

MCEDUHUB FOR PROFESSIONAL DEVELOPMENT

With You On Your Path to Excellence



MCEduHub for Professional Development

We believe that when teaching expertise grows, so does the learning of students. That is why we launched the world's first 24/7 learning portal, specially designed for educators to access certified courses anytime, anywhere.

Our portal, MCEduHub for Professional Development (PD), hosts certified courses that are developed in-house by renowned university and education partners such as Nanyang Technological University, Singapore, Sampoerna University, National University of Singapore, and more.

The certified self-paced and blended courses are perfect for time-poor educators who are looking to advance their expertise with the best of theory and hands-on practice. Our MasterClasses are conducted LIVE and on-demand by expert trainers for educators to keep up with educational trends that can be implemented in their classroom.

Our Partners



Explore our exclusive range of courses in collaboration with renowned partner universities!

Our Development Pathways



Leadership Learning Pathway

by Principals Academy

The Balance Scorecard for Schools (BSfS)

MCE Curated Leadership Programmes



Specialist Learning Pathway

Early Childhood

Primary

Secondary

Technical Skills & Competencies (TSC)

Why MCEduHub for Professional development?

World's first
24/7
learning portal
designed for
educators

More than
90
countries

More than
100
certified
courses

MasterClasses
conducted
LIVE



Scan here to register for a free account on MCEduHub for Professional Development portal for more information.

Learning Delivery

Keep a look out for these icon tabs to find out how this course is being delivered.

Self-Paced 

Self-Paced

24/7 learning portal, specially designed for educators to access certified courses anytime, anywhere.

LIVE 

Live

MCE MasterClasses are LIVE and run between 1 to 3 hours long, hosted on the MCEduHub for Professional Development portal.

Blended 

Blended

Blended delivery combines flexible online modules with interactive in-person sessions. This approach offers convenience, hands-on learning, peer collaboration, and access to rich digital resources, allowing learners to personalise their experience and receive real-time feedback.

Our Credit Redemption Programme

Our self-paced courses, MasterClass LIVE and other Professional Development (PD) resources on MCEduHub for PD portal are available to be purchased by subscribing to our credit redemption programme.

The credits can be purchased as an individual subscriber or as a group.

What will you be able to redeem with your credits?

- 1 Self-Paced Courses
- 2 MasterClass LIVE
- 3 Professional Development Resources such as eBooks

How to subscribe to our Credit Redemption Programme?

- 1 Select your preferred course(s)
- 2 Book your seat
- 3 Confirm your participation and redemption
- 4 Certify

Once you are successfully certified, your credit balance report will be sent to your email.

Terms and Conditions

- 1 All credits must be used within 12 months upon issue, any unused credits will expire at the end of the 12th month
No minimum number of pax required for each course
- 2 MasterClass LIVE: Subject experts for the class will be
- 3 subjected to change according to their availability

Scan here to watch our
credit redemption process



Expert Trainers



Dr Charles Chew

Principal Consultant

Over 36 years, Dr Chew has served as Head of Science, Vice Principal of a school, Senior Lecturer at NIE, Physics Master Teacher and Principal Master Teacher at the Academy of Singapore Teachers, and an editorial advisor for NIE's e-magazine, SingTeach. For his valuable contributions to the field of education, Charles was conferred the Public Administration Medal (Bronze) by the President of Singapore in 2012.



Dr Ho Boon Tiong

Dr. Ho specialises in school research and management, Science teacher education, and pedagogical content knowledge. He has taught secondary Science, Mathematics, and English, and spent two years as Head of Department. He was a Gifted Education Specialist with the Ministry of Education, and he was conferred a Fellow with the Teachers' Network of the Ministry of Education (2000 – 2004).



Dr Brandon Oh

Dr Oh holds a Master's degree in Mathematics Education and has more than 20 years of experience in the education sector. He is a published author, trainer, and education consultant, and conducts workshops for educators globally. He has also served as the Head of Department (Mathematics) and the Chairman of Innovation and Enterprise Council.



Dr Norhuda Musa

Dr Huda has over 20 years of experience teaching Mathematics in Singapore and has been actively championing the use of current mathematics practices in schools, sharing these practices with teachers locally and internationally. Through this, she aims to empower teachers with good mathematical skills to deliver impactful lessons in their classroom.



Mdm Lim Geok Leng

With over 40 years of experience, Mdm Lim is a veteran in the publishing industry. She has been working closely with the Ministry of Education, Singapore to develop leading K-12 educational products and resources. She also has experience working with international publishers to develop a customised Asian Languages curriculum to better support children in learning.



Ms Manisha Nayak

Ms Nayak has been in educational publishing for over 20 years, with a focus on writing, editing, and managing the publication of children's science books and magazines, as well as conducting training workshops. She has written more than 35 books, including a bestseller revision guide, and currently teaches primary school science at Nanyang Education Consultancy, Singapore.



