Friday), Zoom: 538 596 4216 (pw: 123) 15:00-16:30 (GMT+8)

On the afternoon of June 6, 2025, the 5th session of the *International Experts Sharing Meeting* successfully concluded online accommodating 113 international participants. Centered on the theme **"AI and Automation: The Work Revolution in the Future Workplace,"** the session brought together experts from **Brunei, Thailand, China, and Indonesia** to explore how artificial intelligence and automation are reshaping future work models, enhancing industry efficiency, and driving societal transformation. Core topics included workplace transformation, evolving skill demands, industry applications, and human-machine collaboration.



The opening remarks of the event were delivered by Mr. Veoun Ravy, Vice-Head of Research and Development Division of SEAMEO TED. He noted that as technology continues to advance, we are living in an era full of vitality and transformation. This meeting provided a platform for participants to engage in meaningful discussions about the opportunities and challenges brought by artificial intelligence and automation. He emphasized that this is not only a chance for knowledge sharing but also a valuable moment for cross-cultural exchange. Mr. Ravy encouraged all participants to actively engage, express their views boldly, and make the most of this opportunity. He also expressed great anticipation for the insightful perspectives and in-depth sharing from the four invited experts.

Presentation by Dr. Sharina Yunus, Assistant Professor & Director of Enterprise Office, Universiti Teknologi Brunei

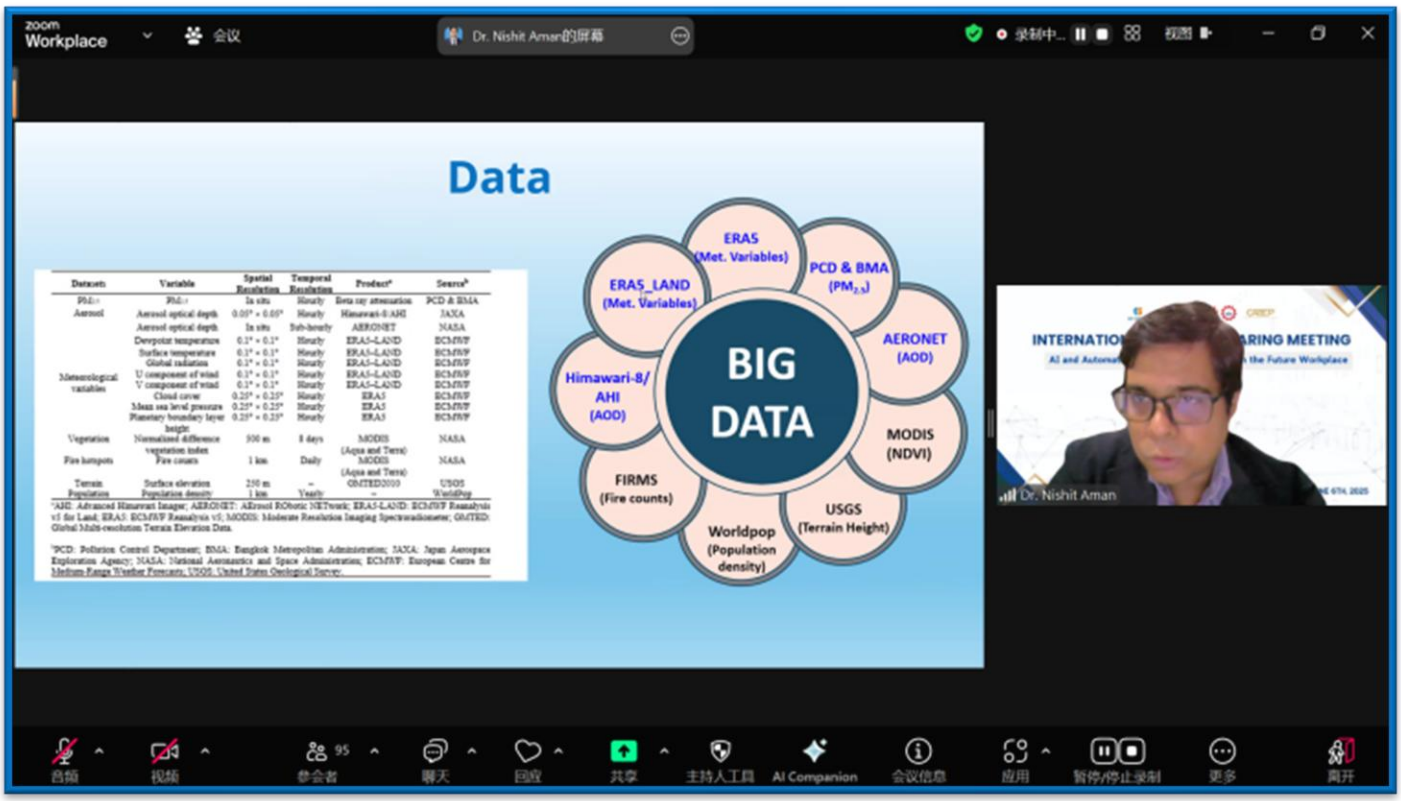


Dr. Sharina Yunus provided an in-depth discussion on how human-centered artificial intelligence (AI) and automation technologies are reshaping the future workplace. She emphasized that the future work model is not about humans competing against machines, but rather about achieving human-machine collaboration through intelligent system design to improve overall efficiency and the work experience. The main challenges currently faced include alert fatigue caused by system design flaws, inefficient operational processes, and resistance to change among employees. Additionally, security vulnerabilities in Operational Technology (OT) systems and the technological gap between Information Technology (IT) and OT pose potential risks. She recommended close collaboration with end users during the system design process to ensure that designs meet practical operational needs. At the same time, embedding a culture of security awareness to strengthen employee safety consciousness; adopting a microlearning approach combined with workflow to enable flexible and efficient skills training; and breaking down departmental silos to build scalable, intelligent system platforms that facilitate organizational collaboration and resource sharing. Finally, Dr. Yunus called on the industry to view Industry 4.0 as essential for business survival, investing in human-centered technology to bridge the talent gap and create a resilient workplace where “automation clears obstacles and humans lead the direction,” promoting a smarter, more collaborative, and sustainable future of work.

Presentation by Dr. Nishit Aman, Researcher, Department of Environmental and Sustainable Engineering, Chulalongkorn University, Thailand

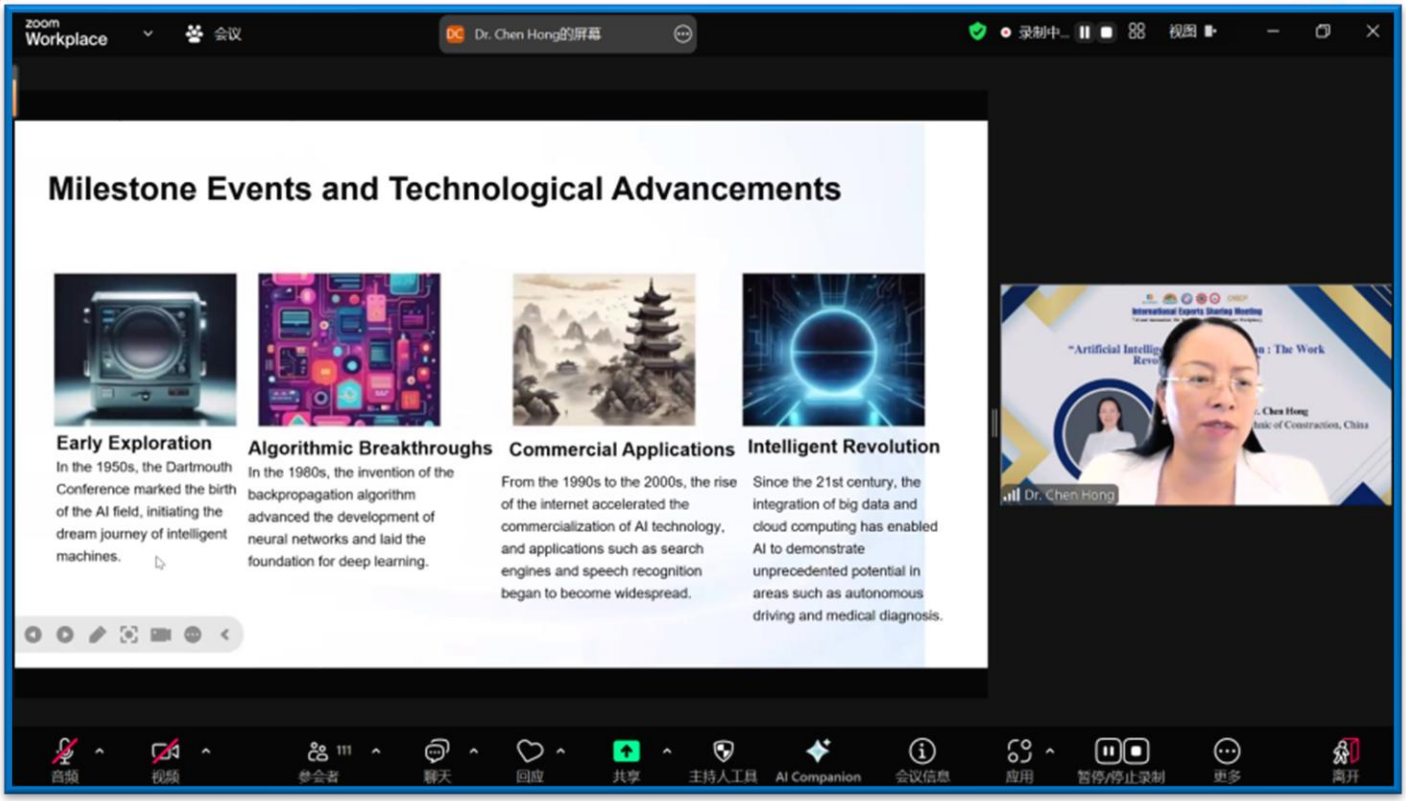
Dr. Nishit Aman shared his research on quantifying PM2.5 pollution in the Greater Bangkok area using machine learning approaches in relation to meteorological factors. By integrating ground-based monitoring data, satellite-derived Aerosol Optical Depth (AOD), and meteorological variables, the study applied six machine learning models—including Random Forest and Gradient Boosting—to assess pollution levels, with Light Gradient Boosting Machine (LightGBM) demonstrating the best performance, particularly during morning hours. The findings revealed that PM2.5 concentrations peaked in the early morning and declined in the afternoon due to increased boundary layer height facilitating dispersion. The most severe pollution occurred in winter (December–February), with meteorological factors contributing up to 67.8% of the variation. High variability was observed in Bangkok's urban PM2.5 due to stable emissions from traffic and industry, whereas surrounding provinces experienced greater fluctuations linked to agricultural burning. The study also found that PM2.5 composition showed stronger persistence during winter, reflecting the cumulative effects of long-term emissions. SHAP analysis identified relative humidity, boundary layer height, and wind

speed as the most influential variables. Dr. Aman concluded by emphasizing the need for targeted winter emission control measures—such as traffic restrictions and burn bans—and called for the integration of meteorological forecasting into air quality alerts. He also advocated for leveraging satellite and machine learning technologies to enhance monitoring capabilities and develop region-specific pollution management strategies.



Presentation by Dr. Chen Hong, Expert, Guangxi Polytechnic of Construction, China

Dr. Chen Hong explored the revolutionary impact of artificial intelligence (AI) and automation technologies on future work models, providing an analysis spanning their definitions, historical development, and practical applications. AI empowers automation by simulating human intelligence to execute physical tasks, and together they significantly enhance operational efficiency. Using comparative charts, Dr. Chen illustrated marked improvements in efficiency and accuracy before and after automation implementation. The study highlighted the dual impact on employment: while new roles such as data scientists emerge, low-skilled jobs face the risk of replacement. This underscores the urgent need for skill transformation—including data analysis and programming—and educational reform emphasizing STEM curricula and lifelong learning. Looking ahead, Dr. Chen proposed a new human-machine collaboration model, where AI handles routine tasks and humans focus on innovation and complex decision-making. He also called on policymakers to improve labor regulations and training systems. The core conclusion stressed the importance of proactively adapting to change by continuously acquiring interdisciplinary skills and soft competencies, thereby seizing competitive advantages in the AI era workplace.



Presentation by Dr. Ronny Hasudungan Purba, Assistant Professor of the Department of Civil Engineering, Universitas Bandar Lampung, Indonesia

Dr. Ronny Hasudungan Purba introduced an innovative automated road condition assessment system called JALANKU, developed for Lampung Province, Indonesia, which integrates photogrammetry technology and artificial intelligence (AI). The system utilizes vehicle-mounted equipment such as DSLR cameras and GPS devices to capture detailed road images, which are then processed to create digital twin models of the road infrastructure. By leveraging AI algorithms, JALANKU automatically analyzes these images to detect and classify road damages with high accuracy, significantly improving the efficiency and reliability compared to traditional manual inspections. Dr. Ronny emphasized how the system employs classification methods based on the Pavement Condition Index (PCI) and Road Condition Index (RCI) standards, which assist the regional transportation agency (BMBK) in optimizing resource allocation and making more informed maintenance decisions. Furthermore, he discussed future to expand this technology beyond roads to include other critical infrastructure such as bridges and tunnels, as well as the integration of unmanned aerial vehicles (drones) and satellite imagery to enhance data collection and monitoring capabilities. This advancement promises to contribute greatly to smarter, data-driven infrastructure management in Indonesia.

24. Workshop on Transformative Learning for Rural Skills Development for ASEAN Policy Makers on June 15-20, 2025, in Beijing, China

I. Introduction

The United Nations Secretary-General's Transforming Education Summit (2022) reaffirmed global commitments to advancing inclusive, resilient, and future-oriented learning systems. Governments pledged to strengthen investments in lifelong learning, technical and vocational education and training (TVET), and skills development to meet evolving labour market demands and support transitions to green and digital economies. The Marrakech Framework for Action, adopted at the Seventh International Conference on Adult Education (CONFINTEA VII), underscores the critical role of lifelong learning in fostering social inclusion and economic growth. It calls for high-quality adult education aligned with labour market needs, ensuring that all individuals, particularly those from marginalized communities, have access to education and sustainable livelihoods. Additionally, UNESCO's TVET Strategy 2022–2029 prioritizes equipping individuals with skills for learning, work, and life, with a focus on green and digital transitions and the promotion of inclusive and peaceful societies. These global initiatives provide essential policy guidance and practical frameworks to advance lifelong learning and skills development worldwide.

Recognizing the shared challenges and opportunities in skills development and lifelong learning, the UNESCO International Research and Training Centre for Rural Education (INRULED), in collaboration with the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), the China Education Association for International Exchange (CEAIE), the ASEAN-China Center (ACC), and other local partners, is organizing the China-Southeast Asia Capacity Building Workshop under the theme "*Transforming Learning for Sustainable Rural Development*". *This workshop is* a platform for policymakers and practitioners from Southeast Asian countries and China to exchange knowledge, share best practices, and explore collaborative solutions on TVET, adult education and lifelong learning.

II. Opening Session

1) Prof. ZHOU Zuoyu, Vice Chairman of Beijing Normal University Council, Director of UNESCO INRULED

   - Extend a warmest welcome to all education professionals from Southeast Asia and China joining the workshop
   - Adult learning and technical and vocational education demonstrate transformative potential for confronting the intensifying climate change, demographic shifts, and rapid digital transformation, humanity faces unprecedented systemic challenges

- To advance global sustainable development, inclusive lifelong learning systems must be built to offer flexible pathways and diverse modalities to meet learners' needs across all ages.
- Targeted skills training, retraining, and upskilling can empower rural workers to adapt to dynamic labor markets, foster employment and entrepreneurship, harness opportunities in the green and dig

2) H.E. Mr. SHI Zhongjun, Secretary-General of the ASEAN-China Centre (ACC)

- 6 LUBAN workshops have been set up in ASEAN countries
- China ASEAN potential collaboration in digital transformation and technologies
- TVET is the priority and students, and institutional exchange shall be encouraged.
- Today workshop bring policy makers from ASEAN and China to discus and share the impact of TVET and Lifelong Learning, Adult Education which are very crucial for the future of regional education agenda
- Inter-Governmental collaboration strategies are to be more innovative and synergistic to support ASEAN-China partnership

3) Dr. AN Yan, Deputy Secretary-General, China Education Association for International Exchange (CEAIE)

- Under the Regional Comprehensive Economic Partnership framework, bilateral trade and investment between China and ASEAN continue to expand, injecting robust momentum into regional economic development
- In recent years, guided by our shared vision of building a *China-ASEAN Vocational Education Community*, we have actively exchanged experiences in using vocational education to reduce poverty, revitalize rural areas, and drive industrial transformation
- This workshop, themed "Capacity Building for Transformative Learning in Rural Development," addresses critical issues in rural education and development.
- For ASEAN nations, bridging the urban-rural education gap and promoting rural development are equally urgent tasks
- CEAIE looks forward to working with INRULED, the SEAMEO Regional Centre for Vocational and Technical Education Development (SEAMEO VOCTECH), and other partners to leverage our collective strengths, share best practices, seize opportunities, and advance China-Southeast Asia vocational education cooperation. Together, we can contribute to achieving the UN 2030 Sustainable Development Goals.

4) Prof. Shahbaz Khan, Director of the UNESCO Regional Office for East Asia (Video Address)

- As outlined in the United Nations Sustainable Development Goal 4 and the 2030 Agenda, we recognize that inclusive, equitable education is the cornerstone of sustainable development.
- This workshop highlights innovative models: China's Dual Learning System (blending classroom and workplace training) and Southeast Asia's community-driven TVET approaches.
- This workshop, we will witness inspiring examples and practices which reflect the guiding principles of adaptability, inclusivity, and resilience in transforming learning for sustainable rural development
- The decades-long partnership between UNESCO and INRULED. As UNESCO's specialized institute for rural education, INRULED has been instrumental in driving innovation across Asia.

III. Keynote presentation

Moderator: Dr ZHAO Yuchi, Executive Director of UNESCO INRULED

5) Mr. LI Yingli, Deputy Director-General, Department of Vocational and Adult Education, the Ministry of Education of the People's Republic of China shared a national policy overview, shared China's strategies, and framed collaborative aims for TVET in rural contexts.

- Key Highlighted Points

  - Policy Leadership in Vocational Learning
    As MOE Deputy, Mr. Li Yingli outlined China's national roadmap for skills education to support rural revitalization—highlighting institutional leadership and regulatory support.
  - TVET & Adult Learning for Sustainability
    Emphasized the dual focus on vocational and adult learning (ALE) to advance green, resilient, and inclusive rural communities.
  - Digital & Green Transition in Rural TVET
    Stressed integrating digital tools (e-learning, remote labs) and green technologies into rural vocational programs to modernize agricultural practices and promote environmental sustainability.
  - Cross-Border Collaboration
    Highlighted the importance of cooperation between China and ASEAN nations in sharing best practices and building capacity via collaborative field learning and joint policy development

- Bridging Theory and Practice
  Advocated for strategies that link TVET curricula with local economic and social needs, ensuring practical, context-aware training for rural learners.

- Key Takeaways

  - China's MOE is prioritizing vocational education as a vehicle for rural transformation, providing direction, funding, and institutional support.
  - Sustainability requires not only initial vocational training, but ongoing adult education tailored to evolving rural economies.
  - Modern rural TVET must equip learners with both digital competencies and environmentally friendly practices to foster resilient livelihoods.
  - Mutual learning across China and Southeast Asia enhances the effectiveness of rural TVET, fostering policy innovation, regional coherence, and shared capacity.
  - Programs aligned with specific regional industries and cultural contexts yield greater relevance and impact in rural communities.

6) Dr. YUAN Ying, Lecturer of School of Journalism and Communication, Beijing Normal University shared about the Empowering Rural Revitalization through Digital Intelligence

- The presentation is rooted in China's national strategy to eliminate poverty and ensure equitable education across rural and impoverished areas. Following directives from President Xi Jinping, particularly focused on Liangshan Yi Autonomous Prefecture, this initiative positions education—especially digital literacy—as a cornerstone of rural revitalization.

- Key Highlighted Points

  - Policy Alignment with National Goals:
    Grounded in Xi Jinping's strategy for poverty eradication via education and digital empowerment.
  - Three-Pillar Framework:
    "New Literacy," "New Curriculum," and "New Vision" guiding structured, scalable implementation.
  - Rural Media and Teacher Empowerment:
    Strengthening local storytelling and teaching capacity to fuel rural development narratives.

- Multi-province Engagement & Partnerships:
  Reaching across 5 provinces with cross-sector cooperation (e.g., Tencent, China Press Association).
- Scalable Digital Literacy Models:
  Developed cloud-based and scenario-driven curricula, integrating AI and youth innovation challenges.

- Key Takeaways

  - Digital empowerment is a strategic tool in breaking intergenerational poverty in rural China.
  - Collaborative, localized education initiatives—backed by policy and technology—can rapidly accelerate rural revitalization.
  - Youth engagement via digital storytelling strengthens cultural identity and connects communities to national narratives.
  - Multidisciplinary partnerships are critical to long-term success—blending education, journalism, technology, and policy.
  - The project serves as a national model for integrating education, technology, and rural development.

7) Dr. ZHU Min, Associate Professor at the Institute of Vocational Education, Department of Education, East China Normal University; Principal Researcher of the ESD Programme, **Shanghai Municipal Institute for Lifelong Education: Research Reflection and Practical Exploration on Green Talents in China**

- Key Highlighted Points

  - Policy Continuity & Strategic Vision:
    China's long-term commitment to ecological development provides a strong framework for green talent cultivation.
  - Urgent Talent Gap:
    Growing demand for green skills far exceeds current educational supply—urgent upskilling is required across sectors.
  - VET as Green Skill Incubator:
    Vocational schools are pioneering curriculum transformation in green technology and industries.

- Shanghai's ESD Model:
  Practical, community-based models integrating universities, local governments, and industries in green education.
- Intergenerational and Localized Learning:
  Shanghai projects uniquely blend intergenerational learning and localized eco-practice, offering a replicable model.

- Key Take-Away Points
  - Green talent is central to achieving national carbon and sustainability goals. It is not just a policy issue, but a workforce imperative.
  - Cross-sector collaboration and community engagement are key to promoting ecological literacy and fostering green values.
  - Localized education programs create greater impact—tailoring content to region-specific industries (e.g., EV in Nanhu, water in Pudong).
  - Interdisciplinary and intergenerational learning models are effective in promoting shared green values across age groups and educational levels.
  - China is building an evolving, systematized approach to integrate green competencies into lifelong education—from K-12 to vocational to enterprise HR systems.

