2505 - 1008

Republic of the Philippines
Department of Education
REGION I
SCHOOLS DIVISION OF VIGAN CITY

DIVISION MEMORANDUM
No. 268, s.2025

CALL FOR NOMINATION FOR THE TEACHERS' CONFERENCE AND EXCEL FEST (TCEF) 2025

TO: Assistant Schools Division Superintendent
Chief Education Supervisors
Public Elementary, Secondary and Integrated School Heads
All Others Concerned

1. In reference to the Regional Memorandum No. 623, s. 2025, the Singapore Ministry of Education is inviting 50 teachers to participate in the **Teachers' Conference and ExCEL Fest 2025 (TCEF2025)**, with details as follows:

Conference Title	**Teachers' Conference and ExCEL Fest 2025 (TCEF2025)**
Date	**June 3-5, 2025**
Modality	**Virtual/Online**
No. of Slots – Region	**Three (3)**
Target Participants	**Public School Teachers across all levels**

2. School heads are encouraged to **nominate at least one (1) qualified applicant**. All nominees must meet the qualifications and submit the documentary requirements listed in **Enclosure 1**. The Scholarship Clearance (**Enclosure 2**) shall also be submitted.

3. Nominees shall complete the required documents and e-mail to: princess.torricer@deped.gov.ph with the subject: TCEF2025 **on or before May 12, 2025**.

4. Please note that applications may be disqualified due to various reasons, such as but not limited to incomplete requirements, lack of official endorsement/s, sending of application, and discrepancies in documents among others.

5. For queries or concerns, please contact the Human Resource Development Division (HRDD) through (072) 682-23-24.

6. Enclosed is the Regional Memorandum No. 623, s. 2025 for reference.

7. Immediate dissemination of this Memorandum is desired.

SCHOOLS DIVISION OFFICE
DEPED VIGAN CITY
13 MAY 2025
RELEASED
BY:

VILMA D. EDA, CESO V
Schools Division Superintendent

Address: Mena Crisologo St. corner Rivero St., Brgy. IX, Vigan City, Ilocos Sur
Telephone No: (077) 722-20-23 / (077) 632-05-33
Email Address: vigan.city@deped.gov.ph
Website: www.depedvigancity.com

Republic of the Philippines
Department of Education
REGION I

REGIONAL MEMORANDUM
No. 623, s. 2025

CALL FOR NOMINATIONS FOR THE TEACHERS' CONFERENCE AND EXCEL FEST (TCEF) 2025

To: Schools Division Superintendents

1. The Singapore Ministry of Education is inviting fifty (50) teachers to participate in the **Teachers' Conference and ExCEL Fest 2025 (TCEF2025)**, with details as follows:

Conference Title	**Teachers' Conference and ExCEL Fest 2025 (TCEF2025),**
Date	June 3-5, 2025
Modality	Virtual/Online
No. of Slots - Region	Three (3)
Target Participants	Public School Teachers across all levels

2. The Schools Division Offices (SDOs) are encouraged to **nominate at least one (1) qualified applicant**. All nominees must meet the qualifications and submit the documentary requirements listed in **Enclosure 1**. The Scholarship Clerance (**Enclosure 2**) should also be submitted.

3. Nominees shall complete the required documents and upload them via this link: https://tinyurl.com/TeachersCon-ExcelFest-Nominees **on or before May 13, 2025**.

4. Please note that applications may be disqualified due to various reasons, such as but not limited to incomplete requirements, lack of official endorsement/s, sending of application directly to the Secretariat's email, and discrepancies in documents among others.

5. Enclosed are the Letter from the Singapore Ministry of Education, Programme, and List of Webinars, for reference.

6. For queries or concerns, please contact the Human Resource Development Division (HRDD) through (072) 682-23-24.

7. For wide dissemination and immediate action.

For the Regional Director:

RHODA T. RAZON
Director III

Encl: as stated
Reference: DM-OUHROD-2025-1154
To be indicated in the Perpetual Index
under the following subjects:

CONFERENCES

PROGRAMS

HRDD/vrdg/RM_ Teachers'Conference&ExCELFest
May 8, 2025

DepEd RO1

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HRDD250474

Enclosure 1

GENERAL ELIGIBILITY REQUIREMENTS/CHECKLIST

Name:	
Scholarship Program:	
Sponsoring Agency/Organization:	
Region/SDO:	
Work Station:	

Remarks (✔, ✘, others)	**Eligibility**	**Documentary Requirements**
	a. Must be a Filipino citizen.	Updated Personal Data Sheet
	b. Must have obtained a very satisfactory (VS) performance rating for two (2) consecutive years. c. Must present his/her Individual Development Plan (IDP) that is validated by the head of the office.	Latest rated performance rating with approved IDP
	d. Must be holding a permanent item.	Updated Service Record
	f. Must have no master's degree (for those who will apply for a master's degree) and shall have no doctoral degree (for those who will apply for a doctoral degree). g. Must have no current or pending enrollment in other institutions for graduate or postgraduate degree programs (for degree programs).	Updated Personal Data Sheet
	h. Must be willing to sign a Scholarship Contract and commit to its provisions.	(shall be complied after being officially nominated)
	j. Must have no pending administrative, civil, or criminal case, and must have not been found guilty of any violation involving moral turpitude, corruption, or fraud.	Certificate of no pending administrative/legal charges

Enclosure 2

SCHOLARSHIP CLEARANCE

I. NAME		
II. Position/Designation		
III. Permanent Station		
IV. Has availed any scholarship program	☐ **Yes** ☐ **No**	If yes, fill out sections V-X, as applicable.
V. Scholarship Program	**Program Type**	**Title of the Program**
	☐ **Degree** ☐ **Non-Degree**	
VI. Scholarship Duration		
VII. Status	☐ **Completed the course (Submit a copy of Certificate of Completion)**	☐ **Withdrawn from the Course (State the reason below)**
VIII. Reason/s for Non-Completion (must be supported by attachments)	☐ **Resignation** ☐ **Transfer** ☐ **Retirement** ☐ **Others** *Explain further.*	
IX. Service Obligation	**No. of Months/Yrs Required**	**No. of Months/Yrs Completed**

X. Reason for Non-Completion (must be supported by attachments)	**□ Resignation □ Transfer □ Retirement □ Others** *Explain further.*

I hereby attest that the information in this form and the supporting documents attached hereto are true and correct

Name and Signature of the Scholar	Date and Time

This is to certify that the information in this form and the supporting documents attached hereto are true and correct

Name and Signature of the Recommending Authority (SDO - HRDD)	Date and Time

APPROVED

Name and Signature of the Recommending Authority (RO-HRDD)	Date and Time

Republic of the Philippines

Department of Education

OFFICE OF THE ASSISTANT SECRETARY FOR EXTERNAL PARTNERSHIPS INTERNATIONAL AND GOVERNMENT COOPERATION

CO-EPS No._____, s. 2025 ICO-S-DM-0301-040825

MEMORANDUM

FOR : **WILFREDO E. CABRAL**
Undersecretary, Human Resource and Organizational Development

FROM : **GEORGINA ANN HERNANDEZ YANG**
Assistant Secretary

SUBJECT : **REQUEST FOR NOMINATION OF 50 TEACHERS TO PARTICIPATE IN THE TEACHERS' CONFERENCE AND EXCEL FEST 2025**

DATE : April 21, 2025

This has reference to the herein attached official letter from the Singapore Ministry of Education regarding the **Teachers' Conference and ExCEL Fest 2025 (TCEF 2025)** to be held virtually on June 03-05, 2025.

This year's theme is "Readying Our Students for the Future" with the aim to bring educators together to learn, to connect and to engage with thought leaders and practitioners, as we explore possibilities for the future of teaching and learning.

All international participants will receive a pre-registration link for the online conference experience. This will be used to set up their account credentials and complete their user profile on the TCEF2025 digital platforms, which comprise the online event portal and mobile app. Upon completion, participants will gain access to the TCEF2025 digital platforms, offering the following features: Live-stream access to conference highlights; registration and attendance for webinars; access to digital Poster Presentations (PP) and virtual ExCEL Fest (EF) Exhibition Booths; and Networking opportunities with fellow educators.

In this regard, the International Cooperation Office (ICO) would like to respectfully request your office to nominate fifty (50) teachers to attend the TCEF 2025 virtually. More information on the program may be found in the attachments.

This Office requests that the list of the nominated participants with their full names, designations, schools, and email be sent to ico@deped.gov.ph and copy to Ms.

Maribeth Chua at maribeth.chua002@deped.gov.ph on or before April 28, 2025, for transmittal to the Singapore Ministry of Education.

For questions and/or clarifications regarding the matter, Your Honor's staff may reach us through email at ico@deped.gov.ph, copy furnish Ms. Maribeth S. Chua at maribeth.chua002@deped.gov.ph. Thank you very much.

Attachments

Letter of Invitation
Programme Note

Ministry of Education
SINGAPORE

1 North Buona Vista Drive
Singapore 138675
Website : www.moe.gov.sg

TCEF2025
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4 April 2025

Dr Gina O Gonong
Undersecretary for Curriculum and Teaching
Department of Education
DepEd Complex, Meralco Avenue
Pasig City, Manila 1600
Philippines

Dear Dr Gonong,

Invitation to Singapore's Teachers' Conference and ExCEL Fest 2025

1. The Teachers' Conference and ExCEL Fest 2025 (TCEF2025), organised by the Singapore Ministry of Education, will be held from **3 to 5 June 2025** for teachers to come together and learn as a fraternity. The conference theme is, 'Readying Our Students for the Future'.

2. It is our pleasure to invite 50 educators from your country to participate in the TCEF2025 virtually. International participants can look forward to attending the keynote addresses, keynote seminars, and webinars online. Participants will also have digital access to asynchronous content such as poster presentations and exhibition booths that showcase innovative projects by our schools and ministry divisions.

3. The programme details are attached for your reference.

4. Please email Mr Tan Han Xiong (TAN_Han_Xiong@moe.gov.sg) and Ms Linette Lim (linette_lim@moe.gov.sg) the following information of the 50 representatives nominated by your ministry by 18 April 2025:

Full Name	Designation	School/Organisation	Email
Dr/Mdm/Miss/Mr/Mrs/Ms			

5. The nominated representatives will receive a unique link via the email address provided above to activate their conference account for access to the conference website **from 28 April 2025** onwards. They will need to sign up for their preferred sessions through the website prior to the conference. Further information will be provided to them thereafter.

6. I look forward to your support and wish the participants a fruitful time at the TCEF2025.

Thank you.

Yours sincerely,

Dr William Lim
Divisional Director, Planning
for Permanent Secretary (Education)

TCEF2025
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Programme Note
Teachers' Conference and EXCEL Fest (TCEF2025)
3 June – 5 June 2025

Theme for Conference:

Readying Our Students for the Future

Participants:

International Educators, School Leaders and Policymakers

Programme Synopsis:

The Teachers' Conference and ExCEL Fest 2025 (TCEF2025) is MOE's biennial signature event, aimed at supporting teachers' professional learning and strengthening their professional identity.

The conference will bring educators together to ignite innovative ideas through the sharing and learning as a community, empower Teacher Ownership, Teacher Leadership (TOTL) in professional learning, and facilitate the transformation of practices within the local educational landscape to enact positive impact.

Themed 'Readying Our Students for the Future', TCEF2025 is set to take place from 3 to 5 June 2025. This year, participants may take part in selected conference features and access all asynchronous learning content from 6 May 2025.

Programme Format:

All international participants will receive pre-registration for the online conference experience. Participants will receive an email containing a registration link to set up their account credentials and complete their user profile on the TCEF2025 digital platforms, which comprise the online event portal and mobile app.

