MCE MasterClasses LIVE & Other Resources

MCE MasterClasses are hosted LIVE that run between 1 to 3 hours long, and other resources such as Educator eBooks are available on MCEduHub for Professional Development portal. Designed for educators, the MasterClasses and Educator eBooks are conducted and written by experienced trainers who are graduates of National Institute of Education (NIE), Singapore or with strong educational and teaching background.

MCE MasterClasses & Other Resources cover 3 learning development pathways, Leadership, Specialist and Skills.

Leadership Development Programme



The Balance Scorecard for Schools 9789814852838

3 Credits (eBook)

Published in 2019, "The Balanced Scorecard for Schools" is written by Peter Adams on a framework for achieving authentic school evaluation and sustainable school improvement.

More Leadership Development MasterClasses Are Coming Soon!

Specialist Development Programmes

Preschool Mathematics

Transition from Kindergarten Mathematics to Primary Mathematics PDSLE07

3 Credits (LIVE)



This workshop will help participants understand the core ideas and learning theories of early childhood numeracy. It covers varied, engaging hands-on activities to reinforce the core ideas. It also highlights the progression from kindergarten to primary mathematics so that young learners can make a better transition to learn mathematics in Primary 1. Participants will better understand the expectations and demands of teaching and learning mathematics in lower primary levels, thus enabling them to prepare young learners more adequately for the transition.

Design Thinking in Early Childhood Education | PDSLE09

3 Credits (LIVE)



Learners will be able to discuss the concept of design thinking and its relevance in today's world. It also explores other types of thinking related to intentional design, talks about the design brief and how to plan for a design brief in the context of early childhood education. Learning focuses include incorporation of design brief in a numeracy and literacy early childhood education classroom.

Preschool STEM

Teaching Nature through Play Based Science in Early Childhood | PDSLE19

3 Credits LIVE

This live webinar will teach about the science of plants, how they draw water up, and why they have different colours followed by showcase of hands-on science experiments.

Primary Mathematics

Key Learning Theories for Teaching Mathematics | PDSLE13 |

3 Credits LIVE

In this session, five key learning theories are discussed to help participants understand how primary students can learn mathematics to achieve conceptual understanding for mastery. Effectively adopting these key learning theories in classroom teaching will help to develop students' thinking and problem-solving skills, among other 21st century competencies.

Differentiated Instructions for the Teaching of Primary Mathematics | PDSLE08 |

3 Credits (LIVE)

In this webinar, participants will learn to plan for differentiation for advanced and struggling students. Differentiation in terms of content, process and product will be discussed. Participants will learn DI strategies to teach effectively and to design assessment tasks and enrichment tasks using the textbook.

Mathematical Problem Solving | PDSLE12 |

3 Credits (LIVE)

Problem solving is an integral part in mathematics learning. It is intended to hone students' problem-solving skills and to gain a deeper insight in the contents they have learnt. Nonetheless, it is also an area that poses tremendous challenge to the minds of the students, especially when it comes to solving non-routine problems. In this webinar, we identify key components and skill sets required in problem solving and address how all these can be integrated to enable students to solve problems more effectively.

Designing Activity-based Lesson in Primary Mathematics | PDSLE18 |

3 Credits (LIVE)

Jerome Bruner's theory of representation provides an underpinning for an activity-based lesson. In this webinar, we address key aspects of an activity-based lesson to make it purposeful and not simply going through the motions of activity.

Teaching of Arithmetic Operations on Fractions | PDSLE21 |

3 Credits (LIVE)

Fraction is a harder concept for students to grasp. The concept is based on part-whole relationships but the main hindrance in learning fractions lies in the extension of the four arithmetic operations from whole numbers to fractions. In this webinar, we address key points in teaching operations on fractions so that not only they master the arithmetic on fractions but also understand the rationale of these operations instead of rote learning a mechanical process.

Primary Science

Alternative Conceptions: When Thinking You Are Right Can Be So Wrong | PDSLE10 |

3 Credits [LIVE]

Often, children learn science, influenced by their daily experiences that may lead to them having alternative conceptions (as distinguished from scientific conceptions or misconceptions). When these alternative conceptions are not addressed, they hinder the learning of scientific conceptions. In this webinar, we explore 5 sources of alternative conceptions and use the A.B.B.A. approach to engender conceptual change.