IV. Key points of Session I: Country report on TVET and adult education policies

Moderator: Dr. QI Xinjian, Assistant Director of UNESCO INRULED

1) **Brunei:** Mr. Armi Durani Durhman, Principal, Institute of Brunei Technical Education, Institute of Brunei Technical Education (IBTE)
   - Cross-Cutting Enablers of TVET in IBTE Brunei include Enhance IT Infrastructure and Innovative Technology, create a Safe and Conducive Learning Environment and Workplace, Promote Greening IBTE and Sustainable Development and Promote IBTE's Brand Identity and Image
   - Establishment of Centre of Technology Enhanced Learning (CETL) is very important. The function of CTEL is to provide resources, tools, and services to support the integration of technology into teaching and learning.
   - TVET Entrepreneurship and Innovation Challenge includes to cultivate entrepreneurial mindsets and skills among students, to enhance interdisciplinary collaboration across TVET fields and to develop innovative and sustainable solutions relevant to 21st-century challenges and to expose students to the fundamental concepts of innovation & green economy

2) **Cambodia:** Dr. Dy Samsideth, Secretary-General of the Lifelong Learning Secretariat of the Ministry of Education, Youth and Sports of Cambodia

- Featured Programs of lifelong learning in Cambodia includes:
    - Vocational and technical training are crucial to contribute poverty reduction especially for young people from poor and vulnerable background receiving free of charge training with a monthly allowance Introducing new education pathways by guiding lower secondary students toward subject-specific streams and enabling flexible transitions between general education and vocational training
    - Introducing a 'fast-track' program in upper secondary education, with selected online courses designed and delivered to students.
    - The Lifelong Learning Standard serves as a licensing framework for Community Learning Centers, Youth Centers, and Women's Development Centers, aimed at enhancing institutional development and ensuring quality service delivery.
    - The Basic Education Equivalency Program is a flexible, alternative education initiative to provide out-of-school youth and adults for receiving a second chance to achieve an equivalent qualification through non-formal, blended learning approaches.
    - Digital transformation is crucial to enable lifelong learning opportunity for all
- Increase access of a completion of 9-year basic education in rural areas as a schooling expansion in rural poor areas.
- Digital learning content development and assessment issues – partnership within the line ministries and private agencies learning contents available for all learners.

3) **China:** Mr Zhang, Dean of Nigbo Vovation and Adult Education Institute

- Presentation on the Innovative and Practices of Ningbo Authority in terms of rural education development: These are Key Highlighted Points
    - Integrated Training Network:
      A four-tier system connects the city, county, township, and village for seamless skills delivery.
    - Specialized Training Zones:
      387 agricultural-industry-aligned programs developed through higher education and vocational collaboration.
    - Experiential and Community-Based Learning:
      Training is not abstract—it is delivered in workshops, farms, and real business settings.

- Digital Learning Infrastructure:
  GIS-based campus mapping and online platforms make lifelong education accessible anywhere.
- Rural Revitalization Through Talent Empowerment:
  The model positions education as the key driver of common prosperity.

– These are Key Takeaways

- Context matters: Designing training based on farmers' actual challenges enhances engagement and relevance.
- Blended learning works: The combination of classroom, fieldwork, and digital modules ensures both knowledge and skills acquisition.
- Digital inclusion is essential: Smart platforms and learning maps bridge urban-rural education gaps.
- Education fuels innovation: Farmers are not just laborers—they're creators, entrepreneurs, and community leaders.
- The Ningbo model is scalable and adaptable: Its structure, tools, and outcomes can be a template for national or global rural skills programs.

4) **Lao PDR:** Dr. Sengaloun: National Strategy on TVET/ Adult Learning

– 6 TVET strategies in Lao PDR:

- Improve access to TVET to enhance employment opportunities
- Improve the quality and relevance of TVET provision
- Develop TVET teachers
- Promoting TVET in Support of Digitalization, Green Development, Sustainability, and Lifelong Learning
- Strengthening TVET Institutional Capacities in Administration, Management, and Financing
- Promote cooperation between TVET institutions at the national and local levels and the public and private sectors, as well as international organizations.

– Key Actions of Lifelong Learning

- Integrating lifelong learning into teaching and learning
- Advertising Lifelong Learning
- Improve and ensure high-quality digital learning resources and curricula are accessible to all students for effective learning

5) **Malaysia:** Dr. Riam: Strengthening: Malaysia's TVET through lifelong learning and Adult Education

- TVET is a key pillar in developing Malaysia's skilled, competitive and future ready/workforce
- Global Trends in Vocational and Adult Learning: International Framework & alignment (UNESCO Strategy for TVET 2022-2029-Ensure inclusive & Equitable quality education and promote lifelong opportunities for All
- National Policies on TVET: (National Policy 2030: Focus is to produce highly skilled and high-income workers….
    - NATIONAL TVET POLICY 2030 - focus is to produce highly skilled and high-income workers
    - It is a comprehensive framework and will serve as a reference point for all initiatives and
    - implementations by public and private TVET providers as well as the 12 ministries involved in TVET
    - National TVET Council (MTVET)
    - National TVET Master Plan - Focuses on strengthening coordination, quality assurance, and industry collaboration across ministries and institutions as well as sets a strategic direction for holistic TVET transformation.
    - 12th Malaysia Plan (2021-2025) - Emphasizes TVET reform, industry-driven training, digital
    - economy skills, and upskilling/reskilling for IR4.0, supports the whole-of-government approach through the Majlis TVET Negara (MTVET).

- Adult Learning and Lifelong Learning Policies: Lifelong Learning Policy, Digital Education Policy, Industry 4.0 Policy, National Human Capital Policy, National Skills Development Policy
    - Lifelong Learning Policy - Promotes access to education for adults and lifelong learners, encourages flexible learning via micro-credentials, modular courses, and Recognition of Prior Learning (RPL).
    - Digital Education Policy - Aims to integrate digital tools and platforms across all education levels, supports digitalization of TVET through Learning Management Systems (LMS), e-assessments, and hybrid learning.
    - Industry 4.0 Policy - Aligns TVET with national digital and industrial transformation, encourages curriculum enhancement to meet Industry 4.0 demands (e.g., AI, IoT, cybersecurity, automation).

- National Human Capital Policy - Focuses on developing a future-ready workforce, TVET is positioned as a critical enabler of economic growth and productivity.
- National Skills Development Policy - Governs the Malaysian Skills Certification System (Sijil Kemahiran Malaysia, SKM), provides structured skill development pathways from basic to advanced levels.

6) **The Philippines:** Dir. Peter Marc D. Magsalin, PhD (Director IV – TVET, Office of the Secretary of Department of Education)

- Key strategies to address the challenges of Skills mismatch, fragmented pathways, limited industry engagement including:
  - Strengthen Senior High and TVET alignment with labor market
  - Institutionalize lifelong learning
  - Enhance recognition of non-formal/informal learning
  - Invest in teacher and trainer capacity
  - Foster multi-stakeholder collaboration

- DeEd's Alternative Learning System (ALS) Program provides non-formal education for out-of-school youth, adults and marginalized groups by implementing flexible learning pathways, modular and community-based instruction.
- Key features of Enterprise-Based Education and Training Framework Act (2024):
  - Expand enterprise-based learning opportunities including apprenticeships, on-the-job-training and upskilling programs
  - Requires all EBET programs to be registered with TESDA, ensuring competency-based and industry-aligned standards
  - Provides trainees with allowances and incentivizes participating enterprises through tax benefits
  - Promotes collaboration across government agencies, industries and TVET institutions
- Key elements of the Lifelong Learning Development Framework Act
  - Expands access to formal education beyond formal classrooms
  - Strengthens the Philippine Qualifications Framework (PQF) by broadening inter-agency coordination
  - Introduces "Learning Cities" and "Learning Municipalities" to promote community-based lifelong learning.
  - Supports upskilling and reskilling for students, workers, entrepreneurs, and senior citizens

7). **Thailand: Asst.**Prof. Phanita Phakdi, Ph.D. (Thailand)

- National Policies and Frameworks on Adult Education and Lifelong Learning includes the National Education Act (1999, amended 2002), The 20-Year National Strategy (2018–2037), and National Scheme of Education (2017–2036)
- Programmes and Initiatives of lifelong learning:
    - Non-Formal and Informal Education Centers (NFIECs)
    - Village Learning Centers***
    - Digital Learning Platforms
    - Skills Development Initiatives

- Smart farming for local needs Project is a good initiative that can lead to a high adult literacy rate and broad access, build Community-based learning hubs and Digital platforms

8) **Vietnam**: Nguyen Van Trang, Ph.D (Ho Chi Minh City University of Technology and Education (HCMUTE)

- Adult Education in VN: Literacy and continuing education centers, Programs for ethnic minorities and rural workers and Mobile training units and community learning centers
- Vietnam's Educational Strategies: Aligning with International Frameworks
    - Curriculum Reforms: New competency-based learning focuses on 21st-century skills. Critical thinking and creativity are key.
    - Teacher Training: Continuous Professional Development programs enhance teacher skills. This ensures high-quality instruction.
    - STEM Investment: Investment in labs and equipment strengthens STEM education. Pilot programs like Cambridge International Examinations are in place.
- Recent Innovations and Reforms includes AI and green skills in TVET, Integration of Industry 4.0 competencies and UNESCO Learning Cities and cross-sectoral policy coordination
    - Strategies to overcome the challenges and align with global in lifelong learning including Expand Recognition of Prior Learning, strengthen data systems for adult learning, foster public-private partnerships in lifelong learning, investing in digital literacy and Strengthening local governance
- Challenges: Addressed Disparities by reducing regional gap in education outcome, Improved remote access (enhancing quality education in remote region…

9) **Myanmar:** Dr. Thaung Htike (Acting Rector of Pathein University)

- Gender-Sensitive Policies, Inclusive Education: Ensure that girls and marginalized group have, equal access to education (Particularly in rural and conflict-affected areas)

- Promote inclusive education by Creating classrooms that accommodate students with disabilities and Providing teachers with training to support diverse learning needs.
- Promote Technical and Vocational Training by:
  - Equipping youth with employable skills and creating pathways to sustainable livelihoods,
  - Establishing vocational training centers that teach marketable skills such as agriculture, livestock, catering, tailoring, farming techniques, IT skills and so on
  - Encouraging private sector to create internship opportunities to students
  - Micro-credits for education: offering micro-loan or scholarship to disadvantaged groups to complete their education, attend vocation programs with mentoring and jobs placement for youth program

V. Session II: Best practices in vocational education and adult education

Moderator: Mr. Suong Saruon, Head of Public Relations and Partnership, SEAMEO TED
Speakers:

- **Cambodia**: Mr. Hem Suntrakwadh, Acting Dean of Faculty of Science and technology, Svay Rieng University
- **China**: Mr. TONG Wuzhou, Principal of the Adult Secondary Cultural and Technical School of Dajiahe Town, Ninghai County, Zhejiang Province
- **China**: Mr. XU Zuping, Principal of Xikou Town Adult Cultural and Technical School, Fenghua District, Ningbo, Zhejiang Province
- **Lao PDR**: Mr. Sengaloun Boutsady, Deputy Director General, Department of Non-Formal Education, Ministry of Education and Sport
- **Malaysia**: Ms. Nur Azureen Binti Jaafar, Director, Hulu Selangor Community College
- **The Philippines**: Dr. Racidon P. Bernarte, University Professor/Managing Director, Holy Trinity University /Asia-Pacific Consortium of Researchers and Educators
- **The Philippines**: Ms. Rita R. Obsequio, Vocational School Superintendent, Camarines Sur Institute of Fisheries and Marine Sciences (CASIFMAS), TESDA Region V
- **Thailand**: Miss Phimpicha Poonprasit, Deputy Director of Nonghan Industrial and Community Education College, Office of Vocational Education Commission, Ministry of Education, Thailand
- **Vietnam**: Dr.Nguyen Van Trang, Vice Dean, Faculty of Vehicle and Energy Engineering, Ho Chi Minh City University of Technology and Education (HCMUTE)

Key Takeaway of China-ASEAN TVET Policymaker Workshop Session II on Transforming Learning for Sustainable Rural Development

- Lifelong Learning International Frameworks includes many actions and strategies to be considered. These are Skills for Green Transitions, Inclusive Training, Career Guidance, Digitalization of Training and Learning Centers, Work-Based Learning and apprenticeship, skills anticipation, Governance System and Policy and Finance and So on.
- Collaboration and systematic development in Life Long Learning need more active and comprehensive roles of all stakeholders from policy level to implementation level including community centers, schools and beneficiaries.
- Village/farming classroom play crucial roles in the new ways of improving learning of students through practical demonstrations and field activities, agricultural technologies, community or villager engagement and government support and other resources.
- Industrial-education linkage in integration in the skills training and market orientation are also important factor for lifelong learning.
- Community Learning is the heart of life long learning development. Therefore, there is more need for a good system to activate the roles of target groups (students school leaders, and learners, industrial workers, professional executive and manager) and supporting groups. Strong partnership and wide-range of academic programs relevant to community needs and responsive to the current market trend are very important.
- Life Long Learning with skills development can help improve social and economic development.
- The roles of nation-wide learning centers at the community level enable to decentralize better adult learning and community education development. Therefore, it needs more attention to push community engagement, serviced-learning, and public-private partnership on learning community center development
- It is very important to considered community-center to promote learning programs. Therefore, industrial-education linkage and partnership on curriculum innovation and digital technology enable to improve rural education and adult learning and skill development
- Skills Certification and promoting income generation during studies are lesson learnt in promoting skills development
- Improving accessibility and equity in technology in education need more availability of infrastructure and M&E system
- Art is also playing an important role in supporting education especially for rural education development
- Lifelong Learning must not stop when have a degree. It should be incorporate into a good learning system.

VI. Industrial, Educational Investigation and Cultural Visit

- ***The Open University of China (OUC)***

Overview of OUC: The Open University of China (OUC) is a modern higher education institution directly supervised by China's Ministry of Education (MOE). Committed to promoting lifelong learning, OUC provides open education nationwide, leveraging modern information technology under the "Internet Plus" initiative. It offers degree and non-degree programs, coordinates the national open education system, and serves as a public service platform for lifelong learning. OUC's mission aligns with the principle that ***"Everyone can study anytime, anywhere."***

Visit Highlights: Distinguished participants toured key facilities, including a ***computer lab, virtual teaching classroom, experiential college, and the ASEAN-China Cooperation Centre***. Later, they attended an institutional introduction session led by an acting dean, who highlighted advancements in ***online teaching and learning***. Notably, most students study remotely from across China. OUC operates ***one headquarters, 44 provincial branches, and 2,692 learning centers***.

- ***Cuihu Science & Technology Backyard (STB)***

Overview of STB: The Science and Technology Backyard (STB) is a **rural hub bridging knowledge and practice** to drive technological innovation. Its framework supports **sustainable intensification** for smallholder farmers by:

1. Developing **demand-driven technologies**,
2. Disseminating innovations through **mixed top-down and bottom-up approaches**.

This model offers insights for **agricultural transformation in China and other developing nations**.
Visit Highlights: Participants were **warmly welcomed by Dr. Tian Yongqiang and his team**, who guided them through **planting areas, a seedling production base, a vegetable-fruit washing facility, and a packaging center**. Dr. Tian also introduced STB's **international collaborations** with **Laos, Australia, and European countries**, noting its **top-ranked reputation in Chinese agriculture**.

- ***Beijing Changping Vocational School***

Overview: Founded in 1958, the school offers **41 majors**, including **aviation services, automotive maintenance, landscaping, drone technology, and preschool education**. With **334 faculty and 3,000+ students**, it operates across **four campuses, one park, and a branch school**. Recognized as a **national model for vocational education**, it has won awards such as **"National Advanced Collective in Education."**

Visit Highlights: Participants received a **warm welcome** and learned about the school's **achievements in agricultural education**. After a **40-minute drive**, they explored a **second campus**, featuring **training bases for automotive, marketing, hospitality, food service, and skiing**—all set in

a **spacious, pristine environment**.

- ***Beijing HUATEC Information Technology Co., Ltd.***

  Overview: Founded in 2004, HUATEC specializes in **educational technology** and holds **29 patents**. Headquartered in Beijing, it drives innovation in **digitization and ICT**.

  Visit Highlights: Delegates from **MoEYS, SEAMEO TED, and the University of Svay Rieng** were greeted by **Mr. Tony Sun (Director of International Education Planning)** and colleagues. They toured the **Digitization Center** and **Intelligent Manufacturing/ICT Experience Center**, followed by a meeting. HUATEC highlighted its **Jingshi Project**, a collaboration with **NTTI, the University of Svay Rieng, and ASEAN partners**. Mr. Sun proposed **expanding cooperation** via **MoEYS and SEAMEO TED**, urging swift **MoU/MoA signings and project implementation**.

- ***The Great Wall (Juyongguan Pass)***

  Participants embraced a **physical challenge**, hiking to the **highest point of Juyongguan Pass** for hours. At the summit, they enjoyed **breathtaking views, fresh air, and a well-deserved respite from stress**.

VII. Key Lessons Learned

1. **Vocational Education as a Pillar of Rural Revitalization**
   - Across China and Southeast Asia, Technical and Vocational Education and Training (TVET) is being leveraged not only for employment but also as a strategic tool for rural transformation, environmental sustainability, and digital inclusion.
2. **Policy Integration is Essential**
   - Strong government leadership and cross-sector policy integration are necessary for scaling up lifelong learning and rural education. China's national strategies and ASEAN countries' reforms reflect an increasing alignment with SDG 4 and the 2030 Agenda.
3. **Community-Based and Context-Driven Learning Models Work**
   - Models like China's "village/farming classrooms" and localized training in Cambodia, Lao PDR, and Vietnam demonstrate that education tailored to local economies and needs leads to stronger engagement and outcomes.
4. **Digital and Green Skills Are the Future**
   - The growing emphasis on green skills, digital literacy, and Industry 4.0 (e.g., AI, IoT, sustainability) highlights the urgency of curriculum modernization and workforce transformation in rural and underserved communities.

5. **Public-Private Partnerships Multiply Impact**
    - Case studies from China (e.g., Ningbo's integrated network, HUATEC's digital labs) and Malaysia (TVET-Industry Council) stress the role of private sector collaboration in skills development, innovation, and technology access.
6. **Inclusivity and Equity Must Remain Central**
    - Emphasis on inclusive education for marginalized, gender-sensitive policies (e.g., Myanmar), and flexible learning pathways (e.g., Philippines' ALS) underlines the need for systems that leave no one behind.

7. **Lifelong Learning Requires Systemic Structures**
    - The importance of institutionalizing lifelong learning through recognition of prior learning (RPL), flexible pathways, and decentralized community learning centers is recognized across all participating countries.

VIII. Conclusion

The **China–Southeast Asia Capacity Building Workshop on Transforming Learning for Sustainable Rural Development** was a comprehensive and dynamic platform for knowledge exchange, policy dialogue, and partnership building among educational leaders and practitioners from across ASEAN and China. Held in Beijing from 16 to 19 June 2025, the event effectively highlighted shared challenges and diverse solutions in using transformative education for rural development.

Participants engaged in a series of thematic discussions, country presentations, and institutional visits, showcasing innovative models and strategies for TVET and lifelong learning. From China's dual learning system and digital empowerment campaigns to ASEAN nations' policy reforms and community-centered learning hubs, the workshop revealed a collective shift towards more inclusive, sustainable, and future-oriented education systems.

Through immersive study tours at institutions such as the Open University of China, the Cuihu Science and Technology Backyard, and vocational schools and enterprises, participants saw firsthand how digital technologies, green skills, and industry linkages are reshaping rural education and labor markets.

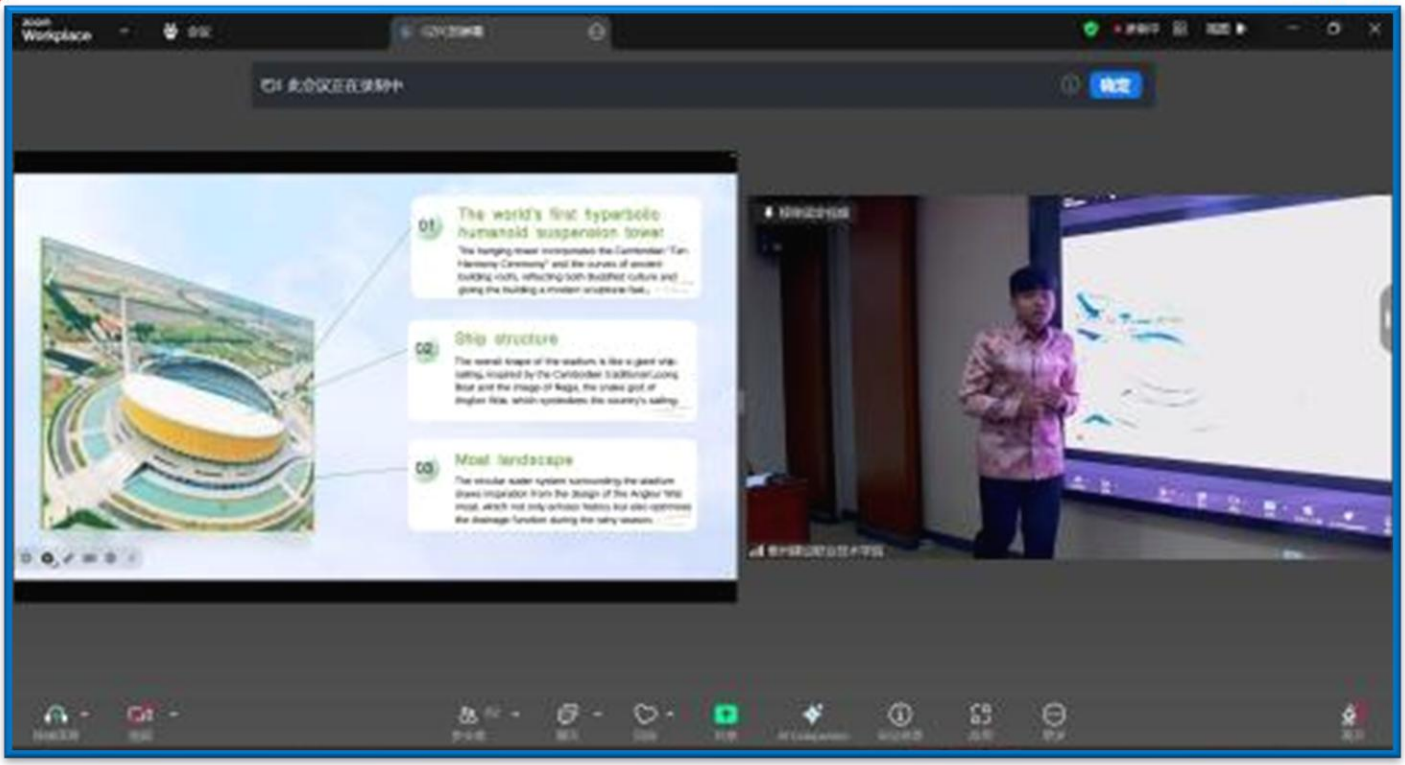
The workshop concluded with a strong consensus on the importance of cross-border collaboration, policy alignment, and local empowerment in advancing the rural education agenda. It underscored that rural transformation is no longer just about infrastructure and agriculture—it is fundamentally about people, their skills, and their ability to adapt, innovate, and thrive in a rapidly changing world.