Upon completion, participants will gain access to the TCEF2025 digital platforms, offering the following features:

- Live-stream access to conference highlights
- Registration and attendance for Webinars
- Access to digital Poster Presentations (PP) and virtual ExCEL Fest (EF) Exhibition Booths
- Networking opportunities with fellow educators

For a detailed breakdown of the programme schedule, please refer to Annex A. Key conference offerings are presented in the table below:

Date	Programme
3 June 2025	• Opening Segment • Keynote Address 1
4 June 2025	• Keynote Address 2 • Webinars (see Annex B)

5 June 2025	• Keynote Address 3 • Webinars (see Annex B) • Closing Address
From 6 May to 31 Dec 2025	• Digital Poster Presentations (see Annex C) • Virtual ExCEL Fest Exhibition Booths (see Annex D)

For queries or technical assistance, please contact the TCEF2025 Secretariat at: MOE_TCEF2025@moe.gov.sg.

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ANNEX A

Programme of TCEF2025 for International Participants

Time (GMT+8)	Item	Remarks
Day 1 (3 June 2025)		
0840	**TCEF2025 Opening Segment#** Arrival of Guest-of-Honour, Minister for Education Welcome Remarks by Director-General of Education Opening Address by Guest-of-Honour MOE Innovation Awards Ceremony	-
1030	Break	
1100	Keynote Address by Professor Manu Kapur, Director of the Singapore-ETH Centre#	Topic of Keynote Address: Productive Failure and the Future of Teaching and Learning
1200	Lunch Break	
1330	Participants may view PP or EF that are digitally available	The list of PP and EF are in Annex C & D respectively
1700	End of Day 1	
Day 2 (4 June 2025)		
0900	Keynote Address by Professor Rosemary Luckin, Professor of Learner Centred Design, UCL Knowledge Lab#	Topic of Keynote Address: Building Human Super Intelligence: Education in the Age of AI
1000	Break	
1030	Webinar	Participants may choose a webinar (see list in Annex B) to attend at this timing and engage in Q&A with the presenters.
1200	Lunch	
1330	Webinar	See Annex B
1500	Break	
1530	Webinar	See Annex B
1700	End of Day 2	

TCEF2025
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Time (GMT+8)	Item	Remarks
Day 3 (5 June 2025)		
0900	Keynote Address by Professor Tom Harrison, Deputy Pro-Vice-Chancellor (Education & Learning Innovation), Vice-Chancellor's Office Jubilee Centre for Character and Virtues#	Topic of Keynote Address: Character Education in the Digital Age; The Importance of Cultivating Digital Wisdom
1000	Break	
1030	Webinar	See Annex B
1200	Lunch	
1330	Webinar	See Annex B
1500	Break	
1530	Closing Address by DyDGE(PD)#	-
1600	End of Day 3	

#Sessions will be live-streamed through the conference website.

TCEF2025
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ANNEX B

TCEF2025 for International Participants – List of Webinars

S/N	Title	Description	Presented by
		Day 2, 1030-1200	
1	Bridging Boundaries: Inspiring Multi-disciplinary Collaboration for 21st Century Competencies	This webinar showcases a multi-disciplinary project inspired by the principles of Science, Technology, Engineering, the Arts, and Mathematics (STE(A)M) education. This pioneering initiative used English as the linchpin for integrating students' learning across Art, Mathematics, and Computer Applications. The project provided students with rigorous, real-world, and relevant learning experiences, while simultaneously fostering teacher collaboration and professional growth. The post-implementation survey revealed promising outcomes, demonstrating increased competence and confidence among students, along with a strong desire for more collaborative interdisciplinary projects. Through this project, students cultivate adaptive thinking by discerning similarities and differences across contexts and applying acquired knowledge and skills in unfamiliar situations. Additionally, students actively navigate disagreements within groups and strive towards project completion as a collective objective. They showcase collaboration and information management skills as they select, organise, and synthesise information from diverse sources, while verifying their reliability.	GUANGYANG SECONDARY SCHOOL
2	Enhancing Social-emotional Competencies to Improve Learning for Students	The webinar aims to introduce participants to the possibilities of developing and strengthening social-emotional competencies in students and their positive impact on brain development through an educational neuroscience lens. Intentionally providing opportunities for students to train different aspects of social-emotional competencies within classroom lessons greatly contributes to students' learning within and beyond the classroom. Teachers will discuss strategic interventions for the classroom and school community, enhancing educators' confidence in overcoming implementation challenges and gaining stakeholder buy-in. Dehaene's four pillars of learning — attention, active engagement, feedback, and consolidation — will be presented as a possible model that can be implemented within lessons. Participants will have the opportunity to co-create strategies to foster social-emotional learning in students, address their academic and developmental needs, and create individual plans applicable to their school contexts. This webinar aims to empower educators with practical tools to enhance students' holistic development.	PEICAI SECONDARY SCHOOL

S/N	Title	Description	Presented by
3	VISION-GY: Empowering the Visually Impaired with Technology and Advocacy	VISION-GY is an initiative by Guangyang Secondary School to empower students to improve the lives of Visually Impaired (VI) individuals. This initiative is a collaborative project between the school's Design and Technology unit of the Craft and Technology Department, and Special Educational Needs unit of the Student Management Committee. By providing students with technical training and hands-on experience in state-of-the-art assistive technologies, VISION-GY equips them with the skills to develop innovative solutions and advocate effectively for the VI community. VISION-GY emphasises a holistic approach, integrating advanced technology with proactive advocacy to create meaningful impact by fostering empathy and understanding. Through collaborative projects and real-world applications, participants learn to design tools and implement strategies that enhance accessibility and inclusivity, contributing to a more equitable society.	GUANGYANG SECONDARY SCHOOL
4	Harnessing Game-Based Learning to Enhance Mastery and Motivation in Learning Mathematics	Game-based learning is an innovative pedagogical approach that makes the learning of Mathematics engaging. By integrating effective manipulatives and interactive games, learners can build, reinforce, and connect various representations of mathematical ideas, fostering deeper comprehension. High-quality games are particularly effective because they offer students control and adaptability, aligning with cognitive and mathematical frameworks. This presentation explores the incorporation of game-based learning in students' six-year Mathematics learning journey since 2023. The study analyses data from various sources to identify areas of need. It then demonstrates how games were incorporated as recess activities and through the Student Learning Space (SLS) to enhance students' learning of Mathematics. Many of these games are unique to the school, designed to address specific areas of need. Feedback gathered from teachers and students highlights the effectiveness of the games, with game quests proving popular.	PUNGGOL COVE PRIMARY SCHOOL
5	Tune into Inclusion: Designing a Differentiated Songwriting Module for Effective Learning in Full SBB Context	This presentation introduces an innovative songwriting module for Secondary 2 students, designed to cater to diverse learning needs within a Full Subject-Based Banding (SBB) context. By incorporating Differentiated Instruction and digital tools, the module ensures engaging and personalised learning experiences for students, regardless of their musical background. Students create original songs, selecting songwriting topics, learning styles, instruments, and performance modes that align with their interests and readiness. This approach fosters self-expression, identity development, and confidence in a supportive classroom environment. The module aligns with key 21st Century Competencies such as Critical Thinking, Communication, and Civic Literacy. This session will showcase how the module's differentiated strategies and use of digital tools promote inclusivity, foster creativity, and equip students with essential skills to navigate future challenges	BEATTY SECONDARY SCHOOL

S/N	Title	Description	Presented by
6	Enhancing Learning Through Outdoor Education: A Path to Holistic Development	Integrating Outdoor Education (OE) into key student development experiences, such as learning journeys and SwimSafer, enriches student engagement and reinforces the learning outcomes outlined in the OE curriculum. This experiential approach encourages direct interaction with the environment, allowing students to develop critical thinking skills, gain hands-on experience, and cultivate a deeper appreciation for their surroundings while achieving level-specific OE objectives. By transforming these experiences into OE learning opportunities, the school fosters holistic development, environmental stewardship, and experiential learning. This approach enhances the relevance and meaning of education, equipping students to become informed, active, and responsible citizens of Singapore. Most importantly, to ensure authenticity in learning, schools can strategically map OE learning objectives to its key student development experiences, creating meaningful, real-world connections that enhance students' understanding and application of their knowledge.	ANDERSON PRIMARY SCHOOL
7	Making English Language Come Alive: Pathlight School's 3As Approach for Students on the Autism Spectrum	Are you seeking effective strategies to engage and empower students on the autism spectrum in their English language journey? This webinar will unveil Pathlight School's intentional approach, showcasing how Active, Applied, and Authentic (3As) learning experiences are incorporated into the STELLAR 2.0 curriculum to meet the unique needs of these learners. Discover how the integration of Universal Design for Learning (UDL), Differentiated Instruction (DI) and educational technology enhance the 3As learning experiences, creating a dynamic and inclusive environment that fosters communication, critical thinking, and social-emotional growth. Participants can also find out how Pathlight School's autism-friendly features enable students to access the national curriculum and develop the skills necessary for future success. Through concrete examples and practical strategies, this webinar will empower you to create impactful English language learning experiences that cater to the diverse strengths and challenges of students on the autism spectrum and promote their love for learning.	PATHLIGHT SCHOOL

S/N	Title	Description	Presented by
		Day 2, 1330-1500	
8	Utilising Peer and Self-Assessment to Enhance the Teaching of Upper Primary Chinese Language Composition Writing	Riverside Primary School demonstrates how peer and self-assessment in Primary 5 and 6 Chinese Language picture composition writing reinforces the Feeling, Action, Speech, Thoughts (F.A.S.T.) writing strategy. The study integrates EdTech tools such as Padlet, and the Interactive Thinking Tool and Poll from Student Learning Space (SLS) to facilitate lesson enactment. Students engaged in peer assessment using the Tell-Ask-Give (TAG) strategy (Tell me something you like, Ask a question, Give a suggestion) strategy and self-assessment via the F.A.S.T. Self-Evaluation Checklist. This approach enhances students' assessment literacy, fosters intrinsic motivation, and promotes critical thinking.	RIVERSIDE PROMARY SCHOOL
9	Collaborative Historical Investigations: Engaging History Learners Across Schools	This webinar presents a collaborative historical investigation project involving three secondary schools, aligning with Minister Chan Chun Sing 's vision of teachers as facilitators of discovery. The team employed an inquiry-based learning approach to explore key historical concepts, centred on Bedok's history. The project aims to develop Emerging 21st Century Competencies (E21CC), to foster passion for History, and to provide authentic learning experiences for students. Qualitative data indicates successful achievement of objectives, demonstrating a positive transformation of the educational experience for History learners across schools. The initiative also enhanced students' socio-emotional and relational skills through diverse group work.	ANGLICAN HIGH SCHOOL ST. ANTHONY CANOSSIAN SECONDARY SCHOOL DAMAI SECONDARY SCHOOL
10	Digitally-Enabled Differentiated Instruction in Inquiry-Based Science Classrooms	This workshop highlights the integration of ICT in Science classrooms to support differentiated instruction and inquiry-based learning. ICT enhances student learning by deepening their understanding of scientific concepts, fostering collaboration, and enabling authentic application. The team uses Student Learning Space (SLS) as a primary platform, promoting self-directed learning through flipped classrooms and differentiated activities based on pre-assessments. The integration of technology, aligned with the "4Es" (Equitable, Efficient, Effective, and Engaging), extends learning beyond the classroom. Survey results indicate increased student interest and motivation in learning of Science, with improved mastery of concepts.	MARIS STELLA HIGH SCHOOL (PRIMARY) GREENDALE PRIMARY SCHOOL

