يونيرسيتي بروني دارالسلام
Universiti Brunei Darussalam

TEACHER'S DAY CONFERENCE 2019

PROGRAMME BOOK

18 Safar 1441 / 17 October 2019

Theme:

"Empowering Education Excellence Through Innovation"
At the Universiti Brunei Darussalam, Negara Brunei Darussalam

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PROGRAMME
MORNING SESSION

7:00 am
Arrival of Committee Members

7:00 – 8:00 am
Registration of participants

8:15 am
Participants gather in the venue

8:30 am
Arrival of Guests

8:45 am
- **Arrival of Guest of Honour**
  Yang Berhormat Dato Seri Setia Awg Haji Hamzah bin Haji Sulaiman
  Minister of Education
- Recital of Surah Al-Fatihah and Prayer
- Welcoming Remarks by Chairperson
- Official Launching by Guest of Honour

9:10 – 9:45 am
Keynote Speaker

9:45 – 10:00 am
Poster Presentation
Foyer Chancellor Hall

10:00 – 10:30 am
REFRESHMENT

10:30 – 11:30 am
Forum Session

Breakout Session
- Attend poster presentation
- Register for Workshops
  (limited seats)
- Register for Parallel Session for the afternoon
  (please take note that attendance will be taken again in the afternoon prior to the session)

12:00 pm
END OF MORNING SESSION

PROGRAMME
AFTERNOON SESSION

2:00 – 2:30 pm
Registration of Participants
(Collect packed refreshment)

PARALLEL SESSIONS

2:30 – 2:55 pm
Parallel Session 1

COMFORT BREAK

3:10 – 3:35 pm
Parallel Session 2

COMFORT BREAK

3:50 – 4:15 pm
Parallel Session 3

WORKSHOP

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Workshop 1 & 2

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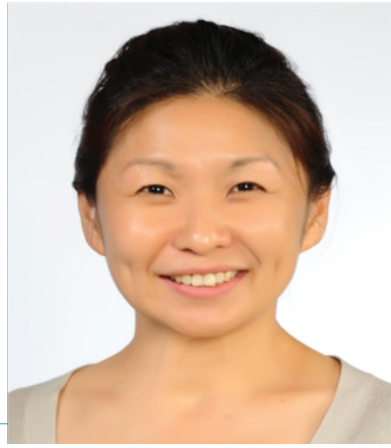
POSTER PRESENTATION

2:30 – 4:15 pm
Participants can also view Poster Presentations at any time in the afternoon

KEYNOTE ADDRESSES

COMMUNITIES OF INNOVATORS THROUGH EVIDENCE-BASED AND THEORY-DRIVEN PRACTICE



DR TEO CHEW LEE

Senior Research Scientist;
Programme Director (Learning Sciences and Innovation),
Office of Education Research National Institute of Education Singapore

About the Speakers

Dr Teo Chew Lee is a Senior Research Scientist in NIE. She began exploring Knowledge Building (KB) technologies in her classroom at the beginning of her career as a science educator about two decades ago. She completed her Ph.D. at OISE/UT, Canada and joined the ministry in 2009 to lead a research group on translating KB theories technologies into Singapore classrooms.

Chew Lee uses a design-based research approach to study ways to facilitate Singapore teachers in designing knowledge building environments. She has worked at various level and subjects from primary school to junior colleges. She focuses her work on understanding teachers' problem spaces in their discourse and their work to design idea-centered learning environments. From 2013, she extended the impact of the work to create a KB network learning community in Singapore that builds new understanding of the practice. She currently leads the Learning Sciences and Innovation research programme in OER, working closely with a group of research scientists in advancing the understanding of innovative practice in Singapore.

Abstract

What does it mean for teachers to be innovators? Why does it matter? What do teachers need to do? This talk puts forth perspectives to address these three questions about innovation in the backdrop of the waves of educational innovation that has swept across the globe while we continue to observe that classroom practice on a day-to-day basis remained predominantly teacher-centred and didactic. Extensive research has shown that developing thinking dispositions such as curiosity, critical thinking and persistence in our students is just as necessary, if not more, than developing their content knowledge. We know that classroom practices need to change to prepare our students for the knowledge economy. This talk draws from a decade of research on Knowledge Building Classrooms in Singapore to present vignettes of teaching and learning in an attempt to explain three concepts that are fundamental considerations to seeding and sustaining innovation for the 21st-century classroom and beyond. The three concepts are "community", "evidence-based", and "theory-driven". The talk suggests definitions to these concepts and provides a model of authentic community approach for teachers professional development with practical strategies for innovative practice.

FORUM SESSION

EMPOWERING EDUCATION EXCELLENCE
THROUGH INNOVATION

Moderator

EDDY FAZLIN BIN HAMDAN
Ministry of Education

About the Speakers

Cikgu Eddy Fazlin started working with the Ministry of Education in 1998. He is currently holding a position as Assistant Director/Head of Services Section/Head of Digital Media and Electronic Unit, under the Department of Schools. He earned a Bachelor of Science Education from Universiti Brunei Darussalam and a Master of Education in Educational Technology. He is currently pursuing a PhD degree in Educational Technology at SHBIE, UBD. His educational background includes services such as Head of Business Analyst for iNIES projects, workshop coordinator for technology integration in the classroom, and facilitator for technology enhanced learning environment (TELE) workshops.

FORUM SESSION

EMPOWERING EDUCATION EXCELLENCE
THROUGH INNOVATION

Speaker 1

CIKGU HAJI MAT DANI BIN HAJI ABU BAKAR

Headmaster
Sekolah Rendah Dato Mohd Yassin Kluster 4
(Anugerah Guru Cemerlang dalam Bidang Kepimpinan Sekolah 2017)

About the Speakers

Haji Mat Dani has been in service with the government of His Majesty, The Sultan of Brunei Darussalam for more than 23 years. He has attended various leadership programs locally and overseas which included Workshop on International Conference on Science and Mathematics Education for South-East Asia, Kuala Lumpur, Malaysia (1999), South-East-Asia School Principal Best Practices Forum, Jakarta, Indonesia (2007), Competition and Innovation for Children, Varanasi, India (2012), School Leadership Program (2010), SEAMEO INNOTECH Regional Scholarship for Leaders and Managers (Regional SELM), Excellence in Strategic Thinking and Innovation for South-East-Asia school leaders, Quezon City, Philippines (2015), School leadership for Senior School Leaders, University Brunei Darussalam (2016) and School Leaders Conference (2017).

He has also presenting papers locally and overseas such as An Inspirational School at South-East-Asia School Principal Best Practices Forum, Jakarta, Indonesia (2007), Developing Dynamic Supervisory Skills through Action Reflection Learning at SEAMEO INNOTECH Regional Scholarship for Leaders and Managers (Regional SELM), Excellence in Strategic Thinking and Innovation for South-East-Asia school leaders, Quezon City, Philippines (2015), Strategic Planning on Quality Instructional Leadership in Teaching and learning at School Leaders Conference (2017), Strategies to help pupils with learning difficulties (2014), School Expectation Towards Excellent School, Workshop for Newly Appointed Local Contract Teachers (2017, 2018), Clinical Outreach Program at Dato Mohd Yassin Primary School (2019).

He was awarded with the Master of Education in Leadership and School Improvement, UBD (2013), Bachelor of Education in Primary Education, UBD (2007) and Certificate of Education, UBD (1996). He is a committed school leader which he has initiated some school programmes such as Ad-Doha, HOPE, home-link project, Clinical Outreach Programme, Learning Outreach Programme in order to improve the education quality of the school. Because of his commitment, he was awarded with the Pingat Indah Kerja Baik (PIKB) 2015 and Anugerah Guru Cemerlang dalam Bidang Kepimpinan Sekolah in 2017.

FORUM SESSION

EMPOWERING EDUCATION EXCELLENCE
THROUGH INNOVATION

Speaker 2
NADIA KADIR

Public Sector, Brunei and Education
Lead for Brunei, Nepal & Bhutan
Microsoft Brunei Sdn Bhd

About the Speakers

Nadia Kadir graduated with BA in Sociology & Anthropology from University of Brunei Darussalam. She is an innovative Microsoft Certified Educator with a strong passion in enhancing the learning experience for all students with Microsoft learning tools. Her extensive experience in developing education intervention programmes for intelligent underprivileged students has shown determination and commitment towards contributing to Brunei's education system. As a public sector and an education lead in Microsoft, she is an enabler in integrating modern technology in traditional classrooms moving towards a transformative education. Nadia has mentored institutional leaders to shift the school's vision into becoming a Microsoft Showcase School in the country. She has proven track record of supporting schools and empowering teachers to become Microsoft Innovative Educator (MIE), Microsoft Innovative Educator Expert (MIEE) & Microsoft Innovative Educator Fellow. Among her great initiatives, she organizes "Coffee with MIEE Sessions" which is a monthly event whereby pro-active teachers are able to share their best teaching practices, exchange knowledge, collaborate and create projects together with teachers not just locally but also internationally.

FORUM SESSION

EMPOWERING EDUCATION EXCELLENCE
THROUGH INNOVATION

Speaker 3

EMILY THAM

Chung Hwa Middle School Brunei

About the Speakers

Mrs Emily Tham is a passionate and qualified secondary school Mathematics teacher at Chung Hwa Middle School, BSB with 10 years' of teaching experience. After obtaining her Bachelor degree in Mathematics from the University of Malaysia, Sabah, Mrs Tham began her teaching career, and has since then been spreading her love for Mathematics to the students under her care.

Mrs Tham has been certified as a Microsoft Innovative Educator Expert since 2016, a Microsoft Innovative Educator Fellow for 2018-2019, a Microsoft Master Trainer for 2018-2019 and a Global Minecraft Mentor recognised by Microsoft in Education.

As a Microsoft Certified Educator, Mrs Emily Tham is well versed in technology literacy competencies, which have enabled her to provide rich, customised learning experiences for her students, as well as the ability to empower other educators to do what she does locally and globally. Her focus is on innovation and value creation in the classrooms, while using useful teaching and learning tools that equip educators and learners with 21st century skills.

In April 2019, Mrs Tham was selected to attend the Global Educators Exchange in Paris, representing Brunei as a Microsoft Innovative Educator Fellow. This honour and privilege have inspired her to venture further in exploring other ways of using games and technology in teaching and learning. She has also presented in various workshops, forums, and professional development training within the school and country in the use of technology in classroom and gamification in education. Besides using Microsoft tools in teaching, her favourite gamification tools that she uses in her mathematics lessons are Minecraft Education Edition, Mangahigh, Classcraft and Prodigy. She believes that gamified classrooms are very effective as they engage students by tapping into their interests while developing their curriculum-based skills at the same time.

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Brunei Darussalam Teacher Academy

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Brunei Darussalam Teacher Academy (BDTA)

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Department of School Inspectorate

Dr Mohammad Sofian bin Haji Radzuan
Department of School Inspectorate

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Brunei Darussalam Teacher Academy

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

Mohammad Erman bin Haji Jais
IBTE Jefri Bolkiah Campus

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Educational Technology Development Section

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Yvonne Yong CC1
Ministry of Education, Brunei

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Dr Haji Abu Bakar Bin Haji Madin
Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Universiti Brunei Darussalam

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Institut Pendidikan Sultan Hassanal Bolkiah, UBD

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Sultan Hassanal Bolkiah Institute of Education, UBD

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Universiti Brunei Darussalam

Dr. Norsadiah binti Hj Mohd Raduan
Maktab Duli Pengiran Muda Al-Muhtadee Billah, Gadong

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Maktab Duli Pengiran Muda Al-Muhtadee Billah, Gadong

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PRESENTERS
Dr. Hjh Jabaidah binti Hj Bungsu
Universiti Brunei Darussalam

Mohammad Erman bin Hj Jais
IBTE Jefri Bolkiah Campus

ABSTRACT OF PAPERS

THE IMPACT OF INVOLVING STUDENTS IN CREATING BIOLOGY YOUTUBE VIDEOS TO TEACHING AND LEARNING

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There are many ways to engage students in learning biology, at the same time making it fun and interesting. In the study on ICT-based Inquiry Instructions (IBII) conducted by the author, using both ICT and inquiry-based showed positive outcomes in students' learning, even though IBII was done offline. In expanding further her research findings, the author has invited her students to team up into respective groups, and to come up with their own higher-order thinking questions and answers respectively. However, they are required to present their findings to the public through YouTube. While the author uploaded these videos in her YouTube channel (XI Xtraintelligent), her students need to advert their video links and get 'likes' by YouTube audiences, as a mean to know whether they able to communicate their findings effectively or not. Even though counting the number of 'likes' maybe biased or planned, what's important is the impact of making videos online to the learning and teaching of biology. Not only have their learning environments changed from typically quiet classes to active learners, the students' academic performances also showed positive significances. They were three classes involved in the creation of YouTube videos, based on the topic Animal Nutrition. This paper will share students' feedbacks on their experiences of creating and sharing their uploaded videos, and the impact of their experiences to their learning through survey and focus group interviews. The author will also share the impact of students' involvement to her teaching to date.

Sub-theme
Digital Technology-based Intervention / Action Research in Classrooms

ABSTRACT OF PAPERS

CRITICAL ASPECTS AND VARIATION THEORY: A LEARNING STUDY ON PROFITABILITY RATIOS

Vincent Andrew
Brunei Darussalam Teacher Academy
vincent.andrew@moe.gov.bn

A group of four high school Business teachers supported by a facilitator set out to discover the critical aspects of teaching profitability ratio, a Year 11 topic deemed confusing and difficult to teach by one of the teachers. The approach used is called a 'learning study' which combines an action research cycle of planning, teaching and evaluation with a theoretical framework, the variation theory of learning. A pre-test was designed to reveal students' different ways of understanding profits and the use of profit margins to assess company performance. Using the critical aspects that emerged from the pre-test, two lessons were designed incorporating a systematic pattern of variation. In the first lesson, students were shown two different methods of presenting financial data but the profits were kept invariant. In the second lesson, the teacher varied systematically revenue, variable cost and fixed cost to help learners discern what might affect profit and margins. The learning outcomes from the post-test suggest that the learners have become more competent in handling financial data. This presentation will attempt to explain what the teachers did and what they learned as a result of their engagement in the learning study.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

THE MAPPING OF BRAIN BASED LEARNING (BBL) APPROACHES IN THE TEACHING FOR MASTERY (TFM) CLASSROOM

Dr. Nadiah Haji Mohamad Noor
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Teaching is a complex and demanding task that requires highly specialized skills and knowledge to impact significantly on student learning. Improving the learning outcomes of all students regardless of their individualities, socioeconomic background or geographical location is one of The Ministry of Education's aims to accomplish the 'Wawasan Brunei 2035'. In realizing this mission, The Ministry of Education through the Literacy and Numeracy Coaching Programme (LNCP) has introduced the Teaching for Mastery (TfM) framework as a guideline to enhance the quality of teaching and learning in the classrooms. The TfM framework guides teachers for effective teaching in relation to the pedagogical themes of, (i) structuring and organizing lessons, (ii) teaching content dialogically, (iii) designing effective learning tasks, and (iv) assessing learning continuously. It is believed that the implementation of TfM in the classrooms may lead to continuous improvement in student attainment (MOE, 2017). Therefore, the main objective of this workshop is to disseminate the implementation of TfM in the classrooms by using Brain Based Learning (BBL) approaches. This workshop reveals powerful information, usable skills and action steps of how brain works and learns with respect to learning and teaching in schools. As such, it also presents the latest research in educational neuroscience, and links it with specific, practical classroom-ready applications that boost student learning. It also discusses examples of incorporating BBL approaches in a TfM lesson plan. Furthermore, this workshop guides participants to consider how this new insight can support a lively and engaging classroom, and hence, enhancing the quality of learning and teaching in Brunei Darussalam.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

TEACHERS' EXPERIENCES OF USING THE DIRECTED READING-THINKING ACTIVITY AS AN INSTRUCTIONAL STRATEGY FOR READING ENGAGEMENT IN THE PRIMARY CLASSROOM

Ewana Dr Hj Mohamad Yusop
Maktab Duli Pengiran Muda Al-Muhtadee Billah
ewana.yusop@md.moe.edu.bn