25. Report on International Youth Talk on "Exploring Cultural Heritage and Innovation in Architecture and Youth Voice: How is AI Empowering Future Cities" on June 25-27, 2025 (Virtually)

The two sessions of International Youth Talk, jointly organized by SEAMEO TED, CATECP and Go Study Global Education in June 2025, were successfully held on June 25 and June 27, 2024. The events featured online presentations by youth representatives from universities across multiple countries including Vietnam, Cambodia, Laos, Malaysia, Thailand, Indonesia, Brunei, Russia, and the Philippines accommodating 138 participants. Centered around the themes of "Exploring Cultural Heritage and Innovation in Architecture" and "Youth Voice: How is AI Empowering Future Cities?", the youth showcased fresh perspectives with a global vision, sparking creative and cross-cultural exchanges.

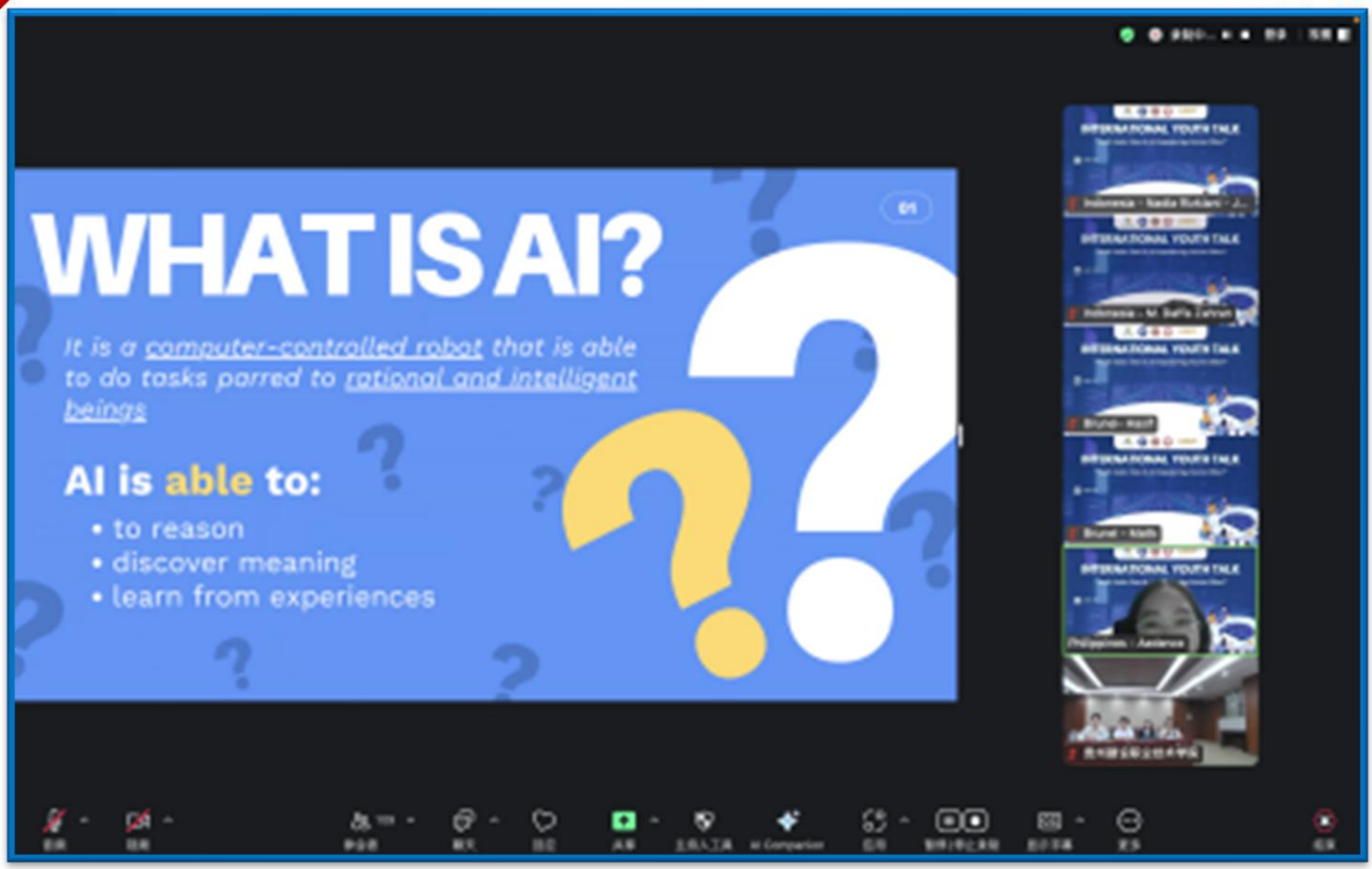
The opening remarks were given by **Mr. Khat Prumsochetra**, Deputy Director of SEAMEO TED. He emphasized the vital role of youth in regional cooperation as leaders of innovation and cultural exchange. He highlighted the importance of nurturing young talents with global vision and multicultural skills to deepen international education and promote sustainable development. He expressed hope that the series would offer a platform for youth to connect, learn, and contribute to the region's future.

On June 25, the International Youth Talk ***"Exploring Cultural Heritage and Innovation in Architecture"***—featured youth representatives from universities across multiple countries, who shared insightful presentations on the protection of world heritage sites and the preservation of architectural culture in their respective countries.



The speaker from Ho Chi Minh City University of Technology, Vietnam, presented an in-depth study of the Imperial City of Hue, Vietnam's first UNESCO World Cultural Heritage site, focusing on its distinctive "double-ridge beam" architectural structure. Through detailed historical document analysis and on-site surveys, the team systematically explained Hue's strategic layout within its military defense system and how its architectural style blends aesthetic values with environmental design adapted to the tropical monsoon climate. The research further highlighted the Imperial City's exemplary role in preserving traditional culture while implementing modern heritage management, offering valuable references for cultural heritage protection in Southeast Asia.

Representatives from the Institute of Technology of Cambodia centered their presentation on four UNESCO World Heritage sites, including Angkor Wat, proposing a comprehensive conservation framework encompassing "historical heritage, religious architecture, colonial heritage, and New Khmer architecture." The team detailed how advanced technologies such as remote sensing, Geographic Information Systems (GIS), and digital twin technologies are applied for precise protection and management of stone architectural sites. This study not only deepened the understanding of Cambodia's multi-layered cultural heritage values but also provided innovative ideas for applying modern technology in cultural relic preservation.



The speaker from the National University of Laos focused on the protection and adaptive reuse of buildings in Luang Prabang, showcasing the fusion of colonial architectural history and traditional Lao styles. The team highlighted restoration projects of temples and school renovations, emphasizing the principle of "restoring as it was," which maintains the historical appearance of buildings while meeting modern functional needs. These experiences offer practical references for cultural heritage preservation in Luang Prabang and the wider region.

The student from Politeknik Sultan Haji Ahmad Shah, Malaysia, used the Sungai Lembing Museum as a case study. Combining digital modeling and historical archives, they systematically analyzed the structural features and cultural significance of this colonial-era building. The team focused on how adaptive reuse strategies have enabled the successful transformation of the building into a modern museum with both cultural exhibition and educational functions, highlighting the balance between heritage conservation and contemporary demands, and demonstrating the ongoing vitality of cultural heritage in modern society.

The international student speaker from Guizhou Polytechnic of Construction, China, explored the similarities and differences between Cambodian traditional architecture and Chinese traditional architecture in terms of structure and decoration. The presentation emphasized the unique stone carving techniques and roof structures in Angkorian architecture, compared with China's traditional timber framing systems. It highlighted the differences and integration in material selection, climate adaptation, and cultural symbolism, showcasing cross-cultural reflections and practices in architectural heritage preservation.

The speaker from King Mongkut's Institute of Technology Ladkrabang, Thailand, addressed cutting-edge topics in digital-era cultural heritage preservation. They explored the application of virtual reality (VR), augmented reality (AR), and artificial intelligence (AI)-based storytelling in cultural transmission. Emphasizing that technology should go beyond mere form to support the continuation and revitalization of cultural spirit, the team advocated for a protection model combining "immersive experience" and "community co-creation," providing innovative ideas and practical pathways for the future development of digital humanities.

On June 27, the International Youth Talk ***"Youth Voice: How is AI Empowering Future Cities?***"—brought together youth representatives from universities across multiple countries for in-depth discussions on how AI is shaping smarter, safer, and more sustainable urban futures.

The team from Politeknik Negeri Jakarta, Indonesia, showcased multiple local innovative cases of AI applications in urban smart transformation, including the EcoBin smart waste sorting system, facial recognition at airports, traffic violation detection, and priority seat monitoring on trains. The students highlighted that with Indonesia's urbanization rate expected to reach 70% by 2045, AI technologies will be vital tools to enhance urban operational efficiency and residents' quality of life, and that youth are the key drivers in building smart cities.

Students from University of Santo Tomas, Philippines, began by describing the significance of AI for contemporary youth and then shared perspectives on AI's interaction with future cities. They emphasized that AI should be human-centered, focusing on public interest and improving quality of life. AI is not merely a technical tool but a strategic resource for sustainable urban development, with synergistic applications in disaster prediction, safety management, and economic growth.

The student team from Guizhou Polytechnic of Construction, China, shared diverse applications of AI technology in urban traffic management and social services. They noted that AI can significantly improve road efficiency and safety through real-time traffic monitoring, intelligent traffic light control, and route planning, thus contributing to creating a safer and more orderly urban mobility environment.

The students from Laksamana College of Business, Brunei, systematically reviewed AI applications across intelligent transportation, urban security, energy management, and healthcare services. Using successful examples from cities like Singapore, Barcelona, and Dubai, they stressed the importance of responsible AI deployment to achieve inclusive and sustainable urban development.

Student from Moscow Institute of Physics and Technology (MIPT), Russia, discussed cutting-edge challenges faced by megacities such as climate uncertainty, technological changes, and urban security. They proposed integrated optimization of traffic, energy, and climate sytems through cross-sector data platforms and AI modeling to tackle future urban uncertainties and introduced the core concepts of Russia's "2025 City AI Development Plan."

Representatives from Capiz State University, Philippines, addressed data privacy and security concerns in digital city development. Highlighting the relevance of the Personal Data Protection Act, the speaker emphasized that as AI technologies become widespread, risks of data misuse and privacy breaches increase. They called on youth to improve digital literacy and enhance cybersecurity awareness and self-protection, aiming to prevent privacy risks at their source in the application of new technologies.

26.Observation Workshop Report on Digital Transformation and TVET Platform Batam City, Indonesia, July 13-16, 2025

Batam City: On July 13-16, 2025, a delegation of 05 Cambodian general and technical high school management led by **Dr. Songheang Ai**, director of SEAMEO TED joined the observation workshop on digital transformation and TVET platform, co-organized by Labtech International Ltd and SEAMEO TED at Batam factory in Batam City, Indonesia for purposes to benchmark the digital TVET system and framework for Cambodian TVET system practices, to seek cooperation opportunities between general and technical high schools and Labtech International Ltd, and to enhance cooperation on TVET field between SEAMEO TED and Labtech International Ltd.

During the workshop, **Mr. Bradley Ker**, director of Digital Programs of Labtech International Ltd, presented the digital TVET system and framework, smart classrooms, XR simulations, Digital Twin Systems, etc. He also shared the experience of teacher training programs and Labtech Total Solutions. The delegation observed the demonstration of digital devices and equipment of the factory.

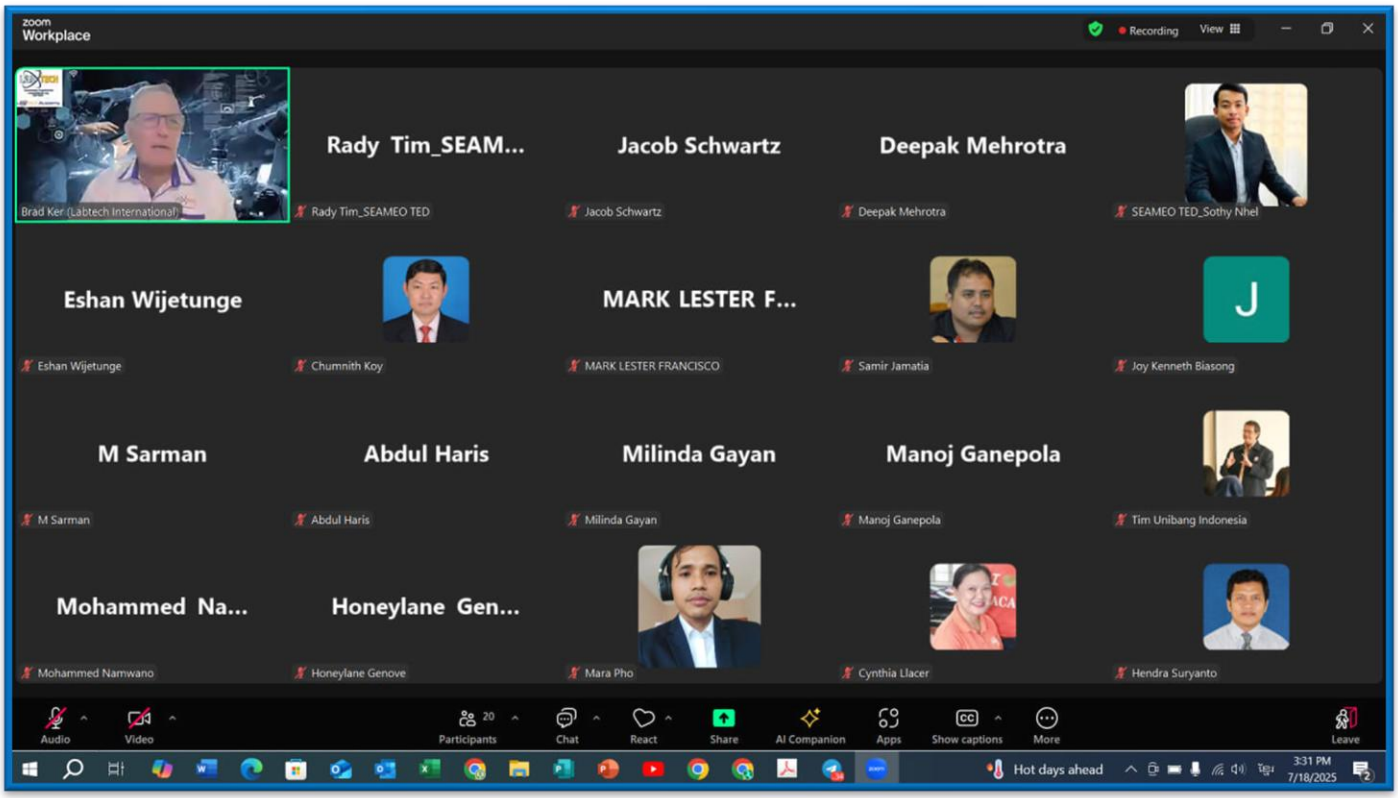
All parties concerned (Labtech International Ltd, General and Technical High School Management) have agreed with some key highlights as follows:

- Labtech International Ltd will provide the 3-month complimentary trial logins to all visiting delegates for full access to all subject areas_Automotive, HVAC, Electronical, Electronics, Renewable Energy, etc_within the Labtech TVET LMS platform with the completion of Khmer-language navigation support
- SEAMEO TED, in cooperation with Labtech International Ltd, will co-host a 2-day intensive training course on Immersive Digital TVET Methodologies focusing on Labtech's Virtual TVET systems for Cambodian TVET teachers from general and technical high schools. After the training course, each participant will receive 6-month free access to Labtech Academy as part of the professional development program. The tentative date and location of the training will be shown by due course
- Labtech International Ltd will offer a 3-month internship program for up to 4 Cambodia TVET teachers at Labtech factor. To be eligible for the intern program, Cambodian TVET teachers should possess Automotive, HVAC, Electrical, Electronics, Renewable Energy, ICT, Smart Agriculture, and Welding and Plumbing. Labtech International Ltd will cover accommodation, meals, and local transportation during the internship period in Batam City. Sending general and technical high schools or intern teachers will cover their own airfares
- SEAMEO TED will explore the opportunity to integrate Mobile Learning Kits of Labtech International Ltd into some projects funded by ADB, WB, ILO, etc. Labtech International Ltd will provide quotation and product catalogues for SEAMEO TED's consideration in writing the project proposals to relevant partners/donors for financial support.

Both parties were committed to working closely in achieving the common points of agreement by appointing Mr. Mara Pho, Head of Technical Education and Training Division of SEAMEO TED and Mr. Bradley Ker, Director of Digital Programs of Labtech International Ltd to be focal points of contact for following-up action. Finally, participants explored Batam City by touring to some tourism attraction sites.

27. Leadership Workshop: Implementing a Digital TVET Framework I on July 17-18, 2025 (Virtually)

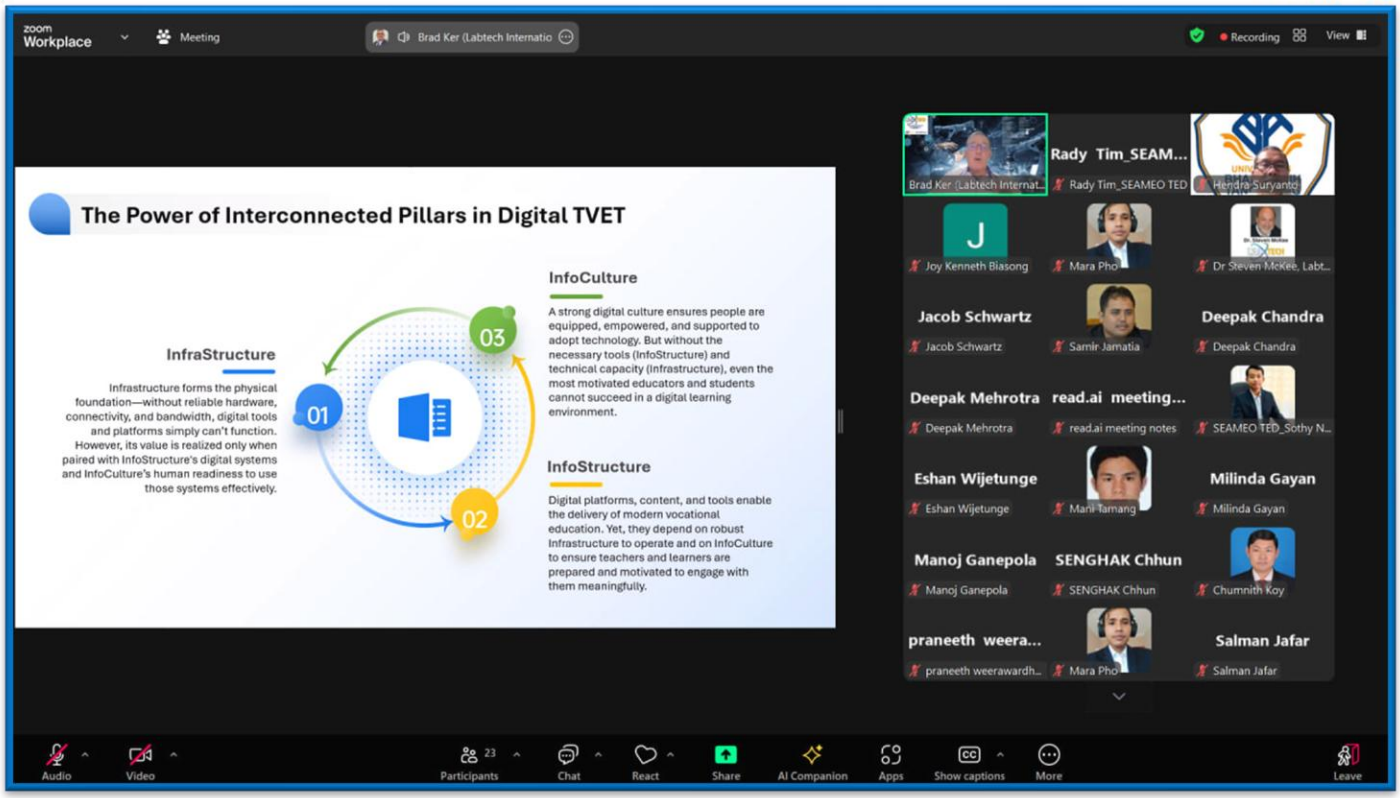
Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED) and Labtech international co-organized the online workshop on "**Implementing a Digital TVET Framework**" participated by over 30 participants.



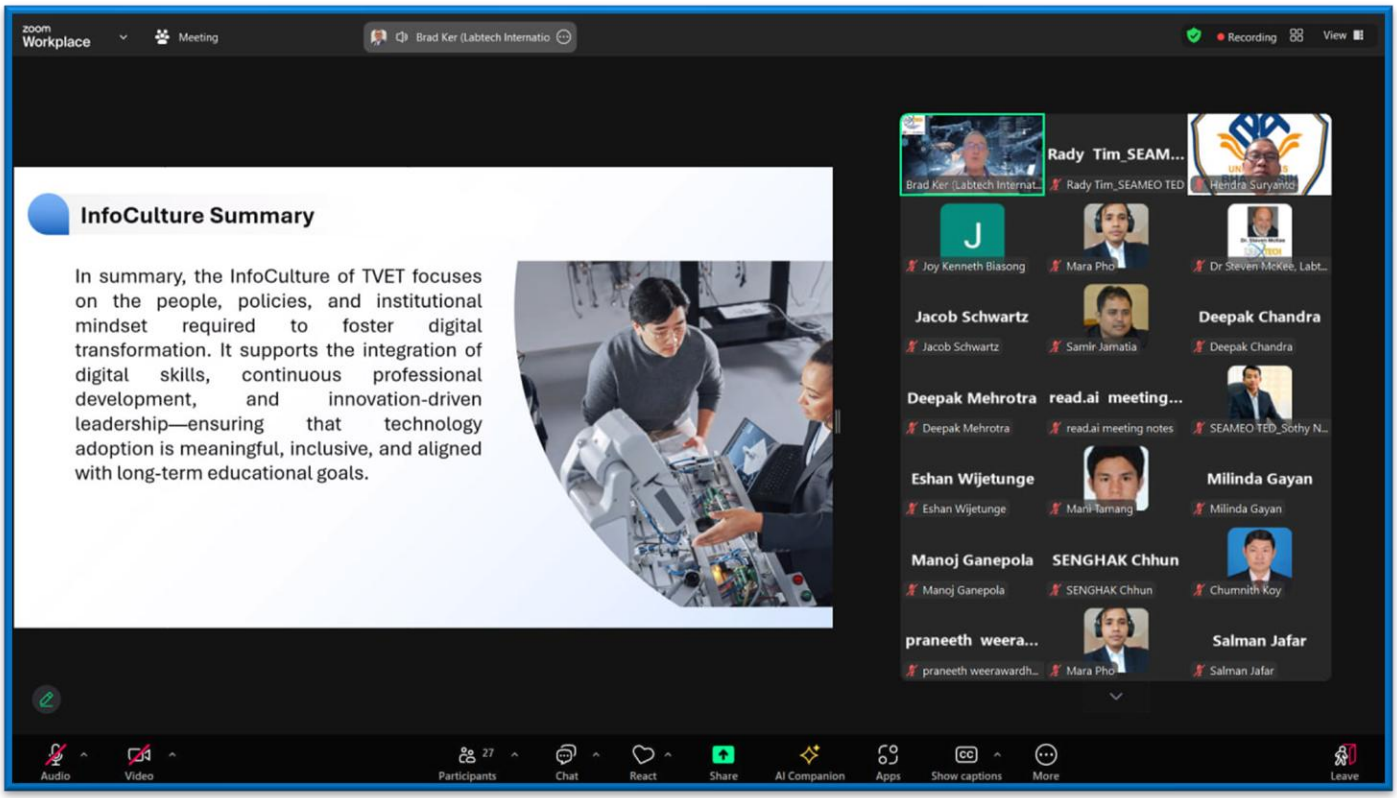
(Participants in the Photo Session)

The workshop was held from 11:00 am to 3:00 pm (Cambodia time) on July 17-18, 2025. The workshop aimed to build technical skills and promote knowledge exchange in the field of Global Perspective, Foundation framework, Strategies, Tools and Evaluation for Digital Framework.