S/N	Title	Description	Presented by
		Day 2, 1530-1700	
11	The E21CC Inception: Ipsative Assessment in PE, Art, and Music	The webinar explores the assessment of Emerging 21st Century Competencies (E21CC) in Physical Education (PE), Art and Music, focusing on ipsative assessment and how students could be developed to be their own assessors and self-regulate learning in these subjects. Ipsative assessment takes place when learners' work is compared to their previous work, involving continuous reflection and drawing from various assessment information to achieve their personal best. It takes a longer-term approach to learning which enables students to become increasingly self-reliant. The presenters will discuss E21CC affordances and case studies of PE, Art and Music lessons where different assessment strategies are used. These are drawn from their classroom practices, where the development of E21CC and assessment practices are of natural fit to their subjects. They will also discuss tensions of beliefs held in the disciplines of which E21CC might be considered pervasive and contextual.	SINGAPORE TEACHERS ACADEMY FOR THE ARTS PHYSICAL EDUCATION AND SPORTS TEACHERS ACADEMY CURRICULUM POLICY OFFICE
12	Teaching Digital Reading Comprehension: Insights from PIRLS and Instructional Practices from the Classroom	The use of digital texts in schools has increased in recent decades. In addition to paper books, students acquire new information through digital texts found on the internet and through the use of digital technologies. Teaching reading in this digital world raises challenges and questions for teachers. Using evidence-based teaching principles for digital reading linked to PIRLS (Progress in International Reading Literacy Study) data, this session will give teachers context and didactics, on digital reading comprehension in the current media and technological landscape. Admiralty Primary School will present its instructional practices and students' learning experiences using digital texts developed by STELLAR (Strategies for English Language Learning and Reading, which is an instructional programme for English Language in Singapore primary schools developed by the Ministry of Education, Singapore). The use of such digital texts is introduced in schools at Primary 4. There will also be insights provided on the PIRLS framework andnational results for Singapore from PIRLS 2021, and a discussion on the second volume in the Research for Educators series "Supporting Reading Comprehension in a Digital World.	CURRICULUM PLANNING & DEVELOPMENT DIVISION 2 ADMIRALTY PRIMARY SCHOOL INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT

S/N	Title	Description	Presented by
13	Fostering Future-ready Learners in Humanities: Authentic Learning Through Partnerships	In this webinar, Humanities teachers from the School of Science and Technology (SST) will present Alternative Assessments (AA) co-designed with authentic stakeholders, namely, the Housing Development Board (HDB) and the Ministry of Culture, Community and Youth (MCCY) for Secondary Two Geography and Secondary Three Social Studies students respectively. The transformative collaborations, combined with SST's 3 DNAs (Applied Learning, Integrated Learning, and Innovation), shape future-ready learners. Integrating real-world challenges into the classroom enables students to engage in authentic problem-solving and facilitates deep learning. Additionally, to assess students' knowledge and skills in a manner that mirrors real-world applications and tasks, four conditions must be fulfilled. This webinar will highlight the AA from conception to evaluation, the partners' role in providing feedback and the student learning experiences that impacted their learning.	SCHOOL OF SCIENCE AND TECHONOLOGY, S'PORE
14	Going Gradeless!	While grades play a role in assessment, they are not the be-all and end-all of education. Overemphasis on academic grades can lead to student fixation or demoralisation. Join the webinar to explore the presenters' journey in adopting a gradeless approach, focusing on formative assessment and continuous feedback to encourage students' metacognition, foster deeper learning, and improve students' intrinsic motivation to learn.	TEMASEK JUNIOR COLLEGE
15	Engage and Excite: Exploring Mathematics beyond the Classroom!	'Exploring Mathematics beyond the Classroom' integrates play-based outdoor education into Mathematics, transforming school spaces into engaging quests that promote excitement and joy in learning. The Relevant, Appealing, and Personal (RAP) teaching guideline is adopted to foster positive emotional connections to learning. The Student Learning Space (SLS) gamifies these quests, enhancing student engagement and learning outcomes. The quests are strategically designed to reinforce Mathematics concepts, appropriately challenge students, and promote self-directed learning, igniting a passion for learning. Students enjoy autonomy in choosing differentiated quests, gaining confidence and advancing toward becoming self-directed, lifelong learners. They discover real-life applications of Mathematics in outdoor settings, making problem-solving fun and meaningful. Join this webinar to experience the excitement of completing quests and earning Experience Points. See how the RAP teaching guideline can transform traditional Mathematics learning into an engaging adventure, and explore how this approach can be applied to other subjects!	KUO CHUAN PRESBYTERIAN PRIMARY SCHOOL

S/N	Title	Description	Presented by
16	Unlocking 21CC in PE: Strategies to Engage and Empower	"How can Physical Education (PE) be made engaging and develop students' 21st Century Competencies (21CC)? 21CC is vital for preparing students to thrive in the rapidly changing 21stcentury (MOE, 2023). To address this challenge, Zhenghua Primary School's PE teachers developed strategies that integrate 21CC in PE lessons seamlessly, while achieving PE syllabus outcomes. These strategies focus primarily on the learning area of games and sports, leveraging affective learning opportunities (PESTA & STAR, 2016) and student-centred pedagogical approaches like Non-Linear Pedagogy (Chow, 2013). As a result, students become self-directed learners who are empowered in their learning, with opportunities for student voice and agency. Students' motivation and engagement are positively impacted, creating a positive classroom culture. Participants will gain practical tools and insights to transform PE lessons into dynamic platforms for developing students' 21CC, creating well-rounded, future-ready individuals. "	ZHENGHUA PRIMARY SCHOOL

		Day 3, 1030-1200	
17	Storytelling as Pedagogy: Building Knowledge Through Meaningful Narratives	This webinar explores the use of storytelling as a pedagogical tool to enhance the joy of learning in students. By integrating narratives into lessons, educators can transform abstract concepts into relatable and memorable experiences, fostering deeper students' understanding and retention. But that's not all! Storytelling taps into the innate human affinity for stories, making learning more enjoyable. It encourages active participation, critical thinking, and creativity, as students are more likely to connect with and internalise materials presented as engaging narratives. This approach to learning aligns with Farmer's (1990) assertion that storytelling introduces students to ideas in an enjoyable and wonder-inducing manner.	TEMASEK JUNIOR COLLEGE CATHOLIC JUNIOR COLLEGE TAMPINES MERIDIAN JUNIOR COLLEGE SKILLSFUTURE
18	Transforming Learning Spaces - Wonder in the Woods (Lower Primary Library)	This webinar presents how the school transformed an under-utilised exhibition space into "Wonder in the Woods", a dedicated library and learning space for lower primary students. This innovative use of space, inspired by the National Library Board's LAB25 initiative, fosters a love for reading and promotes independent learning, aligning with the school's vision of nurturing motivated learners. The presentation will share the journey of repurposing the space to create an interactive and inclusive learning environment catering to the unique needs of younger learners. It will explore the design principles and implementation strategies that have transformed an under-utilised space into a dynamic hub of exploration and educational growth, demonstrating how such transformation can positively impact students' holistic development.	GREENWOOD PRIMARY SCHOOL
		Day 3, 1330-1500	
19	Joy of Learning in Lower Primary Years (JOLLY): A Play-based Approach to Learning	The webinar explores the significance of play in the development of children aged 6-8. Play is crucial for cognitive, social, and emotional growth, fostering creativity, problem-solving skills, and social interaction (Whitebread et al., 2017). The presenters will share their journey in designing and planning play-based activities for P1 and P2 classrooms, highlighting practical strategies, as well as their successes and challenges. Attendees will gain insights into integrating play into the curriculum, ensuring a joyful and effective learning experience for young students. This webinar demonstrates how play-based approaches can transform lower primary education and support holistic child development.	VALOUR PRIMARY SCHOOL

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ANNEX C

TCEF2025 for International Participants – Poster Presentations (PP)

S/N	Title	Description	Presented by
1	Designing Growth: Forstering a Growth Mindset through Applied Subjects	Designing Growth: Fostering a Growth Mindset through Applied Subjects is an innovative project spearheaded by the Craft & Technology (C&T) Department at Guangyang Secondary School. This Professional Learning Circle (PLC) initiative brings together three crucial applied subjects—Art, Nutrition Food Science (NFS), and Design & Technology (D&T)—to enhance experiential learning. The project's primary goal is to cultivate a growth mindset within the Secondary 3 curriculum, emphasizing the joy of learning. Under the theme ""Enabled,"" we aim to nurture a mindset that welcomes challenges, learns from setbacks, and sees effort as essential for mastery. The project employs carefully designed activities in coursework to promote reflection. Teachers use meaningful questioning techniques to help students develop growth. By integrating these practices into Art, NFS, and D&T coursework, we strive to build a resilience and proactive approach to learning, ultimately fostering a more engaging and growth-oriented educational environment amongst our students.	GUANGYANG SECODNARY SCHOOL
2	Building Future-Ready ACSians: UPAR & Beyond	Metacognition, the ability to think about one's thinking, is a cornerstone of effective learning and is crucial for student success. Our Applied Learning Programme (ALP) empowers students to become confident, lifelong learners by cultivating this essential skill. Through Interdisciplinary Project Work (IPW)@ACS(J), curiosity is nurtured as students develop the capacity to ask probing questions, collaborate effectively, and reflect on their learning process. They also develop the skills to think critically, inventively and adaptively. By fostering a psychologically safe classroom environment, we encourage students to take risks, make mistakes, and learn from them. Research shows a strong link between psychological safety, student voice, and metacognitive engagement. Our ALP equips students with the tools and confidence to thrive in the future as they embark on learning joyfully through the schoolwide thinking protocol: Understand, Plan, Act and Review.	ANGLO-CHINESE SCHOOL (JUNIOR)

S/N	Title	Description	Presented by
3	Transforming Student Engagement with Digital Holographic Art in a Differentiated Classroom	This poster illustrates the effective use of learning stations in a differentiated art classroom to transform and engage students in their art-making and learning process. Educators will gain insights into lesson planning and implementing differentiated instruction tailored to students' readiness, interests, and learning profiles. Digital holographic art served as a captivating trigger, fostering adaptive and creative thinking. Each station addressed diverse needs, scaffolding content, process, and product to help students grasp concepts like digital manipulation of stills, Chroma key compositing with green screens, short animation GIFs, and holographic projection. The poster showcases how digital tools enhance engagement and understanding of art concepts and creation. Observations indicate increased student engagement and motivation, leading to unique and personal artworks. Educators will learn practical strategies for integrating these tools into their lessons, aligning with the Ministry of Education's 21st Century Competencies framework, promoting critical, adaptive, and inventive thinking, as well as communication and collaboration skills.	HUA YI SECONDARY SCHOOL
4	Exploring Art Tech in Learning Spaces: The Environment as the Third Teacher	Engagement is crucial for primary school children to sustain their attention. The allure of interacting with a novel and fascinating environment captures their attention longer and more effectively than standard learning environments. Building on the concept of "Environment as the third teacher", the Aesthetics Department in Punggol View Primary School transformed the physical learning environment for students, turning walls, floors, and ceilings into immersive displays through immersive projection technology. EdTech tools, such as interactive whiteboards, educational apps, and virtual reality simulations, are used to further enrich the learning experience. Students explore learning Art concepts in a multi-sensory and interactive manner. This enhances student engagement and learning outcomes. This approach not only enhances student engagement but also improves learning outcomes by making the educational experience more memorable and impactful. The combination of immersive projection technology and advanced EdTech tools fosters a learning environment where students are more motivated and actively involved in their educational journey.	PUNGGOL VIEW PRIMARY SCHOOL