Ms Liu Yueh Mei

Ms Liu served almost 15 years with Singapore Ministry of Education (MOE) as Head of Department (Mathematics), where she was involved in curriculum reviews, policy, and assessment matters. She spent the next 10 years as an international teacher-trainer, consultant, teacher coach, as well as an entrepreneur with a healthcare startup and an edtech startup.

and more!

MCEduHub for Professional Development

Leadership Learning Pathway

The School Leadership Programme provides a Professional Development platform to ensure leaders-in-education continually meet new challenges with fresh insight and perspectives in the VUCA (Volatile, Uncertain, Complex and Ambiguous) environment.

The workshops are designed to enhance the competencies of leaders-in-education to be educational visionaries, instructional leaders, organisational leaders and even community builders. Through a process of learning in authentic workplaces and diverse contexts, leaders-in-education will address a range of topics that are critical for their continual growth. These include Strategic Planning, Transforming Learning Organisations, Curriculum Innovation and Action Management. Leaders-in-education will be provided with opportunities to deepen their understanding of professional, management and leadership issues as well as exposure to thought leadership so that they can become catalysts of change and sustain a competitive advantage in a fast-changing educational landscape.

The Programme is focused on:

1. Deepening an understanding of key professional issues
2. Managerial issues
3. Leadership issues

Our workshops are highly customisable:

1. Tailored to specific contexts, budgets, and timelines
2. Each core module can be taken as a piecemeal experience or a bespoke programme in a span of up to 180 hours within 24 months
3. A certificate of "Achievement in Leadership" will be awarded to candidates who fulfil the required number of hours of coursework and assessment

Enhance your leadership capabilities with specialised programmes **by Principals Academy, MCE Curated Leadership Programmes** or using **The Balance Scorecard for Schools (BsFs)** framework. These courses are designed to equip school leaders and educators with the skills to drive school improvement, foster innovation and lead with confidence in today's evolving education landscape.

by Principals Academy

In partnership with Principals Academy, Singapore's premier provider of Professional Development for educators, we offer a range of curated training programmes designed to inspire leadership, enhance teaching practice, and support school transformation.

Our Programmes

Ethical Leader *LEAD101*

Blended 

Through this module, participants will uncover their own leadership profile and work towards becoming an effective leader of character. They will be provided with opportunities to understand leadership competencies and learn from practitioners to apply the principles of leadership. As part of their personal mastery, participants will also leverage on case studies and journaling to reflect on their alignment to the professional ethics and the values of the teaching profession.

Curriculum Leader *LEAD102*

Blended 

Participants will appreciate the importance of curriculum leadership to provide clarity to teaching and learning with a vision and related goals. They will understand how to develop and empower future curriculum leaders as well as promote continuous improvement and greater alignment in student learning outcomes. The key areas covered during the workshop will include curriculum and content, pedagogy and instruction and assessment and evaluation. Participants will gain insights related to global issues context and trends as they examine curriculum innovations.

Ethical Leader *LEAD103*

Blended 

This module will focus on how to create a shared and compelling school vision. Participants will learn about systems thinking and available tools to bring meaningful and strategic change for school improvements in the 21st century.

The Balance Scorecard for Schools (BSfS)

School Improvement & Inspection

MCE provides core modules that blend research and best practices into a comprehensive, context-driven experience. This survey-based school evaluation and improvement programme is designed to rapidly improve leadership performance in managing an effective and sustainable school environment through research-based and customised solution and assessment tools.

This data-driven approach provides a clear direction for school performance improvement, reveals immediate blind spots and allows schools to visualise how closely they are aligned to international best practices.

1. How to Plan for and Achieve an Effective and Sustainable School Environment
2. Exploring of School Leadership through Different Perspectives
3. The Practice and Art of Teaching and the Nature of Student Learning
4. Equity and Equality in Schools – the Importance and Interconnectedness of Student Performance and Well-Being
5. Understanding Technology and its Impact in a School Environment



Our Programmes

Each programme contains a series of sessions that are a blend of research and best practice presentations, coupled with workshops designed to tailor content to specific contexts by combining international advice with local experience and understanding.

How to Plan for and Achieve Effective Sustainable School Improvement *(Programme 1)*



Participants will be introduced to a methodology for building school improvement plans and implementation strategies and will investigate how their school's BSfS information and data can be used to give content, shape, form and guidance to change strategies. This involves instruction in process and method together with significant sessions that enable participant collaboration in order to model the dynamics of working with strategies for change in their own school setting – where there is a diversity of views, philosophies and personalities. A key objective of the programme will be to locate the content in a realistic setting that is directly relevant to, and representative of, the participant's own school. Another key focus is on the elements of stakeholders' motivation, engagement and mindsets together with prevailing attitudes and behaviours.