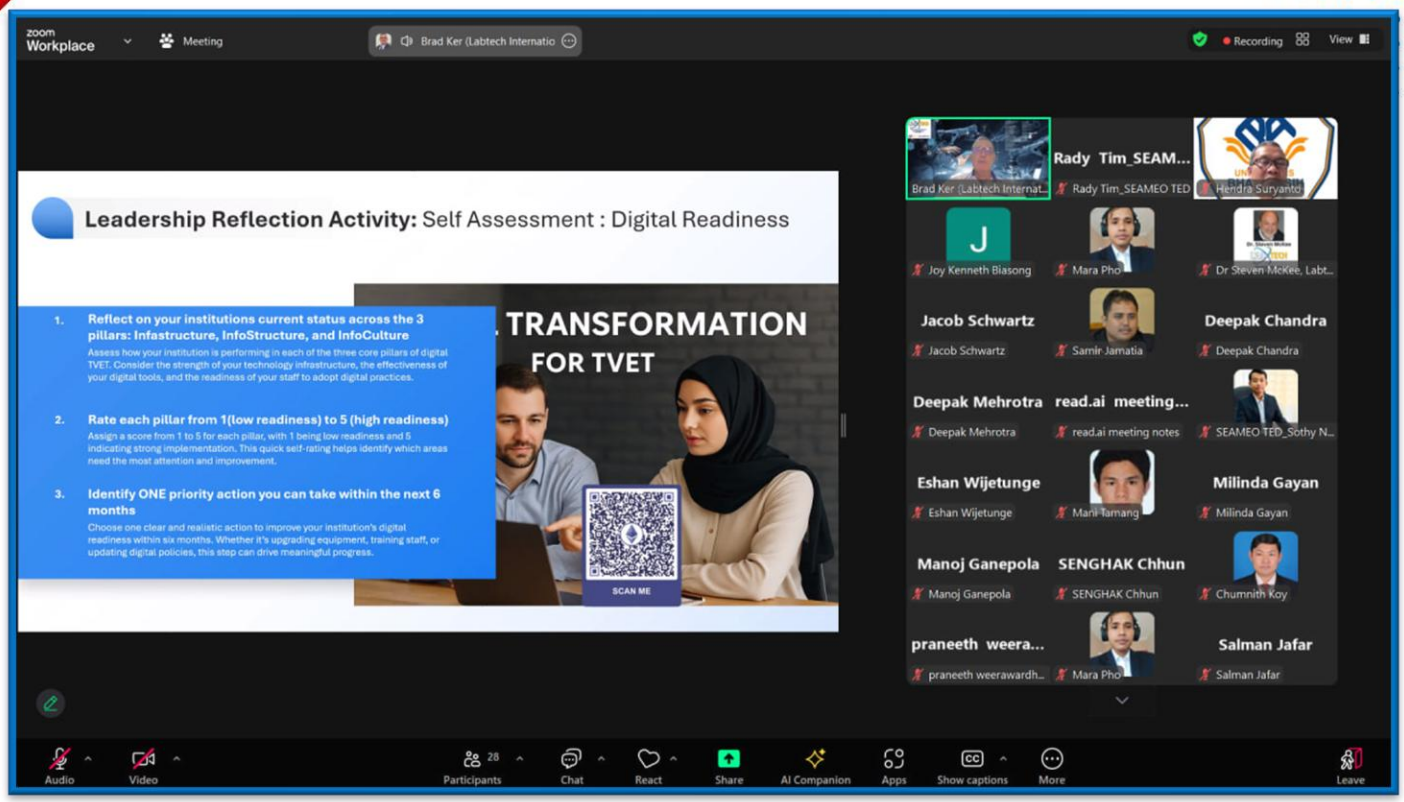
In the whole session, the Labtech international lecturers delivered several important topics and explored how technologies like AI, XR, and learning analytics are shaping vocational education globally, with case studies and best practices. Understanding the three key pillars infrastructure, infostructure, info culture and how to support institutional digital transformation. Gain insights into platform, immersive content, and XR technologies for aligning program with industry needs, learning how to assess and report the effectiveness of digital learning and using dashboards and analytics. Finally, the interaction and communication, as part of Q & A session were encouraged in terms of answering participants' questions, concerns or comments.



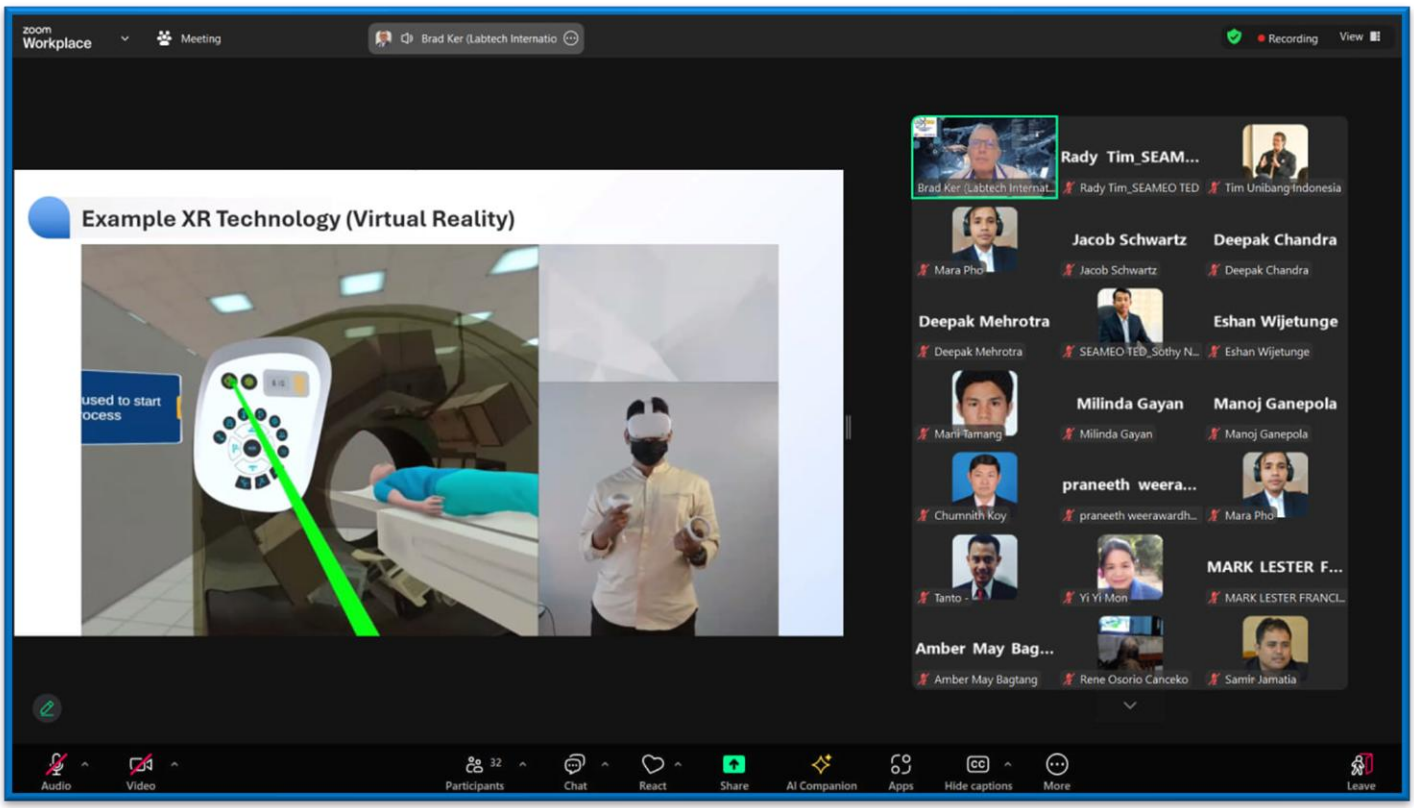
(Explanation on the power of interconnected pillars in digital TVET)



(Explanation on the info culture summary)



(Leadership Reflection Activities: Self-Assessment: Digital Readiness)



(Explanation on the XR Technology Virtual Reality)

In conclusion, the workshop combines theory with hands-on practice, helping participants gain useful skills for today's implementing a digital TVET framework. It also builds up a good relationship among participants and students in the ASEAN region and other orders of the world.

28. China-ASEAN International Youth Summer Camp in Guiyang City, Guizhou Province on July 22-28, 2025

Guiyang: From 22 to 28 July 2025, the 2025 China-ASEAN "Future Architect" Summer Camp was successfully held in Guiyang, Guizhou Province, China, jointly organized by the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), Guizhou Polytechnic of Construction, and Go Study. The event brought together 21 young delegates from nine ASEAN countries—namely the Philippines, Cambodia, Laos, Malaysia, Myanmar, Thailand, Brunei, Indonesia, and Vietnam. The camp aims to inspire youth, strengthen China-ASEAN exchanges, and promote mutual understanding and friendship through architecture as a shared cultural language.

(ASEAN Youth Participating China-ASEAN "Future Architect" Summer Camp Forum)

Focusing on *architecture* as a cross-cultural theme, the summer camp engaged participants through site visits, intangible cultural heritage experiences, enterprise exchanges, and youth dialogues. These immersive activities offered youth a hands-on perspective into China's architectural culture and technological advancements, while fostering mutual understanding and cooperation among participants from diverse backgrounds.

(Bamboo Weaving Activities of ASEAN Youth)

During the camp, the delegates visited Qingyan Ancient Town, a historical and cultural heritage site in Guiyang, where they experienced traditional Chinese craftsmanship such as bamboo weaving and mortise-and-tenon woodworking. They also toured leading companies in China's architectural technology sector, gaining insights into cutting-edge developments in green construction and smart manufacturing.

(ASEAN Youth Visiting Qingyan Ancient Town)

At the International Youth Roundtable Talk, youth from different ASEAN nations engaged in in-depth discussions on topics such as sustainable architecture and urban- cultural preservation. They shared iconic architectural examples and construction experiences from their respective countries, highlighting the exchange and integration of perspectives rooted in diverse cultural contexts.

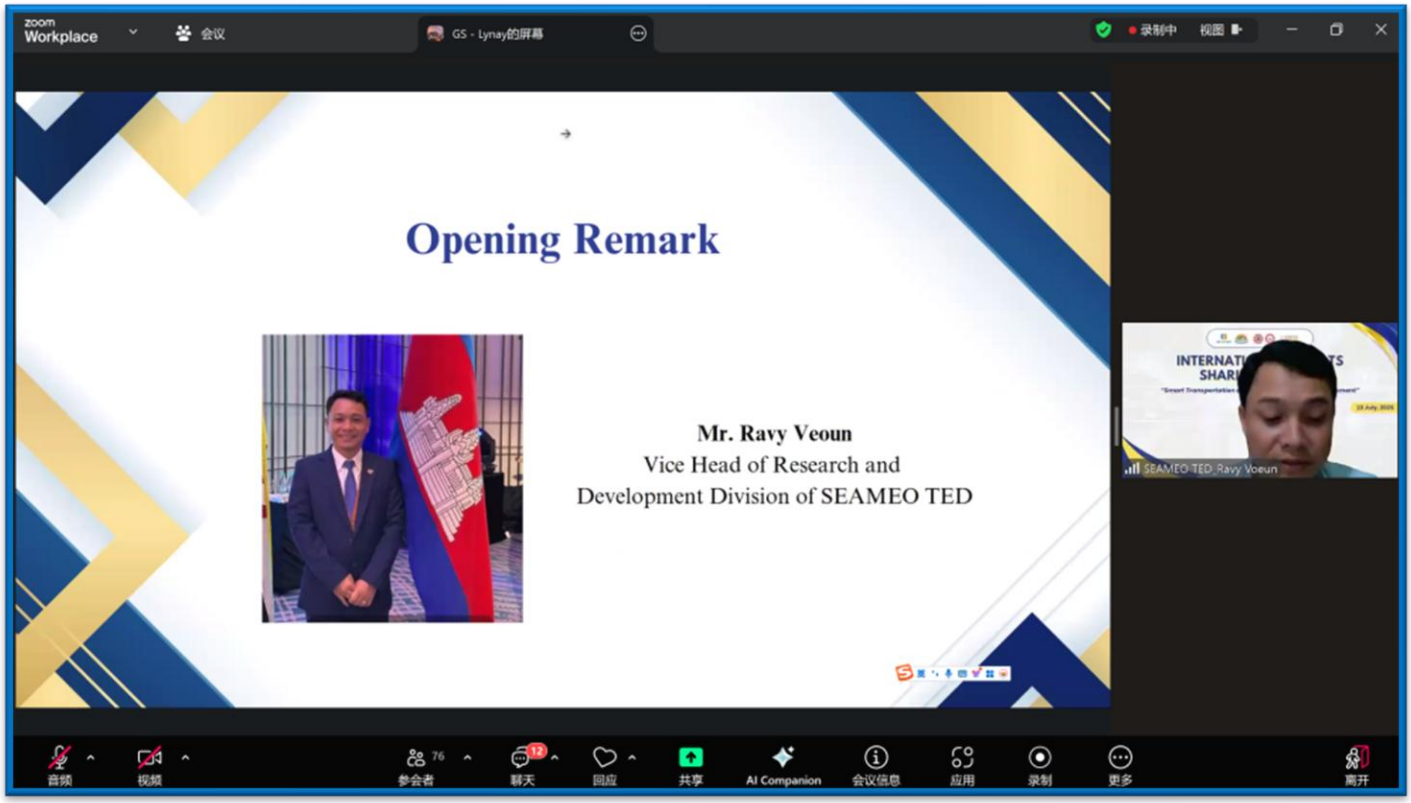
(ASEAN Youth Visiting the Chinese Cultural Performance)

The closing ceremony of the summer camp was held in conjunction with the Forum on Jointly Building a New Ecosystem for China-ASEAN Vocational Education Development: Innovative Integration and Digital Empowerment. During the ceremony, the campers reflected on their experiences through video presentations, showcases, and musical performances—demonstrating their enthusiasm for regional cooperation and shared development.

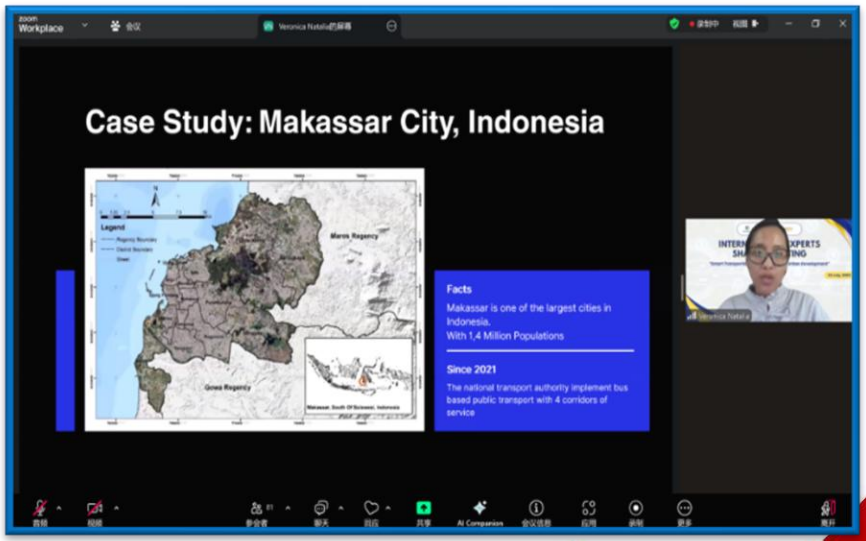
(ASEAN and Chinese Youth Signing Chinese Song During the Forum)

As one of the key organizers, SEAMEO TED remains committed to promoting regional cooperation in vocational education and youth engagement. The successful completion of the summer camp not only provided ASEAN youth with a meaningful opportunity to learn about Chinese culture and advancements in architectural science, but also further strengthened multilateral education collaboration in the region—injecting fresh energy into the building of an open, inclusive, and mutually beneficial educational ecosystem.

29. Report on International Experts Sharing Meeting "Smart Transportation and Sustainable Urban Development" on 23 July 2025

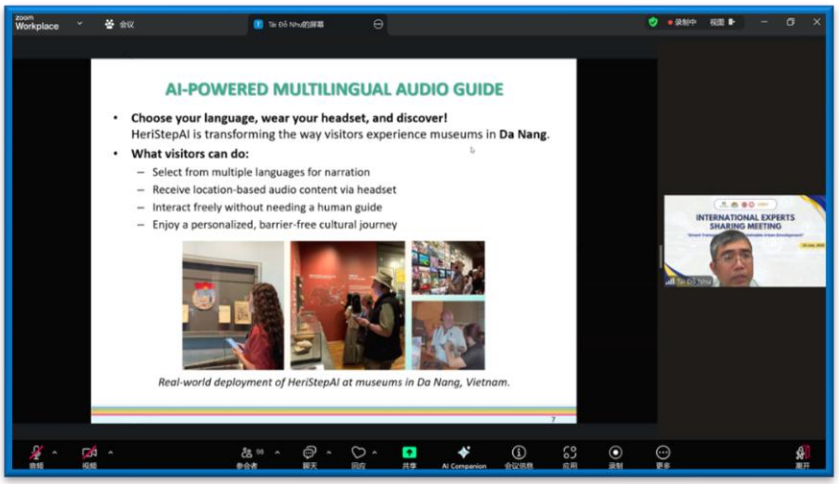


On the afternoon of July 23, 2025, the 6th session of the International Experts Sharing Meeting, hosted by the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED) and the China-ASEAN Technical Education Cooperation Platform (CATECP), co-host by Go Global Education, and the International Youth Culture and Education Organization (KEMG), was successfully held online. Themed "Smart Transportation and Sustainable Urban Development," the meeting brought together renowned scholars from Indonesia, Vietnam, and Laos, participated by 105 participants from around the world. They engaged in in-depth discussions on topics such as innovations in smart transportation technology, pathways to sustainable urban development, and the relationship between smart transportation and sustainable tourism.



The opening speech was delivered by **Mr. Veoun Ravy**, vice chief of Research and Development Division, SEAMEO TED. He emphasized that promoting smart transportation and sustainable urban development is a key strategic direction for regional cooperation. He called for deeper collaboration among countries in areas

such as policy coordination, technological innovation, and talent development and expressed hope that this meeting would bring together diverse expertise to explore innovative approaches to sustainable urban transportation, providing professional support for building green, low-carbon, smart, and efficient cities.



Speaker: Prof. Phongsavanh Inthavongsa
Vice Dean and Professor, Faculty of Logistics and Transportation, National University of Laos

Prof. Phongsavanh analyzed the challenges and policy responses related to sustainable transportation in the Vientiane Capital Region of Laos. Data indicates that the region is experiencing a steady annual growth of 5% in motor vehicle ownership, with mixed traffic flows contributing to an average annual increase of 5.19% in traffic-related fatalities. Meanwhile, public transportation services account for less than 10% of total travel demand. The study focuses on evaluating the implementation of the Vientiane Sustainable Urban Transport Project (VSUTP), which includes the construction of a 12.9 km Bus Rapid Transit (BRT) corridor, the deployment of 40 smart traffic signals, and the redevelopment of non-motorized transport infrastructure. The project adopts a layered governance model that integrates strategies such as roadway expansion with right-of-way reallocation, electronic parking fee systems to enhance fiscal mechanisms, and public behavioral campaigns aimed at promoting modal shifts. Preliminary monitoring suggests a significant improvement in pedestrian accessibility within a 500-meter radius of BRT stations. However, the study also highlights several institutional barriers, including weak enforcement capacity and resistance from private paratransit operators. These findings offer critical policy insights for managing motorization transitions in medium-sized Southeast Asian cities.

Speaker: Dr. Venny Veronica Natalia
Senior Lecturer, Department of Urban and Regional Planning, Universitas Hasanuddin, Indonesia

Using the case of Makassar City (Kota Makassar), Indonesia, Dr. Venny explored the potential of “Digital Placemaking” in increasing public transportation usage. She pointed out that the local bus system has long struggled with inadequate infrastructure and limited payment options, resulting in low ridership and even the suspension of some routes. To better align with citizens' actual mobility needs, her team conducted surveys and gathered feedback via social media platforms, focusing on key improvement elements such as bus shelters, real-time information systems, and charging facilities. Targeting young students as the primary audience, they launched a digital advocacy campaign under the hashtag #AyoNaikBus (“Let’s Take the Bus”). Dr. Venny emphasized that the project not only enhanced public awareness and acceptance of bus transit but also fostered

collaboration between government agencies and private stakeholders. This initiative helped revive several suspended routes, showcasing the practical value of digital tools in public transport governance.