S/N	Title	Description	Presented by
5	Enhancing Art Inquiry with Feedback and Patchwork Texts	In this presentation, we will share strategies for integrating feedback into art inquiry processes and assessing student progress through patchwork texts used in a primary six lesson unit. Feedback in art education is crucial for teachers to promote curiosity through facilitation of personal interpretations and connections between inspiring artworks and objects, students' lives and other areas of study. We will share inquiry teaching strategies in the form of feedback that encourages students to practice attention to detail, inference, and the ability to think for themselves as well as listen to others. Additionally, we will introduce the concept of patchwork texts - a reflective assessment tool where students compile and analyze their inquiry responses through the learning process. By combining these strategies, educators can create a dynamic and supportive learning environment that focuses on 21CC and student outcomes through the encouragement of personal meaning making and cultivating of critical thinking skills.	ENDEAVOUR PRIMARY SCHOOL
6	Integrating Critical, Adaptive, and Inventive Thinking in Lower Secondary Art Curriculum	In a mixed-ability lower secondary art lesson, students develop essential 21st-century skills such as critical, adaptive, and inventive thinking. By reimagining historical artworks to address contemporary teenage issues, students creatively integrate modern challenges into their work using the SCAMPER technique. With the freedom to choose their medium, they draw inspiration from master artists while engaging deeply with societal issues. This approach not only enhances their understanding of art history but also empowers them to create meaningful art that bridges the past and present.	ANDERSON SECONDARY SCHOOL

S/N	Title	Description	Presented by
7	Nurturing curiosity in Biology through outdoor exploration and nature journaling	This poster will focus on the integration of outdoor exploration and nature journaling into the biology curriculum to encourage deeper appreciation of the disciplinary ideas in the revised upper secondary biology syllabus. Teachers will be exposed to key features and benefits of outdoor-based learning and nature journaling, and how these strategies provide opportunities for students to engage in the practices of science while observing their everyday environments. The pilot run conducted showed that students demonstrated relational understanding between their outdoor experience and personal reflections on the context of managing invasive species in Singapore's forest. Findings also suggested that students were able to recognize biological concepts they had observed. Future extensions may include brainstorming and trying out STEM solutions to better manage invasive species. The poster author invites all environmental educators, especially those teaching biology, to explore ways to integrate these strategies into the biology curriculum for better student engagement and outcomes.	CHIJ ST. JOSEPH'S CONVENT
8	Differentiated Instructions to Engage Students in Learning of Chemistry Through Social Constructivist Approach	With the implementation of FSBB in Singapore, catering to the diverse needs of students in the classroom has become increasingly crucial. This poster explores the integration of Differentiated Instruction strategies within chemistry education at secondary school. Specifically, the focus is on facilitating students' understanding of covalent bonding by incorporating a Social Constructivist Approach. The instructional approach involves a phased sequence, starting with a teacher-led explanation of the concept. Students then engage in self-assessment to gauge their comprehension levels. Subsequently, they are presented with a curated playlist offering various learning resources, including instructional videos, practice questions of different difficulty levels, and one-on-one consultations with the teacher. Based on the students' performance in the initial task, the teacher dynamically adjusts the pathway for subsequent learning task, offering options of hands-on manipulatives or online simulations. This adaptive approach empowers students to select learning modalities aligned with their individual learning styles and preferences.	PASIR RIS CREST SECONDARY SCHOOL

S/N	Title	Description	Presented by
9	Empowering Personalised Learning and Metacognitive Development through Chatbot and Assessment as Learning (AaL)	Are you looking to leverage ChatGPT for self-directed student learning while ensuring the content is relevant and manageable? This poster presentation demonstrates how to create an AI-enabled Chatbot with curated content aligned with your teaching and learning objectives. The Chatbot supports personalised learning by providing students with relevant information, anticipating common questions, and administering quizzes to check understanding. Additionally, we will explore how Assessment as Learning (AaL) tools can evaluate students' comprehension of chemistry concepts and foster their metacognitive development through reflection. This innovative approach combines the use of a Chatbot and AaL to offer personalised support and promote deeper learning.	PEICAI SECONDARY SCHOOL
10	Engage, Empower, Excel: Using Multimodal Assessments to Build 21st Century Skills in IP Students	This e-poster explores the use of multimodal assessments in the form of videos, posters, social media posts, persuasive speeches and music as a form of alternative assessment in integrated programme (IP) coursework. By leveraging these diverse assessments, students develop 21st century competencies such as critical, adaptive and inventive thinking as well as communication and collaboration skills. This poster will explore how multimodal approaches together with well-crafted rubrics and reflections can engage students more effectively, provide practical skills for the future and enhance overall learning outcomes. The poster will explore how multimodal theories such as discourse analysis, use of semiotics (i.e. social semiotics) and symbols help educators to evaluate and assess multimodal texts. Other theories such multimedia learning will help educators look at how different modes are arranged and composed for effective communication. Finally some feedback from students and educators will be provided to show anecdotal evidence on the impact of this assessment on teaching and learning. The poster authors invite all language and literature teachers to join them in exploring how multimodal assessments can be implemented in the classroom.	ST. JOSEPH'S INSTITUTION

S/N	Title	Description	Presented by
11	Gamifying Language Learning: Integrating 21st Century Competencies and e-Pedagogy in Mother Tongue Education at the JC Level	This poster explores how a team of junior college mother tongue language teachers incorporated game elements to design an engaging language learning activity. The activity aimed to increase student engagement and motivation in learning their mother tongue languages. Teachers observed that the gamification aspects of the activity encouraged students to collaborate and complete the game. Survey results indicated that students found the gamified learning process meaningful and developed a heightened interest in their mother tongue languages. Additionally, the poster delves into how this gamified approach aligns with the Future of Learning, particularly focusing on the integration of emerging 21st-century competencies (21CC) and leveraging Edtech as a capacity multiplier. The authors aim to share the design, findings, and areas for improvement of the gamified language learning activity, providing valuable insights for mother tongue language educators considering gamification pedagogy as part of their teaching strategies.	JURONG PIONEER JUNIOR COLLEGE
12	Integrating AI and Gamification to Foster Self-Directed Learning and Enhance Student Engagement in Chinese Language Education	This study explores integrating AI and gamification to enhance self-directed learning and student engagement in Chinese language education. To address students' passive learning habits—where they do not proactively preview or review texts—the research employs AI-driven game-like methods to foster active learning. The approach includes using Gimkit for pre-class quizzes to boost interest and reinforce comprehension. AI-generated images and songs related to lesson content help deepen students' understanding. Students create visual aids and musical renditions of the material and produce engaging video reports on assigned readings using AI tools. The study aims to expand cognitive processes rather than replace critical thinking. Preliminary results show increased engagement and comprehension, with the approach successfully making learning more interactive and enjoyable.	NAN HUA HIGH SCHOOL

S/N	Title	Description	Presented by
13	Imagineer +: Cultivating E21CC through Design Thinking & Makers Technology	Imagineer+ @ GYSS represents an enhanced initiative within the Craft & Technology (C&T) Department's Design & Technology Unit (D&T). This project leverages cutting-edge technologies and modern prototyping methods—such as 3D printing, rapid prototyping, laser engraving, and coding—to foster innovation and creative problem-solving among students. Our goal is to inspire the next generation of design and engineering leaders by presenting D&T in a contemporary and engaging manner. By showcasing the subject's relevance through real-world industrial applications and career pathways, we aim to elevate its perception among stakeholders and make it more meaningful for students. Through this initiative, we seek to ignite creativity and problem-solving skills in both students and educators, ultimately driving forward innovation in our educational approach.	GUANGYANG SECONDARY SCHOOL
14	Producing Hybrid Texts on Sustainability through Experiential Learning, e-Pedagogy and Differentiated Instruction	This poster explores the integration of e-pedagogy, experiential learning, differentiated instruction, and assessment for learning in an English Language unit on Hybrid Texts from Voices at Play (Upper Secondary), focusing on Singapore as a sustainable city. These approaches aimed to deepen students' understanding of environmental issues and enhance their use of various semiotic modes for creative communication. E-pedagogy utilized digital platforms to expand knowledge and offer interactive experiences. Experiential learning included learning journeys and collaborative projects to address real-world sustainability challenges. Students expressed their learning through differentiated tasks like video presentations and feature articles, tailored to their interests and abilities. Preliminary results indicate that these strategies significantly improved students' comprehension of sustainability and encouraged critical and creative thinking. The poster invites EL teachers to adopt these methods to enrich student engagement with real-world issues and diverse forms of expression through different semiotic modes.	SWISS COTTAGE SECONDARY SCHOOL

S/N	Title	Description	Presented by
15	Appreciating Character through the Fish Bowl Technique	This poster showcases the Fish Bowl discussion technique to deepen the study of characterisation in Literature. The Fish Bowl technique is modified from the Circle of Viewpoints routine in the pedagogical approach of Making Thinking Visible. This technique encourages an exploration of the characters' different perspectives and motivations, while also helping to develop students' empathy and critical thinking skills. Students are tasked to answer an essential question collaboratively by role-playing as specific characters, and then by interacting with the other characters. When using this approach, some challenges may include ensuring students are comfortable with public speaking, translating what has been learnt into their written work, and tying back all the perspectives and points raised by the students to what has been covered in the text. This activity is most useful as a summariser for students to make connections within their texts, and to reinforce their learning of characterisation.	EVERGREEN SECONDARY SCHOOL
16	Using Talk Moves to promote active student learning in the English classroom	English Language (EL) teachers encounter challenges when attempting to facilitate group or class discussions, especially when students are reluctant participate in these discussions.Talk, comprising both teacher talk and student talk, in the classroom is essential for learning. Hence, teacher talk alone is not sufficient for learning. The important place of talk for learning has also been foregrounded in ELS 2020, where Inquiry through Dialogue is one of the three Peadgogical Emphases as well as part of the E21CC. Students need to talk to actively engage with the lesson, deepen their understanding of the subject content as well as develop their thinking skills. "Ways of talking shape ways of thinking, and ways of thinking are expressed in ways of talking" (Mercer & Dawes, 2018). For classroom interaction to be effective and optimal for learning, all students need to feel confident and comfortable to participate in classroom talk. However, there are students who are reluctant to talk in class and to interact with other students. "As with other human tools, they must learn through experience how to use language effectively – and they can be directly taught language skills" (Mercer & Dawes, 2018). Hence this presentation will discuss the following key question: Can the introduction of Talk moves support and encourage students to participate in classroom talk more readily and confidently? In addition, the place of TSR and a positive classroom culture, where there is mutual respect for one another, will also be discussed.	ADMIRALTY PRIMARY SCHOOL