Learning Outcome:

- Determine your Vision
- Recognise that every School is an 'Eco-system'
- Understand your school's Data and Findings
- 'Get Below the Surface'
- Organise for Change
- Bring it All Together

Key Lessons Learned from International Research, Experience and Best Practice *(Programme 2)*



This programme draws on the Balanced Scorecard for Schools' vast International Evidence Base, leading international research and literature to highlight widely agreed and recommended policies, programmes and practices.

Learning Outcome:

- Look Outwards – Learning from International Research, Experience and Evidence: Systembased Improvement
- Avoid 'cutting and pasting' from one system to another – Instead, Explore, Understand Contextualise, then Adapt
- Debunk Education Myths
- Find Enduring International Lessons – at the School Level
- Bring International Lessons into the Classroom
- Determine Priorities and Strategies to ensure your School continues to meet the challenges of work and life in the 21st century

Essential Teaching Techniques to Improve Student Performance and Well-Being Programme 3



This programme focuses directly on lessons for teachers from findings in Domain 3 (Teaching & Learning) and Domain 4 (Well-being & Equity) of the BSfS programme. It focuses on all the key areas identified in the International Evidence Base relating to effective teaching and learning and to the promotion and achievement of at least minimum acceptable levels of student well-being. The content of good and best practice is contextualised specifically in the classroom and uses participants' as well as other case study- based experiences to better understand and explain the application of the principles and practices being recommended. Additionally, participants will be encouraged to reflect upon, compare and evaluate their own practices, experiences, conceptions and observations against the material presented.

Learning Outcome:

- Identify the Core and Essential Knowledge, Skills, Understanding and Behaviours of Leading Teachers
- Understand the Critical Role for Combined Pedagogical Knowledge in addition to Content Knowledge in Successful Teaching
- Prioritise the Findings of Neuroscience for Education
- Understand the link between Student Well-being and Academic Success
- Explore and Understand the Optimal use of Technology to support Effective Student Learning
- Use Assessment to Maximise the Potential for Student Learning and Development

Gaining a Better Understanding of Educational Assessment and How to Deliver Effective and Better Assessment in the Classroom Programme 4



Assessment of student performance is a core feature of the BSfS programme and is pivotal to effective teaching and learning. This programme explores the nature, purpose, and various available forms of educational assessment, with an introduction for participants to both theoretical features and practical application of fundamental assessment principles and techniques.

Learning Outcome:

- Understand Educational Assessment
- Match Assessment Type to Task, Purpose and Validity
- Explore Features of Assessment Data and Understanding Meaning of Data
- Analyse and Interpret Assessment Data to Reinforce and Enhance Teaching and Learning
- Ensure the Frequent use of Formative Assessment in the Classroom
- Distinguish between Valid and Appropriate Use of Assessment Data compared with Invalid and Inappropriate Use of the Data

MCE Curated Leadership Programmes

Enhance your competencies to be an educational visionary, instructional leader, organisational leader or even a community builder. Below are some of the popular courses that are available.

Our Programmes

Vision, Values and Mission PDLLL02

Self-Paced

3 Credits

Empowering those in leadership positions to focus on what's important and what matters to you and your school whilst, addressing the requirements of rigorous quality assured teaching and learning.

Leading Teaching & Learning PDLLL03

Self-Paced

3 Credits

Empowering those in leadership positions to focus on what's important and what matters to you and your school whilst addressing the requirements of rigorous quality assured teaching and learning.

Learning Outcome:

- Explain the role of school leadership in leading effective teaching and learning
 - Explain leadership of teaching and learning.
 - Describe good practices of successful leadership of teaching and learning
 - Identify ways to improve leadership of teaching and learning in your school.
- There is a short assessment at the end of the learning module as a summative assessment to verify that learning has been transferred.

Safeguarding and Well-Being PDLLL04

Self-Paced

3 Credits

This module will provide leaders at all levels with a toolkit of strategies to empower them to develop effective policies to keep children safe in school, to lead pastoral systems that meet the well-being needs of students and staff; and to lead a happy and cooperative school.

Leading Teams PDLLL05

Self-Paced

3 Credits

Empowering those in leadership positions to focus on what's important and what matters to you and your school whilst, addressing the requirements of rigorous quality assured teaching and learning.

Learning Outcome:

- Describe the types of teams.
- Describe the stages of team development.
- Describe the best practices of team management.
- Describe how to enhance teamwork.
- Use the GROW model to address underperformance.

Strategic Planning for Education Leaders PDLPS01

Self-Paced

3 Credits

This course will introduce strategic planning for educational institutions. It will focus on the key principles and processes underpinning effective strategic planning. Participants will learn how to craft mission statements, develop strategic plans and incorporate strategic planning into school processes and culture. This course will provide educators with the knowledge and skills needed for effective strategic planning. This will contribute to greater organisational cohesiveness in schools and better learning outcomes for students.

