Report on the Seminar on Digital Transformation of Ordinary Level Education in Sri Lanka

From 13th May to 26th May, 2025

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Seminar on Digital Transformation of Ordinary Level Education in Sri Lanka

from 13th May to 26th May, 2025

Sponsor: Ministry of Commerce of the People's Republic of China

承办单位：浙江师范大学

Organizer：Zhejiang Normal University

1) Background and Introduction

In an era defined by rapid technological advancement and global digital convergence, the importance of integrating information and communication technologies (ICT) into education systems has become increasingly evident. Recognizing the transformative potential of digitalization in education, a special initiative titled the **Seminar on Digital Transformation of Ordinary Level Education in Sri Lanka** was collaboratively organized and hosted by Zhejiang Normal University (ZJNU), China. This comprehensive seminar was held from **13th to 26th May 2025**, with the primary objective of equipping Sri Lankan education administrators and stakeholders with knowledge, insights, and practical experiences related to digital transformation strategies adopted in the Chinese education system.

The seminar brought together a selected group of Sri Lankan education professionals—policy makers, curriculum planners, ICT coordinators, and academic leaders—with the goal of examining and understanding how modern ICT infrastructure, policy frameworks, and classroom innovations have shaped and enhanced primary and secondary education in China. The vision was to draw parallels, learn adaptable strategies, and identify scalable models that could be effectively implemented within the Sri Lankan context, particularly focusing on the Digital Transformation **segment of the general education system**.

2) Objectives of the Seminar

The primary goals of the seminar were as follows:

1. **To study the Chinese experience** in integrating ICT into school education, with a focus on infrastructure development, digital pedagogy, and curriculum transformation.
2. **To expose participants to cutting-edge developments** in smart education, artificial intelligence (AI) applications, and digital learning environments.
3. **To promote international collaboration** between Chinese and Sri Lankan educational institutions through experience sharing, cultural exchange, and potential future partnerships.
4. **To empower Sri Lankan participants** with strategic insights and tools necessary for the formulation of a national-level digital transformation roadmap for O/L education.

The seminar was a blend of lectures, on-site visits, and cultural immersions, offering a holistic perspective into China's approach to educational modernization.

3) Seminar Structure and Key Themes

The two-week program was meticulously structured to balance academic learning, field exposure, and cross-cultural engagement. It covered a broad range of thematic areas including:

- **Modern China and Its Educational Development Trajectory:** An introductory session provided an overview of China's social, economic, and technological progress, setting the context for understanding the country's educational reforms.
- **Smart Cities and Education Technology Integration:** Visits to Shanghai and Hangzhou allowed participants to observe real-world implementations of smart city projects and explore the role of ICT in public service delivery and educational support systems.
- **Building Smart Campuses:** Expert-led lectures and institutional tours demonstrated how digital infrastructure, smart classrooms, and data-driven school management systems are reshaping student learning and teacher performance in China's schools.
- **Digital Transformation in Teaching and Learning:** Interactive sessions focused on how ICT tools support personalized learning, learner autonomy, and inclusive education in K-12 settings. The use of AI in education, represented by companies like ULS Robotics Co. Ltd., highlighted China's commitment to next-generation learning technologies.
- **Teacher Development and Talent Cultivation:** The seminar examined national-level strategies for training software talent and upskilling teachers to lead digital classrooms. This was particularly relevant to Sri Lanka's own efforts to empower teachers through ICT training and professional development.
- **STEM Education and Integrated Learning Models:** Another crucial aspect of the seminar was the exploration of STEM (Science, Technology, Engineering, Mathematics) education models and how digital tools facilitate the integration of IT with core subjects like mathematics and science.
- **Strategic Dialogues and Reflection Sessions:** Throughout the seminar, dedicated discussion sessions were held to review the current status of digital transformation in Sri Lankan O/L education and to brainstorm strategic directions for reform, considering local realities and challenges.
- **Cultural Exchange and Diplomacy:** Participants also experienced traditional Chinese culture through guided tours, museum visits, and cultural performances,

which helped strengthen interpersonal relationships and foster mutual understanding between the two countries. The inclusion of topics such as "Xi Jinping Thought on Diplomacy" further contextualized China's global educational outreach and international cooperation efforts.

Day 01

Date – 2025-05-13

Topic- General Introduction to modern china
Opening Ceremony
On site guidance1: Orientation
Welcome Banquet

Objective of the session –

1. General Introduction to Modern China

* To provide participants with a contextual understanding of China's current social, economic, and technological landscape.
* To showcase China's advancements in education, particularly in digital infrastructure and smart learning environments.
* To create a foundation for understanding how China's experiences can be adapted or serve as inspiration for Sri Lanka's digital transformation in education.

2. Opening Ceremony

* To officially inaugurate the seminar and welcome all participants and dignitaries.
* To highlight the importance of the collaboration between China and Sri Lanka in the field of digital education.
* To outline the goals, structure, and expected outcomes of the seminar.
* To provide an opportunity for keynote speeches by officials and education experts.

3. Orientation (On-site Guidance)

* To familiarize participants with the seminar venue, logistics, schedule, and resources.
* To introduce the support team and facilitators who will assist throughout the seminar.
* To clarify expectations, rules, and procedures to ensure a smooth and productive experience.
* To build rapport among participants and foster a collaborative atmosphere.

4. Welcome Banquet

* To offer a cultural and social welcome to the participants in an informal setting.
* To promote cross-cultural exchange and strengthen the relationship between Sri Lankan and Chinese educators and officials.
* To provide a relaxed environment for networking and informal discussions.

Content

Day 1 – Seminar on Digital Transformation in Secondary School Education in Sri Lanka

The first day of the seminar was structured to provide a warm welcome, cultural introduction, and foundational orientation for all participants. The day's sessions focused on familiarizing the delegation with the host country and the program while fostering initial relationships and understanding. The sessions included:

1. General Introduction to Modern China

This session offered a comprehensive overview of modern China, highlighting its rapid development in technology, economy, and education. The presentation focused on how China's digital infrastructure has evolved over recent decades, including advancements in artificial intelligence, smart classrooms, e-governance, and online education platforms. Participants gained valuable insights into how China's development model could inspire or guide similar initiatives in Sri Lanka. Understanding China's approach to integrating digital tools into its education system was particularly relevant to the seminar's main theme.