S/N	Title	Description	Presented by
17	Leveraging e-Pedagogy to Enhance Productive Skills in the Secondary English Language (EL) Classroom	This poster will focus on how e-Pedagogy can transform the teaching and learning of productive skills—writing and speaking—in the secondary English Language (EL) classroom, while taking a more principled approach. Guided by the English Language Syllabus (ELS 2020) learning outcomes, CLLIPS principles, ACoLADE processes, the CLEARR pedagogical scaffold as well as and the Key Applications of Technology, this poster will highlight relevant design principles, strategies for using digital tools and as well as e-pedagogy considerations to enhance the the teaching and learning of productive skills in different areas of EL language learning, such as the revision of writing as well as in speaking and representing. Facilitators will discuss approaches to leverage e-Pedagogy to meet EL learning outcomes and elevate student engagement while nurturing empathetic communicators, discerning readers, and creative inquirers (ELS 2020) as well as promote student agency and support self-directed learning.	HUA YI SECONDARY SCHOOL
18	Metacognition in English Language Receptive and Productive Skills	This poster presentation focuses on the critical role of metacognition in enhancing reading & viewing and writing & representing skills in the English Language (EL) classroom. Through an inquiry-based approach, the East 1 Cluster (Secondary) and West Zone (Primary) Professional Learning Communities (PLC) examined the place of metacognition using specific learner strategies in promoting metacognition in EL reading and writing classrooms. This e-poster will feature the EL lessons implemented by the PLC members to teach learner strategies to promote metacognition among students in reading and writing skills at the secondary and primary level respectively. The members' learning and reflections on their key considerations in lesson design and enactment to raise students' metacognitive awareness in reading & viewing and writing & representing skills will also be highlighted in this poster presentation.	WEST GROVE PRIMARY SCHOOL PASIR RIS CREST SECONDARY SCHOOL

S/N	Title	Description	Presented by
19	Gamification through SLS in Art and Music Lessons	In the digital age, technology has become a fundamental part of daily life, greatly impacting education. Gaming, once purely for entertainment, is now a key tool for enhancing engagement and motivation. Gamification, the application of gaming principles to learning, has gained popularity for maintaining student interest and making education enjoyable. This poster explores how music and art teachers at Rosyth School use SLS's gamification features to enhance Self-Directed Learning, Scaffolding, and Motivation. This method incorporates motivational theories like Self-Determination Theory and Intrinsic Motivation Theory to engage students through a series of tasks.	ROSYTH SCHOOL
20	Self-regulated learning with Large Language Models (LLMs) - my essay writing buddy	Recommended for teachers who have to teach writing in their subject disciplines. Using LLMs such as ChatGPT as a learning buddy to let students embark on self-regulated learning and metacognition. LLMs function as a 2-way learning buddy that is enabled by the immediate serve and return interaction with the server for students to model, co-construct, ask questions, gather explicit feedback, anytime, anywhere. Through this process, students can monitor their progress, evaluate their successes, change their writing strategy, all whist engaging their metacognition. This presentation will demonstrate use of LLMs in two ways: 1. increasing sensitivity to success criteria in Geography, 2. coaching and feedback in Social Studies and English Essay Writing. The poster authors invite all teachers who are keen to find out more about the use of LLM to engage students in learning, especially those who have to teach students to write in their subject discipling, to join them in exploring what other topics lend themselves well to such strategies. Readers will gain insights to how LLMs has been used creatively to support students' learning in a Secondary School context.	TEMASEK SECONDARY SCHOOL

S/N	Title	Description	Presented by
21	Enabling Students to be Metacognitive Learners in English Language and Literature Classrooms	Metacognition, one of three key pedagogical emphases in the English Language Syllabus 2020 (ELS 2020), is closely associated with students' ability for self-regulation and deep learning (Tay et al, 2020). In addition, "teaching approaches that place emphasis on students' metacognitive and self-regulated learning are credited as the most effective approaches for enhancing pedagogical practices" (Hattie, 2008, in Tay et al, 2020, p. 5). In this presentation, English Language (EL) Teacher Leaders (TLs) in the North Zone Professional Learning Community reflect on how they have applied their learning about metacognition to enable students to monitor, plan, and evaluate their own learning. Through an inquiry of their lesson enactment, the TLs will make visible the considerations that undergird their pedagogical decisions and facilitate a discussion on learner strategies and instructional approaches that enable students to be metacognitive learners. [136 words]	ENGLISH LANGUAGE INSTITUTE OF SINGAPORE EDGEFIELD PRIMARY SCHOOL XINMIN SECONDARY SCHOOL

S/N	Title	Description	Presented by
22	Budding Environmental Scientists: Interdisciplinary fieldwork at the coast.	This poster delves into the effective use of interdisciplinary pedagogies to cultivate differentiation and metacognition among students studying coastal environments. Teachers will be exposed to how the incorporation of Tomlinson's Parallel Curriculum Model and the Pedagogical Scaffold can expand existing inquiry-based approaches to achieve an interdisciplinary understanding of the coast as a dynamic environment. Early experience reveals that the project has had a profound impact on student learning and outcomes. Students' comprehension of the various processes and interactions between nature and humans in a coastal environment has widened and deepened, while also gaining a greater appreciation of and care for the environment and other essential 21st century competencies such as resilience, that are vital for their holistic development. The poster also highlights some of the challenges and limitations encountered, providing valuable insights for educators seeking to implement similar pedagogical approaches. Hence, the poster authors invite all teachers, especially those interested in interdisciplinary studies, to join them in exploring what other topics lend themselves well to these strategies.	HWA CHONG INSTITUTION
23	Nellie Mitchell Talent Development Programme (History) - Open Inquiry	This poster will focus on the approach towards guiding students to conduct an open inquiry on a historical topic of their choice. This is done through a specially curated programme for secondary two students who show a strong aptitude and keen interest in history. Teachers will be exposed to how Seixas's guideposts for the historical concepts of significance, evidence and causation, may be applied in the development of historical thinking and interpretaion of historical sources. In addition, the poster will also show how the programme adopts Dylan William's strategy of activating students as owners of their own learning, to compliment the progress of conducting open inquiry. The leveraging of partnerships with other stakeholders in the historical education field will also be shared, and how their roles help to strengthen historical thinking in authentic contexts such as public history. Early experience shows that with the right guidance and historical grounding, students can conduct open inquiry on novel historical issues of their choice. The poster authors invite all history teachers to join them in exploring the possibilities of conducting open inquiry through a structured and sustained programme.	ST. HILDA'S SECONDARY SCHOOL

S/N	Title	Description	Presented by
24	Assessment Feedback Revolution: Transforming Math Understandings Through Empowered Feedback	This poster will focus on the use of feedback reflection in a Mathematics classroom, specifically after formative assessments. Teachers will be exposed to pedagogy or approaches such as Kelvin Tan's 4 boxes of feedback, Hattie and Timperley's feedback structure on "feed-up, feed-back and feed-forward" as well as Lipnevich's RIF tool in capturing of student's voice. Formative assessments, when coupled with effective feedback, optimises student learning. Timely, specific, constructive, clear, and relevant feedback empowers students to grasp their progress, address any knowledge gaps they may have, and build upon their existing strengths. By incorporating opportunities for self-reflection and employing a variety of feedback strategies and empowerment of voice, teachers can further co-create an environment where students actively participate in their learning journey, thereby making progress together.	NORTH VIEW PRIMARY SCHOOL
25	Purposeful Play Pedagogy in Mathematics	Playful learning has long been recognized as a powerful tool for children's cognitive, social, emotional, and physical development. However, in the Singapore school context, teachers often struggle to balance the need to complete the syllabus with the desire to provide engaging and age-appropriate learning experiences. To address this challenge, our school has adopted a 3 C approach to playful learning: Content, Curiosity, and Collaboration. By focusing on the learning intention and purpose behind activities, setting a playful context to capture students' attention and motivation, and encouraging collaboration through play and group work, we aim to create a supportive learning environment where students can thrive. Our approach is informed by the latest research on playful learning and is designed to help staff come to a shared vision of what learning through play means. We believe that by integrating playful learning into the curriculum, we can help students develop important social and cognitive skills, while also making learning more fun and engaging. So, let's play and learn together to achieve the joy of learning and teaching in your own classroom!	NORTH VIEW PRIMARY SCHOOL

S/N	Title	Description	Presented by
26	Maths Around the World: A Global VR Adventure	Embark on a thrilling Virtual Reality journey with "Maths Around the World," where Mathematics comes to life across diverse cultures. Start your adventure in Japan, mastering Sudoku and uncovering strategic number placement amidst Tokyo's bustling streets. Travel to South Korea to explore currency exchange dynamics in Seoul's vibrant marketplace and delve into the Math behind International economics. Head to Thailand to tackle percentage-based challenges in Bangkok, applying mathematical concepts to real-world scenarios like discounts and profits. Conclude your exploration in Europe, where you'll discover the geometric marvels of Paris's Eiffel Tower and other iconic structures. This immersive VR experience not only highlights the universal importance of Mathematics but also reveals its fascinating applications across the globe.	YUYING SECONDARY SCHOOL
27	Levelling Up Engagement with Gathertown: A Gamified Teaching Experience	This proposal utilizes gamification and self determination theory to enhance engagement in music education through Gather.Town. Gamification, incorporating game elements like points and challenges, transforms learning into an engaging experience, motivating students intrinsically. Gather.Town's features, such as customizable avatars and interactive objects, create an immersive virtual environment that supports collaborative learning. Participants will learn practical strategies to design activities where students explore musical concepts and participate in virtual performances. Constructivist learning theory emphasizes hands-on, active learning; in a gamified Gather.Town environment, students build their understanding through exploration and interaction, making knowledge acquisition more effective. This approach aims to create a dynamic, interactive music learning experience that boosts engagement and fosters critical thinking, creativity, and collaboration skills.	TEMASEK SECONDARY SCHOOL

S/N	Title	Description	Presented by
28	Use of AI to encourage aliveness during creative play in Music and Drama	This poster will share the use of generative Artificial Intelligence (AI) as an assistive learning tool to awaken one's boldness in creative play in Music and Drama, giving a spirit of "play" in the classroom. Students will be guided to navigate the respective AI tools to aid their learning in process of music-making and playwriting with AI - a seemingly "lifeless" tool - to bring about "aliveness" in creative play through the confidence it potentially gives the students. The end objective of integrating Ai into the students' creative journey is to instill a sense of critical appreciation to the complexity of the process of playwriting and music making in them. "When a person has playful experiences, areas of the brain are activated, and chemicals are released, that are related to focused attention, memory, and movement from effortful to automatic learning" (Liu et al., 2017) This highlights a fascinating interplay between playfulness and brain function, which is crucial in understanding how music-making and playwriting with the aid of AI can be a deeply enlivening experience. The poster authors invite all performing arts teachers, especially those teaching music and drama, to join them in exploring what other topics that reflect in creative play.	CHIJ SECONDARY (TOA PAYOH)
29	Enhancing Physical Education with Technology for Assessment for Learning	This poster showcases the innovative integration of technology in Physical Education (PE) lessons in Springfield Secondary School to facilitate Assessment for Learning (AfL). The poster highlights how the use of technology, such as interactive tools, enhances the assessment process in PE classes. The poster will share the benefits of real-time feedback, personalised goal setting, and data-driven insights observed for both students and educators.	SPRINGFIELD SECONDARY SCHOOL

S/N	Title	Description	Presented by
30	Designing a 'Heritage Groove' Music Video - A Collaborative Learning Experience to Understand Self	This poster will focus on the design considerations of a project-based Secondary 1 Physical Education (PE) learning task, which is part of the interdisciplinary project work curriculum in Woodlands Ring Secondary School (WRSS). The design is guided by the unique 3C (Connect, Collaborate, Create) Curriculum at WRSS, where interdisciplinarity is a key feature to enable students to connect their learning across different subjects, anchored on character development. The theme for 3C in Secondary 1 is Knowing Self. As part of the 3C Curriculum, this project-based learning task seeks to integrate key skills in PE with Aesthetics and 21st century competencies. It is enacted through the course of 10 lessons, where students are guided in collaborative research of cultural dance heritage and planning, before embarking on creative dance choreography to develop competence in rhythmic movement. The student artefacts affirm the effort to orchestrate opportunities to allow self-discovery in an interdisciplinary setting and empowerment to co-create new knowledge. The poster authors invite all PE, Music and CCE specialised teachers to join them in exploring the potential of such lesson designs for other curriculum modules.	WOODLANDS RING SECONDARY SCHOOL
31	E21CC in PE: Riverside Secondary's journey	This poster will focus on the infusion of E21CC in PE lessons through a period of 6 months. Teachers follow the narrative of layering E21CC outcomes in PE lessons. The narrative will begin with goal setting and co-creating class norms. Students learn to play ultimate frisbee and basketball with focus on collaboration and communicating well. Tools such as sociogram, heat maps are used to build social cohesion within the class. Students exhibited signs of disunity in the beginning of the year when the class co-created class norms. After a period of stabilising routines many students in the class are comfortable playing sport and learning with anyone. The poster will share some insights on methods to achieve both outcomes from the E21CC framework and the PE syllabus. The poster authors invite all PE teachers, especially those keen to explore how to layer E21CC outcomes in their lessons to join them.	RIVERSIDE SECONDARY SCHOOL