Learning Outcome:

- Explain the broad principles and components for strategic planning.
- Describe the essential skills and competencies required for developing strategic plans.
- Analyse educational system and school that have successfully incorporated strategic planning into their workplans.
- Identify advantage and limitation of strategic planning

Participants are required to complete assessments in the module to showcase their understanding of the course objectives. Upon completion of all the assessments, **participants will receive an eCertificate endorsed and sent by NUS.**

Learning Progression PDSPD04

Self-Paced

3 Credits

Learning progressions are descriptions of successive key pathways as students learn about a topic or acquire a skill. This course introduces the reasons, mechanics, and procedures for using a learning progression (LP) to assess students over time.

Learning Outcome:

- Describe what constitutes a learning progression
- Recognise the reasons to apply a learning progression.
- Develop and use a learning progression for assessment purposes.

Participants should have a basic understanding of assessment to fully benefit from this course.

Participants are required to complete assessments in the module to showcase their understanding of the course objectives. Upon completion of all the assessments, **participants will receive an eCertificate endorsed and sent by NTU.**

MCEduHub for Professional Development

Specialist Learning Pathway

At the heart of education, dedicated educators fuel the transformative journey of students and institutions stand as the pillars of knowledge, fostering an environment that nurtures growth and learning.

MCE's Professional Development programmes are designed to help educators gain new insights into pedagogical strategies, enabling you to discover new teaching approaches, stay ahead of the ever-evolving educational landscape and elevate your skill sets to new heights.

Our programmes are conducted by fully qualified facilitators from Ministry of Education (Singapore) or are individuals who are a part of a concerted international effort to raise the professional capacity of educators in the region.

Subject-based programmes

At the core of MCE lies subject-based programmes that have been developed with cutting edge training content and pedagogical strategies. Catering to educators from preschool to high school specialisations, here are some of the top courses that MCE has to offer.

Our Professional Development Framework empowers educators across all levels: **Early Childhood, Primary, Secondary, and Technical Skills & Competencies**. Each pillar is thoughtfully designed to support educators in enhancing subject mastery, pedagogical expertise, and future-ready skills—ensuring impactful teaching and learning in today's evolving education landscape.



Early Childhood

Our Professional Development programmes are designed to deepen understanding of child development, strengthen pedagogical approaches, and equip teachers with practical strategies to create nurturing, stimulating and inclusive learning environment for young learners.

Our Programmes

Differentiated Instruction Strategies 101: For Young Learners

PDPG09

Self-Paced

3 Credits

This course aims to equip participants with the skills as an educator in a differentiated classroom, strategies for differentiated learning, identifying young learners' needs and how best to design a lesson that would cater to individual learners in a classroom setting.

Teaching Mathematics in Early Childhood

PDAS04

Self-Paced

3 Credits

Mathematics is an important part of a child's education in their early years, helping them to develop critical thinking and reasoning skills. Through this module, learn more about the Nurturing Early Learners Framework and the theoretical underpinning behind it, as well as important maths concepts and how to incorporate them seamlessly into the classroom.

The Importance of Using Play Pedagogy When Teaching Maths

PDSPM18

Self-Paced

3 Credits

Educators will explore the different types of Play in an Early Childhood setting and dive into theories that help them understand the benefits of using Play pedagogy in the child development and learning process. This module serves as a foundation for educators who are looking to adopt this pedagogy in their everyday lessons.

Progress Tracking in Numeracy Development 1 (Fundamentals)

PDPG10

Self-Paced

3 Credits

This course aims to equip participants with the skills and knowledge to create a good curriculum or educational programme that comprises of good teaching and learning materials, coupled with dedicated teachers who can teach effectively. Yet, many would overlook the fact that assessment is an area equally as important integral to providing a successful educational programme.

This course consists of two parts. This is part 1 of 2.

Progress Tracking in Numeracy Development 2 (Assessment)

PDPG11

Self-Paced

3 Credits

Assessment and progress tracking allow us to collect quantitative data from our educational program and helps to improve our way of teaching to maximize students' learning, no matter which ability group they belong to. Assessment not only helps us find out whether learning goals are met, it also influences our decision making in the allocation of resources and the refinement of content and pedagogy to meet instructional needs. A good Early Childhood Education (ECE) curriculum is essentially supported by clear goals and rich content, effective pedagogy and constructive assessment.

This course consists of two parts. This is part 2 of 2.



Primary

Our Professional Development programmes for primary educators focus on effective pedagogies, learner engagement and subject-specific strategies to enhance teaching practices and support holistic student development in the classroom and beyond.

Our Programmes

Maths Heuristics: The Bar Model PDSPM24

Self-Paced 3 Credits

Bar modelling is a diagrammatic problem-solving tool that uses rectangular bars to represent known or unknown quantities. It is a common problem-solving heuristic used in Singapore Primary Schools to help students solve arithmetic and algebraic word problems. This is a comprehensive module that introduces the concept and pedagogy behind the bar model method, Part-whole and the Comparison models, more advanced techniques such as additive comparison, multiple comparisons, change model, and the subdividing bar model, and the assessment module of the Maths Bar Model series.