Recent developments in the teaching of reading in ESL settings have shifted towards a new interest for reading for meaning and critical literacy. With this development, nations around the globe have shown an increased focus on developing ways to produce lifelong readers who can engage with text for information, knowledge, pleasure and enjoyment. Brunei Darussalam acknowledges this development in education, as reflected through the goal of its literacy education, which is to create skilful, resourceful, and engaged readers. This is an important goal as research has indicated the correlation between reading achievement and reading engagement is greater than that of reading achievement and social-economic status. Generally, being an engaged reader has been defined as one who is motivated to read, uses good reading strategies, constructs new knowledge from the text and is socially interactive in their approach to literacy. The cultivation of engaged readers requires teachers to use instructional reading practices that puts equal focus on the cognitive and affective aspects of reading development. However, many instructional reading practices used in the ESL settings tend to focus only on developing the cognitive elements of reading such as fluency and decoding. So far, there has been little discussion on instructional strategies that support the engagement in reading in the ESL classrooms. Hence, this study explores teachers' experiences of utilising an instructional reading strategy, the Directed Reading-Thinking Activity, to foster the reading engagement of young ESL learners in Brunei. This study is an exploratory multiple case study involving four ESL teachers from three government primary schools. Qualitative data was gathered through semi-structured interviews with the teachers and through classroom observations. This helped provide rich and in-depth data on the impact of DR-TA on students' reading engagement. The findings from the study indicated that young ESL learners' reading engagement can be supported through classroom instructions that build on intrinsic motivation and through the scaffolding of discussions. These findings from the study contribute to the literature on reading engagement in the ESL settings, in particular the critical elements that compose effective instructional reading strategies that engage readers.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

A SHIFT TOWARDS SOLUTION-BASED CULTURE THROUGH IMPACT DATA: A LEARNING DEVELOPMENT THROUGH LITERACY NUMERACY COACHING PROGRAMME

Dr. Maureen Chong Siew Fang
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The current education system must be built on a culture of impact data-driven, and evidence-based decision making to evaluate current process and outcomes at multiple levels, to better understand the reality in planning for short-term, medium-term and long-term successes. The definition of impact data in this paper focuses on the difference that performance data have made for individuals or communities (students and school) such as, the measures of changes in knowledge and skills. The cycle of evaluation of continuous professional learning of a teacher in Brunei Darussalam would begin with attending a course followed by embedding the new knowledge and skills in classroom practice with evaluation and monitoring for improvement. However, professional learning follows a cycle of continuous process where professional learning is link to needs, and needs are identified through impact data which, is then use to provide secure support and mapping of relevant professional development to create change which, follows up through evaluation and monitoring then back to collecting impact data to plan for future intervention. Importantly, by going through the cycle of professional learning and evaluating at multiple levels, this provides the opportunity to engage with useful, meaningful and valid data to produce impactful outcomes of fully supported and sustained system of improvement and change. Therefore, this paper highlights a robust process of mapping professional and holistic needs of teachers to relevant and impactful professional development and support to ensure the professional learning experiences and support have the greatest impact on his/her practice, based on needs and requests through a survey and a tool of observable characteristics for the measure of transference of knowledge and skills. The process involves a comprehensive management of the impact data collected from starting point of collecting the data, analysing the data, to reporting the data for evaluation and improvement. We are shifting our education system from problem-based culture to solution-based culture through knowledge we know of the system and the use of evidence and data to deepen our understanding of the current reality in steering the decision making process guided by the central principles of the Literacy Numeracy Coaching Programme. We embrace challenges and accommodate to the needs and constraints with flexibility while maintain fidelity to the core principles of the ministry's vision and mission.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

NEURO-COGNITIVE EVALUATION IN EARLY NUMERACY SKILLS FOR PRIMARY SCHOOL PUPILS: MODELING AN INTELLIGENCE-BASED CLASSROOM

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It is argued that pupil's numerical competence in the development of early numeracy skills is crucial to instill the fundamental concept of arithmetic. Neuro-cognitive development is the underpinning factor that stimulates numeracy education across the primary school years but the performance of pupils' experiences in different levels of years with complex underlying difficulty is not significantly prevalence. Samples from past five-years, 'Year Six' public examination results in arithmetic from selected primary schools are evaluated to explore difficulties these pupils experience in performing their early numeracy tasks. The inferential statistical-data is proportionally interpreted as the distribution function of binomial expression below:

$$\text{No.of Samples (N)} = \sum_{n=x}^{1} \Delta(X)$$

Output from such evaluation is essential to successfully design a model of intelligence-based classroom environment that supports curriculum, promotes cognitive-psychology and stimulates pupils' understanding on the unifying concept of mathematics. Overall, this paper looks-ahead into innovative ways a technology-based approach overcomes the complexity of numeracy underperforms amongst primary school pupils in their early education that seeks a scale-up solution made to work both pedagogically and technologically in a smart classroom setting.

Sub-theme
Programming and Coding

ABSTRACT OF PAPERS

INVESTIGATING THE USE OF INTERACTIVE VERTABLE BOARDS (IVBS) IN YEAR 1 CLASSROOMS: A CASE STUDY OF FOUR ENGLISH LANGUAGE TEACHERS IN BRUNEI DARUSSALAM

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The case study presented in the paper described how four Year 1 English language teachers integrated the use of Interactive VerTable Boards (IVBs) in their lessons. This study also investigates the predominant features of classroom talk between these teacher and their students when the IVB was used. In addition, it explores the teachers' perceptions on their use of IVBs. By using Gagne's (1985), Nine Events of Instructions as a framework to analyse how the IVB was used during the English lessons, the findings reveal that the Year 1 teachers tended to use the IVB for giving attention, stimulating prior recall, presenting the stimulus, providing learning guide, eliciting performance, providing feedback and assessing performance. In exploring classroom talk that occurred when using the IVB, it was found that questioning, extended teacher turn and scaffolding were amongst the predominant features. All four teachers perceived that the IVB is a useful, convenient tool that helps to scaffold young learners' learning of English. With this, the study recommends the integration of technology, such as IVBs into English lessons, as it helps to support teaching and learning and promote dialogic interactions between the teacher and students in the primary classroom.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

INVESTIGATING NUMERACY CONCEPTS FOUND IN THE HOLY AL QUR'AN: THE DISCOVERY

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Without a doubt, the teachings of Holy Qur'an were considered the best for the whole of mankind until the end of time. After 1400 years since its first revelation, the Holy Qur'an has been used in diverse areas of research disciplines, however it is still insufficient in the teaching of literacy and numeracy concepts. The purpose of this study is to promote the analysation of the Holy Quran's verses for an in-depth understanding of some numeracy skills found in the Holy Book. When the verses are 'read to ponder and reflect', it gives a different level of thinking than to just 'read and understand' them. The discovery should be able to make numeracy concepts easier for students to remember, understand and endow with insights that may take them to their hearts. The scope of this research involves concrete mathematical concepts of addition, subtraction, multiplication, division and ratio. The study also includes some suggestions on how these concepts should be introduced especially to young children. Since the Holy Qur'an was revealed with full of Allah's blessings, this discovery is intended to have a positive impact in future teachings of numeracy skills amongst Brunei Darussalam's primary and secondary students.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

APPLYING THE BAR MODEL CONCEPT WITH THE BUTTERFLY METHOD TO SOLVE FRACTIONS

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This is an action research study that investigates an intervention for Year 9 students that use the Butterfly method that was taught with the Bar-Model concept. The Butterfly Method is a visual and an alternative method for teaching addition and subtraction of fractions where diagonal and horizontal multiplication of denominators and numerators are applied. Whereas the Bar-Model concept is a technique where bars are drawn as a whole that is divided into equal pieces that is defined by the denominator. A qualitative approach was used in order to explore the impact of the intervention. There were nine out of 19 Year 9 students selected for the interview, in one of the Brunei Government secondary schools. A research instrument was developed and modified that consisted of 16 questions categorised into several levels on adding and subtracting fractions. The data was accumulated and analysed from the students' written pre-test and post-test as well as from the students' interview transcripts. From the students' written analysis, not all of the students applied the Butterfly method. These students were selected for interviews in order to gain deeper insights into how they developed the errors and misconceptions from both tests. Among the common errors and misconceptions which majority of the students develop were adding the numerators and denominators of proper fractions whereby these students were confused with the whole number concepts. Findings from the interviews revealed that the students were not confident with the Butterfly method and they needed more time to be familiar with the concept. Another factor for not applying the Butterfly method are due to students' confusion with questions on subtracting fractions that has the same denominators and subtracting a proper fraction from a whole number. However, the Butterfly method was taught with the Bar-model concept of splitting the bars that can visually assist the students to add and subtract the fractions effectively. For future research, the test instruments and the intervention lessons should be modified to fully test the students' misconceptions on splitting the Bar-models with the Butterfly method. Meanwhile, findings from the students' errors and misconceptions may help teachers be aware of their students' problems in the areas which they needed help the most. Teachers could also review their lesson plans and actual lessons with implementing new and innovative teaching strategies.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

THEORISING VARIATION THEORY – A 'LEARNING STUDY' ON CONSUMER PRICE INDEX

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The aim of this presentation is to describe and reflect on two Economics lessons taught by a group of high school teachers focusing on the object of learning consumer price index (CPI). The teachers (n=8) were part of a learning study course 'Developing a more powerful way to teach Economics', developed and conducted for the first time at the Teacher Academy in 2019. Together with a facilitator, they collaborated to design lessons based on variation theory to improve students' grasp of the object of learning consumer price index (CPI). An analysis of the textbook example on the calculation of consumer price index reveals that it has too many aspects varying, hence making the discernment of (potential) critical aspects more difficult for learners. The teachers were involved in two action research cycles. In the first cycle, the teachers conjectured the potential critical aspects to be the percentage price increases and the weights. To show the impact on inflation rate, the percentage price increase for one good was shown first, followed by a second good. In each case the percentage price increase was invariant. The weights were different for both goods. In the second cycle, in addition to showing the price increase of two goods separately, the teachers also showed a simultaneous increase in the prices of both goods and linked it to the inflation rate. The lived object of learning after lesson one and two reveals some discernment of the critical aspects. The enacted object of learning reveals some differences in how the lesson was taught, which affected what it was possible to learn. Data sources for this study include pre and post-test responses, lesson plans, audio recordings of the sessions, videotaped lessons, teacher survey feedback and a focused group interview.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

KESAN GABUNGAN TEKNIK SQ3R DAN PEMETAAN SEMANTIK TERHADAP KEFAHAMAN BACAAN TEKS EKSPOSITORI DALAM KALANGAN

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Kajian ini mengkaji kesan gabungan teknik SQ3R dan Pemetaan Semantik terhadap pencapaian kefahaman bacaan teks ekspositori dalam kalangan pelajar Tahun 5. Tujuan kajian ini dijalankan adalah untuk mengenal pasti signifikan gabungan teknik SQ3R dan Pemetaan Semantik terhadap pencapaian kefahaman membaca bagi pelajar Tahun 5 serta melihat persepsi pelajar dalam pengajaran membaca dan memahami teks ekspositori. Kajian ini menggunakan reka bentuk eksperimen dan kaedah tinjauan. Kajian terdiri daripada 90 orang pelajar Tahun 5 di tiga buah sekolah rendah kerajaan di Daerah Tutong. Sampel dibahagikan kepada dua kumpulan, iaitu kumpulan eksperimen dan kumpulan kawalan. Kumpulan eksperimen terdiri daripada 30 orang pelajar yang didedahkan dengan gabungan teknik SQ3R dan Pemetaan Semantik manakala kumpulan kawalan seramai 30 orang pelajar berpencapaian sederhana didedahkan dengan teknik SQ3R dan 30 orang pelajar berpencapaian sederhana selebihnya didedahkan dengan teknik Pemetaan Semantik. Hasil kajian ini dianalisis menggunakan ujian-t tidak bersandar dan ujian- t berpasangan untuk menilai sama ada terdapat perbezaan yang signifikan bagi skor min tahap pencapaian kefahaman membaca antara kumpulan dalam ujian pra dan ujian pasca. Analisis parametrik One Way ANOVA juga digunakan untuk membandingkan skor min terhadap dua atau lebih pembolehubah bebas dan mengenal pasti jika terdapat perbezaan yang signifikan antara kumpulan tersebut. Manakala analisis statistik deskriptif digunakan untuk melihat persepsi pelajar kumpulan eksperimen terhadap kesan teknik ini. Berdasarkan analisis ujian-t berpasangan, menunjukkan perbezaan yang signifikan skor min ujian pascakajian berbanding skor ujian prakajian bagi kumpulan eksperimen SQ3R dan Pemetaan Semantik, $t(30) = -5.172$, $p < .05$ ($p = 0.00$). Analisis data One Way ANOVA antara kumpulan dengan nilai $F = 6.791$ ($p < .05$) dalam ujian prakajian dan ujian pascakajian menunjukkan perbezaan yang signifikan antara kumpulan dalam ujian prakajian dan ujian pascakajian.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

BIMBINGAN AKTIVITI PRAPENULISAN KARANGAN: KAJIAN KES GURU KLUSTER 5

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Kajian ini bertujuan untuk menerokai bimbingan aktiviti yang digunakan oleh guru bagi mengenal pasti sejauhmana guru mengaplikasi pelbagai jenis bimbingan yang dapat membantu pelajar dalam kemahiran menulis karangan. Peserta kajian terdiri daripada dua orang guru Bahasa Melayu, iaitu seorang guru penerima anugerah 'special mentioned' dan seorang lagi guru Bahasa Melayu peringkat rendah yang memiliki ijazah sarjana linguistik. Kedua-dua guru ini merupakan guru yang berpengalaman lebih daripada 15 tahun dalam pengajaran bahasa Melayu. Selain itu, peserta kajian yang terpilih berjaya mencapai keputusan pelajar yang sangat baik dalam keputusan PSR pada tahun 2017. Kajian ini menfokuskan peringkat Tahun 4 kerana pada peringkat ini pelajar mula belajar mengarang menggunakan teknik yang betul. Kaedah kajian yang digunakan adalah kaedah temu bual, analisis dokumen dan pemerhatian. Hasil kajian mendapati bahawa kedua-dua peserta kajian mempunyai pola yang sama dalam pengajaran mereka. Enam tema telahpun dikenal pasti dalam pengajaran mereka, iaitu aktiviti bercerita, aktiviti perbincangan, aktiviti sumbang saran, aktiviti penyusunan, aktiviti merangka dan memurnikan dan aktiviti menyemak.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

KESAN FOUR SQUARE WRITING METHOD DALAM MENINGKATKAN KEMAHIRAN MENULIS KARANGAN BERGAMBAR

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Kajian ini dijalankan untuk melihat kesan dan persepsi penggunaan teknik Four Square Writing terhadap pencapaian penulisan karangan bergambar. Kajian kuasi eksperimen ini dijalankan ke atas pelajar-pelajar Tahun 4 di salah sebuah sekolah rendah di Daerah Belait. Seramai 25 orang pelajar dijadikan sampel kajian bagi kumpulan rawatan dan 25 orang pelajar lagi dijadikan sampel kajian bagi kumpulan kawalan. Sepanjang enam kali pengajaran dan pembelajaran, pelajar-pelajar dalam kumpulan rawatan diajarkan dengan menggunakan teknik Four Square Writing dan pelajar-pelajar kumpulan kawalan diajarkan seperti biasa. Ujian pra, ujian pasca dan soalan kaji selidik dijadikan sebagai intrumen kajian. Data dianalisis dengan menggunakan Perisian Statistical Package for Social Sciences (SPSS) versi 20 dengan menggunakan analisis deskriptif, ujian-t dan ANCOVA. Hasil dapatan menunjukkan perbezaan yang signifikan terhadap skor min pencapaian keseluruhan penulisan karangan bergambar bagi pelajar-pelajar Tahun 4 kumpulan rawatan dalam ujian pra dan pasca ($t=-4.24$, $P<0.05$ ($p=0.000$). Manakala ujian ujian ANCOVA juga telah menunjukkan perbezaan yang signifikan terhadap pencapaian penulisan karangan bergambar antara kumpulan eksperimen dan kumpulan konvensional ($p=0.000$, $p < 0.05$). Sehubungan dengan itu, penggunaan teknik Four Square Writing dalam pengajaran jelas menunjukkan kesan yang positif dan menyebabkan pencapaian penulisan karangan bergambar murid-murid kumpulan rawatan meningkat.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

THE IMPACT OF INNOVATIVE PEDAGOGY USING FLIPPED CLASSROOM IN LEARNING HEALTH, SAFETY AND ENVIRONMENT (HSE) FOR VTE

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Educators are usually overwhelmed by the challenge of weaving an abstract concept such as Occupational Safety and Health (OSH) into education and training. As a result, the traditional teacher-centred didactic approaches seem to be a common practice, especially for knowledge-based modules in Vocational and Technical Education (VTE) such as the Health, Safety and Environment (HSE). However, the rapid proliferation of Internet technology nowadays saw the increasing trend of the flipped classroom model in education. Based on a socio-constructivism paradigm, the flipped classroom approach offered students with the prospects to be active learners who are empowered in their own learning as they take advantage of media-rich, digital contents outside class. This research aims at exploring the use of the flipped classroom model in teaching and learning of HSE in a VTE setting. Using a mixed method data collection with action research design, a total of 31 Higher National Technical Certificate (HNTec) students from one of Brunei's VTE institutions were involved in the first (n = 18) and second (n = 13) action research cycles, respectively. Pre- and post-test results showed significant learning gains in both cycles. An improvement was introduced in the second cycle, as informed by the first cycle, which resulted in significantly higher post-test marks, as well as its increment scores. Closer look at students' higher-order thinking skills (HOTS) also suggested that the students were able to engage in higher cognitive thinking in the first cycle, and even more in the second cycle. Meanwhile, students' interview data revealed that the intervention using flipped classroom had, among others, encouraged learning ownership, especially through the active learning in class. Considering the challenging role of VTE in preparing its learners for a culture of safe working habits, flipped classroom offers a promising instructional approach that should be considered in the 21st century classrooms.