Speaker: Dr. Do Nhu Tai

Senior Lecturer, Faculty of Information Technology, Saigon University, Vietnam

Dr. Do explored the integrated application of generative artificial intelligence (AI) and Internet of Things (IoT) technologies in the context of smart tourism and urban traffic management. He noted that traditional tourist cities commonly face challenges such as environmental overloading, traffic congestion, and insufficient personalization of visitor services. In response, his team developed an intelligent service system combining real-time IoT data collection with generative AI analysis. This system uses a sensor network to monitor crowd density, traffic flow, and environmental indicators, enabling functions such as dynamic route recommendations, intelligent navigation, and multilingual interaction. A pilot application at the Da Nang Museum in Vietnam demonstrated that the system significantly improved the efficiency of visitor flows and overall experience, alleviated peak-period pressure on transportation and infrastructure, and reduced management and operational costs. Dr. Do emphasized the system's scalability, noting its potential for broader use in urban transport hubs, tourist site traffic dispersion, and the promotion of green mobility. The project showcases the vast potential of next-generation digital technologies in enhancing urban operational efficiency and advancing sustainable development.

30.Online Seminar International Expert Sharing Meeting on Cultural Adaptation and Acceptance of New Energy Vehicles in Southeast Asia on 8 August 2025

Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), China-ASEAN Technical Education Cooperation Platform (CATECP), Go Study Global Education, and International Youth Culture and Education (KEMG) co-organized online Seminar the 7th International Experts Sharing Meeting on "Cultural Adaptation and Acceptance of New Energy Vehicles in Southeast Asia" participated by 135 participants with 56 females. The participants are from fourteen countries consisting of Cambodia, India, Vietnam, Malawi, Philippines, Nigeria, Malaysia, Myanmar, Indonesia, Uganda, Pakistan, Timor-Leste, Brunei Darussalam and the Gambia.

(Participants in the Photo Session on August 8, 2025)

The Seminar was held from 15:00 am to 16:30 am (GMT+8) on August 8, 2025. This Seminar was brought together experts from Indonesia, Malaysia, China, and Brunei to engage in insightful discussions on the development trends of new energy vehicles and their cultural acceptance in the region.

Mr. Mara Pho, Head of the Technical Education and Training Department at the Southeast Asian Ministers of Education Organization Regional Centre for Technical

Education Development (SEAMEO TED) delivered the opening remarks for the meeting. Mr. Mara highlighted that promoting new energy vehicles involves not only technological innovation and policies but also complex cultural, social, and consumer factors in Southeast Asia. Understanding these cultural differences is key to localizing and sustainably developing the technology. He expressed hope that the meeting would encourage collaboration to explore cultural influences on technology adoption and help expand acceptance of new energy vehicles in the region.

In the whole session, the experts from Indonesia, Malaysia, China, and Brunei delivered several important topics including Brief Introduction to "Cultural Adaptation and Acceptance of New Energy Vehicles in Southeast Asia":

(Sharing session on August 8, 2025)

Speaker: Dr. Sheik Mohammed Sulthan

Associate Professor and Deputy Director of the Transportation Research Centre at Universiti Teknologi Brunei.

Dr. Sheik began by highlighting that transportation is a significant source of greenhouse gas emissions within the context of global climate change. Brunei, with the highest vehicle ownership rate in Southeast Asia, faces substantial pressure in transitioning its transport sector. To address this, Brunei introduced the National Climate Change Policy (BNCCP) in 2020, aiming for electric vehicles (EVs) to account for 60% of new car sales by 2035. Currently, a joint working group for EVs has been established, with plans to develop charging infrastructure and electrify government fleets. Dr. Sheik presented trends in EV and hybrid electric vehicle (HEV) sales and various models, noting that despite growth potential, challenges such as slow policy

implementation, high technology costs, and limited public acceptance remain. He recommended developing more practical strategies to enhance promotion efforts and accelerate the transition to green transportation.

(Sharing session on August 8, 2025)
Speaker:Dr. Aditya Mahatidanar Hidayat

Lecturer, Department of Civil Engineering, Faculty of Engineering, University of Bandar Lampung, Indonesia
Dr. Aditya's presentation focused on the "Hyperloop," exploring the feasibility and socio-cultural adaptability of new, efficient transportation technologies in the era of clean energy. He began by tracing the development and technical principles of the Hyperloop, linking its origins to 18th-century pneumatic tube systems and comparing its speed and energy consumption with current transportation modes. Powered by electricity, the Hyperloop offers advantages such as high speed, energy efficiency, low carbon emissions, and strong resistance to weather conditions, also opening new possibilities for urban space utilization. However, he objectively addressed challenges including motion sickness at high speeds, difficulties in emergency evacuation, and environmental adaptability. Dr. Aditya believes that while the Hyperloop holds potential as a future sustainable transport mode, its development requires integrated efforts across technology, safety, and cultural acceptance dimensions.

(Sharing session on August 8, 2025)
Speaker:Dr. Mohd Khair Hassan
Associate Professor, Faculty of Electrical Engineering, University of Putra Malaysia

Dr. Hassan's presentation focused on the issue of retired lithium-ion batteries generated during the rapid adoption of new energy vehicles (NEVs) in Malaysia. As NEVs quickly gain popularity, the number of retired lithium-ion batteries is increasing. Although these batteries have degraded to 70%–80% of their original capacity, they still possess significant energy storage potential. Utilizing these batteries for second-life applications aligns with the principles of the circular economy, extending battery lifespan and improving resource efficiency, while also reflecting the integration of technology and sustainable development. However, Malaysia faces challenges in recycling infrastructure, policy standards, and dependence on imported technologies, which also affect public acceptance of NEVs and related technologies. Dr. Hassan emphasized that establishing a comprehensive battery management system and applying artificial intelligence technologies can enhance safety and reliability, thereby increasing societal trust and acceptance of NEVs and promoting their cultural adaptation and widespread use in Southeast Asia.

(Sharing session on August 8, 2025)
Speaker: Mr. Ma'ruf Tsaghani Purnomo
Lecturer, Faculty of Civil Engineering, Diponegoro Uni

31. TVET Management Benchmarking Program III and Global Smart Education Conference on August 17-22, 2025 in Beijing, China

With good collaborations with its partners such as UNESCO International Research and Training Centre for Rural Education (UNESCO INRULED), China Education Association for International Exchange (CEAIE), and ASEAN-China Centre (ACC) , SEAMEO TED has successfully organized China-Southeast Asia Capacity Development Workshop on "TVET Digital Transformation for Sustainable Rural Development", as a thematic event of Global Smart Education Conference 2025 in Beijing City, China. 34 participants from 11 countries in Southeast Asia, from 27 technical education institutions, including Brunei Darrusalum (4) Cambodia (4), Indonesia (5), Lao PDR (1), Malaysia (4), Myanma (3), Philippines (6), Singapore (2), Thailand (2), Timor Leste (1) and Vietnam (2). They are education officials, TVET vocational school/colleges principals, managers, institute and university management and head teachers who are TVET partitioners. The 5-days program included field trips, forums, workshops, and cultural activities.

The visit to Alibaba Group, where all participants discovered a leading cloud computing and AI company with its proprietary Apsara Operating System, was on August 18, 2025 (in the morning). Alibaba Cloud provides a comprehensive suite of cloud services structured around a three-tiered architecture of Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Model-as-a-Service (MaaS).

The Opening Symposium, under the theme "TVET Digital Transformation for sustainable rural development" was organized in the afternoon on August 18, 2025. The Opening remarks and keynote speeches were given by representatives of ACC, SEAMEO, UNESCO Beijing, SEAMEO TED, UNESCO INRULED and Beijing Normal University at the Opening Symposium. Thirteen representatives from 12 countries, including Brunei Darussalam, Cambodia, China, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam, were invited to deliver their presentations in the Country Reports and Best Practices session.

In the morning on August 19, 2025, all participants were invited to participate in a Parallel Session on TVET. This session was opened by the representative of Department of Vocational Development, Ministry of Education, China, Prof. Ali Haidar Ahmed, Minister of Higher Education, Labour and Skills

Development, Maldives. Mr. FENG Yu, General Manager of Sports and Education Business Group of CCTV and Dr. Andreas Schleicher, Director for Education and Skills, Organization for Economic Co-operation and Development (OECD), France (Video). The conference focused on the digitalization and intelligent development of vocational education, featuring several prominent speakers and topics. Dr. Habibah Abdul Rahim from SEAMEO secretariat discussed the professionalization of vocational education empowered by digital intelligence. Prof. HE Zhen from Beijing Normal University explored stimulating generative AI to empower independent development, while Dr. Käthe Schneider from Friedrich Schiller University Jena also

contributed. Mr. ZHANG Chengtao from Huawei addressed challenges and solutions in school-enterprise cooperation in digital transformation. Other speakers include Prof. CHEN Jiangfeng from Beijing Vocational University of Science and Technology, Prof. HAN Xibin from Tsinghua University who discussed new situations and approaches for deepening the digitalization of vocational education, and Prof. ZHANG Buhe from the Chinese Academy of Educational Sciences.

The GSE Forum on Smart Villages and Education for Rural Transformation was held at BNU Changping Campus in the afternoon of August 19, 2025. The opening remarks were delivered by Professor ZHOU Zuoyu, Vice Chairman of Beijing Normal University, Director of UNESCO INRULED and Ms. LIN Huifang, Deputy Director-General of Foreign Economic Cooperation Center (China-EU Center for Agricultural Technology), Ministry of Agriculture and Rural Affairs, P. R. China. Keynote presentations were delivered by Ms. Duriya Amatavivat, Director of the SEAMEO Regional Centre for Sufficiency Economy Philosophy for Sustainability and Prof. LIU Ji from Shaanxi Normal University. The forum also included case reports from various educational leaders, a roundtable discussion on TVET for Smart Villages and Rural Transformation with speakers from Brunei, Cambodia, Indonesia, Malaysia, and the Philippines.

In the morning of August 20, 2025, all participants were organized to visit The Great Wall. This visit was arranged for the purpose of cultural exchanges and exploration. In the afternoon, there was an exchange visit to Centre for Language Education and Cooperation of China where participants learned more about Confucius's language academy and philosophy. Participants also had a meeting with the management team of Centre for Language Education and Cooperation of China to learn more about "Chinese + Vocational Skills" program. This program creates a comprehensive system for Chinese language learning and professional skills training, promoting employability and enabling participants to thrive in the global economy. Event Reflections and Cultural Night was organized in the evening time for exploring and strengthening cultural exchange among participants from Southeast Asia countries and China.

In the morning of August 21, 2025, a visit to Beijing Polytechnic University was organized for all participants. During the visit there was a China-ASEAN TVET Exchange Meeting on International Cooperation and Talent Cultivation in which five presentations by 3 representatives from Southeast Asian Countries and 2 representatives from Beijing Institutions were conducted in the form of knowledge and best practices exchange. In the afternoon, all participants were arranged to pay a visit to Smart TVET Development Centre, Higher Education Press of China. HEP is a publishing house in China, specializing in educational materials, particularly for higher education. Participants had opportunities to explore the Smart TVET Development Centre on its achievements and vision.

32. Report on International Youth Talk on "How Electric Vehicles Changed My View of Transportation" on August 22, 2025

On the afternoon of August 22, 2025, the 8th session of the International Youth Talk online youth exchange successfully concluded. With the theme "How Electric Vehicles Changed My View of Transportation", the conference brought together youth representatives from universities in Indonesia, Malaysia, the Philippines, Thailand, and Cambodia. They engaged in lively discussions on topics such as the development trends of new energy vehicles, the application of clean energy, and the prospects of sustainable transportation, while also sharing their personal learning experiences and daily life reflections. 133 participants from around the world logged in the webinar.

The young participants not only exchanged views on how electric vehicles have reshaped individual perspectives on mobility but also explored their broader significance in tackling climate change, driving green transition, and fostering regional cooperation.

The event opened with remarks by Mr. Ravy Voeun, Deputy Director of the Research and Development Department at SEAMEO TED. He highlighted that electric vehicles are not only a new means of transportation but also an important driver of clean energy, green development, and mobility transformation in Southeast Asia. Mr. Ravy called on the youth to embrace this trend, deepen their understanding of sustainable transport through dialogue, and actively contribute to regional cooperation for a greener and more inclusive future.

Youth representatives from the National Polytechnic Institute of Cambodia shared their perspectives on electric vehicles and how they may transform future transportation. They highlighted that EVs can bring economic benefits, such as reducing daily commuting costs and enjoying government incentives, while also enhancing Cambodia's energy independence. In addition, EVs can improve air quality, reduce noise, and promote healthier and more environmentally friendly living. The students emphasized that with expanded charging infrastructure, increased business investment, and intergovernmental cooperation, electric mobility will become more widespread. Their insights demonstrated that EVs represent not only a shift in transportation but also a step toward green travel, sustainable development, and the younger generation's vision for a better life and environmental protection.

The representatives from Gadjah Mada University, Indonesia shared their observations on electric vehicles in Indonesian transportation. They noted the current heavy reliance on fuel-powered motorcycles and private cars, which contributes to congestion, pollution, and energy pressure. They also discussed government efforts to promote EVs, as well as challenges related to cost, charging infrastructure, and public awareness. And analyzed the environmental, social, and economic advantages and disadvantages of EVs, emphasizing the crucial role of youth in advocating green mobility, driving policy innovation, and participating in sustainable transitions. Their insights highlighted the potential of EVs to transform Indonesian transportation and called

for policy improvements, infrastructure development, and active youth engagement to collectively advance an inclusive and sustainable electric mobility future.

Youth representatives from the National University of Laos shared their observations on electric vehicles, describing the shift in perception from “expensive and impractical” to “quiet, powerful, and environmentally friendly.” They highlighted local EV developments, including LOCA EV taxi operations and government tax exemptions, and emphasized the social benefits of EVs, such as improved air quality, enhanced safety, and equal opportunities. The students also discussed the role of youth in advancing electric mobility—participating in technology development, proposing community-based charging solutions, and using social media and policy advocacy to influence public perception. Their sharing demonstrated not only the environmental and social significance of EVs but also called on youth across countries to turn green transportation into reality through knowledge sharing and innovative collaboration.

Youth representatives from Politeknik Tawau Sabah, Malaysia shared their observations on public perceptions and influencing factors regarding electric vehicles in Malaysia. They noted that despite government incentives such as tax reductions and charging station subsidies, the Malaysian EV market remains in its early stages, constrained by high vehicle costs, limited infrastructure, and a fossil-fuel-dependent power grid. The students analyzed the positive attitudes of the public viewing EVs as environmentally friendly, cost-effective, and technologically trendy, while also highlighting concerns over price, range, charging convenience, and energy cleanliness. They further discussed the value of EVs in reducing air pollution, lowering greenhouse

gas emissions, improving energy efficiency, integrating renewable energy, and delivering economic and health benefits. Their sharing illustrated the mixed perceptions of electric mobility in Malaysian society and underscored the importance of policy optimization, infrastructure development, and public education in promoting clean transportation.

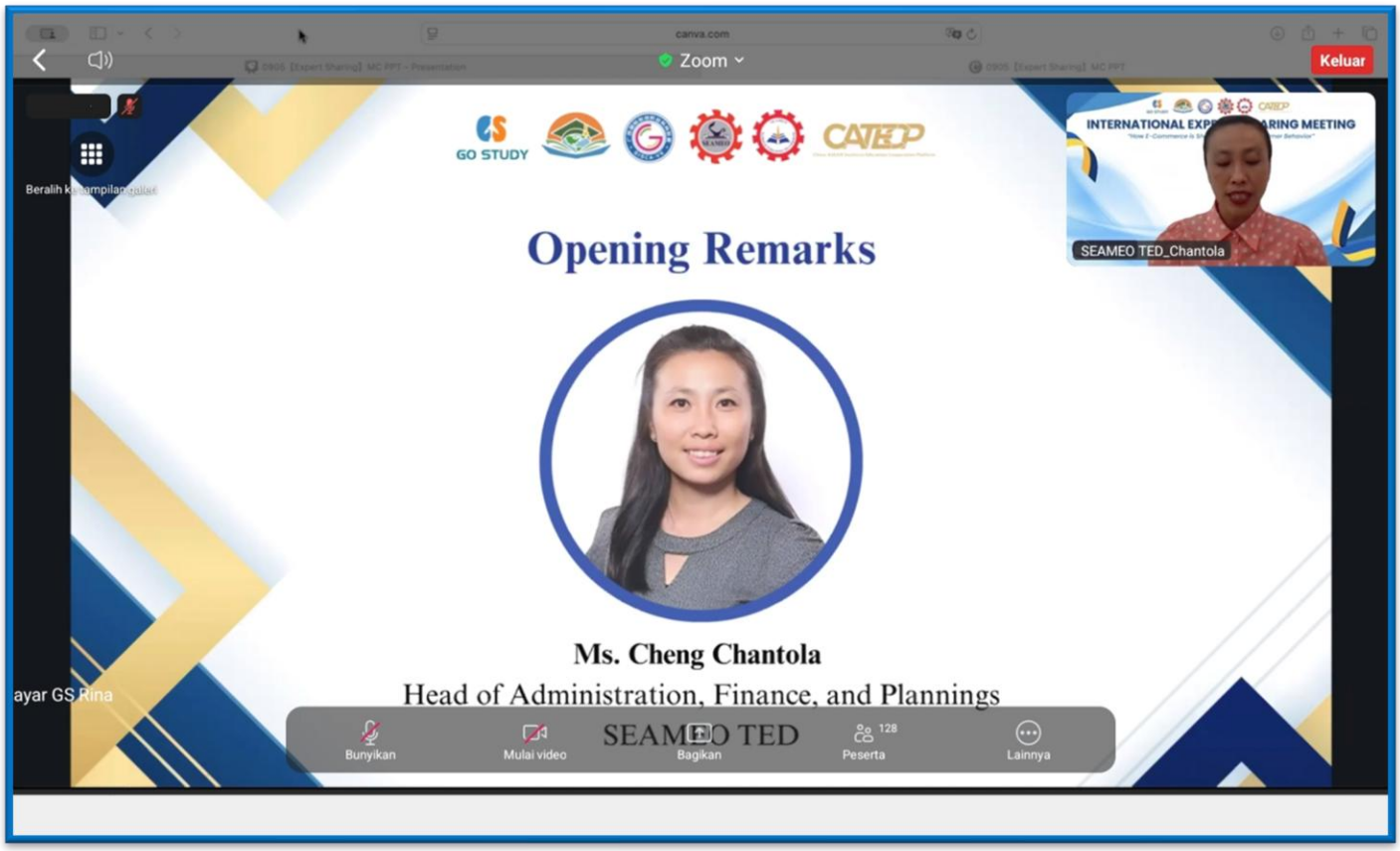
Youth representatives from King Mongkut's University of Technology Thonburi, Thailand shared their observations on how electric vehicles are reshaping transportation systems in Thailand and Sri Lanka. They noted that road transport accounts for 11.9% of global greenhouse gas emissions, highlighting the urgency of EV adoption to reduce fossil fuel dependence and improve air quality. The students reviewed the current EV market in both countries: Thailand’s registrations and charging infrastructure are steadily growing, while Sri Lanka has experienced rapid EV sales growth post-economic recovery, with brands like BYD dominating. They also analyzed challenges such as battery cost, lifespan, insufficient charging infrastructure, range anxiety, and safety risks, suggesting innovations like solid-state batteries, vehicle-to-grid (V2G) interaction, and hydrogen fuel cells to drive industry development. Looking ahead, they projected that by 2030, EVs will account for 60% of major global markets and integrate closely with autonomous driving and ultra-fast charging technologies. Their sharing highlighted the central role of EVs in promoting low-carbon

transportation and emphasized the importance of technological innovation, infrastructure development, and policy coordination for sustainable mobility.

Youth representatives from Universitas Internasional Semen Indonesia shared their perspectives on the development of electric vehicles in Indonesia. They began by outlining national policies supporting the transition from fossil-fuel vehicles to EVs, such as Perpres No. 55/2019 and the target of reaching 2 million EVs by 2030. They then discussed the main EV applications in Indonesia, including electric buses, ride-hailing services, and charging infrastructure, analyzing their economic and energy-saving benefits while highlighting technological and promotional challenges. Finally, the students raised a realistic concern: although EVs help reduce emissions, the extraction of nickel and lithium for batteries poses environmental and social burdens. Their sharing demonstrated the positive impact of EVs on green mobility while emphasizing the need for responsible resource management and environmental protection to achieve a truly sustainable clean future.

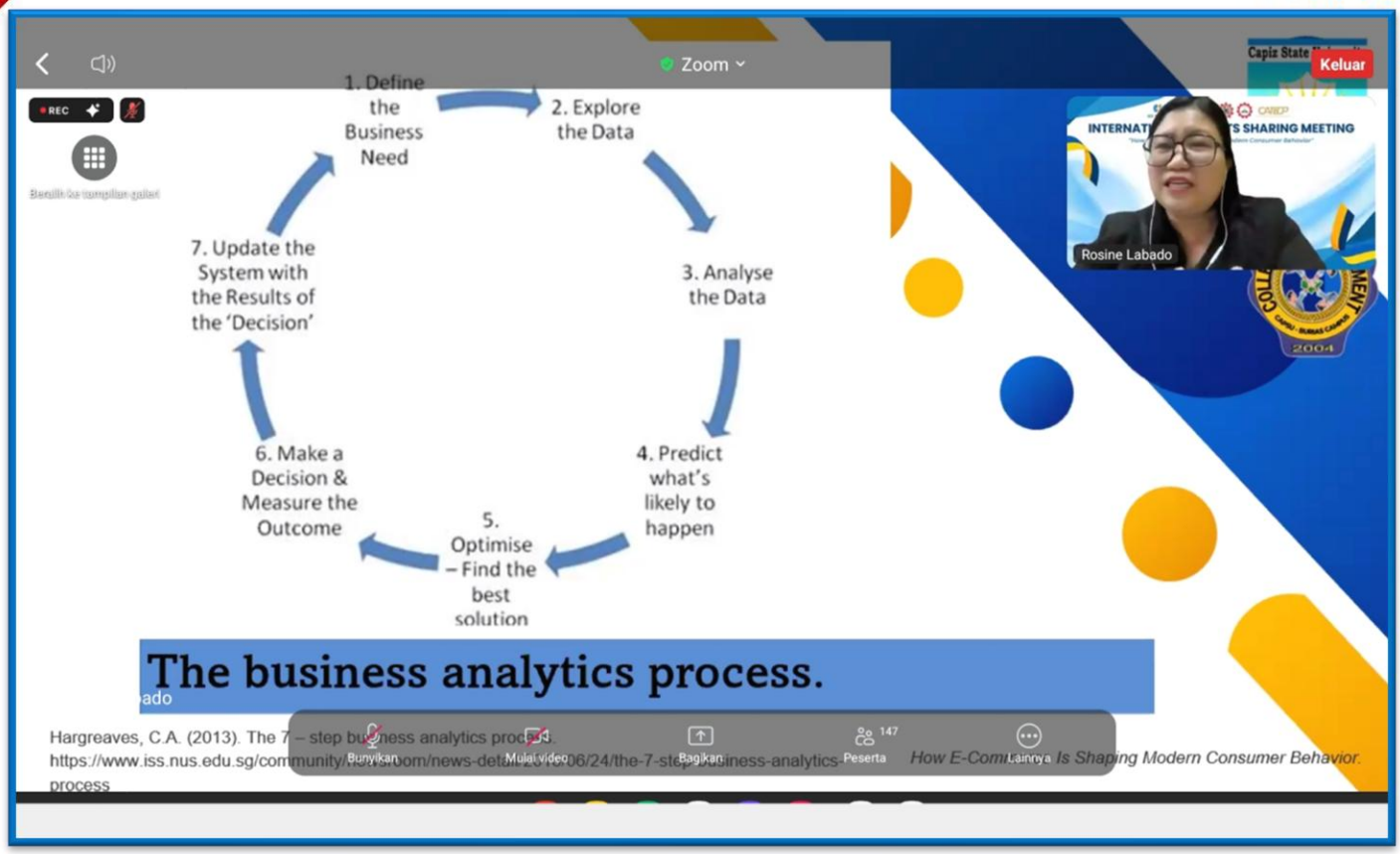
33. International Experts Sharing Meeting: How E-Commerce is Shaping Modern Consumer Behavior on September 5, 2025

On the afternoon of September 5, 2025, the 8th session of the "International Experts Sharing Meeting," jointly organized by the China-ASEAN Technical Education Cooperation Platform (CATECP), the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), and Go Study Global Education, was successfully concluded online themed "How E-Commerce is Shaping Modern Consumer Behavior", the meeting brought together experts and scholars from Indonesia, the Philippines, and Laos. Discussions focused on e-commerce development trends, changes in consumer purchasing behavior, digital marketing strategies, and enterprise innovation practices, explored through keynote speeches, case studies, and interactive exchanges. 215 participants from the around the world joined the webinar.