CPA Approach 101: Deliver Effective Maths Lessons PDAS01

Self-Paced 3 Credits

Learn about the Singapore Maths approach and its application through the series. Discover the available resources for this series to enhance teaching and learning.

Demystifying Heuristics: Solving Word Problems PDPG07

Self-Paced 3 Credits

This course consists of two parts. Focusing on one of the heuristics in Mathematics – the bar modelling and its applications, participants will get to learn what bar models are, the different types of bar models, the different techniques on how to use them to solve word problems.

Inquiry Approach 101: Deliver Fun and Engaging Science Lessons PDAS03

Self-Paced 3 Credits

Find out how to apply the constructivist-inquiry approach to deliver exciting Science lessons through this series. Discover the available digital resources to engage learners and enhance their learning.

5E Instructional Model 101: Enrich Science Learning PDAS02

Self-Paced

3 Credits

At the end of this adoption training course, you will understand MCE's Science Approach, which is the inquiry approach that is incorporated in our Science products. You will learn in detail about the well-known 5E instructional model which is supported by the My Pals are Here! series.

Through this training, you will understand how the 5E Instructional Model can be applied using the resources from the series to conduct an engaging and enriching Science lesson. You will also be introduced to the exciting features and resources in this series that can enhance students' learning. There will also be a walkthrough on our MCEduHub platform to show you where to access the digital teacher's resources that accompany the series and the supplementary digital products which can be purchased as add-ons.



Secondary

Our Professional Development programmes for secondary educators focus on supporting subject mastery, innovative teaching strategies and student-centred approaches that foster critical thinking in learners.

Our Programmes

Differentiating Secondary Mathematics Lessons for the Classroom PDSLE11

LIVE **3 Credits**

A 'one-size-fits-all' maths lesson may not necessarily be effective for classroom instruction as students come with different backgrounds. The lesson will then need to be adapted according to student's readiness, interest and learning profile. In this webinar, we will show you how to apply different strategies to create differentiated lessons for secondary mathematics.

Developing Visual Skills in Secondary Mathematics PDSLE14

LIVE **3 Credits**

Language used in secondary mathematics is generally more symbolic and concepts are more abstract than those in primary mathematics. As such, students may find it difficult to make sense of mathematics in their learning. In this webinar, we talk about helping students to make use of visual skills in learning secondary mathematics. Through visualisation, students will understand concepts better and retain the knowledge longer than mere rote learning.

Bar Model Method and Algebra PDSLE16

LIVE **3 Credits**

The bar model method has been an effective pictorial way to solving word problems in primary mathematics. In secondary mathematics, problem-solving tends to be more algebraic than pictorial. Such change in approach presents itself a gap in students' learning process. This course demonstrates ways to help students transit from the bar model method to algebra and addresses why students need to change their mindset from using bar models to applying algebraic methods.

Transition from Bar Model to Algebra PDSLE22

LIVE **3 Credits**

Bar model has effectively served its purpose for primary mathematics. As it is a precursor to algebra, a need arises to enable students to transit smoothly from bar model to algebra when they move on to secondary mathematics. In this webinar, we address how to provide a smooth transition from bar model to algebra. As students wean off the use of bar model, they will eventually embark on algebraic thinking in secondary mathematics.

Harnessing MCE Cambridge IGCSE™ Physics Instructional Package for Effective Inquiry-Based Learning in Physics PDPG01

Blended 

6 Credits

A major component of MCE Blended/Online Professional Learning Programme (PLP) for schools using MCE Cambridge IGCSE™ Physics Instructional Package. Comprising 5 asynchronous & 1 synchronous learning sessions, this course seeks to equip participants with the knowledge and skills to design and enact effective inquiry-based physics lessons in the classroom context.



Technical Skills & Competencies (TSC)

MCE invites you to explore the world of Technical Skills & Competencies (TSC) and the invaluable role they play in today's fast-paced digital landscape. As technology continues to shape the way we live and work, it is crucial for educators to stay updated with the latest technical skills and competencies relevant to their field. Our comprehensive TSC programmes are designed to equip you with the knowledge and practical expertise needed to integrate technology seamlessly into your teaching practice. From mastering educational software and tools to understanding data analysis and digital literacy, our TSC training empowers you to confidently navigate the digital realm, enhance student engagement, and prepare your students for the future.

Our Programmes



Creating an e-Learning Environment for Student-Centred Interaction PDTT04

Blended  **6 Credits**

Because of the recent global pandemic, schools have transitioned to online learning to continue learning delivery for the students. One big challenge for educators is to engage students and sustain interaction in an online learning environment.