Sub-theme
Digital Technology-based Intervention, Innovative Pedagogy in Adult Learning

ABSTRACT OF PAPERS

CODE/DECODE: THE HIDDEN DIGITAL CODING LITERACIES WITHIN THE EXISTING CURRICULUM

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With the increasing omnipresence of code-based technology and code-based skills to navigate the digital world, educators have identified coding as an integral element of educational technology and more significantly technology education. In technology education, one of the public sphere's prevalent misconceptions of coding is that to understand code means to learn code. This is exclusively true around 20 years ago when mark-up languages were oftentimes incoherent strings of short-forms and abbreviations such as SRC, BGCOLOR and UL, to name a few from an expansive matrix of attributes called the 'standard library'. In addition, the language then was dictated by a rigid taxonomy that a single typo in syntax would likely render the whole platform useless. In contrast, the coding that transpires today, the likes of Python and Kotlin, are more relatable to the language that students use in the curriculum, particularly the concepts and semantics that students encounter in literacy and numeracy subjects. Moreover, languages like Python are more liberal because not only is its 'standard library' a living document of simple and familiar syntax and grammar, but the coder community is able to extend the library as they see fit. Python is also not the be-all-end-all form, with its iterations scalable to the less expansive MicroPython and, for the early childhood and primary level learners, platforms that keep the coding at the backstage such as Scratch and Blockly. Regardless of these features, Python is just one of several contemporary coding languages that have made the shift to simpler coding syntax and grammar, and in doing so have elements that are more commonly found in curriculum content. This paper reports on a concordance based study to identify the representations of coding across non-technology curriculum. The paper recommends that these identified subjects can be the foundations for teachers to inculcate a conceptualised understanding of coding and in return to benefit from the numeracy and literacy components that are prevalent in coding such as MathML and the iOS-app language Swift. For students, understanding these basic concepts allow them to access more technical skills and ultimately the specialisation in future coding-based learning plans and syllabi.

Sub-theme
Digital Technology-based Intervention

ABSTRACT OF PAPERS

PENSTRUKTURAN SEMULA PROGRAM PRAVOKASIONAL – HALA TUJU PELAJAR BERKEPERLUAN KHAS

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Program Pravokasional dibuat khas bagi pelajar-pelajar berkeperluan khas untuk memenuhi keperluan dua kumpulan / kategori pelajar-pelajar iaitu pelajar-pelajar berkeperluan khas tahap tinggi (SN) dan pelajar-pelajar yang lemah pembelajaran (Learning disabilities) di sekolah-sekolah menengah kerajaan di seluruh Negara. Program ini juga berperanan untuk memberikan peluang kepada pelajar-pelajar berkenaan untuk mencapai potensi diri dan belajar dalam suasana pembelajaran yang lebih kondusif berdasarkan tahap kebolehan. Ini adalah supaya mereka mencapai kemahiran-kemahiran yang diperlukan untuk hidup berdikari dan dapat menyumbang kepada ekonomi diri sendiri dan keluarga seterusnya menjadi individu yang dapat menyumbang kepada kemajuan negara. Penstrukturan semula program pravokasional adalah selaras dengan perancangan bahagian perkhidmatan bantuan khusus pelajar-pelajar berkeperluan khas tahap tinggi dan pendidikan sepanjang hayat dalam merangka buku garis panduan kurikulum supaya lebih relevan dengan keperluan semasa (current trend)dan amalan terbaik (best practices). Di samping itu, perlunya penstrukturan ini bagi menyelaras pelan strategik Unit Pendidikan Khas dalam mendokong misi Kementerian Pendidikan dalam memperkasa pelajar-pelajar, ini termasuklah pelajar-pelajar berkeperluan khas demi mencapai potensi diri secara maksimum melalui pendidikan secara holistik. Cadangan kerangka kurikulum (curriculum framework) merupakan elemen terpenting dalam perubahan penstrukturan program pravokasional selama 5 tahun. Kerangka ini memfokus bidang pembelajaran, pedagogi pengajaran, hasil pembelajaran dan penilaian pelajar dari Tahun 7 hingga Tahun 11. Kerangka ini memfokus bidang pembelajaran, pedagogi pengajaran, hasil pembelajaran dan penilaian pelajar dari peringkat Prasekolah hingga Tahun 11.

Sub-theme
Special Needs Education

ABSTRACT OF PAPERS

FUTURE-READY. ARE YOU READY? INNOVATIVE TEACHER PROFESSIONAL DEVELOPMENT (ITPD): RE-THINKING THE 21ST CENTURY TEACHING AND LEARNING

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It has been globally recognized that teacher professional development is essential to bringing about change at the classroom level. The conundrum of effective teacher professional development has been questioned. Teacher professional development is a complex, multilayered process that needs to be highly individualized. Brunei Darussalam Teacher Academy (BDTA) strives to provide high-quality professional development programmes. Teacher professional learning is an important strategy for supporting complex skills students need to be prepared for further education and work in the 21st century. iTPD programme like Differentiated Instruction offered is aimed specifically at supporting our teachers to develop 21st century teaching skills. iTPD sessions featured a combination of presentations, hands-on activities and collaborative teamwork. Teachers act as constructive participants in their professional growth. The aim of this paper is to investigate the perceptions of our teachers with regards to the quality and relevance of this programme in gaining new knowledge and changes in their teaching practices. A questionnaire survey was designed, developed and adapted from a combination of Guskey's Five Levels for Evaluating Professional Development (2000a, 2002a, 2005) and Kirkpatrick's Evaluation Model (1998). This survey was administered to 60 secondary and 6th Form teachers. It gauged the preliminary impact of the iTPD programme conducted. The preliminary findings revealed that 98% of participants agreed that the content of the iTPD programme is relevant and useful to their teaching practices. In addition, more than 95% of participants agreed that they have acquired the intended knowledge and skills. However, about 25% of participants felt that the time allocated for them to effectively deepen their understandings of the presented materials during the sessions was insufficient. Similarly, about 25% of the participants stated that they do not feel confident to apply the new knowledge and skills they acquired into their teaching practices. These initial findings may demonstrate a need to review, improve and design future iTPD programmes to involve more real-world settings, and to ensure that these programs can contribute to specific gains in student learning. Well-designed iTPD programmes must be considered as an essential component of a comprehensive system of teaching and learning that supports teachers and students to develop the knowledge, skills and competencies that they need to strive in the 21st century.

Sub-theme
Intervention in Adult Learning.

ABSTRACT OF PAPERS

THE PERVASIVENESS OF EDUCATIONAL GAMES AMONG STUDENTS AND TEACHERS OF BRUNEI DARUSSALAM

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The digital gaming industry has been sustained by its more than 10,000 games that have been developed since the 1970s. More than half of these games have been invented within the last ten years, in large part because the technologies of games development have shifted from the Konami's, Acclaim's, Nintendo's and Sega's to the home-based enthusiasts such as Dong Nguyen of Flappy Bird fame. In addition to there being more games exponentially, we also now have better accessibility with games platforms purchase no longer limited to visiting the games retail store. Readily downloadable games of various genres and levels of complexity have become staple installations in smart phones and mobile devices. Unlike a video games console, which is oftentimes a shared device for a single household, a mobile device affords its user a personalised digital ecosystem for social, entertainment and, most relevant to this paper, for educational purposes. The enhancements in human-computer interactions have also allowed us to reach the apex of Puentedura's 'Substitution Augmentation Modification Redefinition' model (SAMR) for learning, contributing to the growing educational games genre pool and towards the research on education gamification and digital games-based learning. In tandem, time-tested theories such as Bourdieu's 'player' role, Bartle's 4 player types, and Goffman's dramaturgy theory have also shed light on how games, in particular game dynamics and mechanics such as risks, rewards, competition, challenges and narratives – all of which are present in other learning approaches – can enhance and empower learning. This paper reports on a small-scale study exploring the pervasiveness of games for entertainment and learning purposes in both the student and teacher community. Data from the study have been analysed via a variable reduction approach to generate discernible groups of educational gamer types.

Sub-theme
Digital Technology-based Intervention

ABSTRACT OF PAPERS

THE DESIGNATED PRIORITY LEVEL (DPL) SYSTEM: ESTABLISHING PRIORITY LEVELS FOR STUDENTS WITH SPECIAL NEEDS IN BRUNEI DARUSSALAM

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Students with special needs can achieve their potential in schools that foster acceptance and when taught by teachers who are willing to adapt or modify the curriculum to meet their needs. It was this vision which catapulted special education within mainstream schools in Brunei Darussalam in 1994 and continues to be the thrust in the current Strategic Objective 2 (SO2) of the 2018-2022 MoE Strategic Plan namely, to provide equal and equitable access to quality education. Determining the allocation of appropriate support and resources is, however, a complex process. As such, the Designated Priority Levels (DPL) system was developed to prioritise the level of support and resources required by students with special needs. This paper will first discuss the identified barriers in the implementation of inclusive education in Brunei Darussalam followed by an overview of the DPL system to demonstrate how it can be used to establish the priority level of every student with special needs.

Sub-theme
Special Needs Education

ABSTRACT OF PAPERS

DEVELOPING CONCEPTUAL UNDERSTANDING IN SCIENCE WITH TPACK FRAMEWORK: IMPACT ON COMBINED SCIENCE ACHIEVEMENT

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Reports done by the Ministry of Education, Brunei showed that a very low achievement in the Brunei Cambridge General Certificate of Education (BCGC E 'O ' level) was due to the failure of the students to acquire basic conceptual understandings and had problems with analysing abstract processes. The backward design approach of TPACK has been shown to help teachers to plan their lessons effectively. The objective of this study is to transform scientific concepts into learning experiences that support students' understanding of atomic structures using the TPACK framework. The lessons interventions were planned and designed using the four knowledge of TPACK dimensions (i.e. declarative, procedural, schematic and strategic levels of thinking). Pre-tests were given before the cycles of interventions commences. The first cycle of intervention known as the declarative knowledge dimension of the framework focused on the students' conceptual understanding of atomic structures. The second cycle known as the procedural knowledge dimension focused on students' knowledge of knowing how to apply the knowledge acquired in cycle 1 in constructing their knowledge how the arrangement of electrons in the atomic structures of the first 20 elements in the Periodic Table looks like. Each cycle took 6 hours of the lessons (6 periods). The third cycle called the schematic knowledge dimensions where the students were required to collaborate with their peers to explain why the electron number is the same as the proton number and the electron orbits around the nucleus while proton and neutron are inside the nucleus. This lesson took about 3 hours. After this stage, the students upgraded their conceptual understanding of atomic structures where they are asked to plan a 3D design of atomic structures by using everyday materials from outside of the classroom. The final cycle reflected on the strategic knowledge dimension of the TPACK framework focused on students' knowledge of 'where' and 'when'. At this phase, students learnt to apply the knowledge that they acquired from the previous cycles to come up with their 3D designs. The students are required to bring their 3D model of atom and present their methodology using PowerPoint slides or video apps. When all the cycles are done, the students were given post-test. The results shown there is a statistically significant increase in the test scores from the pre-test to post-test. Thus, this study will provide the academic evidence for upper secondary students' achievements using TPACK-integrated lessons in Brunei. In line with the government's vision to improve students' achievement in the BGCE 'O' Level Examination in Combined Science, the results will also provide useful insights to policymakers or educators to design curriculum based on TPACK framework.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

PENGGUNAAN TEKNIK IMBAKUP DALAM BENTUK PENYUSUNAN GRAFIK BAGI MENINGKATKAN KEMAHIRAN MENGHURAIKAN ISI KARANGAN PELAJAR TAHUN 9

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Kajian berbentuk kajian tindakan ini bertujuan untuk mengkaji keberkesanan penggunaan teknik IMBaKUP dalam bentuk penyusunan grafik terhadap pelajar-pelajar Tahun 9 yang bersekolah di salah sebuah sekolah kerajaan di daerah Brunei dan Muara. Kajian ini juga dijalankan bagi menyelidiki persepsi dan maklum balas pelajar mengenai penggunaan teknik IMBaKUP dalam bentuk penyusunan grafik dalam pengajaran karangan. Kajian ini melibatkan seramai 25 orang pelajar Tahun 9. Data kajian ini dianalisis menggunakan ujian-t sampel berpasangan untuk menjawab soalan-soalan kajian yang dinyatakan (SK 1 & SK 2). Manakala untuk SK 3, data dianalisis menggunakan statistik deskriptif bagi melihat persepsi pelajar terhadap penggunaan teknik IMBaKUP dalam bentuk penyusunan grafik. Berdasarkan kajian yang dilaksanakan, para pelajar telah memberikan maklum balas yang positif dan dapat menghasilkan sebuah karangan berbentuk argumentatif yang lebih baik daripada sebelumnya.

Sub-theme
Action Research in Education

ABSTRACT OF PAPERS

PENGGUNAAN KAEDAH RAFT DALAM MENINGKATKAN KEMAHIRAN PENULISAN KARANGAN JENIS DESKRIPTIF BAGI PELAJAR TAHUN 10

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Kajian ini dijalankan bertujuan untuk melihat kesan dan persepsi pelajar terhadap penggunaan kaedah RAFT dalam meningkatkan kemahiran penulisan karangan jenis deskriptif bagi pelajar Tahun 10. Sampel dalam kajian ini melibatkan seramai 18 orang pelajar. Pelajar-pelajar ini mengikuti pengajaran dan pembelajaran dengan menggunakan kaedah RAFT sebanyak empat kali pengajaran. Terdapat dua instrumen yang digunakan dalam kajian ini, iaitu ujian pra dan pasca dan soal kaji selidik. Tujuan ujian pra dijalankan bagi melihat hasil penulisan karangan deskriptif sebelum kaedah RAFT diperkenalkan. Manakala, ujian pasca pula bagi membuat perbandingan hasil penulisan dengan menggunakan kaedah RAFT. Setelah ujian pra dan pasca selesai dijalankan, setiap pelajar diedarkan borang soal selidik bagi mendapatkan persepsi terhadap penggunaan kaedah RAFT dalam penulisan karangan deskriptif. Maka, data-data yang diperolehi dianalisis menggunakan The Statistical Package for the Social Science (SPSS) versi 20 dengan penganalisisan data ujian-t berpasangan dan statistik deskriptif. Hasil dapatan yang dilaksanakan telah menunjukkan bahawa terdapat perbezaan signifikan terhadap skor min pencapaian keseluruhan ujian pra dan pasca dengan nilai $t(17) = -4.18$, $p < 0.05$, ($p = .001$). Kemahiran penulisan pelajar juga meningkat dan analisis persepsi pelajar menggunakan kaedah ini mendedahkan majoriti pelajar memberikan persepsi positif.

