

ISATE 2024: List of Learning Journeys, Workshops and Roundtables

LEARNING JOURNEY OR WORKSHOP - OPTIONAL for Sep 27 (Fri): Interested participant is to **choose 1 event only, either** a LEARNING JOURNEY (shown in **Table 1**) **or** WORKSHOP (shown in **Table 2**). Due to the limited capacities of such events, and planning of logistics (as transport will be provided for venues outside of SP), **allocation of places will be done on a first-come-first served basis**. You need to **indicate your preference at the time of registration**, and you will be informed out the outcome at a later date. If you are not successful in your selected event, you may be offered another event subjected to availability.

Table 1. List of Learning Journey (choose ONE only; if not choosing a Workshop from Table 2)

Code	Organization	Theme	Details	Min Pax	Max Pax	Time	Duration (hours)
LJ01	Ngee Ann Polytechnic (NP)	Visit to Robotics Research & Innovation Centre (RRIC) & Synergy.Lab	At RRIC, the participants will be introduced to robotic projects that collaborate with industries (NParks, SingHealth, Moovita). These robotic projects are to support industry needs and to optimize commercial operations. At Synergy.Lab, the participants will learn the integration of solar energy and Electric Vehicle charging infrastructure. The Synergy.lab serves as an integrated 'control centre' for the various smart mobility technologies on campus, incorporating advanced data analysis and simulation capabilities. The lab facilitates research to enhance the ecosystem's efficiency by monitoring and analysing data such as solar power generation, as well as EV charging load and energy consumption.	10	30	0930 – 1130	2
LJ02	Nanyang Technological University (NTU)	Visit to Gaia Sustainability Building @ NTU	1. Tour of Nanyang Business School (NBS) and Net Zero emission building 2. Sharing of NBS philosophy for the design of the Net Zero Emission Building	10	25	0900 – 1200	3

ISATE 2024: List of Learning Journeys, Workshops and Roundtables

LJ05	Singapore Polytechnic (SP)	Visit to SP 5G & AIoT Centre and Smart Classroom from School of Electrical & Electronic Engineering (SEEE)	<p><u>Part 1 – 5G & AIoT:</u></p> <ul style="list-style-type: none"> Learn interesting concepts through topics like 5G Overview, Introduction to AIoT Get to know the top 5G & AIoT uses cases and explore how features such as ultra-low latency, high speed connectivity, massive sensor data of 5G & AIoT can enable key drivers such as real time cloud computing, intelligent control and AI that are transforming your industry Engaging discussions on how 5G & AIoT together can benefit the company and workforce <p><u>Part 2 – Smart Classroom:</u></p> <p>Explore the smart learning space at EEE - an educational ecosystem that integrates advanced technology to facilitate a dynamic, interactive, and personalized learning experience. It's characterized by its adaptability, responsiveness, and ability to cater to the individual needs of students. This learning environment fosters a culture of connectivity, creativity, and innovation, which not only enhances the learning process but also prepares students for the digital world, making education a truly transformative experience.</p>	10	25	0930 - 1200	2.5
LJ06	Singapore Polytechnic (SP)	Advanced Manufacturing Learning Journey (AMLJ) including Aerohub Visit	<ol style="list-style-type: none"> Gain an insight about Singapore manufacturing industry landscape in terms of harnessing smart manufacturing technology Learn about how SP-AMLJ is bridging the skill gaps between Industry and IHL by fostering partnership with Industry <p>Learn about how Aerohub facilities are used to support Diploma in Aeronautical Engineering.</p>	10	20	0900 – 1130	2.5

ISATE 2024: List of Learning Journeys, Workshops and Roundtables

Table 2. List of Workshop (choose ONE only; if not choosing a Learning Journey from Table 1)