2. Opening Ceremony

The opening ceremony marked the formal commencement of the seminar. Distinguished guests and officials from both China and Sri Lanka participated in this event. The ceremony featured welcome speeches and an outline of the objectives and expected outcomes of the program. It emphasized the importance of international collaboration and knowledge sharing in advancing educational practices.This session also served to motivate participants by reinforcing the significance of their role in shaping the future of Sri Lanka's education system through digital transformation.

3. Orientation Session (On-site Guidance)

The orientation session was designed to provide practical guidance and ensure participants were well-prepared for the seminar activities ahead.This included a detailed overview of the seminar schedule, venues, and logistics. Participants were introduced to the support staff and facilitators who would assist them during their stay.Rules and expectations were clarified to ensure smooth operation, and the session also included an opportunity to ask questions and interact with fellow participants. This helped to create a comfortable and cohesive learning environment.

4. Welcome Banquet

The day concluded with a welcome banquet hosted by the organizers. This event offered an opportunity for cultural exchange and informal networking in a relaxed and friendly atmosphere. Participants experienced traditional Chinese hospitality and cuisine, which helped to build camaraderie and strengthen interpersonal relationships among the international delegates.

Summary –

On the first day of the seminar on digital transformation in Sri Lanka's secondary school education system, participants were given a warm and informative introduction to both the program and the host country. The day began with a general introduction to modern China, providing insights into the nation's advancements in technology, economy, and digital education, with the aim of inspiring similar progress in Sri Lanka. This was followed by the opening ceremony, which officially launched the seminar, outlined its objectives, and emphasized the importance of international collaboration. An orientation session was then conducted to guide participants through the schedule, logistics, and support systems, ensuring a smooth and well-organized experience. The day concluded with a welcome banquet that offered a cultural experience and an opportunity for participants to network and build relationships in a friendly and relaxed setting.

Benefit for the digital Transformation in Sri Lanka Education System –

1. Exposure to Global Best Practices (via the Introduction to Modern China)
2. Strategic Planning and International Support (via the Opening Ceremony)
3. Clear Direction and Participant Empowerment (via the Orientation)
4. Relationship Building and Cultural Exchange (via the Welcome Banquet)

Day 02

Date: 2025/05/14

9.00 -12.00 session was allocated to medical examination. All of us were taken into a medical center and height, weight and blood pressure were checked by a physician. Individual assistance was given to us and informed if we need to consider about our health.

14.00-17.00

Topic: Cultural Experience: Taijiquan (Tai Chi) Appreciation and Practice

Objective of the session

- To understand the concepts behind traditional Chinese martial arts
- To gain an understanding about basic movements of Tai Chi

During this session we were given the incredible opportunity to participate in a Taijiquan (Tai Chi) appreciation and practice session. Taijiquan, a traditional Chinese martial art known for its slow, flowing movements. It is deeply rooted in Chinese philosophy, medicine, and culture. This experience allowed us to not only observe but also engage in the practice, gaining a deeper understanding of its physical and mental benefits.

Taijiquan is an internal martial art that combines movement, meditation, and breathing techniques. It is based on the principles of Yin and Yang (balance and harmony) and Qi (life energy). Often practiced in parks and public spaces across China, it serves as both a form of exercise and a way to cultivate inner peace.

The session began with an instructor demonstrating the fundamental movements of Taijiquan, such as:

- "Commencing Form" (Qǐshì)* – The opening posture to center the body and mind.
- "Grasp the Sparrow's Tail" (Lǎn Què Wěi)* – A sequence involving ward-off, rollback, press, and push.
- "Cloud Hands" (Yún Shǒu)* – A flowing, side-to-side movement promoting balance.

The instructor emphasized the importance of relaxation, proper posture, and smooth transitions between movements. Watching the graceful and deliberate motions was mesmerizing, highlighting the artistry behind Taijiquan. After the demonstration, we were invited to participate. The instructor guided us through basic stances and movements, focusing on:

- Breathing techniques – Coordinating breath with movement to enhance Qi flow.
- Weight shifting – Maintaining stability while transitioning between steps.
- Mindfulness– Staying present and aware of each motion.

At first, the movements felt challenging, requiring both physical control and mental focus. However, as we continued, all of us felt a sense of calmness. The instructor also shared the cultural significance of Taijiquan, explaining its connections to:

- Daoist philosophy which is a concept of Wu Wei (effortless action) and harmony with nature.
- Traditional Chinese Medicine (TCM)* – How Taijiquan promotes health by balancing Qi and improving circulation.
- Community and Social Bonding* – Many Chinese people practice Taijiquan in groups, fostering social connections.

The session integrated videos and we practiced and enjoyed a lot.

Benefit for the Digital Transformation in Sri Lankan Education system

- This experience was both physically engaging and mentally enriching. It helped us to appreciate the importance of patience and mindfulness in daily life. It reflects how Chinese people have maintained harmony and balance throughout digitalization. They have preserved their culture and use it to maintain life balance.

Day 3: 15th May 2025

Session 1: Travel to Shanghai

Topic: Urban-Rural Connectivity Observation

Objective of the Session:

- To study China's transportation infrastructure linking urban and rural areas
- To identify transferable models for Sri Lanka's education connectivity

Content:

- High-speed rail journey observation (Jinhua → Shanghai)
- Discussion on transport's role in equitable education access
- Notable features: Real-time digital signals, WiFi-enabled carriages

Summary:

The seamless connectivity demonstrated how reliable transit enables resource sharing between urban and rural education centers.

Benefit for Sri Lanka's Education System:

- Infrastructure Planning: Prioritize transport routes connecting rural schools to urban digital hubs
- Mobile Classrooms: Explore train/bus-based WiFi learning pods for remote areas

Session 2: Smart City Tour

Topic: IoT and AI in Public Services

Objective of the Session:

- To examine Shanghai's smart city technologies
- To identify education-specific applications

Content:

Live demos of:

- AI traffic management (optimizing school commute routes)
- Energy-efficient smart lighting (applicable to school buildings)
- Public safety monitoring systems


Day 04: 16th May 2025

Session: 01

Venue : ULS Robotics Co. Ltd. – Shanghai

Topic : Technological advancement in AI + Education – Shanghai ULS Robotics Co. Ltd.

Objectives of the session :

- Identifying technological advancements in AI + Education.
- Experiencing variations of inventions in Robotics.
- Exploring the scope of industrial inventions in China.

Content :

Three types of Exoskeleton Robots are developed by ULS Robotics for aviation logistics, emergency, power and mining, healthcare, physical lifting, automobile manufacturing and constructions.