The opening remarks were delivered by Ms. Cheng Chantola, Head of the Finance and Planning Department of SEAMEO TED. She emphasized that with the rapid growth of e-commerce, both consumer behavior and market structures are undergoing profound transformations. These shifts not only influence business models but also pose new challenges to education and skills training.

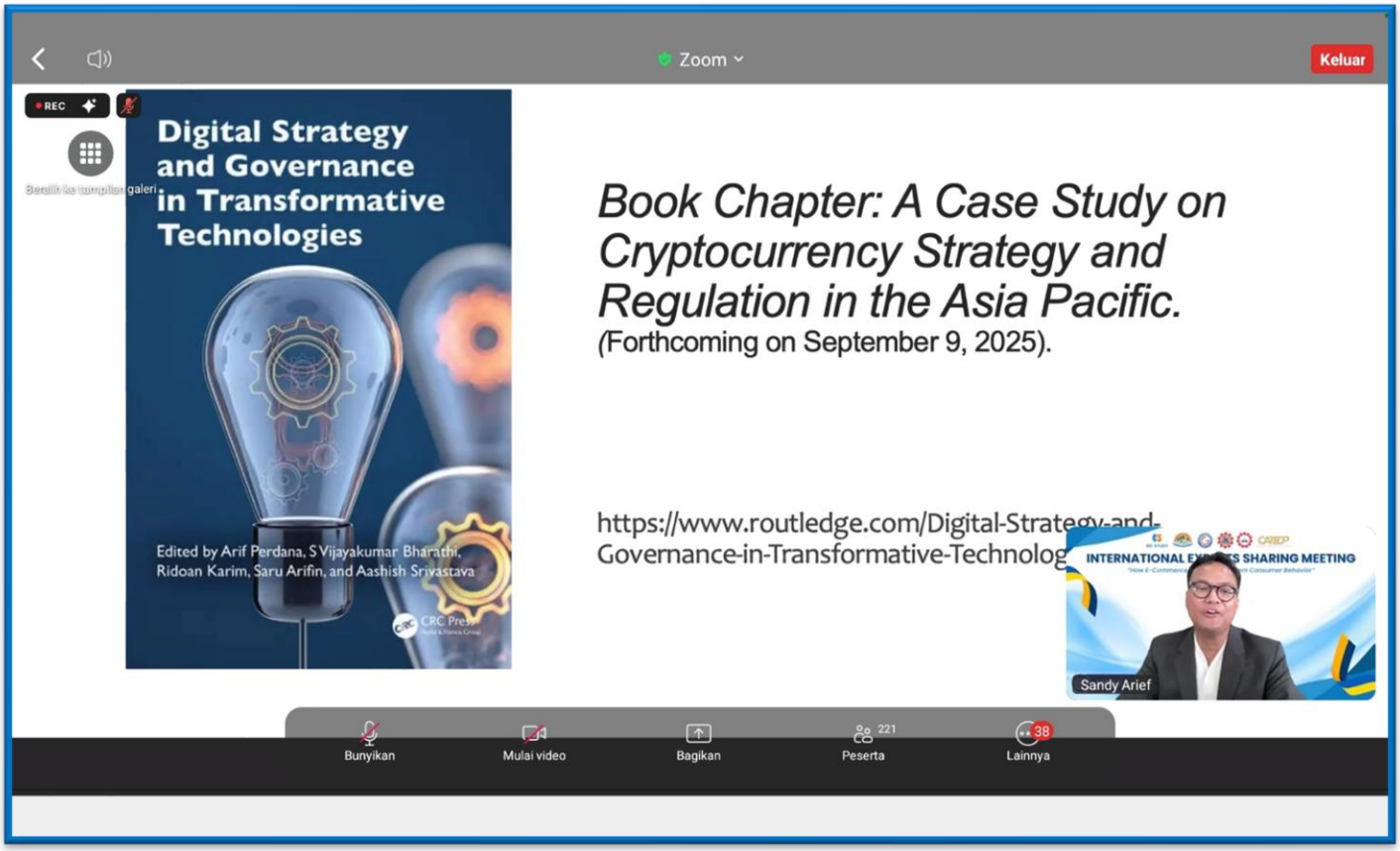
In the digital economy era, regional cooperation in education and technology has become particularly critical. Strengthening exchanges and collaboration in education, research, and technology between ASEAN countries and China will help address the opportunities and challenges arising from industry transformation. She further encouraged participating experts, scholars, and youth representatives to actively share their experiences and perspectives, and to explore innovative educational and practical models in the context of e-commerce.



Speaker: Dr. Rosine O. Labado Dean, College of Management, Capiz State University, the Philippines Topic: E-Commerce and the Redefinition of the Shopping Journey

Dr. Labado highlighted how e-commerce has completely reshaped and redefined the modern shopping journey. Key transformations include: The rise of omnichannel shopping, enabling seamless switching between physical stores, online platforms, and mobile apps. Personalization and data-driven recommendations, allowing businesses to provide tailored products and ads that strongly influence consumer choices. The growing impact of social commerce and influencer marketing—for example, in the Philippines, 70% of consumers purchase products recommended by top TikTok influencers. The pursuit of seamless checkout and instant gratification, driving features such as "one-click purchase," diverse payment options, fast free delivery, and easy return policies. Reviews, trust, and community as the foundation of decision-making, where consumers heavily rely on others' feedback to build trust in brands and products. In sum, e-commerce has transformed the once-linear shopping process into a dynamic, interconnected, data- and socially driven journey.

Speaker: Dr. Sandy Arief Lecturer, Department of Accounting Education, Universitas Negeri Semarang, Indonesia Topic: E-Commerce Archipelago: Unlocking the Potential of Innovation, Inclusion, and Impact.



Dr. Arief described Indonesia's diverse e-commerce ecosystem, which includes traditional platforms (e.g., Shopee, Tokopedia), online marketplaces (e.g., OLX), and quick commerce (e.g., GrabMart). By 2024, Indonesia's gross merchandise value (GMV) had reached USD 90 billion, showing strong momentum. Over 90% of consumers shop online, with browsing and purchasing patterns varying by platform. E-wallets and cash-on-delivery remain the most popular payment methods.

He noted that Indonesia's digital financial services—including payments, lending, wealth management, and insurance—continue to grow steadily, driven by robust demand. Interest in AI applications is also rising, particularly in marketing, gaming, and education. Dr. Arief concluded with six key elements for successfully achieving technology and business transformation, and highlighted innovation, inclusivity, and socioeconomic impact as the cornerstones of Indonesia's "e-commerce archipelago."

Speaker: Ms. Lailatul Hikmah Lecturer, Faculty of Economics and Business, Universitas Merdeka Malang, Indonesia Topic: The Evolution of E-Commerce and Its Impact on Modern Consumer Behavior

Ms. Hikmah focused on how the evolution of e-commerce has profoundly influenced consumer habits, expectations, and decision-making processes. Consumers are increasingly shifting from offline to online channels, relying more on price comparison tools, reviews, and social media recommendations. Impulse buying is on the rise, while expectations for fast delivery, transparent information, and personalized services are growing.

These shifts pose challenges for businesses, such as intensified global competition, the need for stronger online visibility and SEO, and maintaining consumer trust and data security. She also discussed future trends, including AI and chatbot integration, mobile shopping growth, AR shopping experiences, and the rise of sustainable consumption.

Using Shopee as an example, Ms. Hikmah illustrated how leading e-commerce platforms have supported SMEs, employment, and the digital economy in Indonesia. She emphasized that companies must embrace technology, optimize online engagement, and deliver seamless customer experiences to remain competitive in today's digital-first market.

Speaker: Dr. Alay Phonvisay Associate Professor, Faculty of Economics and Business Management, National University of Laos Topic: E-Commerce and Market Transformation in Laos: From Consumer Behavior Shifts to Market Failure Solutions

Dr. Phonvisay shared how e-commerce has helped Laos address traditional “market failure” issues and drive market transformation. With mobile internet penetration reaching 87–88% of the population, Laos has a strong foundation for e-commerce development. Traditional markets often suffer inefficiencies due to information asymmetry, high transaction costs, geographical barriers, and market control. E-commerce reduces these inefficiencies by: Providing product details and consumer reviews to minimize information asymmetry. Lowering transaction costs through online browsing and delivery services. Expanding market access for producers in remote areas by connecting them directly with national markets. Increasing competition and efficiency through price transparency. The growth of digital payments (e.g., Lao QR standard) and third-party logistics are critical enablers. While COVID-19 accelerated e-commerce adoption, Laos still faces challenges such as lack of trust, infrastructure gaps, and limited digital literacy. In conclusion, e-commerce is far more than online shopping. By correcting market inefficiencies, empowering small producers, and reshaping consumer behavior, it is fostering a more inclusive and efficient economy, thereby improving overall economic welfare in Laos.

34.China-ASEAN Industry-Education Integration Specialized Technical Skills Training Program on September 25-30, 2025

From September 25 to 30, 2025, the China-ASEAN Industry-Education Integration Specialized Technical Skills Training Program, jointly conducted by multiple partners from China and ASEAN countries, was successfully concluded.

Co-organized by the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), Xinxiang Vocational and Technical College, and Go Study Global Education, the program comprised three training sessions aimed at promoting talent cultivation in the field of intelligent manufacturing and deepening cooperation and exchange between China and ASEAN in vocational education. The initiative attracted 220 participants from ASEAN countries including Indonesia, Vietnam, Malaysia, and the Philippines. Chinese enterprises operating in ASEAN—such as PT. MTI, the Indonesian subsidiary of Zhongce Rubber Group Co., Ltd. —actively organized more than 30 local employees to participate in the training.

The opening ceremony brought together distinguished representatives from China and ASEAN. Among the keynote speakers were Mr. Mara Pho, Head of the Department of Technical Education and Training of SEAMEO TED; Ms. Yuan Shuhui, Vice President of Xinxiang Vocational and Technical College; Ms. Windi, Human Resources Manager of PT. MTI; and Mr. Yusuf Nugraha Andrian, supervisor of the Southeast Asia Youth Sustainable Development Foundation (PASITA). The guests delivered opening remarks, expressing their shared commitment to strengthening industry-education integration and advancing vocational education collaboration between China and ASEAN. Their speeches marked the official launch of the training program and set the tone for a week of productive learning and exchange.

The training program was designed in alignment with enterprise needs in areas such as automated production line maintenance and mechanical equipment optimization. Enterprise and college jointly determined the core training modules, ensuring a precise match between talent cultivation and industrial demand. It is a meaningful practice of industry-education integration, not only fulfills the company's demand for localized skilled talent but also provides trainees with valuable opportunities for upskilling—achieving a win-win outcome for enterprises, educational institutions, and individuals.

The three online sessions focused on core skills in industrial automation, covering: Fundamentals of PLC, Fundamentals of Mechanical Design, and Fundamentals of CNC Lathe Programming. Each course combined theoretical knowledge with practical case analysis and live demonstrations, ensuring close alignment with real-world industrial applications.

Looking ahead, the China-ASEAN Industry-Education Integration Specialized Technical Skills Training Program will continue to advance a systematic and internationalized curriculum, effectively supporting the

development of ASEAN youth technical talent, strengthening multi-party collaboration among enterprises, institutions, and regional organizations, and energize China-ASEAN production capacity cooperation and vocational education exchange—providing a solid foundation for sustainable regional economic growth.

35. The 8th Governing Board Meeting of SEAMEO TED on 2-3 October 2025, Siem Reap, Kingdom of Cambodia

The SEAMEO Regional Centre for Technical Education Development (SEAMEO TED) proudly hosted its 8th Governing Board Meeting (8th GBM) from October 2-3, 2025, at the Royal Angkor Resort in Siem Reap, Cambodia. This significant annual event underscored SEAMEO TED's unwavering commitment to advancing technical education across the Southeast Asian region.

Conducted in a hybrid format to facilitate broader participation, the meeting brought together Governing Board members and dedicated representatives from all eleven SEAMEO member countries. Delegations from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam actively engaged in extensive discussions and strategic decision-making. It was attended by 25 participants.

The prestigious meeting was formally inaugurated by His Excellency Dr. Kol Pheng Vaddhana, Undersecretary of State for the Ministry of Education, Youth and Sport. Representing the esteemed His Excellency Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of Education, Youth and Sport, Dr. Kol Pheng Vaddhana's opening address highlighted Cambodia's unwavering support for robust regional cooperation in education. He profoundly emphasized the critical role of Technical and Vocational Education and Training (TVET) in fostering national development, driving economic growth, and crucially, empowering the youth of Southeast Asia with essential skills for the future. His speech set a collaborative and forward-looking tone for the entirety of the proceedings.

Dr. Songheang Ai, Director of SEAMEO TED, extended a warm welcome to all participants, utilizing his address to present a comprehensive overview of the Centre's remarkable achievements over the past year. He articulated a compelling vision for future initiatives, emphasizing innovation, enhanced regional integration, and adaptability within technical education. Dr. Ai underscored the paramount importance of sustained collaborative efforts among member countries to effectively address both emerging challenges and promising opportunities within the dynamic TVET landscape.

Following this, Mr. John Arnold Siena, Deputy Director for Programme and Development of the SEAMEO Secretariat, delivered an insightful address. He reaffirmed the Secretariat's steadfast commitment to providing comprehensive support for SEAMEO TED's programs and initiatives. Mr. Siena's remarks critically reinforced the strategic alignment of the Centre's activities with the broader overarching goals of SEAMEO, which are dedicated to fostering sustainable human resource development and educational excellence throughout Southeast Asia.

This annual gathering serves several critical objectives. Firstly, it provides a crucial platform to present and review the Centre's significant achievements and activities accomplished over the preceding year. Secondly, members convene to examine and endorse key policies that are vital for ensuring the sustainable operation

and strategic future direction of SEAMEO TED. Finally, the meeting also involves the important task of evaluating and approving the Centre's annual budget plan.

Notably, the 8th Governing Board Meeting operated with a comprehensive agenda, featuring fourteen (14) prepared reports and proposals (Working Papers). These documents were submitted for the Governing Board's thorough review, constructive input, endorsement, and final approval, guiding the Centre's operational and strategic plans moving forward.

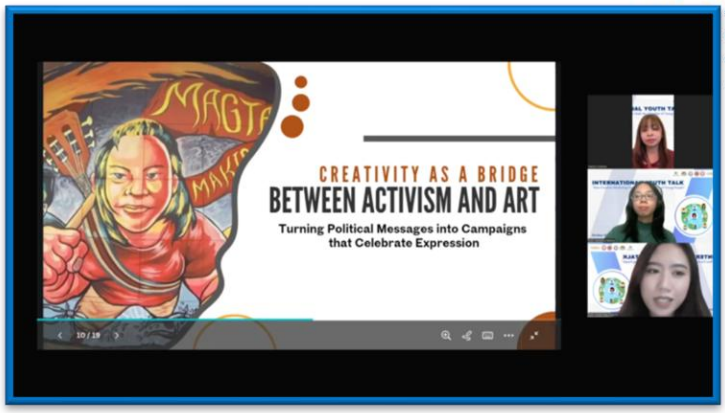
During the meeting, all Governing Board Members and Representatives unanimously approved the proposal for the 9th SEAMEO TED's Governing Board Meeting (GBM 2026) to be held in Phnom Penh, Cambodia, on October 1-2, 2026. This decision reflects the ongoing strong collaboration and strategic foresight within the SEAMEO community, ensuring continuity and progressive advancements in our collective efforts to foster excellence in technical education.

36. Report on International Youth Talk "How Creative Marketing Can Grab the Attention of Young People" on October 17, 2025

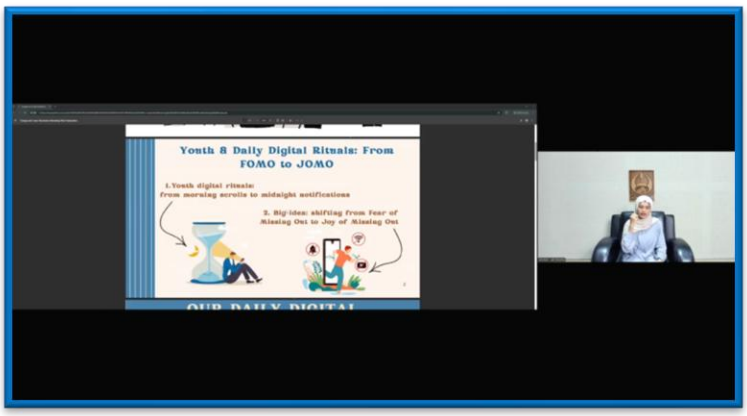
On the afternoon of October 17, 2025, the 10th "International Youth Talk" online youth exchange meeting successfully concluded. The conference theme, "How Creative Marketing Can Grab the Attention of Young People," brought together youth representatives from universities in Indonesia and the Philippines to engage in in-depth discussions and idea exchanges on topics such as creative communication, digital culture, and youth agency. This exchange not only allowed the young participants to gain a deeper understanding of the integration of creative marketing and social responsibility from multiple perspectives, but also further inspired them to contribute their creativity, artistic expression, and practical actions in the digital era toward building a more sustainable and inclusive information-driven future. The webinar was attended by 122 participants from around the world.

The opening remarks of this event were delivered by Ms. Cheng Chantola, Director of Administration, Financial and Planning at SEAMEO TED. She emphasized that in today's digital age, effectively engaging with future leaders and guiding positive values is crucial. Creative marketing can transcend cultural boundaries, combining youth digital rituals, artistic expression, and social action to shape behavior while fostering social responsibility and global perspectives. As digital natives, youth are both consumers and drivers of change. She hopes this exchange will inspire participants to share ideas and explore the potential of creative marketing in building a sustainable, inclusive digital future.

Youth representatives from the Polytechnic University of the Philippines explored how "Artivism" (art + activism) can create new pathways for creative communication. They highlighted that murals, videos, music, and other art forms can transform political and social issues into emotionally resonant visual languages, turning youth from passive audiences into active participants. Their presentation emphasized "authenticity over slogans" and demonstrated how creativity bridges people and politics. Using examples from digital art, street creations, and online content, they showed how art connects emotion and action, elevating communication from mere persuasion to active engagement. This session underscored the central role of creativity and emotion in public communication and provided practical insights on fostering political participation and amplifying meaningful messages.



Youth representatives from Universitas PGRI Adi Buana Surabaya, Indonesia, provided an in-depth analysis of digital rituals among young people and proposed a shift in marketing approach from "Fear of Missing Out" (FOMO) to "Joy of Missing Out" (JOMO). They noted that FOMO-based marketing, such as limited-time stories and yearly recaps, can drive immediate engagement but may also cause anxiety and erode brand trust. In contrast, JOMO promotes intentional digital living, encouraging brands to focus on building long-term trust—for example, by promoting mindfulness apps or slow fashion—helping youth form healthier and more autonomous consumption habits.



This session offered a conceptual framework and practical guidance for brands to move beyond short-term traffic-driven strategies and cultivate sustainable, positive relationships with young audiences.

Youth representatives from Universitas Sebelas April, Indonesia, used the local environmental group Pandawara as a case study to illustrate how young people can transform platform trends into social action. Through 30–60 second "clean-up comparison" videos, ironic storytelling, and documentation of real actions, the group turned environmental

advocacy into a large-scale movement—cleaning over 200 rivers and beaches, mobilizing thousands of volunteers, and removing hundreds of tons of waste. The case demonstrated that creative marketing characterized by short videos, compelling narratives, and clear calls to action can not only attract attention but also drive offline participation and behavioral change. Their sharing went beyond traditional marketing examples, showing that creative marketing can empower youth to become problem-solves in society, adding a socially responsible dimension to influence-driven campaigns.

Youth representatives from Rizal Technological University, Philippines, focused on the core of creative marketing—innovation, emotion, and authenticity. They highlighted that, given the eight-second attention span of young audiences, brands need to leverage short videos, authentic influencers, and culturally resonant content for effective engagement—for example, using trending expressions and local humor on platforms like TikTok instead of polished traditional ads. They emphasized that impactful creative marketing transforms a brand into a cultural movement that resonates and builds genuine connections. This insight addresses current marketing challenges, showing that in the digital environment, authentic cultural resonance has far greater impact on young audiences than refined advertising, providing key guidelines for effectively reaching youth.

37.SEAMEO TED Conducts Training on Curriculum Development and Teaching Methodology for Technical Education in Preah Vihear Province on November 1-2, 2025

November 1-2, 2025, Preah Vihear Province, Cambodia – The Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED) of the Ministry of Education, Youth and Sport successfully organized a training course on "Curriculum Development and Teaching Methodology for Technical Education" on November 1-2, 2025, at Chea Sim Tbeng Meanchey General and Technical High School, Preah Vihear Province. The training was attended by 53 teachers (17 females) from 17 General and Technical High Schools and one New Generation School across Cambodia. The program aimed to strengthen participants' capacity in curriculum development and teaching methodology for technical education, with a particular focus on enhancing the implementation of the Technical Education curriculum.