Code	Organization	Theme	Details	Min Pax	Max Pax	Time	Duration (hours)
WS01	Republic Polytechnic (RP)	Employing Game-Based Learning to Engage Students for Effective Learning in National Education and Current Affairs	<p>Imagine a world where students are engaged in learning difficult subjects and appreciate the value of what they are learning. In reality, students inundated with National Education (NE) messaging and current affairs topics since young, have the impression that such lessons are dull and irrelevant to their lives.</p> <p>Our team found a solution that is working for us. “Diplomats... in Space!” is an innovative multiplayer card game that is designed to change this impression by immersing students in strategic and thought-provoking Game-Based Learning. Students will interact with game elements and gain insights into how their decisions can affect the outcomes, which mirror scenarios and events in the real world, as well as illustrate national and international initiatives and frameworks.</p> <p>In this workshop, participants will get to experience the game, appreciate how Game-Based Learning helps students understand complex issues and they will hear from the designers of the game, their experience and tacit knowledge in designing the game from concept to delivery.</p>	8	40	0900 – 1200	3
WS03	Temasek Polytechnic (TP)	App in a Jiffy - for Educators	<p>In this workshop, participants will gain knowledge on how to develop a secure and customizable mobile app using Microsoft Power Automate and Power Apps.</p> <p>Currently, for some of the academic, project, and student-related routine tasks, human intervention is still necessary. Furthermore, the tasks are time-consuming, require a lot of manpower, and must be repeated every semester. The messages conveyed to the users—in the form of mass emails, reminders, and warnings—are also not personalized.</p> <p>By adopting end-to-end cloud automation platform technology in education, repetitive tasks and personalized messages can be automated and sent to users respectively. Additionally, less human intervention is required, thereby saving man-hours, minimizing errors, and increasing scalability. Furthermore, as this platform can be accessed anytime, anywhere, efficiency and productivity are improved to new heights.</p> <p>Pairing seamlessly with Power Automate, these tools become a powerhouse for automation. Say goodbye to repetitive tasks and hello to newfound efficiency.</p>	3	12	0900 – 1200	3

ROUNDTABLE - COMPULSORY for Sep 26 (Thu): Participant is to **choose 1 event only**, as shown in **Table 3**. For planning purposes, you need to **indicate your preference at the time of registration**.

Table 3. List of Roundtables (choose ONE only)

Code	Name	Sub-Theme	Overview	Target Audience	Follow-ups (if any)
RT03	The BEVI (Beliefs, Events, and Values Inventory)	ST3: Pedagogical Innovation in Teaching & Learning	<p>Many engineering courses do not have a good measurement tool to track students' progress in their beliefs and values. This roundtable discussion will focus on the BEVI (Beliefs, Events, and Values Inventory), a robust analytic tool spanning education, research and leadership. With over 30 years of research backing, BEVI offers a comprehensive understanding of beliefs, values, and life events, fostering learning, growth, and transformation.</p> <p>Participants will explore its adaptability, reliability, and applicability across diverse settings, and delve into its theoretical underpinnings and practical benefits. Let's discuss how BEVI can empower individuals, groups, and organizations to navigate complex processes and outcomes, shaping a path towards personal and collective development.</p> <p>For more details on the BEVI, please go to: https://thebevi.com</p>	No background knowledge required. All are welcome.	Potential future collaboration between facilitators with participants, who are keen to explore the BEVI further.
RT04	Collaborative Lectures between Polytechnic Schools and NIT Colleges	ST3: Pedagogical Innovation in Teaching & Learning	<p>The aim of this roundtable is to delve into possible approaches for student guidance through Collaborative Lectures between Polytechnic Schools and NIT College.</p> <p>Students today study in a different way than in the past, thanks to technological advancements, particularly in the form of AI tools such as ChatGPT, Copilot, Gemini, and so on. As such, there is a need to shift from the current one-way imparting knowledge strategies to become two-ways or multiple ways, with greater student involvement in the lecture components.</p> <p>One of the key takeaways from this roundtable is to be a set of guiding questions for each pair of participating institution's planning and execution. Also, the pedagogy aspect and methodologies involved will be brought up for discussion as well.</p>	Lecturers, ISATE members and collaborators, Teaching and Learning Mentor/Specialist should attend this roundtable	<ol style="list-style-type: none"> 1. Set of guiding questions on the planning and execution 2. Potential research about the effectiveness of Collaborative Lectures 3. Sharing of knowledge/ideas in ISATE 2025.