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF PAPERS

PENERAPAN TEKNIK SALAK DALAM PENULISAN SINOPSIS BAGI NOVEL PUNCAK PERTAMA

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SALAK adalah salah satu teknik yang telah diterapkan dalam subjek Bahasa Melayu. Teknik ini didapati berupaya membantu pelajar dalam pembinaan ayat, iaitu daripada ayat biasa kepada ayat yang lebih gramatis. Kajian tindakan ini adalah untuk mengenal pasti kesan penerapan teknik kuiz SALAK dalam penulisan sinopsis bagi novel Puncak Pertama. Kajian ini menggunakan 18 sampel kajian yang terdiri dari pelajar tingkatan enam bawah. Pengkaji telah memilih salah sebuah pusat tingkatan enam di daerah Brunei dan Muara sebagai lokasi kajian. Dalam kajian ini, pengkaji menerapkan teknik kuiz SALAK untuk membantu pelajar menghasilkan dan mencipta sebuah sinopsis mengikut bab yang terpilih dalam novel Puncak Pertama. Kajian ini juga menggunakan kaedah kualitatif dan kuantitatif. Pengkaji menjalankan sesi temu bual bersama pelajar untuk mengetahui persepsi pelajar tentang penerapan teknik ini. Manakala dengan kaedah kuantitatif, pengkaji menggunakan ujian-t untuk melihat perbezaan skor min terhadap penulisan sinopsis secara keseluruhan dan pembinaan ayat pelajar berdasarkan komponen SALAK. Hasil kajian ini menunjukkan terdapat perbezaan yang signifikan antara skor min ujian pra dan ujian pasca terhadap penulisan sinopsis secara keseluruhan dan pembinaan ayat pelajar berdasarkan komponen SALAK.

Sub-theme
Penulisan Sinopsis

ABSTRACT OF PAPERS

ENHANCING NURSING STUDENTS' SKILLS IN BLOOD PRESSURE MEASUREMENT THROUGH STUDENT TEAMS ACHIEVEMENT DIVISION (STAD) COOPERATIVE LEARNING

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Nursing profession is an important job in every part of the world for caring patients effectively and holistically. In Brunei Darussalam, nursing education is available at tertiary and vocational levels. In order to make student nurses marketable and job ready, they must have excellent core knowledge and competency in nursing skills. However, some students' performances were less competent due to lack of opportunity to engage in learning during lessons and practice. In this study, an innovative pedagogy of Student Teams Achievement Division (STAD) cooperative learning was utilised and investigated for its effectiveness in enhancing one important yet undervalued nursing skill, which is blood pressure measurement. This study's methodological approach is an action research that employed a mixed method data collection on 20 students taking National Technical Certificate in a campus under the Institute of Brunei Technical Education in Brunei Darussalam. The objectives of this research were to investigate the students' knowledge and performance in the blood pressure measurement skills after implementation of the STAD cooperative learning; and how this approach had enhanced their performance in the skills. Results from the quantitative data of paired t-test analysis of the research showed a high significant difference between the pre-test score and the post-test scores, with p-value at less than .05 (0.0001) and large effect size of 1.09, indicating that the findings have a greater impact from the intervention. The qualitative data revealed that students who had positive relationships with their friends during STAD cooperative learning activities were able to enhance their nursing skills in blood pressure measurement more effectively. This study concluded that the STAD cooperative learning was effective in enhancing the nursing students' skills in blood pressure measurement in addition to their increased confidence and motivation compared to when learning in traditional approaches. Therefore, it is recommended that this pedagogy be used more often in future lessons.

Sub-theme

Innovative Pedagogy in Adult Learning, Action Research in Education.

ABSTRACT OF PAPERS

THE USE OF TARSIA ACTIVITY AS A LEARNING APPROACH IN YEAR 9 HISTORY LESSON

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Tarsia activities have been known to be useful for teachers to create inventive learning materials to test students' knowledge and getting them engaged in the learning activities. It is supported by Formulator Tarsia and available freely on the Internet via Hermitech Laboratory. The activities are relevant to the SPN21 as it instilled the 21st century skills such as collaboration, communication, critical thinking and knowledge construction. Worldwide research claimed that History subject were often viewed as demotivating and dull. Therefore, this study explores the use of Tarsia activities as a learning approach in affecting students' motivation, attitude, expectation and cognitive development in learning History. Two different sets of activities were conducted where the students need to solve collaboratively. Data were collected through a set of questionnaires and semi-structured interviews with 15 Year 9 students. The results from the questionnaires showed that the students were highly motivated to engage in learning activities when Tarsia activities were conducted. Similarly, it also has positive effects towards the students' attitude, cognitive development and their expectations towards learning History. The responses from the semi-structured interviews found that the students really enjoyed the activities and had worked very well together in a small group. Majority of the students favoured the Tarsia activities, as they believed that it has facilitated their learning process. This study has shown that Tarsia techniques and activities has helped the students in enhancing their motivation, attitude and cognitive development as well as collaborative skills.

Sub-theme
Digital Technology in Education

ABSTRACT OF PAPERS

PENERAPAN TEORI GERAK MELAYU BAGI MENJAWAB SOALAN ARAS TINGGI PELAJAR KESUSASTERAAN MELAYU DALAM NOVEL PUNCAK PERTAMA

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Penerapan teori dalam pendidikan sangat kurang diketengahkan kerana kurangnya pengetahuan dan sebilangannya menganggap teori ini amat sukar untuk diaplikasikan. Sistem Pendidikan Negara abad ke-21 menuntut supaya para guru mempelbagaikan teknik pengajaran demi membantu menyelesaikan masalah yang timbul dalam kalangan pelajar. Pendedahan teori terutama kepada pelajar tingkatan enam seharusnya sudah mula diperkenalkan sebagai langkah permulaan awal kepada pelajar pra-universiti sebelum memasuki peringkat universiti. Teori Gerak Melayu merupakan salah satu kaedah dalam pengajaran dan pembelajaran yang dikemukakan bertujuan untuk melihat kepada tindak balas watak perwatakan sama ada lahir atau batin. Teori ini amat bersesuaian terutama dalam merungkai kejiwaan watak sekali gus membantu pelajar untuk menghayati teks dan menginterpretasikan kefahaman mereka. Teori ini diketengahkan untuk menyelesaikan masalah pelajar yang mengalami kesukaran dalam menjawab soalan perbincangan. Langkah-langkah yang dikemukakan dalam teori ini berhasil menguji kefahaman aras tinggi pelajar Kesusasteraan Melayu dalam memberikan penghayatan terhadap teks dan menganalisis kejiwaan watak. Kajian ini menggabungkan dua pendekatan analisis, iaitu kuantitatif dan kualitatif bagi mengesan peningkatan dan prestasi pelajar Kesusasteraan Melayu menjawab soalan beraras tinggi. Kajian tindakan yang telah dilaksanakan melibatkan pelajar Tingkatan 6 bawah di salah sebuah Pusat Tingkatan 6 di Daerah Brunei Muara sebagai sampel kajian. Analisis kajian menggunakan ujian-t berpasangan untuk melihat perbezaan signifikan terhadap skor min pencapaian pelajar dalam menjawab soalan aras tinggi selepas intervensi Teori Gerak Melayu antara ujian pra dan ujian pasca. Dapatan kajian menunjukkan hasil ujian-t dengan nilai signifikan 0.001. Seterusnya analisis deskriptif dan tematik terhadap data temu bual digunakan bagi merumuskan persepsi pelajar semasa mengikuti intenvensi Teori Gerak Melayu. Hasil kajian ini membuktikan bahawa Teori Gerak Melayu berjaya meningkatkan pencapaian pelajar sekali gus menerima maklum balas yang positif daripada peserta kajian.

Sub-theme
Action research in Education

ABSTRACT OF PAPERS

INVESTIGATING THE USE OF A MULTIMODAL APPROACH IN THE TEACHING AND LEARNING OF SECONDARY GEOGRAPHY

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Teaching strategies that employ learning materials that match with learners' preferred mode of instruction may lead to higher academic performance and understanding of concepts. One such strategy is the multimodal approach which refers to the use of audio, visual, kinaesthetic and written semiotic resource simultaneously to create a deeper understanding to a topic. Based on local classroom observations, it was found that students have difficulty in understanding geographical concepts on topics that require multiple representations to fully understand them. This study sought to investigate the potential of using multimodal approach in supporting students' understanding of concepts in secondary Geography. Whilst there were a number of studies that investigated multimodal approach in teaching, only one such study had been carried out in Brunei Darussalam, in secondary Mathematics. However, to date there is no record of the multimodal approach being used in the field of secondary Geography in Brunei. This study used a mixed-method action research design conducted in a local secondary school in Brunei. Quantitative data consisted of marks from pre-tests and post-tests whereas qualitative data focused on interviews. The participants consisted of 22 Year 9 students in two groups; the treatment group exposed to the multimodal approach had 7 students and the non-treatment group exposed to the traditional approach had 15 students. Results revealed that the treatment group obtained a significantly higher average marks than the non-treatment group even though both groups recorded improvement in their average marks. The interviews also revealed that using a variety of learning materials were able to assist in students' learning and understanding of geographical concepts in the classroom. Overall findings suggested that multimodal approach used in the teaching and learning of secondary Geography was effective in supporting students' understanding of concepts and it too was perceived positively by students.

Sub-theme
Action research in Education

ABSTRACT OF PAPERS

HYBRIDISATION OF INTERROGATIVE WORDS AND PICTORIAL REPRESENTATIONS IN THE TEACHING PRIMARY MATHEMATICS

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This study was intended in minimising the common errors made by students, which were Comprehension and Transformation errors. In addition, the study also aimed at helping students to perceive word problems as a story line to be completed using the Hybrid Strategy. This strategy is a step-by-step guidance to improve students' visualisations and perceptions of mathematical word problems. The strategy incorporates the use of pictorial representations for students' visualisation and interrogative words (who, what, where, when and how) using the mnemonic Mr. How and his four Warriors to prompt students' understanding when solving 1-step and 2-step word problems. The study involved 39 Year 5 students from a local government school in the Brunei-Muara district of Brunei Darussalam. The research instruments used in collecting the data were diagnostic pre-test, diagnostic post-test, interviews and general observations during intervention lessons. Analyses from students' written responses of the pre- and post-tests revealed that all five types of error committed by the students, and the most common type of error occurred in this study is Comprehension errors. Further analyses showed that the use of the Hybrid Strategy in minimising Comprehension and Transformation errors was successful. However, there was only a slight improvement of students' scores in their post-test, which contributes to only a slight extent of the effectiveness of the Hybrid Strategy used in this study. There was also a slight positive shift of students' perceptions towards solving mathematical word problems.

Sub-theme
Action research in Education

ABSTRACT OF PAPERS

DEVELOPING HISTORICAL THINKING SKILLS THROUGH COLLABORATIVE LEARNING

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History is a subject often considered uninteresting and demotivating to learn. Furthermore, history is probably the school's least transformed subject - be it in terms of pedagogy, curriculum and framework. However, this study examined the Historical Thinking Skills (HTS) of students in learning collaboratively and their attitudes towards it. HTS is a powerful tool for understanding history that may develop one's intellectual skills. Unlike the norm of history lesson, HTS focuses on establishing students' understanding of the meaning of the past actions and events and the ability to relate, explain and predict the present and future activities. These skills are eminent in the 21st century learning which desire its student to acquire knowledge rather than memorising them. Therefore, the primary purpose of this study is to verify whether or not the implementation of HTS in the historical framework may develop Brunei secondary students' higher order thinking skills. The participants of this research were year 10 history students from one of Brunei's government secondary schools. The HTS examined in this study are: strategy in understanding and obtaining the facts from sources; corroborating and contextualising of the sources; and the procedural concepts in writing history. Pre-test, post-test, and rubrics were used to gain data on how collaborative learning helps with HTS. Data analysis involved cross-referencing of the students' responses from the pre- and post-tests and comparing the scores obtained from the tests with the presentation rubric scores. The results showed that when they were grouped together with their peers, the students were able to demonstrate HTS much better. The interview sessions asking for the participants' perceptions on the HTS and collaborative learning showed that students were often unmotivated to study history the 'usual' way, thus adding primary sources provides an opportunity for them to show their findings through presentations while giving the students full autonomy towards understanding the topics. However, the overall results showed that the students were still unable to incorporate HTS into their writing history. However, this problem may be overcome by having more history teachers in their class to adopt this learning style. Implication towards HTS and collaborative learning will be discussed in the presentation.

Sub-theme
Action research in Education

ABSTRACT OF PAPERS

DEVELOPING AWARENESS OF HEALTHY FOOD AND PRODUCT INNOVATION FOR THE PREVENTION OF OBESITY THROUGH PROBLEM-BASED LEARNING

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This paper presents the use of Problem Based Learning (PBL) in developing students' awareness to choose healthy food and create innovation in food meal to prevent obesity. Obesity is one of the largest Non-Communicable Diseases that contributes to the rise of other diseases such as cardiovascular disease in recent years. The use of PBL approach in this study is to overcome the observed problems in the classroom: teacher-dominant classroom, overly dependent students, lack in critical thinking and too theoretical module, and hence could make them job-ready. Teaching vocational and technical students to develop awareness of healthy food for the prevention of obesity is essential for their future career in the food industry. In this study, student awareness is measured as an act of making good food choices with the ability to create healthy meals. This study aimed to determine whether PBL could develop students' awareness of healthy food for the prevention of obesity and consequently develop the skills of healthy food creation as a result of their understanding and awareness of obesity. In the PBL intervention, students were subjected to a real-world diet-related problem, and applied that knowledge through the creation of meals as part of their solution – the innovative aspect – where they had the opportunity to innovate or create healthy meals as manifested from their developed awareness. Seven students participated from a local TVET institute when they studied the module Introduction to Nutrition and Disease, specifically on diet-related diseases and its prevention. This action research study employed a mixed method data collection: teacher-assessed rubrics and feedback, students' pre- and post-tests, and interview. The results revealed that students had a higher prior awareness of healthy food to prevent obesity. After the intervention, majority of the students had improved in their post-test marks. The interview analysis yielded three emergent themes and showed improvements in knowledge and skills due to the nature of the PBL activity and students' enjoyment. The findings implied that learning from the PBL approach was gained through experiential learning and connecting theory and practice to develop their awareness. Food product development skills had also developed fantastically. This study concluded that the PBL and product innovation had been effective and useful in developing students' awareness towards healthy eating in the prevention of obesity. For future study, this research could further investigate students' level of awareness in a survey and determine the factors that cause the awareness.

Sub-theme
Innovative Pedagogy in Adult Learning, Action Research in Education

ABSTRACT OF WORKSHOPS

RUTIN BERFIKIR BAHARU UNTUK PEMERKASAAN PEMIKIRAN INOVATIF DAN INVENTIF

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Inovasi dan inventif berkait rapat dengan produk atau idea baharu dan proses-proses penghasilan sesuatu yang baharu. Justeru, usaha pemerkasaaan kapasiti kognitif setiap individu khususnya pemikiran inventif dan inovatif melalui pendidikan formal adalah amat kritis dilaksanakan untuk mendukung kejayaan di bidang sosial dan ekonomi. Ia penting lebih-lebih lagi mutakhir ini iaitu pada era ekonomi yang berasaskan pengetahuan serta yang menuju ke arah revolusi industri 4.0. Melalui usaha pemerkasaan yang disebutkan, landskap penciptaan dan inovasi akan tercetus lebih rancak dan berlangsung secara lebih sistematik dan berobjektif. Oleh itu, usaha pemerkasaan kapasiti kognitif melalui pendidikan mustahak dipertingkat misalnya melalui pengajaran dan pemelajaran karangan jenis cadangan. Hal ini kerana dalam aspek penjanaan idea baharu, pelajar-pelajar di Negara Brunei Darussalam didapati mempunyai keupayaan menjana pada kadar purata 10.58 (SP = 3.7, n = 33) buah cadangan dalam aktiviti penyelesaian masalah yang diberikan (Aliamat, 2017). Walaupun demikian, hanya sebanyak 1.43% daripada 349 idea yang dicadangkan itu dapat dikategorikan sebagai bersifat baharu. Manakala selebihnya, iaitu sebanyak 78.22% cadangan dikenal pasti bersifat konvensional dan 20.34% daripadanya pula disifatkan sebagai yang tidak relevan dengan masalah yang diberikan. Bertindak daripada dapatan ini, salah satu perkakasan berfikir yang boleh diterapkan bagi menukar cadangan bersifat konvensional kepada yang inovatif dan inventif ialah BAHARU. Dengan kata lain, rutin berfikir BAHARU terwujud untuk membantu seseorang penyelesai masalah menilai dan memperbaik cadangan awal yang ditemukan secara berstruktur. Justeru bengkel ini diharapkan dapat membuka kemahiran peserta untuk berfikir lebih inovatif dan inventif. Diharapkan juga agar kandungan bengkel ini nanti dapat dimanfaatkan oleh para peserta ke dalam pengajaran dan pemelajaran yang mendukung usaha pemerkasaan kapasiti kognitif pelajar-pelajar, khususnya dalam pengajaran penulisan karangan cadangan.