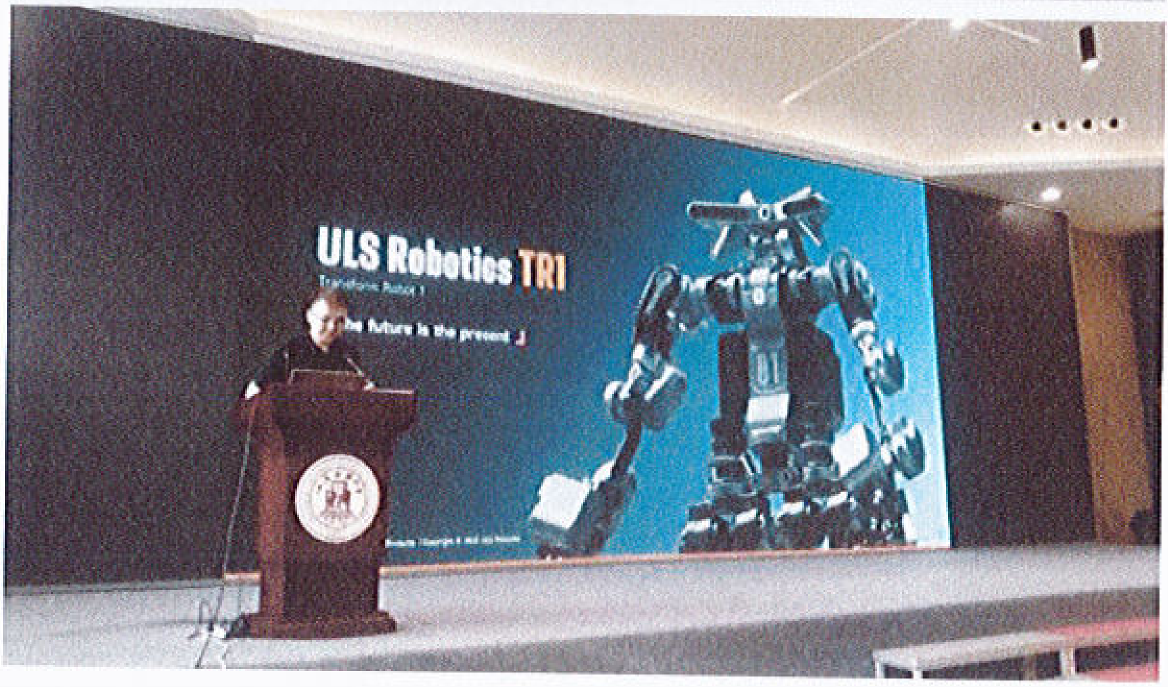
1) **PES-U (Passive Elastic System – Upper Limb)** is a mechanical energy – storing exoskeleton developed and designed by ULS Robotics. It is specially used to assist

users with mechanical support for their shoulders and arms. This is primarily designed for physical labour positions, aiming to reduce the labour burden of workers in lifting work.

2) **FIT – U (Electric Upper Limb Exoskeleton Robot)** is an upper limb and shoulder control system, providing intelligent electrical assistance for the users' shoulders, arms and waist, aiming to reduce occupational injuries, worker turnover and to improve production efficiency.

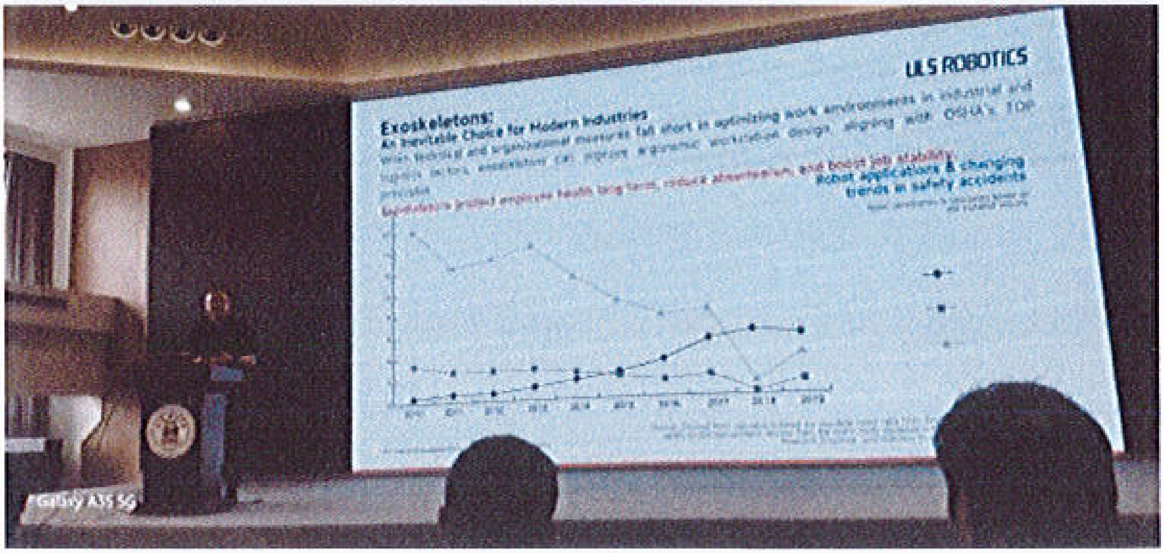
3) **FIT HV (Electric Waist Exoskeleton Robot)** integrates adaptive intelligent motion control systems developed by ULS Robotics, to provide workers with efficient lifting assistance and walking support.

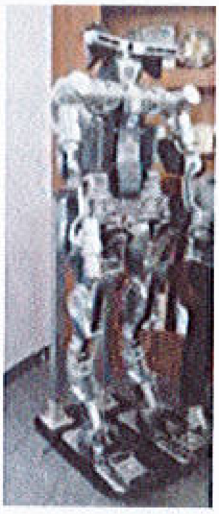
They have developed IoT data platform and lumbar exoskeleton robot iteration through 2019 to 2024.




ULS ROBOTICS
About Us
Galaxy A35 5G


ULS ROBOTICS
The Founder
Zhenhua Xu (Eric)
Galaxy A35 5G


ULS ROBOTICS
Exoskeletons:
An Inevitable Choice for Modern Industries
Robot applications & changing trends in safety accidents
Galaxy A35 5G

Summary :

China has demonstrated remarkable progress in identifying day-to-day challenges within its workforce and developing technological solutions to enhance productivity, safety, and employee well-being. By recognizing and prioritizing key needs, Chinese innovators have successfully introduced practical assistance to address these issues, contributing to both industrial efficiency and worker welfare.