S/N	Title	Description	Presented by
32	EdTech in Motion: Fostering Student Fitness and Motivation through Technology	This project is designed to increase student motivation towards fitness and facilitate collaborative learning by leveraging the principles of Self-Determination Theory (SDT) (Ryan & Deci, 2000) and the Key Applications of Technology (KAT) framework (MOE ETD, 2024). Aligned with the outcome of EdTech Masterplan 2030, the project empowers students to become self-directed learners, set goals and manage their learning independently, while also being collaborative and connected, using digital platforms to co-construct and share knowledge with others. The project aims to demonstrate how Edtech platforms such as Padlet, can foster student ownership and engagement by enabling them to share and reflect on their fitness experiences. It also supports peer feedback, enhances communication skills and builds a supportive community. Additionally, tools like the Student Learning Space (SLS) and Fitness apps help track progress, promote self-monitoring and encourage thinking through continuous reflection.	KUO CHUAN PRESBYTERIAN SECONDARY SCHOOL
33	Cognitive Moves: Leveraging Questioning and Peer Assessment in PE to developing Metacognition	The poster will focus on the use of effective questioning and peer assessments in PE lessons to develop students as critical, adaptive, and inventive thinkers. Territorial and Invasion games provide the perfect platform for students to think critically when deciding their next move and adapt to the ever-changing game circumstances. PE Teachers will learn how questioning techniques and peer assessment strategies can help students become more metacognitive when enjoying territorial and invasion games. Learn about a range of metacognitive strategies that are applicable across subjects such as probing questioning and conscious choosing that grow students to be adaptive and critical when making decisions. Participants will leave with practical, immediately applicable methods to transform their PE lessons into powerful platforms for cognitive growth. The poster team invites PE teachers to join them in exploring how the fraternity can develop the cognitive competencies of our students that could lead to better performance.	EDGEFIELD PRIMARY SCHOOL

S/N	Title	Description	Presented by
34	From Joules to Jewels: Gamifying Your Way to Energy Mastery	This poster will showcase how gamification, coupled with collaborative hands-on activities and blended learning, increases student engagement and improve student learning of the Energy topic. Teachers will explore how to conduct a series of blended learning lessons which will include online tools for AfL, hands-on activities to deepen conceptual understanding and gamification activity for students to master the concepts on Energy. Inspired by Tomlinson's Differentiated Instruction principles and teaching strategies, teachers will learn how to implement a game-based learning activity to engage students of different readiness. SOLO taxonomy guided the design, ensuring activities are catered for students to progressively master the concepts on Energy. Survey and performance results show improvement in student understanding of energy topics alongside increased classroom participation and enjoyment. This blended learning approach offers a promising strategy for differentiated instruction regardless of the subject taught, fostering a more captivating and effective learning environment for all students.	ST. HILDA'S SECONDARY SCHOOL
35	Leading Educators in Assessment Literacy	This poster outlines our initiatives to enhance assessment literacy within our educators' professional development programme. Grounded in Wiliam's (1998) assessment framework, the programme guides educators through understanding where the learner is going, where the learner is now, and how to reach the learning goals. The core assessment team led comprehensive PD sessions, followed by multiple cycles of deep learning, deliberate practice, and effective sharing during PLC sessions. Topics covered included clarifying learning intentions and success criteria, formative assessment strategies enactment in class, providing effective feedback and feeding forward. Educators documented their reflections in a digital learning log, and periodic surveys captured their successes and challenges. This approach has fostered an assessment culture centered on generative conversations, significantly enhancing educators' learning and classroom implementation.	HORIZON PRIMARY SCHOOL

S/N	Title	Description	Presented by
36	Engaging and Empowering Learners through Project Work to Create, Collaborate and Communicate	At Greenwood Primary, students participate in a two-week Project Work programme grounded in Design Thinking principles. Lower primary students focus on developing empathy and brainstorming skills, while primary 3-5 students work collaboratively to create prototypes. This hands-on learning approach involves applying knowledge from various subjects, conducting interviews, and research to develop innovative solutions. The curriculum incorporates pedagogical practices such as guiding questions and self-assessment rubrics to facilitate learning and reflection, empowering students to actively engage in their own development. Teachers use streamlined rubrics aligned with developmental milestones and selected E21CC learning goals to holistically assess students' learning dispositions. Each level explores different themes in collaboration with various partners such as the NLB Contemporary Collecting, Senior Care Centres, and Preschools in the neighbourhood. Projects are showcased at Celebrating OWLETS, providing students with an opportunity to present their work to the school and valued partners. The poster authors invite all educators to leverage partnerships and design thinking to create authentic learning experiences that develop E21CCs in our students.	GREENWOOD PRIMARY SCHOOL
37	Can Inquiry-Based Learning in Science be Enhanced with the Station-Rotation Model?	Inquiry-based learning in Science through scientific investigation requires time investment and therefore should be a meaningful venture. The separation technique of paper chromatography affords opportunities to broaden and deepen students' understanding, and hence lends itself well to inquiry-based learning. Station rotation, a blended learning model where students rotate between different learning stations during a lesson (Caitlin Tucker, 2019), was adopted to further enhance the learning experience. This model facilitates differentiated instruction, allowing the scientific investigation to be pitched appropriately, and increases student engagement through small-group instruction. Beyond facilitating collaborative learning, analysis showed improvement in attainment of learning outcomes. However, adapting the station rotation model to the Singapore context is not without its challenges and limitations. This presentation will share the development of the design of this learning experience across 2 years, and the insights gleaned along the way.	RAFFLES GIRLS' SCHOOL (SECONDARY)

S/N	Title	Description	Presented by
38	Sparking 21st Century Skills: Primary 5 Electric Circuit Prototypes	"Sparking 21st Century Skills: Primary 5 Electric Circuit Prototypes" is a collaborative project-based learning activity resulting from the effort of primary 5 science teachers. Students will construct prototype models of electric circuits, fostering adaptive thinking as they troubleshoot and innovate. The project emphasizes collaborative learning, with students working in teams to design and build their prototypes, developing essential teamwork and communication skills. In addition to traditional electric circuit prototypes, students have the opportunity to choose the scenario they want to work on, such as creating useful prototypes like greeting cards and models that incorporate microbit with sensors, fostering inventive thinking and expanding their understanding of real-world uses for their knowledge. Scenarios are given to students to encourage critical thinking as they analyze the functionality of their prototypes and make necessary adjustments. Furthermore, students are required to critique their peers' work and use feedback to improve their prototypes, enhancing their collaborative and critical thinking skills, and increasing ownership in their own design.	TELOK KURAU PRIMARY SCHOOL
39	Out-of-classroom Experiences in STEM Education	This poster will espouse the integration of out-of-classroom experiences into STEM curriculums, which can be leveraged through synergistic partnerships between schools and industry experts. Sustainability, which is becoming an increasingly urgent topic within climate-vulnerable Singapore, lends itself as a powerful context for the development of critical, adaptive and inventive thinking desired in transdisciplinary learners. STEM curriculums, which have demonstrated success in the maturation of 21st century competencies, should therefore provide opportunities for students to explore, appreciate, and innovate potential climate solutions (Wahano et al., 2020). Through this poster, teachers can reflect and ideate about how positive partnerships can add value to student outcomes. The poster exemplifies how a learning experience was enacted through a partnership with The S.E.A. Aquarium to emphasize transdisciplinary considerations behind sustainability while providing students with an authentic platform to explore industry practices. Overall, the students report meaningful engagement and greater sensitivity towards the applicability of STEM.	ZHENGHUA SECONDARY SCHOOL

S/N	Title	Description	Presented by
40	Cultivating 21st Century Competencies through a Tiered STEM Curriculum in Woodlands Secondary School	This poster presents the impact of tiered STEM learning opportunities on student outcomes in Woodlands Secondary School. A three-tier approach was adopted to foster students' emerging 21st-century competencies in STEM education. Tier 1 programmes are catered to the entire student population, ensuring broad-based exposure to STEM principles. Tier 2+ programmes include a school-based STEM curriculum designed to engage students in projects that aim to develop critical thinking, inventive problem-solving and collaboration skills through engineering design processes. Tier 3+ programmes offer opportunities for high-achieving students to participate in external competitions and research to further develop their STEM dispositions. Student learning outcomes were measured through surveys which indicated improvements particularly in motivation and critical thinking skills. This underscores the importance of a whole-school integrated STEM programme in enhancing student engagement and preparing them for future challenges by catering to diverse student needs through a structured, tiered approach.	WOODLANDS SECONDARY SCHOOL
41	Envisioning Green: Student Design Thinking For a Sustainable Future	This poster presentation will focus on the use of design thinking in Applied Learning Programme (ALP) to educate students on sustainability focusing on resources management through the 3Rs and renewable energy. Design thinking is a strategy to engage students in hands-on investigation and projects as students learn to understand the needs of stakeholders through context-based scenarios, brainstorm solutions and design products that repurpose recyclables in inventive ways, highlighting the importance of resource management and environmental responsibility. From the poster, participants will have the opportunity to learn how to apply design thinking to guide students in sustainable-themed topics grounded in experiential learning activities and advance efforts in the development of emerging 21st- century competencies such as critical and inventive thinking as well as communication and collaboration skills in the students.	NGEE ANN PRIMARY SCHOOL

S/N	Title	Description	Presented by
42	Enhancing Inclusivity : SENsible Stories for All	This poster will focus on how Social Stories as an evidence-based approach is critical for students who may have additional needs and lack the awareness and understanding of social norms. Teachers will gain insights on how this approach may be implemented at an individual level to assist students in managing their behaviour as well as be extended to support the wider student population to enhance their self-management, social awareness and relationships skills. This presentation will also focus on how the integration of the principles of Universal Design for Learning (UDL), with Social Stories can facilitate a more extensive level of support for all students to foster an inclusive environment. The poster authors invite Student Development Team members, Teachers Trained in Special Needs (TSN), Special Education Officers (SENO) and MK Educators to join them in exploring how Social Stories can improve student behaviour.	NORTH VIEW PRIMARY SCHOOL
43	Shop for Family Programme	CYS Shop for Family Programme is an engaging and interactive program designed to teach students about essential budgeting and money management skills. Through a hands-on shopping experience in the community, students will learn the value of money, how to make informed spending decisions, and develop practical life skills in a supportive and inclusive environment.	APSN CHAOYANG SCHOOL
44	Empowering student ownership of well-being and developing social-emotional competencies through a 'holistic development portal'	This poster introduces our school's development and enhancement of a school-developed student portal, 'Edgefield Digital Planner', where participants will learn how it has empowered students to: • understand their emotions and mindsets better, through weekly reflection questions and wellbeing logs that include mood, sleep, exercise, and screen time indicators. • self-regulate their thoughts and behaviours, through monitoring of their own wellbeing data and the use of 'wellness widgets' to achieve personal wellbeing. • develop affective study skills and growth mindset through the use of 'study companion widgets'. • develop empathy and positive relationships, through the use of 'reaching out' widgets that foster peer affirmation and gratitude. The poster authors invite all participants to join them in exploring how we can better support students in developing their social-emotional competencies, thereby enabling them to take great ownership of their well-being.	EDGEFIELD SECONDARY SCHOOL