This course is designed to guide educators in understanding the importance of interaction in an online learning environment, explore various strategies and online tools to foster interaction and design student-centred learning experiences that promote interaction.



Implementing Effective Assessment Strategies in an Online Classroom PDTT05

Blended  **6 Credits**

This 7-week course is designed to guide K-12 educators and academic leaders in designing formative learning experiences and assessments to deliver feedback to students in an online learning environment. Authentic assessments will also be covered as ideal methods for students to demonstrate mastery and transfer of learning in online learning.



Introduction to Microsoft Excel

PDPT01

Self-Paced

3 Credits

This course helps you to understand the interface and basic features of Excel. You will learn how to maintain and organise worksheets. At the end of this course, you will be able to identify basic components of a spreadsheet. Learn the steps to rename, delete, duplicate and copy a sheet. You will be able to create, organise sheets, show and hide sheets.



AI in Education, AI Literacy, and Pedagogy*

PDSPD05



Centre for Professional and Continuing Education

Self-Paced

4 Credits

This course aims to help educators increase their general understanding of AI. Educators who complete this course successfully should develop a deeper understanding of the background, evolution, application, and pedagogical knowledge of AI.

Course Objective:

- Explain what Artificial Intelligence is.
- Identify the key historical events of AI and how AI has evolved since 1950.
- Explain how different disciplines have contributed to the development of AI (e.g., Mathematics, Philosophy, Psychology, Engineering, Control theory and Cybernetics).
- Identify the use cases and applications of AI.
- Explain pedagogical practices for AI literacy through the TPACK framework.



STE(A)M Education (Food and Consumer Science Curriculum)*

PDSPT01



Centre for Professional and Continuing Education

Self-Paced

4 Credits

To prepare the students to be future-ready, among them are being creativity, collaboration, cognitive flexibility and problem-solving, which are included in the 21st Century Competencies (21CC) for Singapore schools. One of the ways to equip the learners with the 21CC was through STE(A)M. Food and Consumer Education curriculum is a subject that encompassed the characteristics of STEM education framework, especially on the aspect of providing the opportunities of authentic real-world problems. This course provide an overview on how Food and Consumer Education (FCE) lessons can incorporate the S-T-E-M Quartet Instructional framework and fit into the curriculum.

Course Objective:

- Define the FCS-STEM Connection
- Design a FCS-STEM problem
- Incorporate FCS-STEM into the FCE Curriculum



Computational Thinking Practices for Teachers in K-12 Settings*

PDSPD06



Centre for Professional and Continuing Education

Self-Paced

4 Credits

As Computational Thinking (CT) becomes more relevant in the interdisciplinary field, this course aims to prepare educators to develop the necessary skills to integrate CT practices into their teaching. This course aims to assist teachers in gaining the knowledge and confidence needed to implement CT challenges that inspire their students to apply math, science, and other disciplinary concepts to solve real-world problems.

Course Objective:

- Explain the core concepts of computational thinking .
- Explain computational thinking concepts using multiple and effective instructional strategies .
- Provide examples on how to engage students in class using CT .
- Design activities and peer teaching their own content-integrated CT lessons.



Sustainability and Data Literacy Through Effective Teacher Facilitation* PDSPD07



NANYANG
TECHNOLOGICAL
UNIVERSITY
SINGAPORE

Centre for Professional and
Continuing Education

Self-Paced



4 Credits

This course provides explicit instruction on how to facilitate classroom discussions around data related to sustainability. You will learn how to scaffold discussions to encourage critical and independent thinking around sustainability data. In addition, you will learn how to ask questions that foster student engagement and collaboration to support knowledge building on sustainability topics.

Course Objective:

- Explain the steps involved in a questioning framework for guiding discussions on sustainability-related data.
- State the principles of designing mathematical instruction using comics from communication perspectives.
- Formulate questions to foster critical and independent thinking in students.
- Adapt questions to cater to diverse levels of student readiness.
- Develop questions to foster student engagement during classroom discussions.
- Construct prompts to facilitate collaborative exploration and application of data skills.



Infusing Comics into Mathematics Instructions for Low-Attaining Students* PDSPM25



Centre for Professional and
Continuing Education

Self-Paced  **4 Credits**

This course aims to equip the participants with awareness of low attaining students in mathematics, their needs and concerns, comics, and the design principles for infusing comics into mathematics classroom instruction. We will learn about the principles to note when one infuses comics into mathematics classroom instruction.

This course introduces a new way to teach mathematics that is rarely explored and often without a systematic, theoretical underpinning. By participating, you will gain confidence in implementing this innovative teaching method, making it easier to approach mathematics education from a fresh perspective.

Course Objective:

- Explain pedagogical strategies for supporting low-attaining students in mathematics.
- State the principles of designing mathematical instruction using comics from communication perspectives.
- Design a comics instruction package using the principles from communication perspectives.