Similarly in Sri Lanka, we should foster a culture of innovation among its students, encouraging them to devise smart, localized solutions tailored to the country's specific needs. Rather than focusing solely on large-scale inventions, students should be motivated to tackle smaller, yet significant, problems with creative and efficient ideas. This approach will not only cultivate problem-solving skills but also drive meaningful improvements in various sectors, ultimately supporting Sri Lanka's economic and social development.

By promoting such innovation, Sri Lanka can empower its youth to contribute effectively to national progress while addressing real-world challenges in a sustainable manner.

Day 04: 16th May 2025

Session: 02

Venue :

Topic : Building the smart campus for primary and secondary schools.

Objectives of the session :

- Identifying the concept "Smart Campus" as a technological advancement in education.
- Identifying next generation information technology.

Content :

1. What is a Smart Campus?

A Smart Campus is a modern, digitally transformed educational environment built on next-generation technologies like IoT, AI, and big data. It enhances learning, administration, and campus operations through:

- Data-Driven Decision Making – Sensors collect real-time data (attendance, energy use, security) for optimization.
- Connected Systems – Seamless integration of academic, logistics, and security systems.
- Intelligent Services – AI-driven personalized learning, automated facilities, and smart security.

2. Key Features of a Smart Campus

- IoT – Smart sensors for facility management, environmental monitoring, and asset tracking.
- Big Data – Analytics for academic performance, resource optimization, and personalized recommendations.
- AI – Intelligent tutoring, facial recognition for attendance, and predictive maintenance.
- Cloud/Fog/Edge Computing – Faster data processing for remote learning and real-time analytics.

3. Key Technologies in Smart Campus (China's Focus)

Technology	Applications in Chinese Campuses
IoT	Smart classrooms, energy monitoring, lab safety sensors
Wireless Networking (5G/Wi-Fi 6)	Supports remote learning, mobile apps, high-density connectivity
Big Data & Cloud Computing	Academic analytics, student performance tracking
Digital Twin	Virtual campus modeling for maintenance & emergency drills
Cybersecurity	Protects student data and smart infrastructure

4. IoT in Smart Education (China's Context)

- Definition: IoT connects physical devices (sensors, cameras, smart boards) to the internet for data exchange.
- History in China: Rapid adoption since 2010, supported by government policies like "Internet Plus Education".
- Key IoT Technologies: RFID, AI cameras, environmental sensors.
- Applications:
  - Smart Classrooms – AI attendance, interactive whiteboards.
  - Campus Safety – Facial recognition, emergency alerts.

- Energy Efficiency – Smart grids, automated lighting.

5. Future Trends in China's Smart Campuses

- Expansion of 5G + AI for immersive learning (VR/AR).
- Digital twin campuses for better facility management.
- AI-based personalized education aligned with China's "Double Reduction" policy.

Summary :

A **Smart Campus** in China is a modern, technology-driven educational environment built on **IoT, AI, big data, and cloud/edge computing**. It relies on **data-driven decision-making**, seamless **connectivity** between academic and administrative systems, and **intelligent services** like personalized learning and automated campus management. Key technologies include **IoT sensors** (for facility and environmental monitoring), **wireless networking** (supporting remote learning and mobile apps), **big data analytics** (for resource optimization), **digital twins** (for simulation and maintenance), and **cybersecurity** (ensuring data protection).

Benefits of Smart Campus in China:

1. **Enhanced Learning** – AI-driven personalized education, VR/AR tools, and remote learning capabilities.
2. **Operational Efficiency** – Automated energy management, smart facility maintenance, and optimized resource usage.
3. **Improved Security** – AI surveillance, emergency response systems, and cybersecurity measures.
4. **Data-Driven Decisions** – Real-time analytics for better academic and administrative planning.
5. **Sustainable Development** – Smart grids, waste reduction, and eco-friendly campus operations.

China's adoption of **Smart Campuses** aligns with its digital education goals, improving accessibility, efficiency, and innovation in higher education.

Date day 5: 17 May 2025
Topic: Digitalization in Traditional Culture Education – Smart Qinghefang Ancient Street

Objective of the Session :
To explore how Qinghefang Ancient Street leverages digital technologies to preserve and promote traditional culture while creating economic value, and to identify transferable strategies for modernizing heritage education in Sri Lanka.

Facts found :
1. E-Commerce and Digital Transactions at Qinghefang

- QR Code Shopping System
  - Every physical shop and stall on Qinghefang Ancient Street is equipped with unique QR codes linked to:
    - Product details (history, materials, artisan profiles)
    - Multi-language descriptions (Chinese, English)
    - Secure payment gateways (Alipay, WeChat Pay, international cards)

- Visitors scan to purchase instantly, with options for:
  - In-store pickup
  - Direct shipping (including international)
  - Digital receipts with cultural storytelling content
- Livestream Commerce Integration
  - Daily scheduled livestreams on Taobao Live, Douyin (TikTok China), and WeChat Channels featuring:
    - Master artisans demonstrating traditional crafts (silk weaving, tea processing)
    - Real-time Q&A with cultural experts
    - Limited-time discounts and exclusive online-only products
  - 2025 Innovation: AI-powered auto-translation in 12 languages boosts foreign sales by 65%
- Blockchain-Verified Authenticity
  - Each handcrafted item comes with a blockchain-based digital certificate verifying:
    - Artisan identity and workshop location
    - Materials used and production date
    - Ownership history (for collectibles)
  - Customers scan QR codes to verify authenticity before/after purchase
- Membership and Loyalty Programs
  - "Qinghefang Cultural Insider" digital membership provides:
    - Early access to new products
    - Virtual workshops with master craftsmen
    - Accumulable points redeemable for experiences (private museum tours)

Summary :
Qinghefang's e-commerce system successfully:
- Monetizes cultural assets while preserving authenticity
- Expands market reach beyond physical visitors (30% of revenue now from online)
- Educates consumers through transactional interfaces
- Supports artisans with transparent, fair-trade digital platforms