Laboratory Activities of Process Skills and Practices as Inquiry Teaching Partners in Science | PDSLE15 |

3 Credits (LIVE)

In this module, participants will leverage on laboratory activities to conduct inquiry– based investigations and fair-tests. Age-appropriate science process skills will be illustrated in examples provided. Participants will select one investigation of their choice and share how inquiry is included in the design of the investigation.

Technology as Inquiry Teaching Partner in Science: Using Simulations and Videos | PDSLE17 |

3 Credits (LIVE)

In this module, participants will be introduced to the meaningful use of emerging technologies for scientific inquiry. Participants will explore the use of science simulations and videos to facilitate meaningful scientific inquiry. Specifically, they will learn to identify and locate websites for age-appropriate simulations and video resources and integrate them in the teaching-learning process.

Assessment For, Of and As Learning in School Science | PDSLE23 |

3 Credits (LIVE)

In this session, participants will be introduced to "assessment for, of and as learning" in science. Participants will examine the different types of assessment items that will focus on performance and higher order thinking as well as the use of use of technologies for assessment. Participants will be guided to design age-to-appropriate assessment items to facilitate the teaching and learning processes. Formative assessment will be covered in the training.

Primary STEM

Learning Through Exploration on STEM Trails | PDSLE20 |

3 Credits (LIVE)

A STEM trail creates opportunity for exploratory learning experience beyond classroom. On a STEM trail, students learn how science, technology, engineering and mathematics can be used synergistically to explore and handle problems in a real-world environment. In this webinar, we address what it takes to make a trail effective and fun for students to extend and enrich their learning experience. We illustrate STEM trails with examples.

Secondary Mathematics

Differentiating Secondary Mathematics Lesson for Classroom | PDSLE11

3 Credits LIVE

A 'one-size-fits-all' math 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 lesson for secondary mathematics.

Developing Visual Skills in Secondary Mathematics | PDSLE14 |

3 Credits (LIVE)

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

3 Credits LIVE

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 |

3 Credits LIVE

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.

Skills Development Programmes



Social Skills MasterClasses

Cooperative Learning 1: Concept and Prominence | PDKLE01 |

3 Credits (LIVE)

This Live Webinar discusses the concept of cooperative learning and its prominence in today's education scene. It also explores eight cooperative learning principles and how to implement them.

Cooperative Learning 2: Techniques and Usages | PDKLE02 |

3 Credits (LIVE)

This Live Webinar explains and demonstrates a range of cooperative learning techniques that can be used in any area of language learning.

Cooperative Learning 3: Difficulties in Implementing Cooperative Learning | PDKLE03 |

3 Credits LIVE

This Live Webinar addresses difficulties in implementing cooperative learning and how to attempt to overcome these very real difficulties. The webinar also offers suggestions for teachers who are just getting started with cooperative learning.

Anger Management MasterClasses

Positive Discipline Series 1 - Understanding and Connecting with Children: Principles of understanding children misbehaviour | PDKLE04 |

3 Credits LIVE

This 'live' webinar-workshop will discuss the main principles of understanding children misbehaviour and connecting with children.

Positive Discipline Series 2 – Understanding and Connecting with Children: Positions of control of the adult & alternatives to punishment | PDKLE05 |

3 Credits LIVE

This 'live' webinar-workshop focuses on the positions of control of the adult-caregiver-teacher and the alternatives to punishment.

Positive Discipline Series 3 – Understanding and Connecting with Children: Interaction with children in the context of children misbehaviour | PDKLE06 |

3 Credits (LIVE)

This 'live' webinar-workshop focuses on the dos and don'ts in our interaction with children in the context of children misbehaviour, and how to engage willing cooperation from children.

Emotional Intelligence (EQ) Development MasterClasses

Power English Communicating with Confidence 1: Science of Voice Production | PDKLE07 |

3 Credits

This 'live' webinar-workshop will unpack the science of voice production, along with the understanding of phonetics and the use of the IPA system for articulation and pronunciation.

Power English Communicating with Confidence 2: Articulation of Long and Short Vowel Sounds | PDKLE08 |

3 Credits (LIVE)



This 'live' webinar-workshop will focus on the articulation of long and short vowel sounds, single and double consonant sounds, and voiced and unvoiced consonants, as well as common errors in pronunciation.

Power English Communicating with Confidence 3: Developing Proper Sentence Structures | PDKLE09 |

3 Credits [LIVE]



This 'live' webinar-workshop will look into the developing proper sentence structures in the classroom, including modelling and reinforcing positive speech patterns and vocabulary for young children and developing language activities for them.