Keywords
Inventive thinking, Inventive problem solving, Inventive thinking skills, Innovative thinking, Pengajaran karangan

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF WORKSHOPS

ART OF MINE: CREATIVE ARTS THERAPY FOR TEACHER WELL-BEING

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For decades, effectiveness of teaching is documented clearly and comprehensively in the literature. While, teaching effectiveness is recognised as an essential element contributing to student learning achievement, current studies suggest to pay more attention towards teacher well-being. Nowadays, teachers experience more stress, anxiety and depression in the workplace and this may affect their teaching effectiveness. The challenge for educational researchers is to explore ways on how to support teachers who often experience significantly from mental health problems. Expose teachers with innovative pedagogy such as creative arts therapy may improve teachers' well-being and teaching effectiveness. The study on Arts, health and well-being (2018) argues that people who access to arts opportunities and participation in the arts can dramatically improve health outcomes and well-being. Therefore, this workshop will apply creative arts therapy which aims to 1) relieve stress, anxiety and depression; 2) encourage participants to express their feelings and emotions through creative art activities in a cheerful and fun environment; and 3} look towards and lean into emerging future possibilities for improving teacher well-being and teaching effectiveness using creative arts opportunities. For this workshop, no prior art experience or skills and artistic ability required. Interestingly, in this workshop, the participants will be given the opportunity to explore and enjoy the world of art. They will be invited to draw and paint a variety of creative art activities that can help them to identify and express their feelings, thoughts, emotions, skills and self-esteem.

Keywords
Teaching effectiveness, students' learning, teacher well-being, mental health, creative arts therapy, artistic ability.

Sub-theme
Innovative Pedagogy in Adult Learning

ABSTRACT OF WORKSHOPS

MATHEMATICS PEDAGOGY: CONFLICT BETWEEN PROCEDURAL AND CONCEPTUAL

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Skemp (1976) stated that in mathematics learning, there are two types of understanding: Instrumental Understanding (the ability to execute mathematical rules and procedures) and Relational Understanding (knowing both what to do and why). To achieve the latter, more time is needed in making students understand the concept well, not just perform the procedure. Hence this arises one of teachers' teaching conflict, the pressure of making students competent and conceptually understand math to facilitate future higher studies, versus pressure of focusing on procedural understanding so students can just focus on performing well in public examination. Due to the overwhelming administrative work of teachers in addition to teaching, majority of mathematics teachers resort to complete the prescribed syllabus as fast as possible. This is to give opportunity for students to undergo intensive revision before sitting for public examination, in hopes that students will perform well during these examination. This indirectly takes away ability for teachers to be creative in their teaching, and selecting the best pedagogical choice for their students. In this workshop, three examples of procedural approach of teaching specific topics in mathematics will be discussed: Bubble Method for percentage calculation; Lattice Method for multiplication of two numbers; and Butterfly Method for addition/subtraction of fractions. These examples can be used by primary and secondary teachers as their alternative pedagogical or intervention approaches in the classroom that focuses on instrumental understanding. The workshop will further discuss in-depth the concept behind each approach, as to provide the opportunities for teachers to facilitate relational understanding if they decide to further teach the approach conceptually in their classrooms.

Keywords
Bubble method, Butterfly method, Instrumental-relational understanding, Lattice method, Mathematics pedagogy

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF WORKSHOPS

INNOVATIVE PEDAGOGIES IN COOPERATIVE LEARNING FOR TEACHING IN VTE CONTEXT

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In embracing Industry 4.0, the world nowadays has students who are more global and social aware, and this challenges the way we approach teaching. In response to this, Muscatelli (2019) suggested schools and institutions play a necessary role to encourage collaborative and active learning, in additional to traditional learning. Students' participation, engagement and interactive socio-constructivist of learning can build a strong foundation on their characters and the way they act and function in future. Inadvertently, teaching in VTE contexts has become increasingly more challenging as students require relevant training on competency skills that match the work-world requirements in order to be employable and future ready. Educating these youngsters demanded teachers and trainers to find suitable and innovative pedagogies that are effective and can successfully transform learners to become expert in their fields. And, one such pedagogy gaining more prominence is cooperative learning. Through cooperative learning, students can experience teamwork and collaboration first hand while schooling – this is important as schools act as a smaller sub-set of the real world before stepping into workforce. VTE teachers' essential roles are preparing students for the workforce; consequentially, they should be more creative in matching students' learning experiences with future work environment. Although innovation does not always necessarily involve technology, they need to have innovative technical skills and pedagogies to prepare students' future careers. This is where utilising cooperative learning in classrooms innovatively could be one of the learning strategies that can benefit learners immensely: provide them with a sense of teamwork spirit, working together collaboratively with colleagues, and be future ready for working in an organisation once graduated. In this workshop, participants will be introduced to cooperative learning and shared its potential benefits. Participants will also have the opportunity to try out various approaches of cooperative learning integrated with technology, in which they could explore, share, apply, and bring back to their classrooms to help transform their students' learning effectively.

Keywords
Cooperative learning, Innovative pedagogy, Vocational and technical education, Workforce and job ready

Sub-theme
Innovative Pedagogy in Adult Learning

ABSTRACT OF POSTERS

EXPLORING SECONDARY PHYSICS STUDENTS' LEARNING OF D.C CIRCUIT WHEN USING AUGMENTED REALITY TECHNOLOGY

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Augmented reality technology is a fast emerging trend in this digital era and with the current generation of students identifying themselves as digital natives; the use of augmented reality technology will be prevalent across the globe. As educators, it is imperative to integrate technology in the teaching and learning environment so as not to estranged students from the digital world. Although researchers have discussed the benefits of using augmented reality technology, there is still a lack of research that discusses the potential of augmented reality as an educational tool to aid in the teaching and learning environment. The purpose of this study is to discover if this technology could potentially aid in students' learning. In this study, the researcher has constructed a prototype mobile application that integrates augmented reality technology with the use of flashcards as an interactive tangible item. Software used in the making of the mobile application have also been discussed. Employing a Mobile Computer Supported Collaborative Learning theory, a quantitative and qualitative data has been collected to gain further insight in the impact of the technology's implementation. A test has been disseminated before and after the lesson intervention to discuss the statistical significance of the technology in the lesson implementation. Sequentially, a semi structured interview has been conducted to explore students' perspective on the technology and on the lesson intervention. The potential contribution of this research is to provide an insight on how this technology could potentially aid in students' active learning and this opens up new opportunities yet to be explored about the potential of augmented reality in education. Suggestions on improvements on the mobile application have also been discussed.

Keywords
Augmented reality technology, Collaborative learning theory, Digital natives, Digital world, Mobile computer supported

Sub-theme
Digital Technology in Education

ABSTRACT OF POSTERS

UTILISING EFFECTIVE QUESTIONING TECHNIQUE TO PROMOTE DIALOGIC TEACHING IN PRIMARY MATHEMATICS CLASSROOMS

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Dialogic teaching had been introduced in Brunei Darussalam's schools to promote pupils' active learning and engagement in the classrooms since 2017. It was launched through the Literacy and Numeracy Coaching Programme (LNCP) which involved international coaches, local coaches and potential local coaches to train the teachers in various pedagogical aspects, including dialogic teaching. The emphasis was on the use of effective questioning to elicit meaningful responses from the pupils by giving them chances to actively participate in their learning to share their ideas and thinking to the whole class. This study examined the questioning techniques utilised by three primary mathematics teachers in their journey to incorporate dialogic teaching in their classrooms. Furthermore, the researcher also considered the teachers' perceptions towards dialogic teaching to inform its use in their teaching practices. A case study method was employed to examine the teachers' questioning techniques, which had been classified into the different ways teachers addressed the questions, the types of questions they asked, and the ways they gave feedback to their pupils' answers. The findings of this study indicated that the three mathematics teachers had used three types of questions predominantly: focusing question, genuine enquiry, and closed testing. However, how the teachers addressed the questions and gave feedbacks to the pupils differ in terms of their occurrences. This study had also revealed that the teachers portrayed positive attitudes towards dialogic teaching and shared their comprehensive understanding on the approach and unanimously mentioned that questioning techniques are the most important element in dialogic teaching. Moreover, they perceived dialogic teaching as beneficial in preparing the Year 6 pupils for the Penilaian Sekolah Rendah (PSR) and further helped in building the pupils' conceptual understanding.

Keywords
Coaching, Dialogic teaching, Effective pedagogy, Primary mathematics, Questioning techniques

Sub-theme
Education Innovation Practices

ABSTRACT OF POSTERS

A DESIGN FOR TEACHING AND LEARNING CHEMICAL EQUILIBRIUM BASED ON THE VARIATION THEORY OF LEARNING

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An understanding of the concept of chemical equilibrium (ce) is fundamental for learning more advanced chemistry topics. Numerous studies have shown that ce remains a troublesome concept for students to comprehend and for chemistry teachers to teach. A phenomenographic research approach was adopted to identify the qualitatively different ways in which a sample of bruneian pre-university level students understand ce. The analysis of interviews with students from four sixth form centres revealed eight categories of description of qualitatively different ways of understanding ce. This analysis supported the identification of critical aspects of the most advanced and comprehensive way of understanding ce and what students needed to learn to achieve that understanding. Thus, a digital ce simulation was designed, framed by the variation theory of learning, incorporating the critical aspects. The ce simulation was implemented to achieve the intended object of learning ce. Research lessons were conducted to explore what is possible for students to learn – afforded by engagement with the ce simulation – through experiencing patterns of variance and invariance shaped by the researcher and in cooperation with the students through interaction in an ict laboratory. The lessons were videotaped and analysed in terms of the enacted and lived objects of learning constituted by students' exposure to the ce simulation. The findings of this study have some important implications for the teaching of ce and other chemical concepts. The results of this study are anticipated to be useful in informing teachers, authors of chemistry textbooks and software developers, and in promoting the preparation of instructional sequences in chemistry that address students' conceptions using variation theory as the theoretical design tool.

Keywords
categories of description, chemical equilibrium, critical aspects, object of learning, phenomenographic research, patterns of variance and invariance, variation theory

Sub-theme
Digital Technology In Education

ABSTRACT OF POSTERS

TEACHERS' EXPERIENCES OF USING THE DIRECTED READING-THINKING ACTIVITY AS AN INSTRUCTIONAL STRATEGY

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Recent developments in the teaching of reading in English as a Second Language (ESL) have shifted towards a new interest for reading for meaning and critical literacy. With this development, nations around the globe have shown an increased focus on developing ways to produce lifelong readers who can engage with text for information, knowledge, pleasure and enjoyment. Brunei Darussalam acknowledges this development in literacy education, as reflected through the goal of its literacy education, which is to create skilful, resourceful, and engaged readers. This is an important goal as research has indicated the correlation between reading achievement and reading engagement is greater than that of reading achievement and social-economic status. Generally, being an engaged reader has been defined as one who is motivated to read, uses good reading strategies, constructs new knowledge from the text and is socially interactive in their approach to literacy (see for example, Guthrie, McGough, Bennett & Rice, 1996; Guthrie & Wigfield, 2000). The cultivation of engaged readers requires the instructional reading practices that puts equal focus on the cognitive and affective aspects of reading development. However, many instructional reading practices used in the ESL settings tend to focus only on developing the cognitive elements of reading such as fluency and decoding. So far, there has been little discussion on instructional strategies that support reading engagement in the ESL classrooms. Therefore, this study aims to investigate the extent an instructional reading strategy, the Directed Reading-Thinking Activity (DR-TA), fosters the reading engagement of young ESL learners in Brunei. The study hypothesised that the DR-TA, supports both components of reading engagement: the cognitive and motivational components. Additionally, the study seeks to explore ways in which the DR-TA can be developed to encourage reading engagement specifically among young readers in Brunei Darussalam's ESL classrooms. This study is an exploratory multiple case study involving four ESL teachers from three government primary schools. Qualitative data was gathered through semi-structured interviews with the teachers and through classroom observations. This helped provide rich and in-depth data on the impact of DR-TA on students' reading engagement. The findings from the study indicated that young ESL learners' reading engagement can be supported through classroom instructions that build on intrinsic motivation and through the scaffolding of discussions. These findings from the study contribute to the literature on reading engagement in the ESL settings, in particular the critical elements that compose effective instructional reading strategies that engage readers.

Keywords
Directed reading-thinking activity, English as a second language, Reading engagement,Primary level

Sub-theme
Literacy and Numeracy Skills

ABSTRACT OF POSTERS

THE IMPACT OF INNOVATIVE PEDAGOGY USING FLIPPED CLASSROOM IN LEARNING HEALTH, SAFETY AND ENVIRONMENT (HSE) FOR VTE STUDENTSl

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Educators are usually overwhelmed by the challenge of weaving an abstract concept such as Occupational Safety and Health (OSH) into education and training. As a result, the traditional teacher-centred didactic approaches seem to be a common practice, especially for knowledge-based modules in Vocational and Technical Education (VTE) such as the Health, Safety and Environment (HSE). However, the rapid proliferation of Internet technology nowadays saw the increasing trend of the flipped classroom model in education. Based on a socio-constructivism paradigm, the flipped classroom approach offered students with the prospects to be active learners who are empowered in their own learning as they take advantage of media-rich, digital contents outside class. This research aims at exploring the use of the flipped classroom model in teaching and learning of HSE in a VTE setting. Using a mixed method data collection with action research design, a total of 31 Higher National Technical Certificate (HNTec) students from one of Brunei's VTE institutions were involved in the first (n=18) and second (n=13) action research cycles, respectively. Pre- and post-test results showed significant learning gains in both cycles. An improvement was introduced in the second cycle, as informed by the first cycle, which resulted in significantly higher post-test marks, as well as its increment scores. Closer look at students' higher-order thinking skills also suggested that the students were able to engage in higher cognitive thinking in the first cycle, and even more in the second cycle. Meanwhile, students' interview data revealed that the intervention using flipped classroom had, among others, encouraged learning ownership, especially through the active learning in class. Considering the challenging role of VTE in preparing its learners for a culture of safe working habits, flipped classroom offers a promising instructional approach that should be considered in the 21st century classrooms.