Benefits for Sri Lanka's Education System Transformation
1. Curriculum Integration
   - Teach digital entrepreneurship through case studies of Qinghefang's model
   - Add e-commerce modules to heritage-related vocational training
2. Artisan Empowerment
   - Replicate the QR code product system for iconic products like:
     - Kandyan metalwork
     - Galle lace
     - Traditional wooden masks
   - Develop Sinhala/Tamil/English multilingual interfaces
3. Revenue Generation for Heritage Sites
   - Implement livestream selling from locations like:
     - Galle Fort (handicrafts)
     - Kandy Temple (cultural souvenirs)
     - Sigiriya (art reproductions)
4. Authentication and Anti-Counterfeiting
   - Adopt blockchain tracking for:
     - Ceylon tea
     - Handloom textiles
     - Ayurvedic products

5. Tourism-Education Linkages
    - Create student-managed e-commerce projects selling local crafts
    - Develop app-based cultural treasure hunts with in-app purchasing

Day 06

Date:2025/05/18

Topic: High-Quality Public Service and Products – The Story of the Silk Road at China Silk Museum

Objective of the session

- Get a profound understanding of China's role in global history, especially in terms of trade and cultural diplomacy
- Give an understanding of blending of cultures along the Silk Road through textile patterns and techniques.

We were very lucky to visit the China Silk Museum in Hangzhou. We experienced a high-quality cultural exhibition that showcased the history, craftsmanship, and global influence of silk along the Silk Road. This visit highlighted us about China's dedication to preserve its heritage while delivering exceptional public services and products to visitors.

Upon the arrival, we were warmly welcomed by the museum staff, who provided clear guidance and multilingual support, demonstrating a high standard of public service. The environment was clean, well-organized, and thoughtfully designed to enhance visitor experience. The China Silk Museum was established in 1992 and it is the world's largest museum dedicated to silk. It serves as a research, education, and cultural exchange center, offering insights into:

- The history of sericulture (silk production) in China.
- The Silk Road's role in global trade and cultural exchange.
- The artistic and technological advancements in silk weaving and dyeing.

Our tour began with a walkthrough of the Silk Road Gallery, which showcased the global significance of the Silk Road as a network of cultural and economic exchange between East and West. Through attractive exhibits, artifacts, and multimedia displays, we learned how silk production and trade contributed to cross-cultural connections, technological advancement, and diplomatic relationships.

The museum showcased well-preserved Han and Tang Dynasty textiles, demonstrating intricate weaving and embroidery, silk road trade routes with maps and artifacts showing how silk traveled from China to Europe, the Middle East, and beyond, how silk influenced fashion, art, and religion in different civilizations as well as China. It displayed how the dresses evolved throughout history and how fashion developed.

The museum also presented the entire process of silk production from silkworm (Bombyx mori) breeding to weaving and dyeing, highlighting the craftsman ship and innovation of ancient Chinese artisans. The silkworm is the larva of the silk moth and plays a vital role in sericulture (silk farming). These caterpillars feed exclusively on mulberry leaves and spin cocoons made of a single, continuous silk thread. The cocoon serves as a protective casing where the silkworm undergoes metamorphosis into a moth.

Silkworms and their cocoons hold deep meaning in Chinese culture as they represent the *foundation of China's silk industry*, which began over 5,000 years ago. Silk production was once a closely guarded secret that helped China dominate global trade via the Silk Road. We observed live silkworms munching on fresh mulberry leaves, and had the chance to feed them. These live demonstrations and hands-on activities allowed us to engage more deeply with the topic and learn that in Chinese folklore and art, silkworms symbolize diligence, transformation, and prosperity. We also visited the museum's gift shop, which offered high-quality silk products like scarves, ties, and replicas of ancient designs.

Benefit for the Digital Transformation in Sri Lankan Education system

- How interactive exhibits can be used to aware public. Here they used touchscreens, multimedia displays, and virtual reconstructions of ancient weaving techniques. We also can use this to develop education as well as tourism industry.
- Multilingual Support - Audio guides and information panels in multiple languages, ensuring accessibility for international visitors.
- How countries should preserve and share their cultural heritage through high-quality public services and artifacts.

Day 7: 19th May 2025

Session 1: Discussion Session 1

Topic: Sri Lanka's Digital Education Challenges & Solutions

Objective of the Session:

- To identify key barriers to digital transformation in Sri Lankan schools
- To brainstorm context-specific solutions

Content:

Open discussion on challenges:

- Limited infrastructure (especially in rural areas)
- Teacher resistance to technology adoption
- Lack of localized digital content

Solution frameworks:

- Public-private partnerships for resource mobilization
- Mobile-first content for low-device settings

Summary:

The session revealed systemic gaps but also highlighted Sri Lanka's potential to leapfrog through targeted interventions.

Benefit for Sri Lanka's Education System:

- Localized Content: Develop apps/textbooks in Sinhala/Tamil for core subjects
- Teacher Incentives: Create "Digital Champion" programs with training & recognition

Session 2: Lecture 2

Topic: China's Digital Education Practices

Objective of the Session:

- To analyze China's policy-driven EdTech scaling models
- To extract adaptable strategies for Sri Lanka

Content:

Deep dive into "Internet+Education" national initiative:

- Satellite-enabled virtual classes for remote schools
- Standardized digital curriculum frameworks

Case study: Gansu Province's rural smart classrooms

Summary:

China's top-down policy alignment combined with grassroots innovation emerged as a replicable model.

Benefit for Sri Lanka's Education System:

- Phased Rollout: Start with centralized digital content before full infrastructure overhaul
- Low-Tech Bridges: Use SMS/radio-based lessons where internet is unreliable



Day 08: 20th May 2025

Session: 01. Lecturer: Prof. Wung Hai

Venue : Zhejiang Normal University

Topic : Introduction of China International College Students' Innovation Competition.

(China International College Students' Innovation and Entrepreneurship Competition.)

Objectives of the session :

- Showcase the procedure and achievements of previous editions of the innovation competition.
- Valuing the competition for promote innovation and entrepreneurship to provide solutions for global challenges.
- Emphasize China's education ecosystem to highlight China as a role hub for global innovation industry.
- Identify the importance of innovation to develop digitalization in ordinary education of Sri Lanka.

Content :

The session of the Introduction to China International College Students' Innovation Competition contents the following key points.