The opening ceremony was presided over by Dr. Songheang Ai, Director of SEAMEO TED. In his remarks, Dr. Ai extended congratulations to Mr. Bun Pengkeang, Director of Chea Sim Tbeng Meanchey General and Technical High School and the Preah Vihear Department of Education, Youth and Sport, for the school's notable achievements thus far. Dr. Ai emphasized the critical role of the Technical and Vocational Education and Training (TVET) sector in national development. He highlighted TVET as a school-to-work pathway that enables youth to transition efficiently into the labor market. The training course, he explained, was designed in response to a training needs assessment that identified the importance of equipping technical education teachers with strong foundations in curriculum development and pedagogy.

He also underscored the value of peer learning, encouraging participants to share their newly acquired knowledge and best practices with colleagues upon returning to their institutions.

The training program combined theory and practice across four key topics:

1. Curriculum Development and Implementation
2. Integrating Modern Technology into the Classroom
3. Test Development and Evaluation
4. Skills Competitions for Teachers and Students in China

This training was taught by three experts. Dr. Songheang Ai, Director of SEAMEO TED, Ms. Zhao Peili, Professor of Guangxi Polytechnic of Construction, and Mr. Wei Qinghua, Senior Engineer of Guangxi Vocational College of Water Resources and Electric Power. The training covered fours topics with a balance of theory and practices: Curriculum Development & Implementation, Integrating modern technology in the classroom, Test Development and Evaluation, Skills competition for teachers and students in China.

During the sessions, Dr. Songheang Ai discussed Curriculum Development and Implementation from the perspective of from the perspectives of the Ministry of Education, Youth and Sport. In addition, Mr. Wei Qinghua led discussions on skills competitions in China, sharing insights on how such events can foster innovation and excellence among teachers and students. Meanwhile, Ms. Zhao Peili facilitated training on test development and evaluation, guiding participants through practical exercises that enhanced their understanding of effective assessment techniques.

38. Closing Workshop Marks Success of the “Developing Teachers to Raise One-Health Awareness at General and Technical High Schools in Cambodia” Project, Phase 2 on November 17, 2025

Battambang, Cambodia, 17 November 2025: The Southeast Asian Ministers of Education Organization Regional Center for Technical Education Development (SEAMEO TED) and the Southeast Asia One Health University Network (SEAOHUN) successfully concluded the "Developing Teachers to Raise One Health Awareness at General and Technical High Schools in Cambodia" project phase 2 with a closing workshop at National University of Battambang. This milestone event concluded a seven-month initiative dedicated to equipping teachers with the knowledge and skills to promote One Health awareness in schools and communities.

At the ceremony, nine national teacher trainers received certificates of completion, recognizing their dedication to advancing One Health education. Additionally, the One Health Champion Awards celebrated outstanding teacher trainees from the three target schools, with Preah Norodom Sihamoni General and Technical High School winning Teacher and Student One Health Champion Award, Hun Sen Peamchikorng High School winning School Campaign Champion Award, and Community Development Institute winning Community One Health Champion Award.

This initiative, funded by Chevron, aligns with the company's commitment to empowering communities through education and public health initiatives. The closing workshop was presided over by H.E. DR. KOLPHENG VADDHANA, Under Secretary of State, Ministry of Education, Youth and Sport (MoEYS), and brought together over 60 stakeholders, including representatives from CAMBOHUN, government agencies, and 20 general and technical high schools.

H.E. DR. KOLPHENG VADDHANA, Under-Secretary of State, Ministry of Education, Youth and Sport (MoEYS), presided over the closing workshop, emphasizing the project's significance for students, teachers, and communities and advocated for extending One Health awareness programs to other general and technical high schools.

He highlighted that One Health concepts align with Cambodia's Pentagonal Strategy and MoEYS policies, including student health initiatives through school feeding programs and school food quality regulations.

Additionally, he stressed the importance One Health Program for Cambodia. He addressed the sustainability of the project by encouraging the representatives of General and Technical High Schools in attendance to include One Health Concept in the 1-hour-school health session of the existing curriculum. He also emphasized how crucial health was to our lives by quoting the Buddha's saying, "Health is the best of all Wealth". To conclude, he thanked the Southeast Asia One Health University Network (SEAOHUN) and Chevron for their support of this project. He called on SEAOHUN and Chevron to continue their support for the One Health project in Cambodia.

Reflections on Achievements and the Path Forward

Dr. Songheang Ai, Center Director of SEAMEO TED and Project Manager, recapped the project's progress and achievements, emphasizing overwhelmingly positive feedback from evaluations. The initiative successfully conducted seven key activities, including a kick-off workshop, three One Health Awareness Raising for teachers and students, and for community. Participants deepened their understanding of One Health concepts, food safety, and zoonotic diseases.

During the feedback and the discussion session he facilitated, there were overwhelming calls for support from Chevron and SEAOHUN to expand the project to other target schools, as well as other communities by the representatives of General and Technical High Schools, CAMBOHUN and MOEYS. Four main emphases were the expansion of One Health Program to both primary and secondary schools, capacity building for teachers, community engagement, and integrating new elements of One Health Concepts such as the effects of drugs on Youth's physical and mental health.

39.13th ASEAN Connectivity Forum, 10 December 2025

Seoul: on 10 December 2025, Dr. Songheang Ai, director of SEAMEO TED, participated in the 13th ASEAN Connectivity Forum that has been organized by ASEAN-Korea Center for purposes to support ASEAN's connectivity efforts and promote Korea's engagement in ASEAN connectivity priority projects and to prospect a way forward for ASEAN connectivity in partnership between ASEAN and Korea for greater synergy.

(Group Photo of all Speakers and Guests of Honors)

The forum has three sessions consisting of (1) Connecting the Connectivity: Driving Regional Connectivity through Indo-Pacific Cooperative Partnership; (2) From Policy to Practice: Building Resilient and People-Centered ASEAN through Reconfiguration of Supply Chains and Coordination of Cross-Sectoral Ecosystem; and (3) From Digitalization to Environment Sustainability: Shaping Innovative and Dynamic Future through the Twin Transitions.

(Dr. Ai Delivering his Presentation)

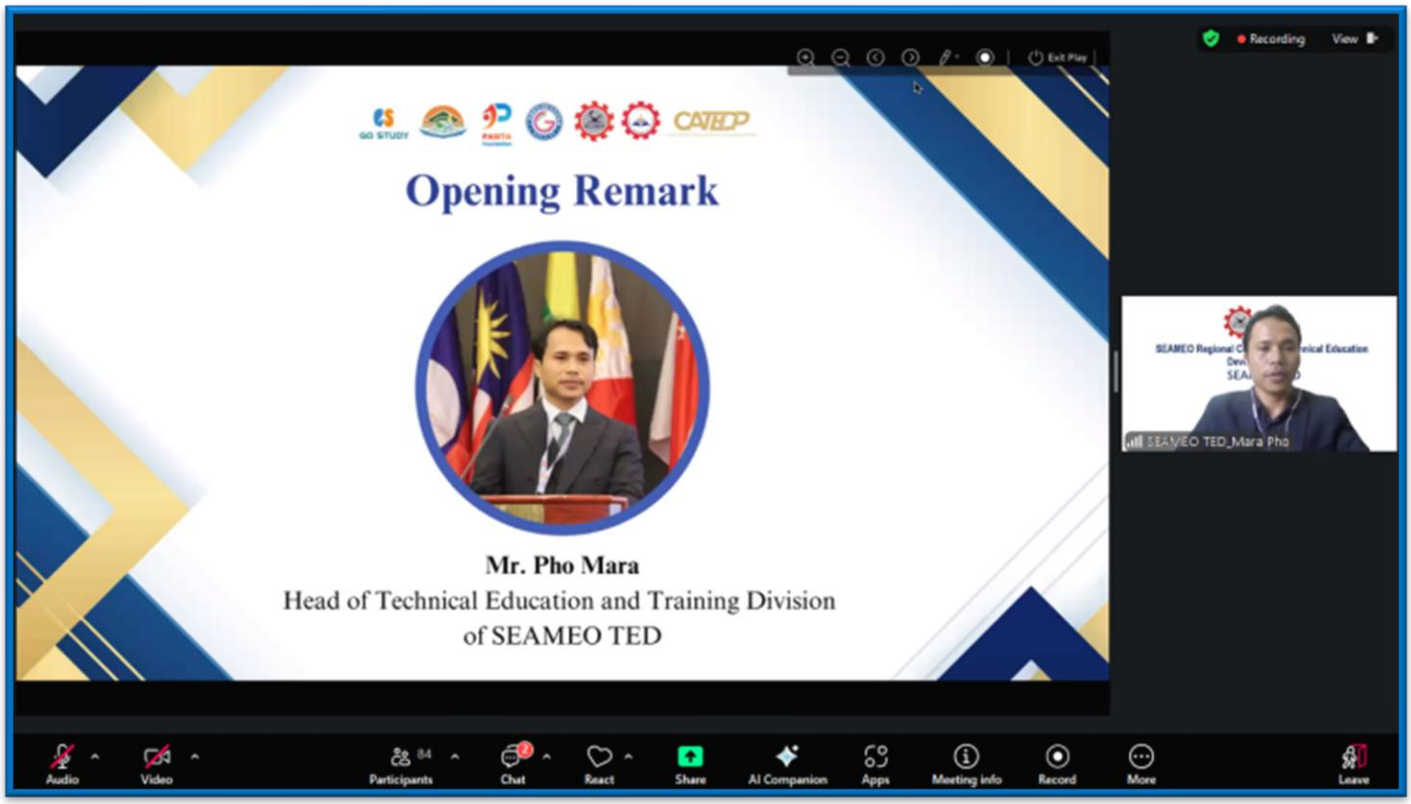
During the forum, Dr. Songheang Ai, delivered his presentation on Labor and Talent Mobility: The Human Elements: Fostering Greater People Mobility in Session 2. He focused on four points: Labor and Talent Mobility, Intra-ASEAN Mobility for Labor and Talent, Korea and ASEAN Connectivity for Labor and Talent, and Policy Direction.

(Dr. Ai Explaining his Topic)

40. International Expert Sharing Forum on Sustainable Architecture and Green Design on December 12, 2025

On the afternoon of December 12, 2025, the 12th session of the "International Experts Sharing Meeting," jointly organized by the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), the China-ASEAN Technical Education Cooperation Platform (CATECP), among other partner organizations, was successfully concluded online with 110 participants from a round the world.

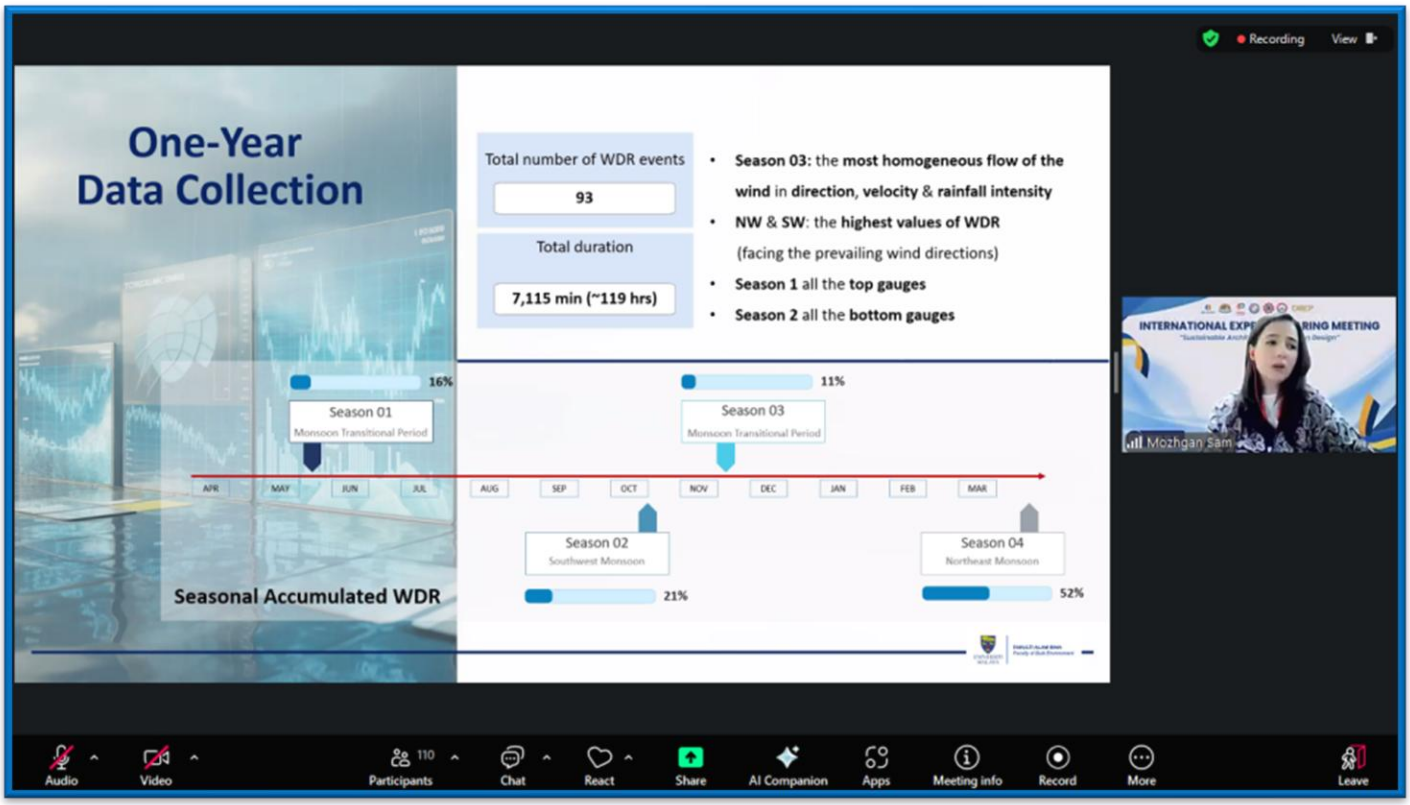
Themed "**Sustainable Architecture and Green Design**", the meeting brought together experts and scholars from Malaysia, China, Cambodia, and Brunei Darussalam. Discussions covered digital intelligence, sustainable development and approaches, smart-city concepts, the role of architecture and design, environmental sustainability, and the social–economic impacts of vertical greening in advancing green residential building, explored through keynote speeches, case studies, and interactive exchanges.



The opening remarks were delivered by Mr. Mara Pho, Head of Technical Education and Training Division of SEAMEO TED. Mr. Mara Pho opened the event by welcoming all participants and emphasizing the growing importance of sustainable architecture and green design as environmental pressures intensify. He noted that how we plan and build our cities is now a shared responsibility, requiring thoughtful material use, reduced environmental impact, and designs that support healthier communities. He highlighted the value of collaboration between ASEAN countries and China in advancing education, research, and innovation in sustainability. Mr. Mara Pho encouraged participants to share their insights and explore new approaches together, and he thanked all speakers and participants with the hope that the event would inspire meaningful ideas for a greener future.

Topic: Next-Generation Blue Façades: Leveraging Predictive Modeling for Sustainable VRWH in High-Rise Architecture

Dr. Mozhgan Samzadeh, lecturer, Department of Building Surveying, Faculty of Building Environment, Universiti Malaya, Malaysia, explained that Malaysia's water crisis, intensified by climate change and rising urban demand, requires new strategies beyond conventional rooftop rainwater harvesting, especially for high-rise buildings. She highlighted building façades as a major untapped catchment area, since wind-driven rain frequently hits vertical surfaces. Her work produced the first full-year in-situ dataset of WDR in a tropical climate, capturing 93 rain events and identifying clear seasonal patterns. Dr. Mozhgan stated that ISO and ASHRAE are predictive models to improve accuracy across different façade heights and seasons, activating more reliable estimates of harvestable rainwater. Dr. Mozhgan concluded that vertical rainwater harvesting systems can cut potable water consumption, reduce urban runoff, and support long-term water sustainability in tall buildings, offering a scalable solution for other tropical cities that face the same challenge.



Speaker: Ms. Wang Li

Faculty Member, Shanghai Urban Construction Vocational College, China

Topic: **The Ecological Value and Technological Innovation of Vertical Greening**

Ms. Wang Li explained that vertical greening helps cities reclaim lost green space by improving air quality, lowering temperatures, and enhancing urban biodiversity. She also described four system types, which are modular, pocket, pot-based, and climbing. She mentioned that each offers different flexibility for buildings and public spaces. Plant selection must consider root depth, drought tolerance, wall orientation, and seasonal variation. Ms. Wang Li added that key technologies include load calculations, structural reinforcement, efficient irrigation systems, and proper substrate and drainage. Maintenance focuses on pruning, pest control,

and replacing unhealthy plants. Lastly, she concluded that vertical greening would advance through ecological design, multifunctional integration with rooftop gardens, and smart technology, positioning it as a core strategy for sustainable and resilient cities.

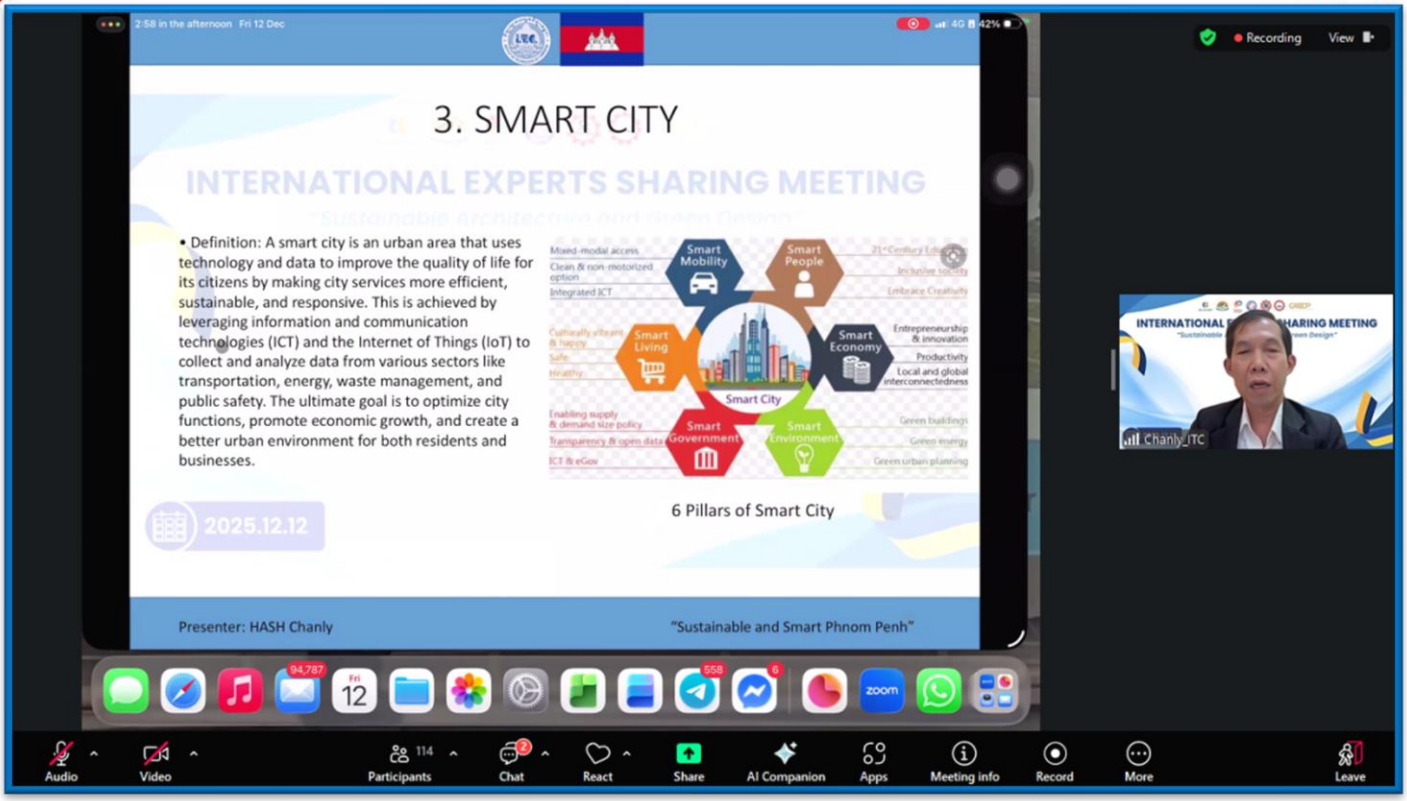
Speaker: Mr. Chanly HASH

Head of Department, Department of Architectural Engineering, Institute of Technology of Cambodia, Cambodia.

Topic: **Sustainable and Smart Phnom Penh**

Mr. Chanly stated that Phnom Penh's push toward becoming a sustainable and smart city is driven by rapid urbanization. He explained the pillars of sustainable development and smart-city systems, emphasizing the role of technology, data, and IoT in improving services and quality of life.

Mr. Chanly mentioned that key priorities include renewable energy, green buildings, smart waste and water systems, inclusive housing, digital governance, and a growing green economy. He highlighted the 2020–2035 Strategic Road Map and stressed that architecture and design—through sustainable, passive, and green approaches that are central to this transformation. He concluded that smart cities "think" and sustainable cities "feel," both essential for Phnom Penh's future.