Keywords
Flipped classroom, Health, safety and environment, Innovative pedagogy, Occupational safety and health, Vocational and technical education

Sub-themes
Digital Technology in Education; Innovative Pedagogy in Adult Learning

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Biography

A research enthusiast, have been teaching for 20 years and currently still enjoying teaching the Year 9 biology students. She is a Special Education Officer, have received her PhD from Universiti Brunei Darussalam in 2018, and is always looking forward to use innovative ways to make Biology a fun and engaging lesson. She was a recipient of Chevening scholarship in 2004, still holding the position of Vice President in Persatuan Biologi Brunei Darussalam since 2000; she tries to come up with new programmes and activities to keep herself inspired and motivated. Previously she made departmental science quizzes, and writing songs for her previous school, 2004 teachers' day and Education Ministers' meeting; to PRYNSA judging, and organising events such as outdoor biology for school twinning programme, and joined BICTA. Her most recent programme was to merge students' basic skills with 21st century skills by competing students in Semangkuk Agung Challenge.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Dr Vincent Andrew is a lead facilitator with the Brunei Darussalam Teacher Academy. He designs and develops professional development courses for Business-related subjects such as Economics, Commerce and Business Studies. He currently runs a Learning Study project in government secondary schools using a theoretical framework to design teaching. An experienced teacher, he was awarded Special Mention in 2010 and has been a Cambridge Economics A-level examiner since 2017. He is a reviewer for the International Journal for Lesson and Learning Studies. He obtained his PhD focusing on teacher professional development in 2011 which he did part time while leading / teaching in two different schools. He had been a school leader for eight years in both the private and public sector.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Dr. Nadiah binti Haji Mohamad Noor has been an educator for 25 years and is presently the Guru Besar at Sekolah Rendah Mulaut. Her academic career started at UBD where she achieved a Certificate in Primary Education and B.Ed (Hons) in Teaching English as a Second language. Her passion for teaching led her to undertake MA in English Language Education. Dr. Nadiah achieved her highest accolade, a PhD at the University of Queensland in Brisbane, Australia. Her PhD study focused on the teaching of reading comprehension strategies in Brunei Darussalam's primary schools.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Ewana holds a BA (Hons) in English Language and Literature (University of Manchester) and MA in English Language Studies and Methods (University of Warwick). She also did a Postgraduate Diploma in Education at the National Institute of Education, Singapore, specializing in teaching English. Recently, Ewana successfully defended her PhD thesis whereby her doctorate study focused on improving reading comprehension and reading engagement among young learners in Brunei Darussalam. Her interest in reading pedagogy stems from her 12-year experience of teaching English.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Dr. Maureen Chong Siew Fang is a senior education officer at the Human Resource Development Division (HRD), Ministry of Education. She heads the data management unit at HRD. She is also one of the mathematics facilitators at the Brunei Darussalam Teacher Academy (BDTA). She has been in the education system for 19 years and taught mathematics in one of the colleges in Brunei Darussalam for 13 years before embarking to pursuit her post-graduate study, in PhD of education specialising in mathematics education at Universiti Brunei Darussalam. Her main research interest includes developing mathematical framework for problem solving model, the pedagogical approaches in the teaching of problem solving using real-life applications and data analytics. In addition to being a BDTA facilitator, she work closely with other departments and units in the Ministry of Education to continue to develop improved quality in teaching and learning of mathematics across primary and secondary levels.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Hajah Suraini binti Haji Shahir joined the Department of School Inspectorate in 2017 following a 9 year career as an English language teacher at several secondary schools in Brunei Darussalam. Hajah Suraini began her career in the Ministry of Education after graduating from the University of Brunei Darussalam, where she read Geography and Teaching English as Second Language (2007). She then took Master of Public Policy (2009). After being initially assigned to teach English Language at secondary schools, she then specialized as a Specialist Inspector and took up various leadership roles including member of Senior Leadership Team.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Mohammad Sofian bin Haji Awang Radzuan received his B.Eng.(Hons.) upper second class in Automotive Engineering from the Bolton Institute of Higher Education, Bolton, U.K., in 2001, the Postgraduate Certificate in Technical Education from the University of Brunei Darussalam, Brunei Darussalam, in 2002, the M.Sc.(Eng.) degree in Automotive Engineering from the University of Bradford, Bradford, U.K., in 2010, and his DPhil.(Eng.) degree in Industrial Artificial Intelligence from the University of Sussex, Sussex, U.K., in 2016. His research interests include IioT, Cognitive computing, Machine language, Control system, Neuro-mechanical intelligence and smart machines. He has published some papers related to artificial intelligence together with Professor C Chatwin from the University of Sussex, U.K. and Professor Emeritus Sir T Ewin from the University of London, U.K. He is a member of the Institute of Mechanical Engineers of U.K., the Institute of Physics of U.K., and the Institute of Mathematics and its Applications of U.K. He is a Chartered Engineer registered in the U.K. Dr. Sofian is employed with the Department of School Inspectorate, Ministry of Education.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Cikgu Sujinah Binti Mejari, is an educational officer with 16 years of experience teaching Primary English especially pre -school and year 1 level. Currently, she is teaching at Sekolah Rendah Kampong Mata-Mata, Gadong, Cluster 1. She has a Master in Education (English Language and Literacy) in 2019, B.A (Hons) in English Language and Linguistics) in 2014 and had obtained a Diploma in Education (2003) from Universiti Brunei Darussalam. In 2012, under UBD Discovery year, she had undergone a Study Abroad Programme at Lancaster University, UK. Her secondary education was mainly at Sekolah Menengah Sayidina Ali Kuala Belait. Her area of interest includes language teaching and learning, literacy and education and teacher research.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Hajah Nor Irniwati Ismail gained her B.Sc Education (Hons) Degree in Mathematics and Chemistry from Universiti Brunei Darussalam in 1998. She is a fully accredited Numeracy Expert Coach after completing the Expert phase training of the Literacy Numeracy Coaching Programme (LNCP) with International Coaches to raise student achievement, progress and learning in Brunei. In 2018, she was awarded a Special Mention by the Brunei Darussalam Ministry of Education in recognition of the depth of reflective journal entries demonstrating progress as a coach during the Accreditation Phase of the LNCP. She was awarded “Best Paper Presenter” at the 2018 6th International Conference on Teaching, Education & Learning (ICTEL) in Kuala Lumpur, Malaysia. She also attended the 14th ASEF Classnet 2018 in Helsinki, Finland. She is passionate about Mathematics education and has taught all levels in the same school for 20 years.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

My ambition since my childhood days is to be a Mathematics teacher. I always have a passion in teaching because I want to help the younger generation to excel in Mathematics. I did my degree in BSc Education in Mathematics at UBD and graduated in 2005. Throughout my 13 years of teaching Mathematics, there are many teaching strategies which I had implemented in order to improve my students' academic performance. I did my masters part time in 2017 and even though many people told me it is impossible to manage the time but I can prove them wrong. With proper time management and self – discipline, I graduated with merit in Masters of Education this year. For me learning does not stop and I like to challenge myself to do many things like trying a different teaching strategy that can improve my students' understanding in learning Mathematics.

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Dr Vincent Andrew is a lead facilitator with the Brunei Darussalam Teacher Academy. He designs and develops professional development courses for Business-related subjects such as Economics, Commerce and Business Studies. He currently runs a Learning Study project in government secondary schools using a theoretical framework to design teaching.

Surianah Hj Junaidi graduated from Universiti Brunei Darussalam in 2000 with a major in Economics and minor in Accounting and Finance. She started her role as an Education Officer in 2001 teaching Commercial Studies and Principles of Accounts at SM Muda Hashim. She received her PGCE in 2003. At SM Sultan Sharif Ali she has taught Economics since 2004. She is also the HoD for Economics and the Assistant Senior Mistress Finance.

Sharon Lim Meau Ying has been teaching Economics, Enterprise and Commerce at SM Katok for 3 years. Her other duties include being a class tutor, finance officer and a career teacher.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Saya bernama Aisah Binti Alidin, berkhidmat sebagai seorang guru di Sekolah Rendah Perpindahan Kg.Bukit Beruang 11,Tutong, Kluster 5. Saya telah berkhidmat selama 10 tahun. Antara tugas dan tanggungjawab yang dipikul ialah sebagai guru kelas dan Ketua Pengawas Pendaftaran & Program Penilaian Sekolah Rendah (PSR), Penolong Guru Kanan Akademik, Penolong Pengawas Aktiviti Bahasa Melayu, Penolong Pengawas Pendaftar Sistem Maklumat INEIS, Penolong Ketua Pengawas Buku Teks Pelajaran Sekolah & SukatanPelajaran / Panduan Guru, Pengawas Program Pengayaan & Intervensi Bahasa Melayu serta ahli jawatankuasa PIBG sekolah dan perpustakaan sekolah. Selain itu, kelayakan akademik yang telah dicapai setakat ini ialah Ijazah Sarjana dalam pengkhususan Bahasa Melayu yang telah dianugerahkan pada tahun 2017 di Universiti Brunei Darussalam. Antara kursus perkembangan Profesional yang pernah dihadiri ialah kursus SBAfl (Assessment for Learning), Whole School Evaluation (WSE), TPD Zoning By Kluster dan penglibatan dalam Standard Literasi Kebangsaan Bahasa Melayu.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Nama saya ialah Noria binti Jenek @ Jumat. Saya merupakan seorang wanita yang berumur 43 tahun. Saya ialah alumni daripada Universiti Brunei Darussalam. Saya telah lulus dalam Sarjana Pendidikan Bahasa Melayu pada tahun 2019. Pada masa ini, saya merupakan seorang guru yang mengajar di bahagian pendidikan rendah. Saya mengajar Bahasa Melayu dan juga Matematik. Sehingga kini, saya telah mengajar selama 20 tahun. Saya pernah mengajar di Sekolah Rendah Long Mayan pada tahun 1996 sehingga tahun 2000. Kemudian saya dipindahkan ke Sekolah Rendah Penapar dari tahun 2000 – 2006. Pada tahun 2007, saya ditugaskan di Sekolah Rendah Rambai sehingga kini. Pada masa lapang saya suka melakukan aktiviti sukan seperti meredah hutan simpan, bermain badminton dan bola jaring.

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ERWAN ABU BAKAR
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Biography

Erwan Abu Bakar seorang guru Bahasa Melayu di Sekolah Rendah Panaga, Negara Brunei Darussalam. Dia telah berjaya menamatkan kursus Ijazah Sarjana Dalam Pendidikan secara kerja kursus (separuh masa) di Institut Pendidikan Sultan Hassanal Bolkiah, Universiti Brunei Darussalam pada tahun 2019. Beliau pernah terlibat dalam pembentangan kertas kerja sempena Persidangan Hari Guru tahun 2013. Beberapa penglibatan kursus pendek yang pernah diikuti ialah The 1:1 Computing in Model Schools Leadership Professional Learning Program 2013 – 2014 dan PEAKS ICT Leadership Certification Levels 1,2 & 3 tahun 2013. Pada ketika ini, beliau dilantik sebagai Ahli Jawatankuasa Standard Kebangsaan Literasi Bahasa Melayu bagi Guru-Guru Peringkat Rendah dan Menengah 2019 – 2020 dan School Based Committee (SBC) bagi Bahasa Melayu Kluster 6 Tahun 2019. Selain itu, terlibat dalam perjumpaan bagi membincangkan format kertas soalan Penilaian Sekolah Rendah (PSR) di Jabatan Perkembangan Kurikulum, Kementerian Pendidikan pada tahun 2019. Bidang penyelidikan yang diminati adalah berkaitan dengan pengajaran dan pembelajaran di sekolah khususnya Bahasa Melayu peringkat sekolah rendah.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Mohammad Erman Haji Jais is an Education Officer from IBTE Jefri Bolkiah Campus, Kuala Belait. Being NEBOSH certified, he is also the Head of Health, Safety and Environment (HSE) Unit where he manages and also teaches HSE in the campus. He obtained BSc in Product Design in 2010 from University of Bradford, UK and completed MSc in Mechanical Engineering (Modelling) in 2011 from Aston University, UK. He recently received his Master of Teaching from UBD where he was awarded a Pass with Merit. His research exercise had also obtained an excellent grade. Previously in 2016, he had also presented a paper at the International Conference on Ensuring Greater Impact of Technical Vocational Education Training (TVET) for Sustainable Development in Brunei. Since 2012, he has been actively teaching AutoCAD evening classes for the public under IBTE Continuing Education and Training. To date, he has already trained over 300 students in AutoCAD.

BIOGRAPHY OF PAPER PRESENTERS

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Biography

Pengiran Shaiffadzillah Pengiran Omarali is an educational technologist with the Ministry of Education Brunei Darussalam. He has more than 20 years of experience in programming and web development and as a faculty academic has trained international postgraduate teachers on the front-end integration and use of games and virtual worlds in lessons. His more recent projects involve apps and games development for education. His areas of interest include online learning, emerging educational technologies and digital transformation.

BIOGRAPHY OF PAPER PRESENTERS

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Mempunyai Diploma in Teaching And Supporting With Special Needs at Christchurch College of Education in New Zealand, 2001. Dan seterusnya mendapat Ijazah Sarjana Muda (Bachelor In Education – Special Education) di Univerisiti Brunei Darussalam pada tahun pada 2008. Pernah menyampaikan beberapa kertas kerja melalui persidangan dan persidangan baik di dalam negeri mahupun di luar Negara diantaranya 2018 – Menyampaian kertas kerja bertajuk "Assistive Technology : Opening opportunities for students with High Support Needs in Primary School" at Spectronics Conference in Gold Coast, Australia. Mengendalikan bengkel "Combining the excitement of computer games with serious task of learning to read and spell: Wordshark III. 2nd National Seminar & Workshop on Special Education (22nd – 24th July, 2008. . Menghadiri seminar "Special Olympics Asia Pacific 2009 Strategic Leadership & Training Conference in Kuala Lumpur, Malaysia (May, 2009)". Menyampaikan kertas kerja "International Conference on Learner Diversity (ICELD) in Kuala Lumpur, Malaysia (October, 2010). Menghadiri "The 1st International Symposium On Education For Person With Special Needs : Transition From School To Work Bangkok Thailand. (29-30 August, 2017). Pengalaman dan pengetahuan beliau dalam bidang pendidikan khas sangatlah luas, ini terbukti dengan adanya perkongsian pengetahuan dan pengalaman beliau kepada guru-guru / ibubapa / Ngos' / persatuan-persatuan yang berhubungkait dengan pendidikan khas sangat ketara sekali melalui taklimat, kongsisama, bengkel dan lain-lain lagi.

BIOGRAPHY OF PAPER PRESENTERS

ROSLENA JOHARI

Brunei Darussalam Teacher Academy (BDTA)
Ministry of Education
roslena.johari@moe.gov.bn

Biography

Dr. Roslena Johari is currently leading the Brunei Darussalam Teacher Academy (BDTA). She co-developed and designed the Teacher Professional Development (TPD) Framework for Schools. She is the Lead Facilitator for General Courses and Science at the academy. She is also an accredited Lead Trainer for Literacy and Numeracy Coaching Programme for both primary and secondary teachers. Her areas of expertise are: Differentiated Instruction, Classroom Action Research, Growth Mindset to Enhance Teaching and Learning, and Social Emotional Intelligence for Better Teaching and Learning Environment. In addition, she co-developed capacity building plans to build and sustain the skills and knowledge required for systemic improvement in the Literacy and Numeracy Programme to develop teacher capacity.

BIOGRAPHY OF PAPER PRESENTERS

AURELIA ESCOTO-KEMP

Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam
aureliaupk@gmail.com

Biography

Aurelia Escoto-Kemp is a Registered Educational Psychologist at Special Education Unit, Ministry of Education in Brunei Darussalam. She completed her training as an Educational Psychologist at the University of Otago. Aurelia holds a Bachelor of Arts (BA) degree in Psychology, a Master of Arts (MA) degree in Psychology, a Master of Education (MEd) degree in Educational Psychology and a Postgraduate Diploma in Educational Psychology. She is a member of the New Zealand Psychologist Board (NZPB), the New Zealand Psychological Society (NZPS), NZPS' Institute of Educational and Developmental Psychology and the Allied Health Professions Council of Brunei Darussalam. Aurelia is currently undertaking a Doctor of Philosophy (PhD) degree in Education at University of Brunei Darussalam.

BIOGRAPHY OF PAPER PRESENTERS

YVONNE YONG CC

Ministry of Education, Brunei

15h1452@ubd.edu.bn

Biography

Yvonne Yong is a secondary science teacher in Brunei who has a background knowledge on chemistry, biology and foundations on educations at the level prescribed for B.Ed. (General Science) programme at the University of Brunei Darussalam and MSc in Educational, Technology and Society at the University of Bristol, United Kingdom. Shortly after graduated from her degree, she joined SHBIE for a brief period as a Graduate Research Assistant where she learnt to use the research software, SPSS. Additionally, she has participated in numerous conferences like 16th and 17th International Conferences in Education (ICE), both organized by UBD in 2011 and 2012 respectively, STEP's Learning Study Project presentation in 2011 and International Conference in Applied Counselling and Psychology at Johor in 2017. She is currently in her 4th Year PhD part-time student from SHBIE.