- Overview of Innovation Competition
  - China's top international innovation and entrepreneurship competition which held annually. For their innovative young people, it is a global trend which encourages new ideas for resolve problems.
- Previous competition overview
  - 9th "Internet +" held in Shanghai, 2024 and there have participated 15.78 million college students, 3.77 million teams and 124 countries and regions in 5 continents
- The key features of "Internet +"
  - How china integrate with traditional industry
  - Government driven policy
  - Tech ecosystem growth
- IT contacts and networking
  - Huawei (ict solutions) reach out via their Innovation Lab.
  - Alibaba Cloud (Ai/Cloud tech)
- Focused Area
  - E-commerce
  - Healthcare
  - Smart cities
- About the winners
  - Online competition, on site competition, Final competition

- participants there have few stages to go through then can win gold, silver and bronze medals.

Summary :

"Internet +" competition is extremely useful in harnessing the potential of young innovative creators in China as well as around the world to make people's lives easier and create a better world.

Benefits :

Understand the importance of invention culture which can motivate students, teachers and society while providing solutions for problems of the society.

Constructed a bridge to align Sri Lankan education system with global innovation trends while addressing local socio economic needs to skill development and international collaborations.

Explored opportunities to build entrepreneurial skills access global networks and foster cross cultural innovations.

Day [illegible] **25**

Session **: 02**

Venue **: Zhejiang Normal University**

Topic **: (Visit) Advanced cases of education informatics building smart learning space.**

Objectives of the session :

- Experiencing a learning space which is developed with the assistance of automation and Artificial Intelligence for an effective learning.
- Encountering a real world application of smart learning space in higher education system in China.
- Identifying new techniques and methods in building a smart learning space.

Content :

Zhejiang Normal University is located in Jinhua, Zhejiang province. It has a library which is comprehensive academic resource centre which supports the university's educational and research missions. It is collectively housing over 3 million print volumes and more than 1.85 million digital resources including e-books and online databases.

The main library is equipped with modern facilities and designed for a comfortable and quiet spacious environment. It offers digital services, 24/7 access of online resources, academic support services as research assistance. It has designed to enhance the research capabilities and academic success of the university community.

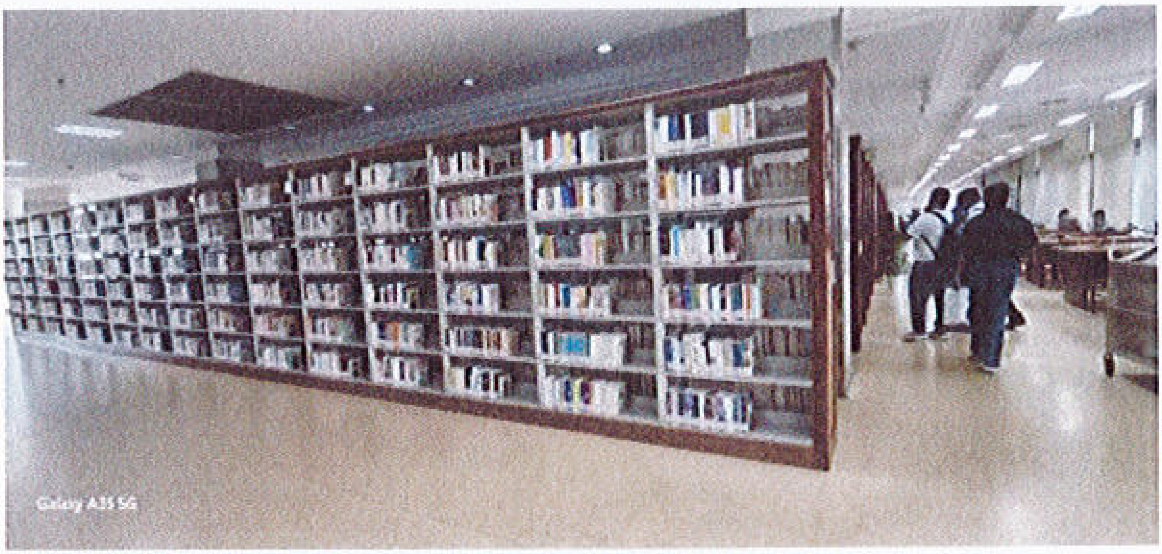
The library is facilitated by modern automation systems and it is already created an advanced smart learning space which is essential for contemporary higher education institute. Auto lending and borrowing of books, pre-seat allocation system, user registration and identification system are few of those applications of modern technology which are using in the library.

Summary :

The university library has established an advanced smart space by integrating automation technology, aimed at enhancing the effectiveness and efficiency of the learning environment for students and researchers.

Benefits :

- Enduring an experience on how a smart learning space is functioning while creating effective and efficient learning environment.
- Developed a concept for leveraging advanced digital technological innovations currently utilized in China to design and implement intelligent learning environments within schools and universities in Sri Lanka.



Day 9 : 2025.05.21

Topic: Supporting student's become intentional, active & and strategic learners

Day 9 consist of two activities lecture on the topic of "Supporting student's become intentional, active & and strategic learners" and field visit activity to visit of Yiwu market (Visiting the industrial support case of education digitalization)

Objective of the session:

- Learning about the Self-regulation theory and its application
- Share some insights of Chinese experience in application of Self-regulation theory

Content:

Introduction

- By definition self-regulation learning involves metacognitive, motivational and behavioral processes that learners actively use to achieve academic goals
- Self-regulated learning can be simply described as a method of learning by themselves with individual learning goals, plans and ensuring high self-motivation to achieve self-defined goals. SRL promotes autonomy of learners,

Self-regulation for Learning

- Self-regulation is important in this method as it implies. Self-regulation shall be defined as ability to control thoughts, actions and feelings to achieve personal goals and respond to environmental demands.
- Self-regulation is intentional, goal directed and contextual.
- Self-regulation is about setting goals, planning to achieve it, managing environmental factors while resisting distractions, persisting in difficulties and finally achieving the goal.

- Self-regulation is important because it's a source of achievement, acknowledges difference among students, students shall become agents of their learning so that independent learning is supported.

- SRL for learning refers to intentional, goal directed engagement in the context of learning. Self-regulated learners are lifelong learners and they are capable designing strategies for their own learning.
- Specially SRL is not an isolated activity it encourages learning through activities and group works.

Theory of Self-regulation and SRL promoting practices

- SRL can be described theoretically as regulation of metacognition, Motivation & Emotion and strategic action.
- Metacognition regulation involves understanding of individuals and empowering individuals as self-learners.
- Regulations motivation and emotions shall be shaping the interactions between learners, tasks and outcomes and improving self-confidence and willingness to try and explore.
- Strategic actions are about goal setting, implementation of strategies and self-monitoring and review.
- Motivated learners are with growth mindset, focuses on personal progress and willing to try challenging tasks and take risks.
- Motivated learners will persist in difficult situations and cope well with emotions in learning process.