Organise Your Science Curriculum to Improve Learning* PDSPT02



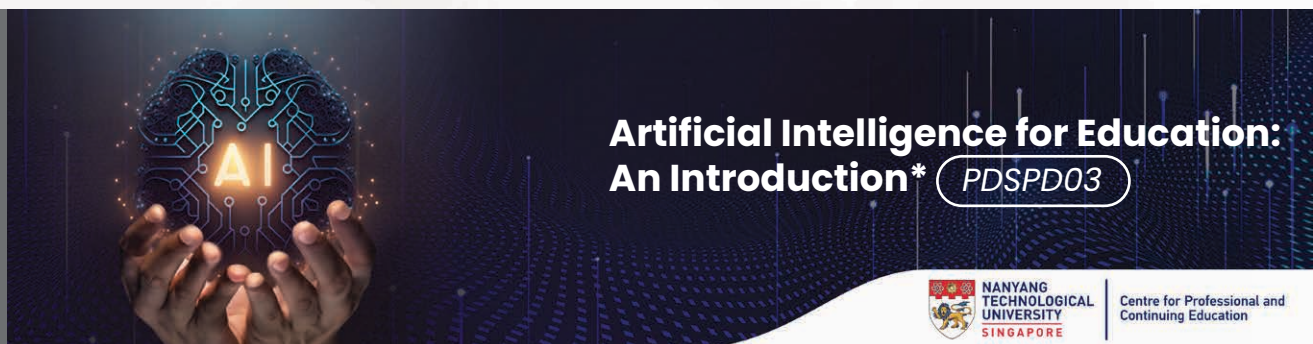
Centre for Professional and Continuing Education

Self-Paced 4 Credits

This course will assist participants in understanding key curriculum concepts in terms of how science curricula organise their topics or content. As well, the course will examine how learning content in curricula may be expressed in different ways especially through the use of learning outcomes. Knowing the characteristics of the latter can help teachers determine the overall cognitive demands of science curricula, which will be explored here using revised Bloom's Taxonomy. Participants will also learn how to ensure that learning outcomes and topics are organized in a coherent manner to ensure effective and meaningful learning.

Course Objective:

- Identify the reasons why learning may be expressed as competencies, standards or outcomes in science curricula.
- Explain how to determine the cognitive demand of science curricula.
- Identify key curriculum principles used to organise science topics/content for effective learning.
- Apply basic methods to ensure coherency in the science curriculum.



Artificial Intelligence for Education: An Introduction* PDSPD03



Centre for Professional and Continuing Education

Self-Paced 4 Credits

This 3-hour course introduces the use of Artificial Intelligence (AI) for education by explaining what AI is and how it has been used in education, including some emerging applications. It will also discuss some basic ethical issues or concerns related to the use of AI, such as transparency, fairness, and responsible AI. This course is designed for educators seeking entry-level knowledge of the use of artificial intelligence in education.

Course Objective:

- Define artificial intelligence.
- Describe how AI can be used in student-facing applications such as personalised learning.
- Describe how AI based on large language models can be used as a teaching and learning companion.
- Discuss key concepts related to the ethical use of AI for education.



DESIGNING EFFECTIVE ONLINE LESSONS

Designing Effective Online Lessons*

PDTT02



Centre for Professional and
Continuing Education

Self-Paced



4 Credits

With the global push towards more diverse ways of learning, online teaching and learning is set to become a regular feature in the learning experiences of students worldwide. Creating online lessons may have been a reaction to the COVID-19 pandemic all over the world but this year at NTU, we accelerated the pace and widened the scope of transformation for the way lessons are conducted.

Subject matter experts from the National Institute of Education (NIE) and the Teaching and Learning Pedagogy Division (TLPD) of the Nanyang Technological University have collaboratively developed this Design Online Learning course to help you gain insights into the principles of online teaching and learning. This course will empower you to plan and design powerful online learning courses by leveraging key instructional and learning design principles.

Course Objective:

- Understand the key principles in designing effective online learning courses.
- Leverage key instructional and learning design principles
- Engage students in deep learning of the knowledge and skills for your specific discipline
- 4. 100% Asynchronous learning

*Participants are required to complete assessments in the module to showcase their understanding of the course objectives. Upon completion of all the assessments, **participants will receive an eCertificate endorsed and sent by NTU.**



Apply Emotional Competence to Manage Self at Workplace[^]

PDSPD011

 JAMES COOK
INSTITUTE

Self-Paced

4 Credits

On completion of the course, learners will be able to understand and apply self-awareness techniques and Emotional Intelligence principles such as self-confidence, flexibility, conscientiousness, and initiative to manage self at the workplace.