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Code	Name	Sub-Theme	Overview	Target Audience	Follow-ups (if any)
RT05	Desirable Common Platform for ISATE Participants to be Connected throughout the Year	ST4: Stakeholder Engagement in Education	<p>In this roundtable, we will explore the key features of a common platform for ISATE participants to network, collaborate with and learn from each other throughout the year.</p> <p>Roundtable participants will be actively involved in contributing towards development of this platform by sharing their insights, experiences and preferences so that the platform will reflect the diverse needs and perspectives of its intended users.</p>	ISATE members and collaborators	<ol style="list-style-type: none"> 1. Participation in working groups to contribute further to platform's development and refinement eg. design, user testing, feedback sessions. 2. Setting up of communities of practice to foster a sense of community among platform users, and to share resources and best practices on using the platform.
RT07	Empowering Student Success: Strategies for Motivation, Self-Concept, and Volition Control	ST3: Pedagogical Innovation in Teaching & Learning	<p>This roundtable delves into the intricate relationship between the three vital elements (motivation, self-concept and volition control) and self-regulated learning elements. It aims to explore how these three elements intersect with the principles of self-regulated learning to enhance students' academic performance and personal development.</p> <p>By examining the interconnectedness of these elements and sharing insights on fostering self-regulated learners, educators can develop comprehensive strategies to empower students to succeed academically and thrive personally.</p>	All passionate educators, driven to inspire and impact students' learning behaviors, particularly their self-concept, personal motivation and volition control.	NIL
RT08	Infusing Sustainability into Education: Sustainable Development Goals (SDGs) and Curriculum Design – ideas for creating a meaningful learning experience	ST3: Pedagogical Innovation in Teaching & Learning	<p>This roundtable seeks to interactively engage participants to discuss the best ways to introduce and infuse the SDGs into curriculum. How can this be done efficiently, yet sustainably and what would be some of the best ways we can ensure there is meaningful learning rather than the checking of boxes. Participants will also be given an opportunity to discuss possible approaches to measure the success of such integration, by engaging in critical discourse with fellow participants attending the roundtable.</p>	Educators interested in infusing the SDGs in a meaningful and sustainable manner are welcome. A basic understanding of what the SDGs are is preferred and experience in integrating these goals are also welcome as we can learn from best practices as well.	While we expect there to be no follow ups, we, however would like to see if there are participants who may be open to the idea of potential collaboration in areas such as best practice sharing or joint curriculum development of modules that infuse the SDGs.

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Code	Name	Sub-Theme	Overview	Target Audience	Follow-ups (if any)
RT09	Ethical Considerations in the Integration of AI for Teaching and Learning	ST1: Artificial Intelligence in Teaching & Learning	<p>Artificial Intelligence (AI) has become a transformative influence in the education industry, reshaping the delivery of teaching and learning. It introduces both opportunities and challenges in this context. AI technologies, exemplified by tools like ChatGPT, have the capacity to revolutionize the creation of various content types, such as text, images, art, music, or programming code. This can result in the development of dynamic and interactive teaching materials designed to engage students more effectively. However, the same AI tools could be misused to generate academic work, such as assignments or final year reports, potentially leading to unethical behavior and academic misconduct when used without proper declaration or authorization.</p> <p>While AI technologies may pose a threat to academic integrity, they also offer significant advantages. AI enhances users' capabilities, both positively and negatively. Therefore, it is crucial for students and educators to receive guidance on the benefits and limitations of AI technologies, enabling ethical usage and upholding academic integrity. The objective is to strike a balance between harnessing the transformative potential of AI and safeguarding against unintended and unethical consequences. This requires collaborative efforts among stakeholders, including educators, to establish comprehensive frameworks aligning AI advancements with academic integrity, human values, ethical standards, and societal expectations.</p> <p>This roundtable session aims to foster discussions on ethical considerations in the implementation of AI for teaching and learning.</p> <p>The topics to be explored in this session include, but are not limited to:</p> <ul style="list-style-type: none"> • An overview of various AI technologies for teaching and learning • Potential academic threats and challenges associated with AI • AI Ethics and Governance in Education • Awareness of AI Ethics and Governance • Tools and technologies for AI Ethics and Governance 	Educators with or without expertise/experience in AI	NIL

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Code	Name	Sub-Theme	Overview	Target Audience	Follow-ups (if any)
RT10	Student engagement and first-year experience	ST3: Pedagogical Innovation in Teaching & Learning	<p>The roundtable discussion will focus on the crucial topic of student engagement, the first-year experience in studies, and strategies for supporting incoming students to seamlessly integrate into the learning community. Recognizing the pivotal role of the initial year in shaping students' learning path and overall study experience, this discussion aims to explore innovative approaches, best practices, and challenges in fostering student engagement and facilitating a smooth transition for newcomers.</p> <p>Participants are invited to discuss and share insights on orientation programs, mentorship schemes, study support services, or any other practices aiming at enhancing student retention, satisfaction, and success.</p> <p>By addressing key issues and sharing practical solutions, this round table seeks to empower educators, administrators, and stakeholders to create inclusive, supportive environments that nurture the holistic development of all students within the learning community.</p>	Anyone interested in the topic is welcome to join the roundtable.	The aim is to initiate cooperation in developing student engagement and first-year experience.