BIOGRAPHY OF PAPER PRESENTERS

NORIYADTUL ISMA BINTI AWANG MOHAMAD

Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam
kr.92@live.com

Biography

Nama saya Noriyadtul Isma binti Awang Mohamad, berumur 28 tahun dan berasal dari Kampong Perpindahan Serasa, Muara, Negara Brunei Darussalam. Saya memperoleh kelulusan Ijazah Sarjana dalam bidang Pendidikan pada bulan Ogos tahun ini, dan sebelumnya saya memperoleh Ijazah Sarjana Muda dalam bidang Bahasa Melayu dan Linguistik pada tahun 2015 dari Universiti Brunei Darussalam. Saya pernah menjalani Latihan Penempatan di Dewan Bahasa dan Pustaka, Kuala Lumpur sebagai seorang daripada pembantu juruaudit surat-surat rasmi kerajaan di Kementerian Pendidikan dan sebagai pendidik di bawah penyeliaan Universiti Airlangga, Surabaya.

BIOGRAPHY OF PAPER PRESENTERS

ASRI HAJI ADAM

Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam
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Biography

Pendidikan sekolah rendah di Sekolah Rendah Tungku dan menengah di Maktab SOAS. Pra-u di Sekolah Pusat Tingkatan Enam Katok. Melanjutkan pelajaran ke peringkat degree (Sarjana Muda) dalam bidang Bahasa Melayu dan Linguistik di Universiti Brunei Darussalam bermula pada tahun 2013 sehingga 2016. Setelah itu, menyambung ke peringkat master (Sarjana) dalam bidang Master of Teaching khusus pengajaran Bahasa Melayu bagi peringkat sekolah menengah di Institut Pendidikan Sultan Hassanal Bolkiah, Universiti Brunei Darussalam bermula tahun 2018 sehingga 2019.

BIOGRAPHY OF PAPER PRESENTERS

NURFATIN AQEELA @ SITI SALWA BINTI USOP

Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam
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Biography

Nurfatin Aqeela @ Siti Salwa binti Usop berkelulusan Ijazah Sarjana Muda dalam Kesusasteraan Melayu (Universiti Brunei Darussalam) dan Ijazah Sarjana dalam Pendidikan (Universiti Brunei Darussalam). Dalam bidang Kesusasteraan Melayu, saya lebih berminat kepada sastera prosa seperti novel dan sastera tradisional seperti hikayat. Semasa mengikuti program Master of Teaching, saya telah menjalani penempatan mengajar di sekolah menengah dan pusat tingkatan enam. Pengalaman mengikuti penempatan mengajar telah memberikan saya peluang untuk berinteraksi dengan pelajar dan komuniti sekolah. Pengalaman ini telah menaikkan semangat dan minat saya untuk menjadi guru yang berkesan. Saya telah mencuba pelbagai teknik dan aktiviti dalam pengajaran. Saya mendapati kerjaya guru sangat mencabar dan memerlukan kesabaran dan kegigihan.

BIOGRAPHY OF PAPER PRESENTERS

HAJI MOHAMMAD SYUKRI BIN HAJI MD NOOR

Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam
syukri.noor20@gmail.com

Biography

Haji Mohammad Syukri was appointed as a registered nurse after graduating from Universiti Brunei Darussalam (UBD) in 2016. In the same year, he was employed as a staff nurse at The Brunei Cancer Centre and then promoted as a Senior Staff Nurse in 2017 at the Raja Isteri Pengiran Anak Saleha Hospital. Previously, he studied Diploma in Nursing for 3 years before he pursued to Bachelor of Nursing in UBD for another 4 years where he had the opportunity to study abroad at University College Cork, Republic of Ireland, for a year in the Discovery Year programme. Concurrently, while working in hospital wards, mentoring junior staff nurse and nursing students on attachment in his department, he developed passionate interest as an educator due to compliments received during mentorship. He recently received his Master of Teaching qualification from Sultan Hassanal Bolkiah Institute of Education, UBD where he was awarded a Pass with Merit.

BIOGRAPHY OF PAPER PRESENTERS

NURUL SYAHWANA YUSRA BTE MOHAMMAD YUSOF

Sultan Hassanal Bolkiah Institute of Education,
Universiti Brunei Darussalam

Syahwanayusof@gmail.com

Biography

Nurul Syahwana Yusra is a graduate student undertaking the Master of Teaching programme from Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam. She specialized in the Secondary Education with the learning area in History and Social Studies. Her first degree was in Historical Studies under the Faculty of Arts and Social Sciences at Universiti Brunei Darussalam. Syahwana also went to study abroad in Hankuk University of Foreign Studies, South Korea for six months and studied Asia's studies. She is well versed with Brunei's History as well as Asia's History. Her experience as an Assistant Teacher during industrial training in Pusat Bahagia Eric Goh, under Jabatan Pembangunan Masyarakat (JAPEM) has made her aware that education is very important to change one's life and status. Her research interest includes Teacher's Professional Development, Game-Based Learning, History Teaching, and Curriculum Development.

BIOGRAPHY OF PAPER PRESENTERS

NURDIYANA BINTI ABD. GHANI

Sultan Hassanal Bolkiah Institute of Education
Universiti Brunei Darussalam
nurdiyanaghani@gmail.com

Biography

Nama saya Nurdiyana binti Abd. Ghani, berusia 31 tahun. Saya adalah anak kedua daripada tujuh beradik. Saya merupakan alumni daripada Universiti Kebangsaan Malaysia yang telah menamatkan tempoh pengajian peringkat sarjana pada tahun 2015 dalam bidang Kesusasteraan Melayu. Saya pernah mengajar di kelas tusyen selama dua tahun sehingga menyuntik semangat saya untuk menimba ilmu secara lebih meluas dalam bidang pendidikan. Saya memilih untuk memantapkan pengetahuan saya sehingga lulus dalam program Sarjana Pendidikan Kesusasteraan Melayu di Universiti Brunei Darussalam pada 2019. Saya memiliki peribadi yang ceria dan seorang yang berfikiran terbuka. Saya mudah menyesuaikan diri dalam persekitaran baharu dan teliti dalam menyelesaikan setiap pekerjaan. Jika ada waktu lapang saya suka mengemas dan membuat kraf tangan. Sekarang saya menjadi pembantu penyelidik, sekali gus pengalaman ini dapat mengembangkan lagi pengetahuan saya dalam bidang penyelidikan.

BIOGRAPHY OF PAPER PRESENTERS

MOHAMMAD RAIHAN HAJI ABDUL RAHIM

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Biography

Raihan Rahim, a Ministry of Education Scholarship recipient, graduated from University of York with a Bachelor of Science (Hons) degree in Environment, Economics & Ecology back in 2017. He also recently completed his postgraduate studies in Master of Teaching (MTeach) at Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam. During his postgraduate studies, he was given teaching placements at two local secondary schools in Brunei Darussalam, teaching Geography and Social Studies for a total period of 6 months. He is keen in exploring different teaching methods and is currently focusing on using differentiated instruction in his teaching to cater more towards students with different learning abilities.

BIOGRAPHY OF PAPER PRESENTERS

SIDDIQAH ROSLI

Sultan Hassanal Bolkiah Institute of Education
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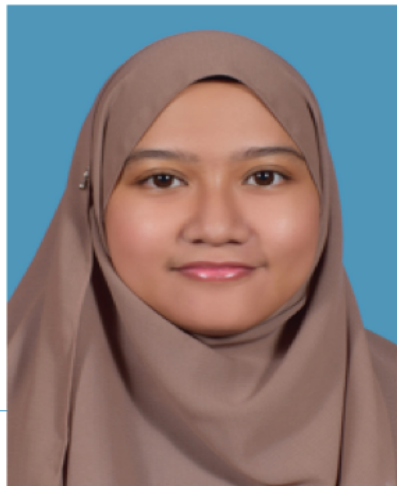
Biography

Siddiqah Rosli is a Master of Teaching alumnus of Sultan Hassanal Bolkiah Institute of Education UBD, specialising in Primary Education. She has spent 6 years in the United Kingdom where she obtained her A level qualifications and degree in Bachelor of Science (Honours) in Mathematics from Heriot-watt University in Edinburgh Scotland. Her research interests primarily lies in curriculum designing and the use of elements of creativity in teaching and learning elementary Mathematics such as the use of storytelling. She is currently a primary school teacher teaching Mathematics, undertaking a part-time PhD in Education programme in Universiti Brunei Darussalam.

BIOGRAPHY OF PAPER PRESENTERS



'IZZATUL ABIDAH BINTI HAJI MOHAMAD GANI

Sultan Hassanal Bolkiah Institute of Education
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izzatulabidah.gani@gmail.com

Biography

'Izzatul Abidah Gani is a graduate student undertaking the Master of Teaching programme from Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam. She specialised in the Secondary Education with the learning area in History and Social Studies. Her first degree was in Historical Studies under the Faculty of Arts and Social Sciences at Universiti Brunei Darussalam. Abidah also went to study abroad in Akita International University, Japan for one year and studied Global Studies. As a graduate student, she was invited to present her paper at the 7th SMR II Action Research Conference (2018) organised by Sekolah Menengah Rimba II. Her paper focused on the use of Jeopardy! as a revision tool for history lesson. Her areas of interest include Curriculum Development, Teachers' Professional Development, Pedagogy and History Teaching. She is also well versed with History of Brunei and South-East Asian History.

BIOGRAPHY OF PAPER PRESENTERS

FATIN KHADIJAH BINTI MASWADI

Sultan Hassanal Bolkiah Institute of Education,
Universiti Brunei Darussalam
fatinkmaswadi@gmail.com

Biography

Fatin Khadijah was a recipient of a Ministry of Education scholarship and bonded to be a teacher. She is a graduate of a Bachelor's Degree in Food Science and Nutrition from the University of Leeds in 2017. During her final year, her team and herself won second prize of the Marks and Spencer New Product Development Innovation Prize. After obtaining her first degree, she worked in designing new menu items and improving upon existing items to gain experience in the food industry. Not only that, Fatin Khadijah is also an active member of one of Brunei's Non-Government Organisation targeting youth development, Persatuan Kemajuan Insan (KESAN), as an executive committee of the Education Unit. She has engaged in event planning and management for leadership outreach programmes in various schools in the country. Recently, Fatin Khadijah obtained a Masters of Teaching qualification from Universiti Brunei Darussalam, and passed with Merit.

BIOGRAPHY OF WORKSHOP PRESENTERS

DR. ALIAMAT BIN OMAR ALI

Institut Pendidikan Sultan Hassanal Bolkiah,
Universiti Brunei Darussalam
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Biography

Dr. Aliamat Omar Ali is a lecturer in Language and Literacy Education at the Sultan Hassanal Bolkiah Institute of Education (SHBIE), Universiti Brunei Darussalam. His present research interests are in teaching and learning of thinking skills and the use of digital technology in language classrooms. On top of his current duties at SHBIE, he is also an active member representing the faculty at the university's Entrepreneurship Village. Dr. Aliamat earned a Ph.D in Education from National Institute of Education, Nanyang Technological University (Singapore), a Master of Arts in Language Learning and Education from the University of York (England), and a Bachelor of Arts with honours from Universiti Brunei Darussalam.

BIOGRAPHY OF WORKSHOP PRESENTERS

DR SHAMSINAR BINTI HAJI HUSAIN

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Shamsinar.hussain@ubd.edu.bn

Biography

Dr Shamsinar Haji Husain is a lecturer at Sultan Hassanal Bolkiah Institute of Education (SHBIE), Universiti Brunei Darussalam (UBD) where, she has been a faculty member since 1998. Shamsinar completed her Phd and Master's degree at University of Exeter and her undergraduate degree at Universiti Brunei Darussalam. At UBD, she served as Deputy Director of International and Public Relation Office (IPRO), Programme Leader of School Partnership, Academic Group Convener of Creative Arts and Sport Studies as well as Coordinator of International Master of Teaching Programme. In 2015, she served as Coordinator and Facilitator of The English Teaching Apprenticeship (ETA) Programme and involved in teaching English Language with Teaching Apprenticeship and Creative Arts. She currently teaches Art and Design Education, Islamic Art and Research Methodology. She actively involves in supervising masters and phd students in Art and Design Education, Art and Technology and several other disciplines, such as Islamic Studies and Education. Serving actively in teaching activities, under The Brunei-U.S. English Language Enrichment Project for ASEAN, she has involved in teaching Designing and Developing Materials module with SHBIE lecturer at University of Manoa, Hawaii in 2015. Last year, under SHBIE Short Course Abroad programme, she has participated in conducting two lectures on Global Education for UBD MTeach students at Namseoul University, Seoul. Her research interest includes Art and Design Education, Culture and Heritage, Teacher Education, Qualitative Research, Fine Art, Islamic Art and Values, Creativity, Technology, Innovation and Architecture. She is currently involved in research projects related to International Practicum, Culture and Heritage, Islamic Architecture in Malay World, Teacher Education and Higher Education.

BIOGRAPHY OF WORKSHOP PRESENTERS

MOHAMMAD KHAIRUL AMILIN BIN HJ TENGAH

Sultan Hassanal Bolkiah Institute of Education,
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khairul.tengah@ubd.edu.bn

Biography

Khairul Amilin Tengah started working in the Mathematics Education team at SHBIE in 2004. Initially appointed as a tutor, he continued his Master in Education at Kings College London in 2005. In his early lecture career, Khairul taught different levels of secondary and pre-university in several secondary schools three mornings per week over two years for personal and professional experience. He pursued further graduate studies at Teachers College, Columbia University, New York (USA), where he obtained Master in Science (Mathematics Education) and Master in Philosophy in the same area. He published his first solo paper in the Journal of Mathematics Education at Teachers College (JMETC), and continues to publish papers in several international peer-reviewed journals. He is also an active reviewer in several journals and part of international advisory editor in Journal of Research and Advances in Mathematics Education (JRAMathEdu). Khairul has facilitated several math pedagogy workshops, including for primary and secondary teachers from MORA and YSHHB Primary School.

BIOGRAPHY OF WORKSHOP PRESENTERS

DR. HJH JABAIDAH BINTI HJ BUNGSU

Sultan Hassanal Bolkiah Institute of Education,
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jabaidah.bungsu@ubd.edu.bn

Biography

Dr. Hjh Jabaidah was the recipient of gold award Diploma in Agriculture, graduated in Agriculture & Food Science from Nottingham University (UK) before appointed as Education Officer teaching Mathematics, Science and Agriculture subjects in secondary schools. Later, she was in-charge of agriculture secondary curriculum at the Curriculum Development Department. She obtained a Master of Education from Sultan Hassanal Bolkiah Institute of Education (SHBIE) in 2002. She was awarded a PhD in Curriculum Innovation gearing towards quality and relevant education from Newcastle University (UK). Currently, she is a Lecturer in Technical Education for teacher training at SHBIE and is a passionate advocate about agriculture education, and learning by doing through experiences. Her research interests lie in the quality and relevant curriculum innovation; key concepts for deeper understanding; effective pedagogies for VTE teaching-learning; job-readiness and employability. She has supervised many research students at master's level in various learning areas and received commendable results.

BIOGRAPHY OF POSTER PRESENTERS

AK MUHD RAIHAN SYAFIQ BIN PG HJ ROSLAN

Sekolah Menengah Sultan Sharif Ali, Salambigar

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Biography

Raihan Roslan was a recipient of Ministry of Education's Special Scheme scholarship and bonded to become a teacher. After graduating with Honours from Loughborough University in BSc Physics and Mathematics, Raihan Roslan pursued Master of Teaching (MTeach) and graduated in 2018 with a specialisation in Secondary Physics education from UBD. He is also an active member of Belia Masjid Ash-Shaliheen, a local mosque youth organisation registered under KHEU and KKBS. As a member of the organisation, he has actively participated in the planning and management of various activities ranging from charity work, community outreach and religious activities. Currently teaching O level Physics at Sekolah Menengah Sultan Sharif Ali, Raihan aims to make Physics a fun and easy to understand subject with the students' best interest in mind taking inspiration from Walter Lewin, a famous professor at MIT who once said "Teachers who make Physics boring are criminals".