Course Objective:

- Recognise own emotional states, the causes of those emotional states and its effects on performance and interpersonal relationships at the workplace.
- Identify personal strengths and weaknesses and make improvements needed to develop Emotional Intelligence.
- Manage own emotions and impulses to work effectively with others, taking into consideration the different cultures and background of individuals at the workplace.
- Recognise the emotional needs of others, and empathise and respond appropriately to their needs.
- Present self with confidence and show flexibility in responding to changes at the workplace.
- Demonstrate conscientiousness and trustworthiness to complete given tasks according to organisational standards.

[^] **Participants must complete each module to receive a completion certificate from James Cook Institute.**



如何通过小学阅读评估 促进教学#

PDSPL01



Self-Paced

4 Credits

本课程介绍语言测试的基本知识和原则、设计课堂语言测试题目的基本步骤, 以及如何对阅读评估进行有效的量化分析。

学习成果:

- 了解语言测试的基本知识与原则
- 把语言测试的基本原则应用到课堂实践中
- 掌握设计课堂语言测试题目的基本步骤
- 了解与实践如何利用所学知识和原则设计课堂语言测试题目
- 对阅读评估的有效性进行量化分析



从看图写句到全篇写作#

PDSPL03



Self-Paced

4 Credits

本课程旨在为小学阶段的教师提供写作教学的思路, 帮助学生从单句写作逐步进阶, 带领他们慢慢学会全篇写作, 从而消除他们对写作的恐惧。

学习成果:

- 了解小学阶段几种不同写作形式(写句子、写话、写段、写篇中段、写看图作文、写命题作文)的写作要求。
- 明白几种不同写作形式各自的教学要点。
- 学会利用学生的先备知识, 根据不同教学需求进行过渡教学。

你必须完成每个单元才能获得结业证书。

Success Stories



Partnership with Ministry of Education, Brunei

MCE conducted an efficacy study to design a programme for teachers in Brunei. The level of mathematical pedagogical knowledge and proficiency of teachers were measured pre and post-programmes, with striking results.

After attending MCE's Professional Development Programme:

- 45% of the teachers were able to achieve at least a 70% score.
- Lower-performing learners improved their scores by 15%.

MCE accurately identified gaps to create a targeted intervention that generated results. Today, MCE continues to serve educators in Brunei.

Benchmark your school's performance, adopt leading international best practices, and identify effective solutions in improving school leadership and administration performance with us today.



Partnership with Ministry of Education, Chile

In 2014, all public schools in Chile received Mi Matematica, a primary Maths textbook series, from MCE.

To ensure this resource was fully utilised by the schools:

- MCE deployed bilingual trainers who continually guided and partnered with Chilean educators.
- Professional Development programmes were tailored to the needs of Chilean educators operating in different environments and with different student abilities.



Let's listen to what educators have to say about MCE's Professional Development!



Testimonials

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Bibie Nariswari
Singapore Indonesia School, Palembang
(SIS Palembang)

Courses on MCEduHub for Professional Development highlight evolving trends, which helps us improve the ways we impart our knowledge to our students. What I've learnt from the courses are greatly useful for planning classroom content and activities. I recommend

all educators to attend courses on MCEduHub for Professional Development portal.

Educator from International School Dhaka who
attended a customised Professional Development
course on Singapore Maths Approach by MCE

We use Singapore Math at our primary level to make math learning more effective for our students. This method preserves the techniques, sequencing, and rigor that help learners.

The customised Professional Development course gives insights to a highly effective teaching approach based on research on math mastery! And now, our math classes are productive, focused, and full of mathematical conversations.

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Dr. Hunada Kanbar
Chief Learning Officer,
Sharjah Education Academy

MCE's Professional Development courses and programmes helped our teachers exercise creativity and alter traditional teaching methods for the new age. The use of up-to-date technology in MCE's online PD courses also means that learning is high impact, productive and accessible to all our teachers.

Brazil Gutierrez,
Singapore School Philippines

The workshop on: Effective Teaching Strategies in Singapore Mathematics delivered by Dr. Lai Chee Chong is enormously effective. After attending several Singapore Maths training, my impression was this is a training that will help improve our lesson delivery.

As an educator, the training was a reminder for us to deliver the lessons from the lens of the pupil, i.e. keeping all instructions simple, less is more. We articulated about how to make kids "own their Maths" by fostering relational understanding, providing opportunities to make connections between maths and real life. Which I believe must be the core in teaching and learning.

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Marshall Cavendish Education (MCE) is a global innovative education solutions provider dedicated to nurturing the joy of learning and preparing learners for the future. We believe the best way to do so is by simplifying learning and listening to the needs of schools, teachers, students, and parents.

MCE makes world-class educational content more accessible through a seamless experience that integrates both print and digital resources.

MCE has worked with ministries, policymakers, educators, and parents in over 95 countries, designing education solutions in 17 languages for Pre-K to Grade 12. MCE is an Asia-based publisher who was the first to have its resources endorsed by Cambridge International Education and have been publishing resources to support the Cambridge Pathway since 2019.

www.mceducation.com