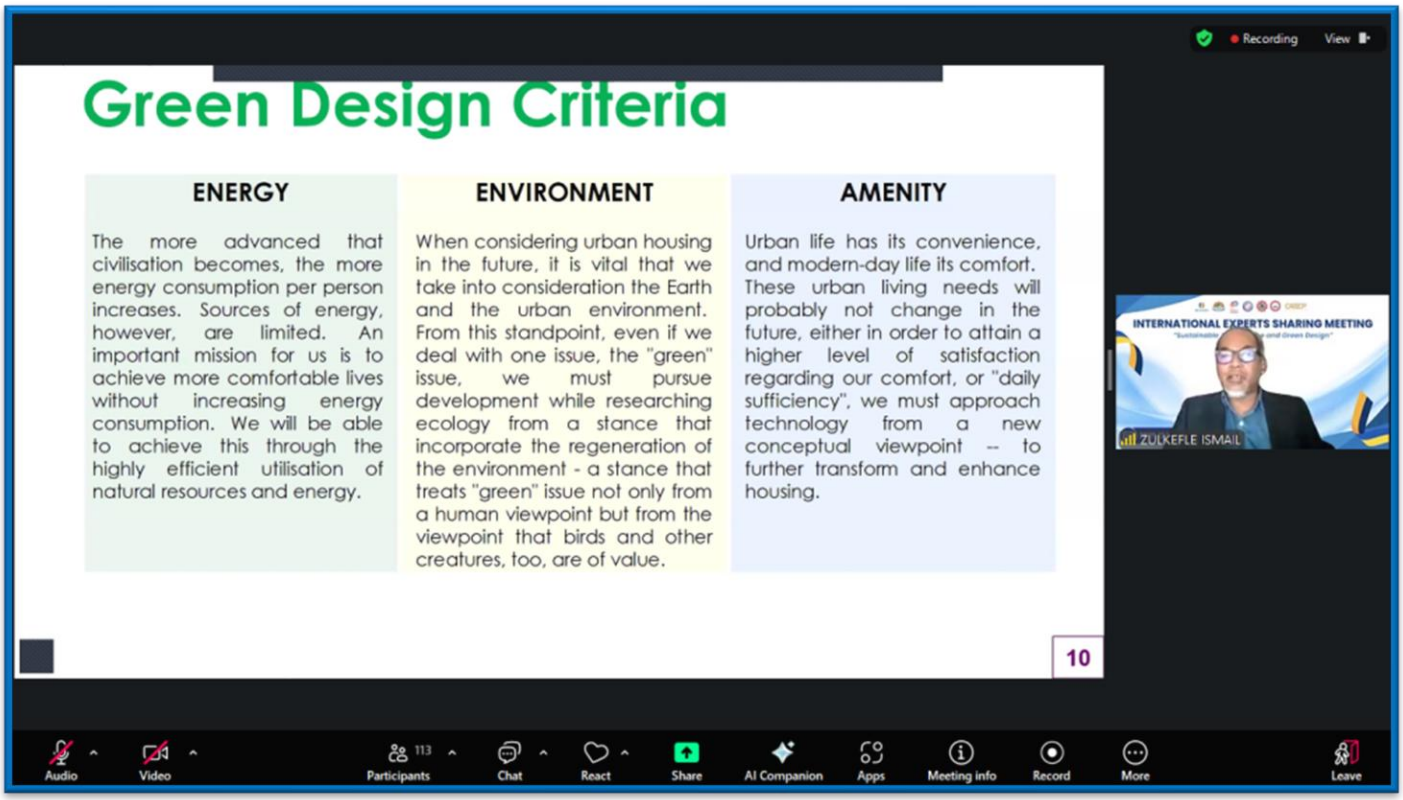
Speaker: Dr. Zulkefle Bin Ismail

Assistant Professor, School of Design, Universiti Teknologi Brunei, Brunei Darussalam

Topic: **Sustainable Vision Towards Green Design for Residential Buildings**

Dr. Zulkefle explained that sustainable architecture aims to minimize environmental impact while improving comfort and efficiency throughout a building's lifecycle. He emphasized the need for sustainable housing that is open, adaptable, and upgradeable which aligned with SDG 11. He also mentioned key components that include strong energy performance through passive design, efficient material use, and reducing both embodied and operational carbon emissions.

Dr. Zulkefle highlighted the importance of life-cycle assessment and global green building standards such as LEED, BREEAM, and ASEAN codes. Green design transformations were grouped into adaptability and reconfigurability, supported by systems like Skeleton-Infill structures and adaptable architectural programming. He concluded that merging technology with adaptable housing design is critical and potential for achieving greener residential environments.

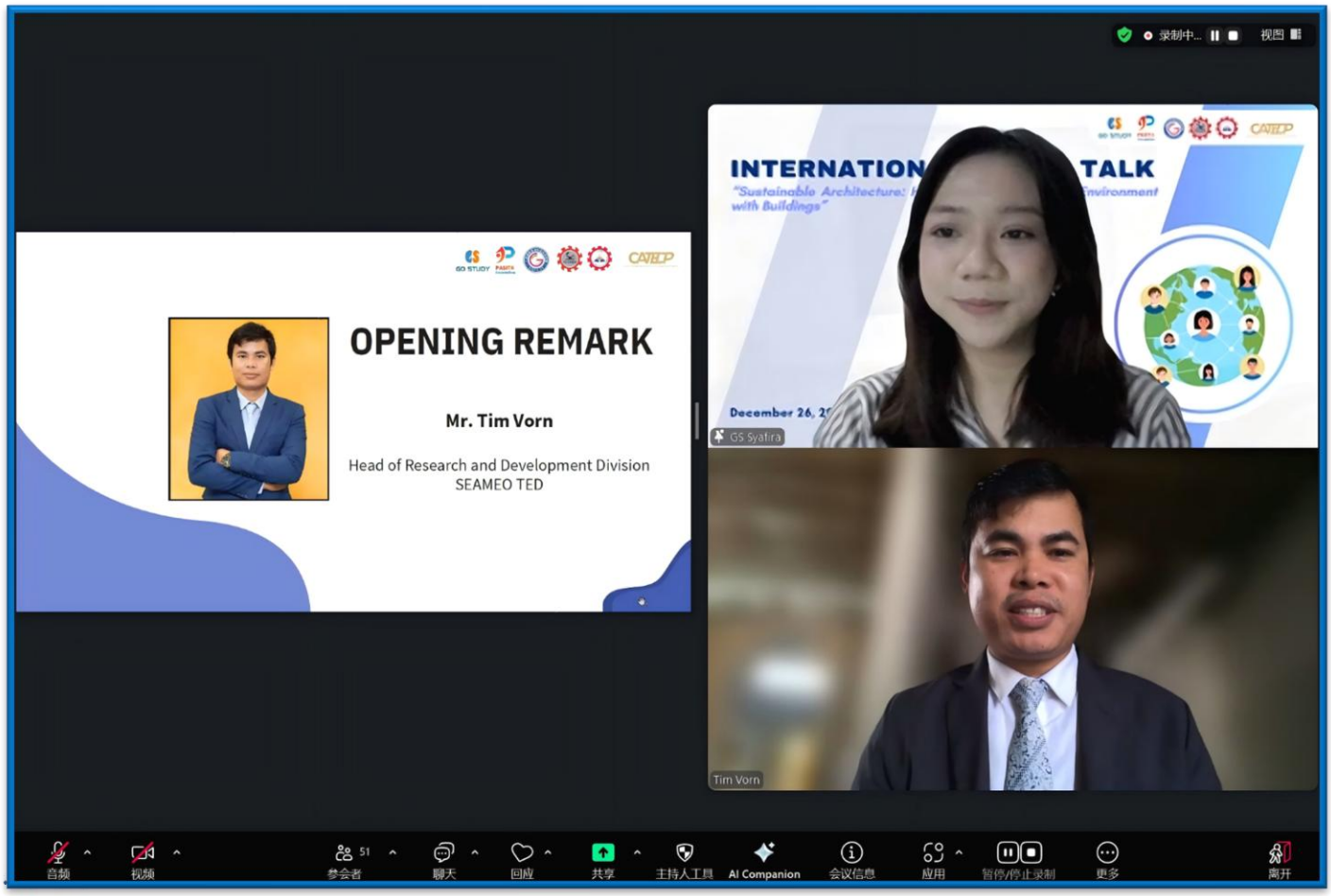


41. International Youth Talk | Sustainable Architecture: How We Can Protect the Environment with Buildings on 26 December 2025

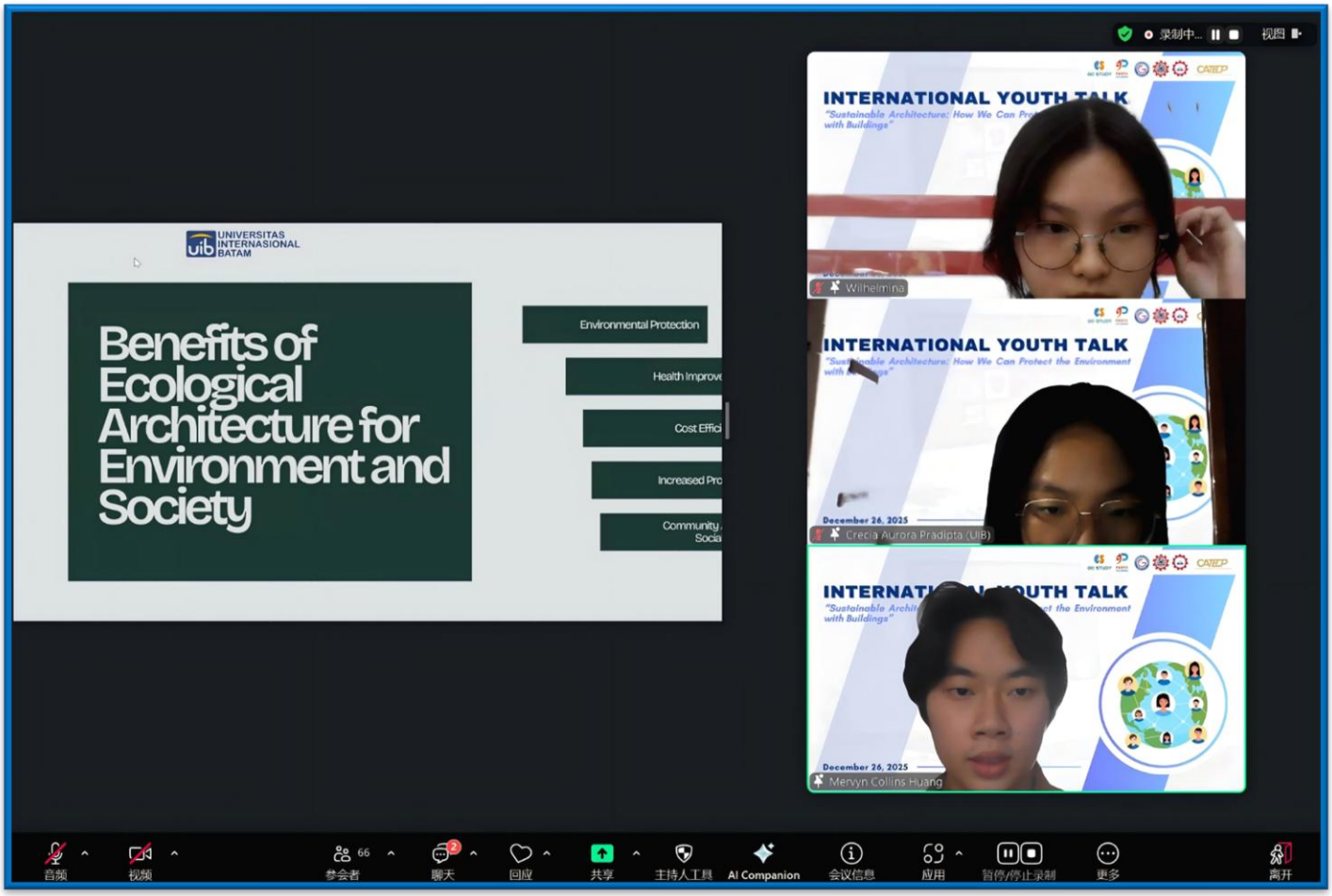
On December 26, 2025, the 11th session of the “International Youth Talk,” jointly organized by the Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED), the China-ASEAN Technical Education Cooperation Platform (CATECP), with support from PASITA, was successfully concluded online, with 77 participants from the around the world.

The events featured online presentations by youth representatives from universities across multiple countries including Indonesia, Vietnam, and the Philippines. Centered around the theme of “Sustainable Architecture: How We Can Protect the Environment with Buildings”, the youth showcased fresh perspectives with a global vision, sparking creative and cross-cultural exchanges.

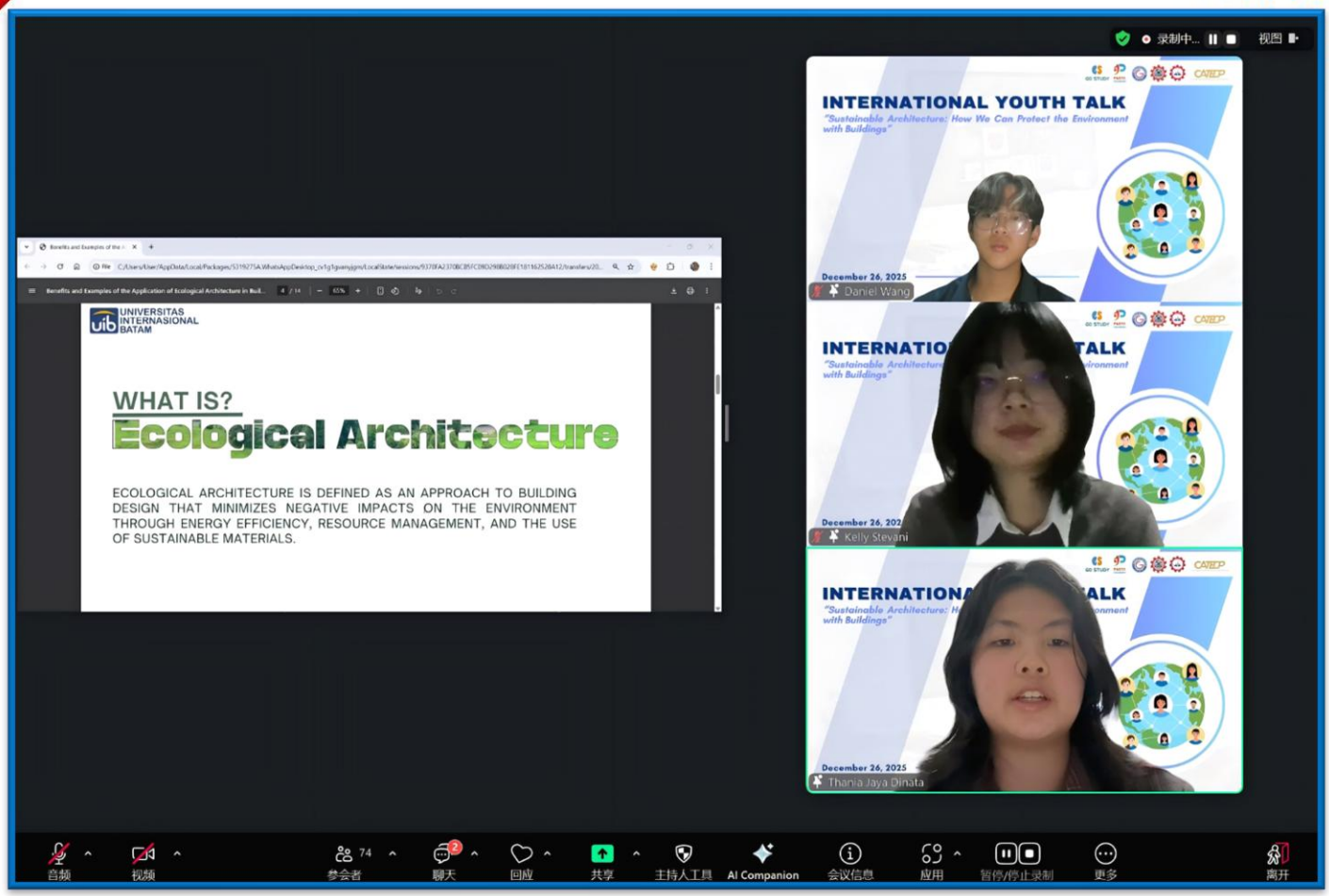
The opening remarks were given by Mr. Tim Vorn, Head of the Research and Development Division of SEAMEO TED. He emphasized three key aspects for youth: adopting eco-friendly materials and evaluating carbon footprints, adapting architectural designs to regional climates and resources, and mastering emerging technical skills such as robotics and energy modeling. He encouraged participants to use these insights to prepare for future careers in sustainable architecture and officially declared the session open.



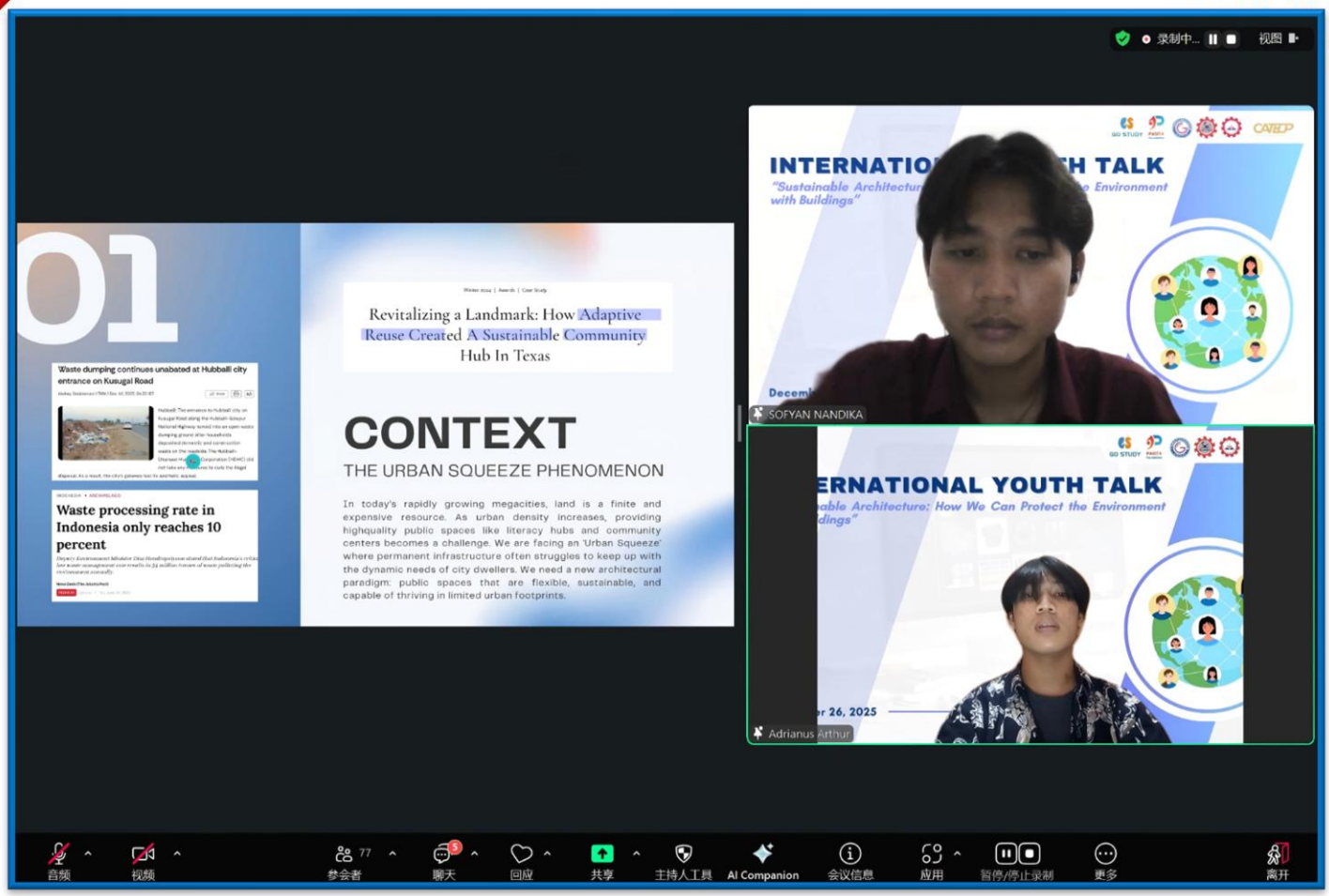
Team 1 representatives from Universitas International Batam（UIB） presented youth-led perspectives on Ecological Architecture as an Integrated System for Environmental Protection, focusing on the benefits and implications of ecological architecture for the environment. The students emphasized architecture as an integrated system that should coexist harmoniously with nature rather than dominate it. Their discussion highlighted key issues such as environmental protection, human well-being, and the growing responsibility of architects to respond to climate and ecological challenges. The presentation clearly underlined the importance of thoughtful planning, responsible material selection, and sustainable building management as practical strategies to reduce environmental impact and support long-term sustainability.



Team 2 representatives from UIB focused on Practical Green Design Strategies for Sustainable Urban Buildings, effectively translating sustainability concepts into tangible design solutions, including solar energy integration, green roof systems, vertical gardens, natural ventilation, and rainwater harvesting. Their presentation highlighted how these strategies not only reduce energy consumption and environmental impact but also improve building performance and user comfort. By showcasing real-world case examples, they demonstrated that sustainable design is achievable and adaptable, particularly in dense urban contexts. The presentation offered valuable insights into how green design principles can be realistically implemented and scaled to support environmentally responsible urban development.



The speakers from UPN Veteran Jawa Timur introduced “The Agile Modular Pavilion” as an innovative response to urban density and environmental waste, under the theme of Modular and Circular Architecture for Adaptive Urban Public Spaces. The project addressed issues of urban rigidity by proposing a flexible, modular pavilion system designed for circular cities. The presentation highlighted how the use of standardized modular units enables reconfiguration, relocation, and reuse, significantly reducing construction waste and avoiding demolition. The team emphasized principles such as Design for Disassembly, material recovery, and energy independence through solar integration. By positioning architecture as adaptable infrastructure rather than permanent objects, the presentation strongly reflected the event’s theme of environmental protection through sustainable and resource-efficient building design.



The students from Ho Chi Minh University of Technology (HUTECH), under the theme of Community-Based Modular Housing for Environmental and Social Resilience, introduced the project "Small Lots – Big Impacts," which addressed environmental degradation and housing challenges in flood-prone riverbank areas. The project highlighted how architectural design can respond to both environmental and social issues simultaneously. The proposal utilized modular construction systems combined with recycled plastic materials, offering an innovative approach to reducing waste while improving living conditions for vulnerable communities. The presentation emphasized flexibility, scalability, and community-oriented design, allowing small housing modules to adapt to changing environmental conditions such as flooding. By transforming environmental problems into architectural solutions, the HUTECH team demonstrated how sustainable architecture can play a critical role in environmental protection and social resilience.

The speakers from Capiz State University presented a compelling discussion on sustainable architecture as a response to climate vulnerability, particularly within the Philippine context, under the theme of Climate-Responsive Architecture and Youth Advocacy for Sustainability. The presentation clearly illustrated how architectural design can contribute to environmental protection while enhancing community resilience. The team emphasized the importance of passive design strategies, including natural ventilation, daylight optimization, and climate-responsive building orientation, as effective approaches to reducing energy consumption. They also highlighted the use of indigenous and locally sourced materials as a way to lower embodied carbon and strengthen cultural identity. In addition, the presentation underlined the role of net-zero buildings and youth advocacy in promoting environmentally responsible architecture, reinforcing the importance of education and awareness in shaping a sustainable future.

MoU Signing

- Moscow Institute of Physics and Technology on March 14, 2025, in Moscow City, Russian Federation
- Cheju Halla University on March 25, 2025, in Jeju City, South Korea
- Shanghai Education Association for International Exchange on April 10, 2025, in Shanghai City, China

- Guizhou Education Association for International Exchange on April 8, 2025, in Guizhou Province, China
- Chongqing (China) Vocational Skills Training Center on April 9, 2025, in Chongqing City, China
- SEAMEO CELLL on May 23, 2025, in Ho Chi Minh, Vietnam
- National Joint Conference of Vocational & Technical College and University Presidents, May 08, 2025, China (Virtually)

Southeast Asian Ministers of Education Organization Regional Centre for Technical Education Development (SEAMEO TED)

#80, Preah Norodom Blvd, Beoung Kengkang, Phnom Penh, Cambodia

Website: www.seameoted.org

Email: song.heang@yahoo.com