S/N	Title	Description	Presented by
45	Oracy Mats Unveiled: Elevating Speaking Skills in the Classroom	This poster session explores the role of oracy mats as a scaffold to support the development of oracy skills among students of varying abilities. The session will highlight the versatility of oracy mats in guiding students to articulate their thoughts with clarity and confidence. By scaffolding communication tasks into manageable steps and through questioning techniques, oracy mats empower students to become confident speakers and active contributors. The poster will feature sample oracy mats, strategies for customization, use of digital tool and feedback from educators who have incorporated them into their lessons. As highlighted in Jerome Bruner's concept of scaffolding, it involves providing students with support to help them achieve tasks they cannot yet perform independently. Bruner also believed that questioning could act as a scaffold by guiding students' thinking and helping them articulate their thoughts more clearly.	INNOVA PRIMARY SCHOOL

ANNEX D

TCEF2025 for International Participants – EXCEL Fest Booths

S/N	Title	Description	Presented by
1	Integrating Digital Competencies and AI Literacy development into the Total Curriculum	Learn about how schools seamlessly integrate digital competencies and Artificial Intelligence (AI) literacy development into the curriculum, co-curriculum and other school distinctive programmes such as enrichment programmes, Applied Learning Programmes and Learning for Life Programmes. Find out how these approaches also equip students with 21st Century Competencies. Through engaging with our interactive teaching and learning resources and hearing from educators, discover how you can prepare and empower students to thrive in a technology-saturated world.	EDUCATIONAL TECHNOLOGY DIVISION
2	ETD's SgLDC and ELC Education Reimagined: Igniting Innovation in Tech-Enabled Teaching and Learning	Step into a hub of creativity and innovation at the virtual booth, where visitors can explore a dynamic showcase of curated presentations and watch educators demonstrate how technology enhances student engagement, deepens learning, and fosters collaboration. From Artificial Intelligence (AI)-powered digital tools to lesson designs grounded in e-Pedagogy, these presentations highlight practical strategies that can be adapted for different classroom contexts. Discover new ideas on how technology can be a powerful ally in enhancing students' learning experiences and make learning more impactful.	EDUCATIONAL TECHNOLOGY DIVISION
3	Harnessing Technology using the Rotation Model in the Mainstream Classroom	The use of a Rotation Model, combined with personal learning devices (PLDs) in classrooms, gives teachers the freedom to customise learning experiences for their students. This project explored how teachers can integrate e-Pedagogy, differentiation and collaborative tasks using two different Rotation Models. The first approach combines a Flipped Classroom Model and Individual Rotation Model as part of a Blended Learning experience to address the challenge of students being at different starting points for synchronous lessons. The second approach features a Station Rotation Model with an online station as part of a synchronous lesson. With PLDs now becoming the new normal in classrooms, this project demonstrates for teachers two useful methods of incorporating a Rotation Model to create a Seamless Blended Learning experience that best caters to the needs of their students.	ST ANDREW'S SECONDARY SCHOOL

S/N	Title	Description	Presented by
4	Improve Chemistry Test Paper Setting Efficiency with Chemistry Question Setting Toolkit	Setting Chemistry papers is a tedious process, and some of the key issues faced are: (1) redrawing diagrams, (2) tedious formatting of text and chemical symbols, and (3) plotting graphs and resizing them for test papers/mark schemes. The Chemistry Question Setting Toolkit consists of a package of three tools – Collator's Tool, Chemistry Building Blocks and AutoGraph. The tools were created to tackle the three issues aforementioned, to make the process of setting papers smoother. Both the Collator's Tool and Chemistry Building Blocks are templates that can be added onto Microsoft Word, and AutoGraph can be added onto Microsoft Excel. The three tools have become an indispensable add-on to the whole department, reducing the hassle of formatting test papers. This not only frees up time for teachers but also allows more time and space for thinking about better questions.	RAFFLES INSTITUTION
5	PLD Orchestras: Harnessing PLDs to shape the future of classroom music-making	Personal Learning Device (PLD) Orchestras is a common curriculum lower secondary music programme that wields two innovations to bring the orchestral experience to the Full Subject-Based Banding (FSBB) classroom. First, it utilises a new way of writing orchestral scores, using PLDs as instruments, allowing teachers to write scores that can be easily read by students, even those without formal music background. Second, by re-envisioning how Digital Audio Workstations (DAWs) are typically used, teachers can harness PLDs as individual instruments, allowing students, even those physically impaired, to easily learn how to make music together as an orchestra. Wielding these two innovations together, teachers can create an inclusive environment where all students experience something they would otherwise rarely have experienced - playing together in an orchestra. Being part of something far greater than the sum of its parts gives students a greater sense of togetherness and confidence in and with others, values embodied in the FSBB approach.	EVERGREEN SECONDARY SCHOOL

S/N	Title	Description	Presented by
6	Virtual Art Gallery	The virtual art gallery provides students with opportunities to perceive their world, communicate with relevant vocabulary, and display their artworks on a school-wide and cluster level. The value proposition of this project lies in its innovative use of a virtual art gallery to teach art principles and concepts remotely in a practical, immersive, and interactive manner. This innovation allows for peer evaluation, self-reflection, and recognition of students' hard work, thus building their confidence and self-esteem. The virtual gallery also provides a platform for students to display their artworks on a larger scale, creating a sense of community and shared achievement. The project provides a unique and innovative approach which fosters a sense of community among students, leading to an enhanced learning experience and a lifelong appreciation of the arts.	MONTFORT SECONDARY SCHOOL
7	Use of Integrated Digital Sensor to Infuse Practices of Science and Digital Literacy via Inquiry-based Practical Lessons	To enhance Millennia Institute (MI) students' future-readiness and promote deeper learning, the team designed a series of innovative Biology inquiry-based learning (IBL) practical lessons that involved the novel use of integrated digital sensors. The innovation strengthened MI Biology students' Practices of Science and digital literacy. The team specially designed a series of IBL practical tasks of increasing complexity – from structured, to guided, then open inquiry. Socratic questioning and learning activities framed by design thinking principles were incorporated to support students in eventually formulating their own hypotheses and experimental designs. The integrated digital sensors allowed students to collect simultaneous data in real time. Through the innovative design of IBL practical lessons supported by the novel use of integrated digital sensors, the students demonstrated scientific thinking and inquiry skills, developed digital literacy skills, and better understood how science concepts are applied in real-world contexts – beyond what typical practical lessons could achieve.	MILLENIA INSTITUTE

S/N	Title	Description	Presented by
8	Graph Grid Generator	Creating graph grids of decent quality for assessment purposes is a struggle. In worse case scenarios, grids were created on Microsoft Word using hundreds of vertical and horizontal line tools that may shift. Despite the presence of online graphing tools like Desmos and GeoGebra, creating a user-friendly generator is also challenging, requiring users to have good technological knowledge of the tool, to screenshot with minimal pixelation loss, correct centimetre-to-unit dimensions and more. A custom web application was created to generate graph grids that are as close to national exam format as possible and can be easily exported as an image file to insert into Microsoft Word. The web app is deployed and shared in Singapore Learning Designers Circle (SgLDC) for the benefit of all teachers since April 2023, saving time and energy nationwide.	MAYFLOWER SECONDARY SCHOOL
9	Making Shakespeare Accessible	The plays of William Shakespeare are considered to be central to the literary canon, with academics arguing that all students in Singapore should study a Shakespearean text to deepen their cultural literacy. Secondary 2 students in Raffles Institution (RI) have been taught a Shakespearean text since 1984, and are currently studying the play Julius Caesar. However, feedback from both teachers and students in 2017 – 2018 indicated that students found Shakespearean language challenging. As a result, teachers were spending more time unpacking the literal meaning of the text and less time on the discipline-specific skills of analysing the language. To address this problem, a team of teachers surveyed students about the struggles they faced in understanding Shakespearean language. As a result, the team adopted curricular ideas from cognitive load theory (John Sweller, 2011) to create and publish a Julius Caesar textbook designed specifically for RI students.	RAFFLES INSTITUTION
10	Bringing the Periodic Table Alive with Augmented Reality	The Outreach Team designed a teaching tool that can enable learning independent of the physical space and time. This tool should also allow self-directed learning by giving students the opportunity and resource to explore on their own and learn at their own pace. The periodic table is a source of wonderment for students passionate about science due to the wealth of information that can be learnt from it. Through the use of Augmented Reality (AR), we have created an interactive periodic table easily accessible on the phone via a QR code. The features in the AR Periodic Table are dynamic. With the same periodic table, the student can learn new things over time in the virtual space. Use of augmented reality allows students to do this in the comfort of their home without needing to acquire/loan expensive molecular models.	NUS HIGH SCHOOL OF MATHEMATICS AND SCIENCE

S/N	Title	Description	Presented by
11	An enhanced and a more inclusive Vocational Education (VE) for Special Education (SPED)	Since 2010, Special Education (SPED) schools have implemented a vocational curriculum to prepare "work capable" students for employment. Notwithstanding this, preparing and developing students with moderate-severe disability to transit to a work setting remained challenging. An extensive review led to a new SPED vocational syllabus that boldly redefined a broadened and more inclusive work concept beyond open and paid employment, including more diverse work pathways like home-based work and volunteering, premised on enabling all SPED students to make 'valued contributions' at home, community and work settings. The syllabus introduced new processes namely intentional teaching of soft skills, 'collaborative teaming' and a refreshed 'Continuum of Work Experience'. The syllabus has strong buy-in from various stakeholders and schools are augmenting their school-based curricula to incorporate stronger Vocational Guidance and Work Experience to cater to diverse student needs. SG Enable has adopted the syllabus to develop the Enabling Skills Framework that provides continued training for People with Disabilities (PwDs) in the post-school work settings.	SPECIAL EDUCATIONAL NEEDS DIVISION
12	Supporting Reading and Comprehension with Reader Pens	Reader Pens were trialled, for the first time, to support the learning of Secondary students with literacy difficulties. The pens were used in English Language (EL) as well as other English-medium subjects to lower the barriers. By making reading more accessible, students reported higher (a) motivation to read, (b) self-concept as a reader, (c) perception of the value of reading. Some students with Special Educational Needs (SEN) are assigned a Reader as a form of Access Arrangements during national examinations. This provision requires a separate exam room and deployment of two additional teachers. The Exam Pen was trialled and found to be a viable replacement for human Readers. With the Exam Pen, schools will no longer have to deploy the additional teachers or arrange for a separate room This would result is signification savings of manpower and implementation costs of providing Readers to students with significant literacy difficulties.	SPECIAL EDUCATIONAL NEEDS DIVISION