- Metacognitive learners are well aware of activities required to achieve the goal, personal strengths and weaknesses and strategies to solve problems.
- Strategic learners are able to recognize best strategies to achieve goals in different situations and proactive, flexible and easily adaptable to situations,
- Research shows students find difficulty in interpreting tasks, strategy description and defining monitoring criteria. Goal setting is weakest in less self-regulating students.
- Supportive workshops, tutoring on SRL and learn to learn courses shall help students to effectively practice SRL

- Providing structures, providing opportunity in decision making of their own study and creating of community of learners (forum) shall promote SRL

- In china in ZJNU undergraduate course of probability and statistics was provided in SRL mode and study on success was conducted, findings were discussed in the lecture.

Benefit for the Digital transformation in Sri Lankan Education system:

- Digital transformation in education is related to empowering of self-learning. Since SRL is an established model in self-learning approach, learning of this lecture shall be very useful in transformation of teaching learning process.

- Content development shall follow SRL strategies and techniques. Learning to learning courses and awareness courses for SRL shall help to promote SRL. Further strategies like creating learning community shall be easily designed through a digital learning platform.

Date: 2025.05.21

Topic: Visiting the industrial support case of education digitalization

Objective of the session:

- To Study Digitalization strategies in Empowerment of SME"s
- To understand ways and means to improve entrepreneurship among students.
- To mimic industrial digitalization in education digitalization

Content

- Yiwu International Trade Market, located in Yiwu City, Zhejiang Province, China, is one of the largest wholesale markets in the world. Often referred to as the "world's supermarket," it covers a massive area with over 75,000 booths spread across multiple districts.
- The market offers an extensive variety of products, including toys, jewelry, accessories, household items, textiles, and electronics, primarily catering to small commodities.
- It attracts buyers and traders from over 200 countries, making it a global hub for international trade.
- Yiwu Market is well-known for its efficient logistics, comprehensive services, and affordable prices. It plays a vital role in China's export economy, particularly for small and medium-sized businesses.
- The market operates year-round and is designed like a permanent trade fair, offering convenience and accessibility to global buyers. Its blend of scale, variety, and infrastructure makes it a unique and essential destination for importers worldwide.

Benefit for the Digital transformation in Sri Lankan Education system:

- Marketplace Model for Educational Resources - Create a digital platform similar to Yiwu's market, where educators, content creators, and institutions can offer diverse educational resources (courses, e-books, teaching aids).Enable micro-transactions for affordable content—mirroring Yiwu's small commodity trade.

- Logistics-Style Learning Management - Apply a logistics-like system to manage and deliver digital learning materials efficiently. Use smart scheduling, content recommendations, and tracking systems for learners' progress.

- Promote entrepreneurial skills: Introduction and providing experience of Digital market places and platforms for students shall improve entrepreneurial skills, communication skills ....Etc.

Day 10: 2025/05/22

Topic: Common prosperity in China: A case of Zhejiang

Objective of the session

- To give an overall awareness on Zhejiang province
- To link the development of Zhejiang province and compare it with prosperity of China.
- To give an understanding of "Common Prosperity"

The first session from 9.00 to 12.00 was conducted by Dr. Zhu Yaxiong of Zhejiang Normal University. He explained that Zhejiang[is a coastal province in East China and is the 8th largest city in China. Its capital and the largest city is Hangzhou.

The population of Zhejiang stands at 65 + million and has increased due to better living standards. He elaborated the growth of income using per capita income of 2005 and 2024.

It has been called "the backbone of China" because it is a major driving force in the Chinese economy with special economic zones. Zhejiang consists mostly of hills, which account for about 70% of its total area, with higher altitudes towards the south and the west. Zhejiang also has a longer coastline than any other mainland province of China. The Qiantang River runs through the province, from which it derives its name.

The economy and education are linked and admission for university is encouraged by the government. Research is done and results are implemented to provide better living for both rural and urban people. As the government is people oriented, every decision is accepted by the people and effortlessly they join to build the nation. Reform and innovation, system collaboration and building together to enjoy are their working principles. People are provided with multi channels to generate income.

Next, by using Zhejiang, how China became what it is today was described vey narratively. Their stand as a proud and peaceful country withstanding current tariff issues with USA was explained with patriotism. The relationships they maintain with USSR, USA and European countries were discussed. The government's policies to maintain proper life standards to all in the society was highlighted through their transition to a socialist market economy from a communist economy. was explained.

Chinese government's 2021-2025 plan includes Zhejiang as an area to demonstrate common prosperity. Finally, he expressed China's dream for an ideal for a well-off society with great harmony very successfully.

Benefit for the Digital Transformation in Sri Lankan Education system

- Use of low-cost simple systems to enhance public wellbeing
- Dedication of people to the development of the country
- Implementation of fairer public services through software system

Topic: Chinese Information Technology Development and software talent cultivation.

Objective of the session

- Providing an awareness on software and related concepts

- Giving as insight into the current Status and trends of China's software industry

The evening session from 14.00 to 17.00 was conducted by Dr. Zhiguo Ding who is an associate professor in Zhejiang Normal University, about the development of China's software industry and the software engineering program at Zhejiang Normal University (ZJNU). It was done under four main sections: Software Concepts, China's Software Industry Development, ZJNU's Software Engineering Program, and the achievements.

First software, software engineering and related concepts were introduced and defined. Then the current Status and trends of China's software industry was described in detail. At present software industry plays a major role in promoting national, economic and social development in China. They have developed many software to suit themselves which perform similar functions without using them. Based on industry analysis Information technology services dominate (59.3%), while software products (3.0%) and data services (10.0%) account for smaller shares.

They believe that their software internationalization policy is weak and government supports a lot to develop the industry. The following key challenges exist in software industry was also discussed.

- Shortage of high-end software talent.
- Software intellectual property rights.
- Relative low software engineering development.
- Relative low share in global market.

When talking about technological development trends he emphasized on deep integration of software technology with traditional industries and emerging fields (e.g., AI, IoT), forming cross-domain collaborative innovation ecosystems. Due to these trends a high demand for interdisciplinary, innovative software engineering professionals, especially in system quality assurance, anomaly detection, and predictive technologies exist in the society.