BIOGRAPHY OF POSTER PRESENTERS

ROSNI BINTI OTHMAN

Sekolah Rendah Kapok, Muara (Kluster 4)

rosni.othman@kapok.moe.edu.bn

Biography

Rosni Othman is a primary mathematics teacher with 10 years of teaching experience. She recently graduated from Universiti Brunei Darussalam with a Master of Education (by Coursework) degree in Mathematics Education, and the Book Prize recipient for her programme at the 31st UBD Convocation 2019 Ceremony. She also has a degree in Bachelor of Arts (Honours) in Primary Education from the same university. Rosni has been involved in several projects with the Curriculum Development Department, Ministry of Education as panel moderators for the YES! Maths curriculum package for Years 3 to 6, appointed as an expert committee for Numeracy, Brunei Darussalam Literacy and Numeracy National Standards, and a committee member for the Student Assessment Tracker. Her research interests are predominantly on the primary mathematics curriculum, specifically on its design, assessment and pedagogy.

BIOGRAPHY OF POSTER PRESENTERS

DR. NORSADIAH BINTI HJ MOHD RADUAN

Maktab Duli Pengiran Muda Al-Muhtadee Billah,
norsadiah.reduan@md.moe.edu.bn

Biography

Norsadiah earned her BScEd (Hons) in Chemistry, UBD and her MSc in Chemistry, University of Hull, UK. Her research work on Non-Ionic Polymeric Macrosurfactants has been published in international scientific journals (Soft Matter and Polym. Prepr.) and in Polymer Science conference proceedings in Loughborough and Glasgow, UK and Chicago, USA. She has taught secondary sciences and various school levels' chemistry in SMSUA and PTEK. Currently, she is teaching Chemistry in Maktab Duli PMAMB and has just completed her PhD in Education at the Sultan Hassanal Bolkiah Institute of Education, UBD. Her PhD research focused on using phenomenography and designing a digital CE simulation based on variation theory of learning to improve Bruneian Pre-University students' understanding of chemical equilibrium. Parts of this research have been presented at the 16th Biennial EARLI Conference and JURE pre-conference in Cyprus. She has interest in using phenomenography and variation theory to improve chemistry teaching and learning.

BIOGRAPHY OF POSTER PRESENTERS

DR. EWANA BINTI DR. HJ MOHAMAD YUSOP

Maktab Duli Pengiran Muda Al-Muhtadee Billah, Gadong

ewana.yusop@md.moe.edu.bn

Biography

Ewana holds a BA (Hons) in English Language and Literature (University of Manchester) and MA in English Language Studies and Methods (University of Warwick). She also did a Postgraduate Diploma in Education at the National Institute of Education, Singapore, specialising in teaching English. Recently, Ewana successfully defended her PhD thesis whereby her doctorate study focused on improving reading comprehension and reading engagement among young learners in Brunei Darussalam. Her interest in reading pedagogy stems from her 12-year experience of teaching English.

BIOGRAPHY OF POSTER PRESENTERS

MOHAMMAD ERMAN BIN HJ JAIS

IBTE Jefri Bolkiah Campus

erman.jais@ibte.edu.bn

Biography

Mohammad Erman Haji Jais is an Education Officer from IBTE Jefri Bolkiah Campus, Kuala Belait. Being NEBOSH certified, he is also the Head of Health, Safety and Environment (HSE) Unit where he manages and also teaches HSE in the campus. He obtained BSc in Product Design in 2010 from University of Bradford, UK and completed MSc in Mechanical Engineering (Modelling) in 2011 from Aston University, UK. He recently received his Master of Teaching from UBD where he was awarded a Pass with Merit. His research exercise had also obtained an excellent grade. Previously in 2016, he had also presented a paper at the International Conference on Ensuring Greater Impact of Technical Vocational Education Training (TVET) for Sustainable Development in Brunei. Since 2012, he has been actively teaching AutoCAD evening classes for the public under IBTE Continuing Education and Training. To date, he has already trained over 300 students in AutoCAD.

ORGANIZING COMMITTEE

CO-ADVISORS

Dr. Shamsiah Zuraini Kanchanawati binti Haji Tajuddin
Permanent Secretary (Core Education), Ministry of Education

Dr. Haji Azman bin Ahmad
Permanent Secretary (Higher Education), Ministry of Education

DEPUTY CO-ADVISORS

Awang Aliuddin bin Haji Abdul Rahman
Deputy Permanent Secretary (Core Education)

Dr. Chin Wei Keh
Deputy Permanent Secretary (Higher Education)

CO-CHAIRPERSONS

Dr. Hajah Rosmawijah binti Haji Jawawi,
Dean,
Sultan Hassanal Bolkiah Institute of Education, SHBIE

Pengiran Hajah Mas Joliwane binti Pengiran Haji Tejudin
Acting Head,
Science, Technology and Environment Partnership Centre, STEP

SECRETARIAT

Dr. Hajah Jabaidah binti Haji Bungsu, Co-Chairperson, SHBIE
Dayang Nurul Fathiah Bazilah binti Haji Ibrahim, Co-Chairperson, STEP Centre
Dr. Juraidah binti Haji Musa, SHBIE
Dk. Nurul Aqilah binti Pengiran Masuni, SHBIE
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre
Dayang Hajah Rohizan binti Haji Jamadil, STEP Centre

EVENTS

Awang Hazarry bin Haji Ali Ahmad, Co-Chairperson, STEP Centre
Dr. Haji Abu Bakar bin Haji Madin, Co-Chairperson, SHBIE
Awang Haji Mohammad Azwan bin Haji Awang Besar, SHBIE

FINANCE

Dayang Ayuni Khairunnisa binti Awang Haji Ismail, Chairperson, Finance Department,
Administration and Services Department, Ministry of Education, DA
Dayang Zulika binti Zaini, DA

ORGANIZING COMMITTEE

PARALLEL SESSION DAN WORKSHOP

Dr. Dayang Shamsinar binti Haji Hussain, Chairperson, SHBIE
Awang Mohd Khairul Amilin bin Awang Haji Tengah, SHBIE
Dayang Nor Azura binti Haji Abdullah, SHBIE

ABSTRACTS / PAPER SELECTION

Dr Haji Rozaiman bin Makmun, Chairperson, SHBIE
Dr. Masitah binti Shahrill, SHBIE
Dr. Jainatul Halida binti Haji Jaidin, SHBIE
Dr. Hajah Sallimah binti Haji Mohd Salleh, SHBIE
Dr. Adeline Goh Yuen Sze, SHBIE
Dr. Haji Gamal Abdul Nasir bin Haji Zakaria, SHBIE

MODERATOR AND RAPPORTEUR

Dr. Juliana Shak Poh Kam, Chairperson, SHBIE
Dr. Hajah Salwa binti Dato Seri Setia Haji Mahalle, SHBIE
Dr. Hajah Suraya binti Haji Tarsat, SHBIE
Dr. Hajah Dayang Nor Zaiham Midawati binti Haji Abdullah, SHBIE
Dk. Yusimah binti Pengiran Haji Amjah, SHBIE
Noradinah binti Haji Jaidi, SHBIE
Hajah Masriatol Zuraifah binti Haji Sajali, SHBIE

PROTOCOL

Dr. Hajah Salwa binti Dato Seri Setia Haji Mahalle, Co-Chairperson, SHBIE
Awang Hazarry bin Haji Ali Ahmad, Co-Chairperson, STEP
Dr. Hajah Rohani binti Haji Matzin, SHBIE
Dr. Haji Abu Bakar bin Haji Madin, SHBIE
Dr. Hajah Sallimah binti Haji Mohd Salleh, SHBIE
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre
Dayang Hajah Rohizan binti Haji Jamadil, STEP Centre

INVITATION

Dr. Andery Lim, Co-Chairperson, STEP Centre
Dr. Marlizayati binti Johari, Co-Chairperson, SHBIE
Habibah binti Haji Abdul Rahman, SHBIE
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre
Dayang Hajah Rohizan binti Haji Jamadil, STEP Centre

ORGANIZING COMMITTEE

REGISTRATION

Dr. Siti Norhedayah binti Haji Abdul Latif, Chairperson, SHBIE
Nor'Arifahwati binti Haji Abbas, SHBIE
Hajah Malawati binti Haji Bungsu, SHBIE
Dayang Hajah Siti Hamizah binti Abdullah, STEP Centre
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre
Dayang Hajah Rohizan binti Haji Jamadil, STEP Centre

LOGISTIC / P.A SYSTEM / TECH SUPPORT

Awang Haji Zufri bin Haji Hassan, Co-Chairperson, SHBIE
Dr. Andery Lim, Co-Chairperson, STEP Centre
Dayang Hamadiatul Hayati binti Abdul Hamid, Information Communication and Technology (ICT) Department , Ministry of Education,
Awang Mohamad Firdaus bin Yussof, ICT
Awang Mar Aswandi bin Haji Mahadi, SHBIE
Dayang Titi Sulastri binti Haji Timbang, STEP Centre
Awang Amirol Affindi bin Haji Bujang, STEP Centre
Awang Mohammad Eswandy bin Awang Zahari, STEP Centre
Awang Junaidi bin Jamudin, STEP Centre

BACKDROP, VIDEO LAUNCH, CERTIFICATES, PROGRAMME

Pengiran Suffian bin Pengiran Said, Co-Chairperson, Curriculum Development Department (CDD), Ministry of Education
Dr. Andery Lim, Co-Chairperson, STEP Centre
Pengiran Dr. Hajah Nur-Ashikin binti Pengiran Haji Petra, Co-Chairperson, SHBIE
Fifi Faulina @Nuur Fadhlun binti Haji Zailani, SHBIE
Awang Asri bin Haji Budin, CDD
Dayang Nanihasrinah binti Haji Hanafi, CDD
Muhammad Nuraiziz bin Muhammad, CDD
Siti Nur Haziyah binti Haji Kamaluddin, CDD

REFRESHMENT

Dayang Hajah Zuriyatini binti Haji Mohd Zainal, Co-Chairperson, SHBIE
Dayang Titi Sulastri binti Haji Timbang, Co-Chairperson, STEP Centre
Dr. Hajah Suraya binti Haji Tarasat, SHBIE
Dayang Sri Kartika binti Haji Abd Rahman, SHBIE
Dayang Hajah Siti Hamizah binti Abdullah, STEP Centre
Dayang Nurul Fathiah Bazilah binti Haji Ibrahim, STEP Centre
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre
Dayang Hajah Rohizan binti Haji Jamadil, STEP Centre

ORGANIZING COMMITTEE

PUBLICITY

Dr. Desmond Tan Chia Chun, Co-Chairperson, SHBIE
Dr. Andery Lim, Co-Chairperson, STEP Centre
Dayangku Ratna Suriani binti Pengiran Haji Osman, SHBIE
Nur Ar Mardhiah binti Haji Mohd Akin, Public Relations Unit, Ministry of Education

MEDIA (PHOTOGRAPHY & VIDEOGRAPHY)

Awang Haji Jefri bin Jais, , CDD
Dayang Rennay Masdiana binti Haji Hidop, CDD
Awang Joey Tashrin bin Haji Hamidon, CDD
Awang Mohammad Ezam bin Haji Abu Bakar, Media Unit, CDD
Awang Haji Edham bin Haji Abdul Rahman, CDD
Awang Muhammad Bahri bin Haji Ibrahim, CDD
Awang Muhammad Arif bin Hashim, CDD

PARKING VENUE AND SECURITY

Dr. Aliamat bin Omar Ali, Chairperson, SHBIE
Haji Hazilan bin Haji Ramli, SHBIE
Awang Mohd Azman Bin Haji Azamain, DA
Dayang Nur Ashikin binti Haji Puting, DA
Awang Omarali Salimin bin Haji Mohammad, DA
Awang Adanan bin Haji Diwa, DA
Awang Abdul Abeeb bin Lamat, DA
Awang Junaidi bin Jamudin, STEP Centre
Awang Muhammad Amirol Affindi bin Haji Bujang, STEP Centre
Awang Mohammad Eswandy bin Awang Zahari, STEP Centre

DOA RECITAL

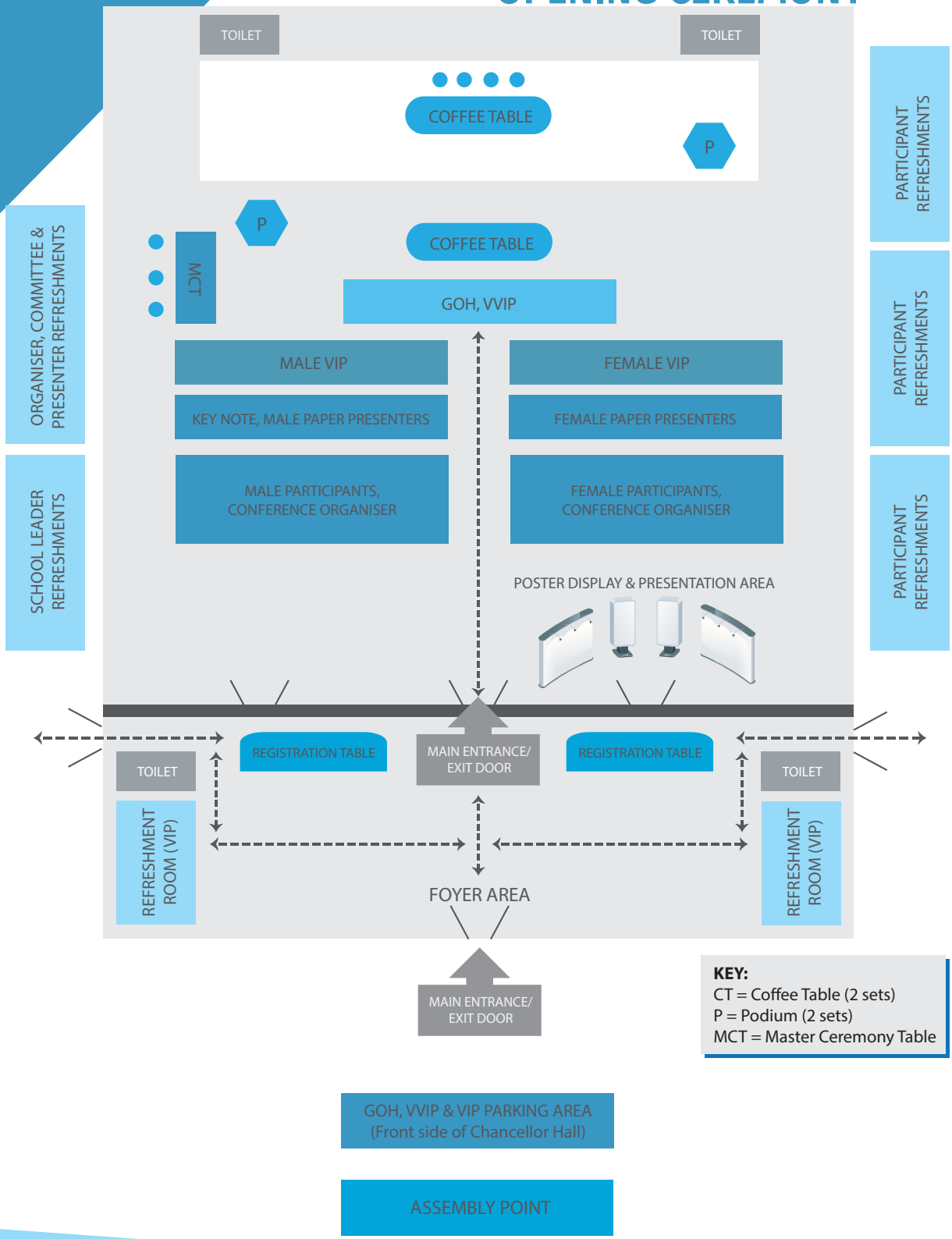
Dayang Hajah Siti Hamizah binti Abdullah, Chairperson, STEP Centre
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre

MASTER OF CEREMONY

Dayang Hajah Siti Hamizah binti Abdullah, Co-Chairperson, STEP Centre
Dayang Nurirma Yusrina binti Haji Adanan, STEP Centre
Dayang Junaidah binti Haji Abd Hamid, STEP Centre

FLOOR PLAN

CHANCELLOR HALL OPENING CEREMONY



KEY:
CT = Coffee Table (2 sets)
P = Podium (2 sets)
MCT = Master Ceremony Table

GOH, VVIP & VIP PARKING AREA
(Front side of Chancellor Hall)

ASSEMBLY POINT

FLOOR PLAN

SHBIE
SHBIE 2ND FLOOR (TINGKAT 2)