Courses on MCEduHub for **Professional Development Portal**

These certified self-paced and blended courses are great for time-poor educators who are looking to grow their expertise. These courses are either asynchronous or blended, so educators can complete the course at their own pace.

Educators will receive an e-certificate endorsed by MCE or partnering universities upon completion of the course.

Leadership Development Programmes



Vision Values and Communication | PDLLL02



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.

Specialist Development Programmes



Preschool Mathematics

Differentiated Instruction Strategies 101: For Young Learners | PDPG09



This course aims to equip participants with the skills as an educator in a differentiated classroom, some 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.

Nurturing Early Learners: Mathematics | PDAS04|



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.

Progress Tracking 101: Fundamentals (Maths) | PDPG10



This course aims to equip participants with the skills and knowledge to create a good curriculum or educational program 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 program.

Progress Tracking 104: Assessment (Maths) | PDPG11

3 Credits Self-Paced

This course aims to equip participants with the skills and knowledge to create a good curriculum or educational program 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 program.

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.

The Importance of Using Play Pedagogy When Teaching Maths | PDSPM18

3 Credits (Self-Paced)

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.

The Methodology of Teaching Maths Using Play Pedagogy | PDSPM19

3 Credits (Self-Paced)

Educators will learn about the different aspects of the Play pedagogy and how they can be implemented in the classroom. They will also learn about the planning process, evaluating the suitability of materials, and the different teaching pedagogies, as well as be expected to critique lessons. There will also be a short section on digital technology in Play pedagogy.

Teaching Maths Using Play Pedagogy: Planning Play Lesson Creatively | PDSPM20 |

3 Credits Self-Paced

Educators will look at how different forms of Play can be used for the same lesson. At the end of this course, educators should be familiar with the different categories of Play and will be able to create alternative forms of Play lessons for different age groups or capabilities. Educators will also learn to critique and select websites that may be beneficial to reinforce students' learning.

Teaching Maths Using Play Pedagogy: Materials and Study Centres | PDSPM21 |

3 Credits Self-Paced

Educators will explore the use of different materials in different study centres. Educators will examine how the materials may differ and how the different centres serve the many aspects in the teaching of mathematics and numeracy in the early years. This course also covers some games educators can play with their students.

Primary Mathematics

Maths Heuristics: The Bar Model | PDSPM24 |

3 Credits (Self-Paced)

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 advance 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 Lesson | PDAS01 |

3 Credits (Self-Paced)

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

Demystifying Heuristics: Bar Modelling and Applications | PDPG06

3 Credits Self-Paced

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.

Demystifying Heuristics: Solving Word Problems | PDPG07 |

3 Credits (Self-Paced)

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.

Teaching Whole Numbers 101 | PDPG08 |

3 Credits Self-Paced

This course aims to equip participants with the basic concepts of teaching whole numbers. It provides educators with the necessary guidelines on how to design a lesson and to apply the different strategies when teaching whole numbers, addition and subtraction.

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 1 of 2.

MAP101: Fundamentals of Singapore Mathematics Curriculum | PDSPM22 |

3 Credits (Self-Paced)

This course aims to help participants re-think the role of school Mathematics to develop thinking and problem-solving ability. Learning theories such as those by J. Bruner, R. Skemp and Z. Dienes help participants understand how students can access mathematical concepts.

Primary Science

Inquiry Approach 101: Deliver Fun and Engaging Science Lesson | PDAS03 |

3 Credits (Self-Paced)

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

3 Credits (Self-Paced)

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 Science

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

6 Credits Blended

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.

Skills Development Programmes

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

6 Credits Blended

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 |

6 Credits Blended

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 |

3 Credits Self-Paced

An introductory course to Microsoft Excel. 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.

Designing Effective Online Lessons | PDPT02 |

4 Credits Self-Paced

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 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.