To address the above, Zhejiang Normal University has implemented software engineering programs which are supported by National Natural Science Foundation projects and Ministry of Education. They base on industry-academia initiatives, focusing on software system quality assurance, testing technologies, and anomaly detection. Since 2006 software engineering major was started. Since 2017, faculty members have engaged in international exchanges, including visiting scholar programs at institutions like the University of Massachusetts.

Undergraduate Education programs aim to strengthen programming fundamentals, system design capabilities, and practical innovation skills of students. The core courses include introduction to software engineering, system testing and quality assurance with other optional courses. It also has practical training through industry-academia collaborative projects and national competitions. The software talent cultivation development is another program which enables students to develop their software engineering skills and soft skills.

During the final part of the lecture the academic achievements of students were discussed. The lecturer has also published over ten papers in journals such as Reliability Engineering & System Safety and has led 3 provincial and ministerial-level research projects. The graduate students have achieved over 95% employment rate for five consecutive years, with multiple students winning national innovation awards.

Benefit for the Digital Transformation in Sri Lankan Education system

- To develop talents in software engineering and coding of students
- Linking with universities to obtain opportunities for students and teachers
- To identify the trends in software development field

Day 11: 23rd May 2025

Session 1: Visit 6

Topic: Ancient Village Protection (Investigation in Less Developed Regions of Zhejiang Province)

Objective of the Session:

- To examine how digital tools preserve cultural heritage in rural areas.
- To explore applications for Sri Lanka's historical sites.

Content:

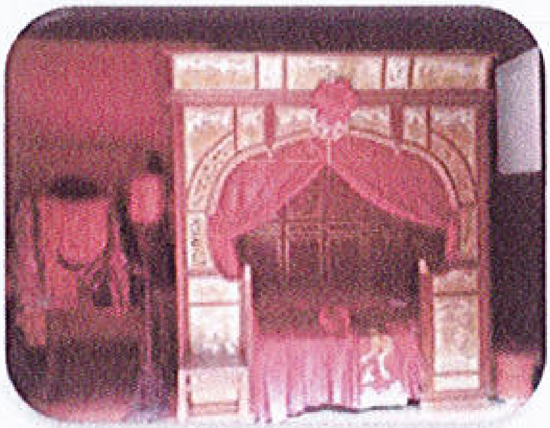
- Field study of ancient villages using AR/VR for conservation.
- Discussion on balancing modernization with cultural preservation.

Summary:

Observed China's use of immersive tech (e.g., 3D scanning, virtual tours) to protect rural heritage while boosting tourism and education.

Benefit for Sri Lanka's Education System:

- AR Integration: Digitize sites like Anuradhapura for interactive history lessons.
- Rural Revitalization: Link heritage preservation with digital literacy



programs in villages.

Conclusion

The official visit to China from May 13th to May 26th, 2025, focusing on the *Digital Transformation of Ordinary Level Education in Sri Lanka*, offered a comprehensive and immersive learning experience for the Sri Lankan delegation. Through a series of lectures, institutional visits, cultural interactions, and live demonstrations, the program provided deep insights into China's advancements in digital education, smart campuses, artificial intelligence, and educational entrepreneurship.

Key learnings included:

- The structure and implementation of **smart learning spaces** using AI, IoT, and big data.
- China's **policy-driven digital education initiatives** such as "Internet+Education" and support systems for rural education.
- The importance of **teacher and student empowerment**, particularly through self-regulated learning (SRL) strategies.
- Insights into **smart cities and infrastructure** supporting education accessibility.
- The strategic integration of **traditional culture with digital tools** for education and economic growth.
- Practical applications of **robotics, automation, and software development** in educational contexts.
- Observations of **common prosperity principles**, equitable service provision, and talent cultivation strategies in Chinese provinces.

4) **Significance for Sri Lanka**

This seminar was of immense strategic importance for Sri Lanka's Ministry of Education, as the country continues to implement reforms aimed at aligning its education system with 21st-century skills and digital literacy goals. With the global shift toward e-learning, hybrid classrooms, and digital content development, the insights gained from China's educational journey can inform Sri Lanka's own policy direction and resource allocation.

Key takeaways from the seminar include:

- **The need for holistic digital infrastructure** in schools, going beyond hardware provision to include connectivity, content platforms, and data management systems.
- **A focus on teacher capacity building** as a critical enabler of digital transformation.
- **Strategic planning and governance mechanisms**, including partnerships with the private sector and international stakeholders.
- **The potential role of AI and learning analytics** in supporting differentiated instruction and student tracking.
- **A culturally sensitive approach** to digital transformation, where technological adoption respects and reflects national education values and identity.

Furthermore, the timing of the seminar aligns with ongoing national projects in Sri Lanka such as the "ICT Hub for the Education System," the "SMART Board School Network," and e-learning content initiatives like **e-Thaksalawa**. Thus, the program served as a valuable knowledge bridge, connecting local needs with global best practices.

5) **Conclusion**

The "Seminar on Digital Transformation of Ordinary Level Education in Sri Lanka" served as a landmark event, symbolizing the growing collaboration between Sri Lanka and China in the field of educational development. It provided Sri Lankan educators with the opportunity to witness firsthand how one of the world's largest and most complex education systems is leveraging technology for inclusive and sustainable development. Through an immersive learning experience, the participants returned with renewed vision, practical insights, and collaborative spirit to lead the digital transformation of O/L education in Sri Lanka.

The seminar has paved the way for future bilateral engagements and has underscored the role of international cooperation in driving educational innovation. As the global landscape of education continues to evolve, such platforms are vital for ensuring that developing nations like Sri Lanka can participate in and benefit from the global digital learning ecosystem.

The visit underscored China's systemic, policy-supported, and technologically advanced approach to educational transformation. It highlighted how a strong commitment to innovation, collaboration across sectors, and the fusion of traditional and modern practices can result in scalable and inclusive education solutions.

For Sri Lanka, the key takeaways are:

- The urgent need to **invest in digital infrastructure** across urban and rural schools.
- The importance of **teacher training** in digital pedagogies and fostering a culture of innovation.
- The potential of **public-private partnerships** to drive localized content development and entrepreneurship.
- Opportunities to **introduce smart learning environments** and **digital tools** aligned with local needs and languages.
- The value of **cross-cultural collaboration** and international exposure for policymakers and educators.

These insights pave the way for a more inclusive, technology-enhanced, and future-ready education system in Sri Lanka, capable of meeting global standards while preserving local relevance.

Annexure 01

They were all the way with the Team,..........................