S/N	Title	Description	Presented by
13	Enhanced In-house Industry Experiential Programme	The Enhanced In-house Industry Experiential Programme (or 'In-house IEP') is an improved version of an existing programme where students hone their trade skills and develop workplace readiness through a carefully-designed experiential, and inter-disciplinary school-based IEP. It provides a simulated real work experience, offering students a more authentic and engaging experience, while specifically targeting the application of their vocational competencies and developing their workplace skills such as cross-disciplinary thinking and skills, communication, planning and organization, and teamwork.	NORTHLIGHT SCHOOL
14	Formative Assessment Booster Resource Package (FABulous)	In line with our school vision of nurturing our students to be Motivated Learners and Critical Thinkers, we want to develop their 21st Century Competencies. With this in mind, the FABulous (Formative Assessment Booster) resource package was designed. The package includes Assessment for Learning (AfL) tools and thinking protocols used in Project Work, Applied Learning Programme (ALP), Learning for Life Programme (LLP) and other lessons. These tools encourage students to be active and independent learners as they think, reflect, and evaluate their work. In 2021, the package was refined with innovative changes for greater accessibility and ease of use. The flipbook was made detachable, and the 4-in-1 Formative Assessment Student Tool (FAST) toolkits were included in the student organiser. To encourage a culture of learning, new Formative Assessment (FA) posters were designed and displayed in class. A separate package was customised for the respective Mother Tongue Languages (MTLs). The revised FABulous was well-received by students and teachers, and help to drive an AfL culture in the classrooms.	GREENWOOD PRIMARY SCHOOL

S/N	Title	Description	Presented by
15	Science, Technology, Reading & wRiting, Arts and Mathematics (STrEaM) @ Rosyth	Rosyth School's STrEaM (Science, Technology, Reading & wRiting, Arts and Mathematics) programme enhances subject connectivity for Primary 3 students.The programme enables students to experience cross-subject links, participate in Singapore's Recycle Right Challenge, educate through storytelling, explore material reuse to reduce waste, and foster teamwork. Moving beyond science department-led STEM (Science, Technology, Engineering and Mathematics) education in Rosyth, a core team named STrEaM was formed with teachers teaching Science, English, Mathematics and Art which emphasized the importance of STEM ecosystem. STrEaM was crafted using appropriate instructional strategies of the various disciplines whereby Primary 3 students are led through lessons using the context of Man and environment. We also planned bite-size challenges for students to pick up the 3 Cs skills such as curiosity, creativity and collaboration. Conducted over five weeks within the same term, the lessons in the various disciplines allowed students to efficiently experience the connectivity.	ROSYTH SCHOOL
16	Developing e-21CC (21st Century Competencies) through the Primary 5 Surrealistic Ceramic Sculpture Art programme	The Primary 5 level surrealistic sculpture project introduces students to creative expression using the wheel spinner software, which generates random combinations to inspire unique ideas. The project aims to foster critical thinking, inventive problem-solving, collaboration, and perseverance among students. By combining two opposite objects from the wheels, students generate original concepts for surrealistic sculptures. Despite the challenges of sculpting with clay, students remain engaged and committed to realizing their artistic visions. The project's innovation lies in its creative use of technology to stimulate creativity and exploration in art education. By embracing unconventional combinations and leveraging digital tools, the project encourages students to think outside the box and push the boundaries of traditional artistic expression, ultimately enabling them to become contributors and creators in the world of surrealistic sculpture.	FAIRFIELD METHODIST SCHOOL (PRIMARY)

S/N	Title	Description	Presented by
17	Digital Literacy Programme	A survey revealed varied Information & Communication Technology (ICT) competencies among Secondary 1 students, which include Google-suite tools and media design apps. It is important to close this gap to ensure all students are equally: (1) Familiar with basic literacies and routines for daily lessons and HBL (2) Competent in using media design tools for alternative assessments (3) Confident in using digital tools to explore and manage their learning In alignment with the EdTech Masterplan 2030, Edgefield Secondary School implemented a Digital Literacy Programme so that all Secondary 1 students can: • Use a range of tools to develop executive functioning skills • Collaborate and co-construct knowledge with others • Use technology in a safe and discerning manner • Leverage new technologies to develop solutions to real-world problems By fostering digital literacy and cyber wellness skills, the programme supports students in becoming self-directed and autonomous learners.	EDGEFIELD SECONDARY SCHOOL
18	Farm-to-Table (FTT) Programme for Lower Secondary Science	Commonwealth Secondary School's "Farm-to-Table (FTT)" programme, an initiative under the Eco-Stewardship Programme, integrates authentic urban farming experiences into our lower secondary Science curriculum for all students. This innovation aims to broaden the impact of food security discussions to the whole school, and deepen the impact beyond talking level towards active learning and stewardship, while aligning to goals of Science education. Students underwent first-hand farming from seed sowing, daily maintenance to harvesting and cooking using both traditional and technology-enhanced farming methods, appreciating local produce and the importance of technology in Singapore context. This also created authentic opportunities for relevant STEM (Science, Technology, Engineering and Mathematics) R&D projects that extended beyond FTT, nurturing young scientists and eco-stewards. The innovation involved ranges from redesigning spaces for student-friendly urban farming, setting up processes to coordinate all lower secondary classes, to designing FTT lesson packages which emphasised on active learning while integrating seamlessly with existing lower secondary science topics e.g. Scientific Endeavours, and Food & Consumer Education (FCE).	COMMONWEALTH SECONDARY SCHOOL

S/N	Title	Description	Presented by
19	Mole Master Card Game	The teaching of mole concept and stoichiometry to students has often been approached didactically, resulting in students finding the topic boring and becoming less motivated to study. This makes teaching these concepts an uphill task for teachers. To make learning fun and interesting, the project team used a gamification approach using a card game. This innovative method aims to to teach the concept in a fun way and allow students the opportunity to practice related questions. Through this game, students were able to understand this topic better. Using the Design Thinking Framework, the team conducted multiple rounds of testing with students and staff to ensure that the final product was useful and effective.	ADMIRALTY SECONDARY SCHOOL
20	Oral Coach - Enhancing Students' Oral Skills Using Personalised Feedback through Artificial Intelligence	The Oral Coach, a 1:1 personalised coaching tool, was developed with the objective of enhancing students' oracy skills. This Artificial Intelligence (AI) -powered platform offers a transformative approach to oral skills development and coaching, aiming to provide real-time, personalised feedback to students, thereby promoting self-directed learning. The value proposition of the Oral Coach lies in its ability to nurture critical and inventive thinking in students, using school-based thinking frames like PEEL, 5SW1H, and OREO. It addresses challenges teachers face during oral lessons, e.g. time constraints for 1-to-1 oral practices, by offering immediate feedback tailored to each student's needs. The innovation of the Oral Coach is evident in its integration of technology with pedagogical strategies, such as Making Thinking Visible (MTV), Differentiated Instruction (DI), and EdTech Pedagogical Scaffold. By merging AI capabilities with sound pedagogical principles, the Oral Coach can bring about personalised learning, self-directedness and formative feedback to propel learning forward in classrooms.	ALEXANDRA PRIMARY SCHOOL

S/N	Title	Description	Presented by
21	Redesigning the Approach for Art to Increase Student Engagement	The teaching approach for subjects must keep pace with changes, and Art is no exception. While Art expressions are traditionally media-bound, digitally literate students may find a disconnect. Therefore, the Upper Secondary Art team at Compassvale Secondary School redesigned the learning approach for upper secondary Normal Technical (NT) Art to inject technology by introducing cloud-based applications for (i) art portfolio journaling process and (ii) self-directed facilitation of design. These two processes are crucial parts of the Art coursework. The applications were carefully selected for their ease of use to minimise the induction process and allow students to spend more time on their artworks. Importantly, these digitalised platforms enabled students to edit their creations anytime, anywhere, and greatly increased the opportunities for them to engage with their works at unexpected 'lightbulb moments'. Compared to traditional Art approaches, the students were also observed to be more engaged. As students navigate through these cloud-based applications, they continuously gain self-confidence, speed, and efficiency in their artmaking processes. The team observed a positive impact on the students' sense of wonder and hunger for creation.	COMPASSVALE SECONDARY SCHOOL
22	Rosyth Mobile Makerspace - Makerspace Anytime, Anywhere	Rosyth School has an existing Roszania Makerspace which allows students to benefit from Maker Education as they explore, design (Khalifa et al., 2017), collaborate, solve problems and invent through a Constructivist Approach (Loertscher et al., 2013; Kim, 2020). However, due to space and time constraints, only limited students may use the space at any one time. To address this, the committee leveraged Design Thinking to create "Rosyth Mobile Makerspace - Makerspace Anytime, Anywhere!" The Mobile Makerspace extends the reach and benefits of the Makerspace programme. It can be deployed to any location in school, providing hands-on learning experiences wherever they are needed at multiple locations. This flexibility enables the Mobile Makerspace to meet the unique needs and interests of different programmes, which allows more organic curriculum integration. It also facilitates students' engagement by bringing them together for collaborative learning and creative expression anytime, anywhere. With the Mobile Makerspace, any location can be transformed into a hub for fostering connections, sharing knowledge and sparking innovation.	ROSYTH SCHOOL

S/N	Title	Description	Presented by
23	Smart Search Tool for Organic Chemistry	Since the COVID-19 pandemic, Raffles Institution has moved away from in-person lectures to online lecture videos. This has empowered students to learn the digital lecture content at any time and any place. In addition, many students are using their personal learning devices (PLDs) for learning and revision, no longer relying on physical notes. It was found that students needed an efficient search tool for content within the digital space. When students are studying, significant time is used to search for information. Students might recall concepts, but they might not know where exactly the content is in the lecture notes or videos. Significant time might be spent flipping pages and scrubbing video timelines, especially if the students remember the content vaguely but do not know the correct keywords. Therefore, the Smart Search Tool – an app which leverages on machine learning to make learning more efficient for the students' revision – was created.	RAFFLES INSTITUTION
24	Technovator Programme	The TvP (Technovator Programme) is the first of its kind in Singapore schools, whereby all Year 1 and 2 students will go through time-tabled lessons, 1hour per week, to learn about the various tech skills. The curriculum coverage is based on the essential tech skills and top 10 skills identified by World Economic Forum. These identified core tech competencies that will provide the necessary exposure to students and enable them to be digital makers that will contribute to our society. In essence, TvP (Technovator Programme) curriculum serves as a model that schools can adapt or adopt to fulfil the 3Cs vision (Creator, Connector, Contributor) set forth by Minister Chan Chun Sing and the Educational Technology Division's Masterplan 2030 – "Transforming Education Through Technology".	ANGLO-CHINESE SCHOOL (INDEPENDENT)

S/N	Title	Description	Presented by
25	The Passionate Sustainability Stewards (TPSS)	'The Passionate Sustainability Stewards' (T.P.S.S.) aims to nurture green advocates through the 4Cs of the MOE Eco-Stewardship Programme: Curriculum, Campus, Culture and Community. The initiative encourages staff and students to see possibilities and make a difference through personal and collective efforts that support two pillars of the SG Green Plan 2030 – 'City in Nature' and 'Sustainable Living'. The theme – INVEST IN OUR PLANET, LIVE SUSTAINABLY achieved the following objectives: • Established an environmental literacy program using innovative pedagogies and strategic partnerships to cultivate waste reduction habits • Promoted a learning environment enhancing green conversations and practices Outcomes include: 1. Increased awareness and confidence among Tampinesians as green advocates. 2. Stronger internal and external collaboration for green efforts 3. National affirmation for eco stewardship efforts. Tampinesians developed environmental literacy as they learnt how to practice sustainable lifestyles by recycling right and transforming trash to treasure.	TAMPINES SECONDARY SCHOOL
26	Simpler	Simpler empowers students to engage with literacy content at their preferred reading level, nurturing self-directed learning, and fostering reading engagement and motivation. This approach enables students to concentrate on learning rather than deciphering text.	INFORMATION TECHNOLOGY DIVISION &SPECIAL EDUCATIONAL NEEDS DIVISION