

Session Code P21

Presenter(s) : Lajwanti Thakurdas Melwani  
Lavinia Toh  
Sim Joo Sen  
Liew Guan Jie

School : White Sands Primary School

Title : Literary Intervention for Weaker Pupils

Subject Area : English

**Synopsis**

An action research was carried out on a group of 14 pupils to find out if applying certain strategies for teaching of vocabulary would help pupils understand a passage better. Pupils were banded according to their reading age and a range of strategies was applied to help them in their reading comprehension. Reading comprehension texts were chunked into paragraphs and teachers went through the meaning of the vocabulary words before going through the reading of the texts. Strategies applied include: chunking of texts, teaching vocabulary out of context, frayer's model, Clarifying word bookmarks.

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Session Code P22

Presenter(s) : Angeline Nadia Lim

School : Bedok Green Primary School

Title : Building Teachers Pedagogical Content Knowledge through Networked Learning

Subject Area : Maths

**Synopsis**

Lesson Study is one of the modes for professional learning of teachers involved in Networked Learning Communities (NLCs) in Singapore. The intent of this sharing is to demonstrate how collaborative reflection and learning through Lesson Study impacts the pedagogical content knowledge (PCK) and beliefs of a group of primary and secondary mathematics teachers in NLCs. Through this network we gain deeper insights into the development of our PCK. We will share the learning gathered from pre and post conferences and lesson observations. We will also share the thinking behind designing each lesson to develop teachers' PCK. This is to ensure that we become effective classroom teachers; understanding students' learning behaviour and develop their mathematical concepts and skills. Besides sharing our learning experiences, participants will also engage in co-generative dialogue on how they could develop their PCK to enhance the teaching and learning process.

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Session Code P23

Presenter(s) :Chia Poh Kwang Florence  
Kok Yuet Heng  
Ng Keng Choon Fiona

School : St Anthony's Canossian Primary School  
Rosyth Shool  
Qiaonan Primary School

Title : The Impact of the use of iPad on the Teaching and Learning of Chinese Oral Skills for Primary School Pupils

Subject Area :MTL

**Synopsis**

Effective Communication is an integral part of everyday life and English being the predominant language used by many parents and children, many pupils are unable to communicate fluently in Mandarin. The teaching of oral skills is important as oral component comprises 25% of the entire Chinese Language paper. In recent years, new developments and the increasing availability of technology in the classroom offer the potential for new approaches to teach oral skills.

The aim of this thesis is to investigate three hypotheses based around the concept of using iPad as a tool to enhance communication skills. The first of these is that the use of iPad may stimulate their interest in exploring how to express themselves orally. The second is that the use of an appropriate tool will integrate well into classroom teaching to produce effective learning. Finally, the same tool can be used to enhance learning of these skills outside the classroom.

The result indicated that iPad is an effective tool to enhance the pupils' oral skills in the Chinese Language.

Session Code P24

Presenter(s) : Siti Fatimah Binte Hassan  
Ng Lay See

School : Yu Neng Primary School

Title : Use of ICT to enhance Self-directed Learning (SDL) and Collaborative Learning (CoL) for Primary 2 pupils in Malay

Subject Area : Malay

**Synopsis**

The teachers explore ways to enhance T&L through the use of ICT to promote self-directed learning and collaborative learning in different learning contexts. The use of QR codes has enhanced the students' interaction, making learning more engaging and encouraging collaboration among students. QR codes provide a platform for students to access a wide variety of learning materials instantly and are convenient for younger pupils who now need not type in complicated URL with the introduction of QR codes. More importantly, teachers could create a safe and secure online environment where the accessibility to online resources is controlled. It is easy to plan and prepare impactful and interesting lessons involving QR codes through online sites. This project adopts a comparison-between-groups design to analyse the pupils' response to their classroom environment as related to the learning of Malay with the use of ICT. The pupils reflected on their lessons. Besides, a focused group interview and a WIHIC survey were carried out after the lessons. The pupils in the experimental group responded more positively and looked forward to having more of 'hands-on' and 'sharing' during lessons. The pre- and post-test result shows that the experimental group made a significant improvement in their summative assessment.

Session Code P25

Presenter(s) : Mohammed Nidzam Bin Zakariah  
 School : Fuhua Primary  
 Title : Writing @ Fuhua  
 Subject Area : Malay

**Synopsis**

10'M Programme has been essential in engaging a group of eight year old students to write, edit and submit their writings through collaborative learning. Using 10'M Portal as an engaging tool, teacher is able to engage students to writing better through collaborative learning. In a lesson study conducted, teachers played the role of a facilitator who assists students to generate ideas at the beginning of the writing process. The ideas were then compiled and pupils wrote their stories using the ideas shared as a guide or reference.

The student then had the chance to read their peers' work and use the portal's affordances to edit any spelling, punctuation or grammar mistakes made. After editing, students were given the task to grade their peer's work using a rubric that was provided in the portal. The students find this process meaningful as they get to learn from one another. They had the opportunity to read, edit, grade and comment on a few essays for each writing exercise. When they read their own edited writings, students chose to either follow the changes that their peers had made for them or keep it as it was written originally. This final writing piece would be the one which teacher would read, grade and comment.

Session Code P26

Presenter(s) : Chan Siew Boon (ST)  
 Soh Hoon Kian (ST)  
 School : Telok Kurau Primary School  
 Title : Autonomy Support and Learners' Motivation  
 Subject Area : General

**Synopsis**

One of the important outcomes of education in Singapore is to develop students to be self-directed learners. However, it is not uncommon to hear teachers say that their learners are unmotivated, and extrinsic motivation methods like rewards and punishments reap short-term benefits that are not sustainable. In order to inculcate in our learners the natural desire to learn, teachers from Telok Kurau Primary School, Pioneer Primary School, Maris Stella High School and Temasek Junior College worked together to explore what triggers the learners' intrinsic motivation.

Research has shown that motivation is related to whether learners are given the opportunities to be autonomous. The purpose of this study is to investigate if providing autonomy support can enhance learners' intrinsic motivation. In this project, the Self-Determination Theory put forward by Deci and Ryan (2000) was applied to investigate:

1. the effects of intervention strategies for promoting autonomy support and
2. learners' perception of their teachers' autonomy support on their learning

Quantitative data was collected and compared between the experiment and control groups. In implementing this project and as part of the intervention strategies, the five acts of autonomy support postulated by Reeve (2009) have been used and applied in the classrooms by the teachers involved in this study.

Session Code P27

Presenter(s) : Kiew Kwok Fong Victor  
Rizanudin Jusary

School : Griffith Primary School

Title : The Significance of a Running Training Programme in Affecting the 1.6 Kilometre Run Timing of Primary Five Pupils in Griffiths Primary School

Subject Area : PE

**Synopsis**

This action research helped answer the need to abrogate a specific training programme for NAPFA. The research explores the two types of training programmes (a running programme versus playing games which involves active running.) to see whether there are any significant improvement in the timing of the pupils' 1.6 kilometre run.

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Session Code S21

Presenter(s) : Masturah Abdul Aziz,  
Tan Yen Chuan  
Jarina Peer

School : Raffles Girls' School

Title : Teachers and Practitioner Inquiry: The Benefits and Challenges

Subject Area : General

**Synopsis**

This research is about the motivational factors of teachers embarking on Practitioner Inquiry (PI) and their challenges faced. The school in this study seeks to support the Reflective Practitioner through an in-house research ecosystem that provides targeted support for teachers' inquiry into their practices. The goal is to create a supple theory-practice nexus in research where teachers illuminate their own practices through active review and discourse as well as participate in the educational fraternity as informed practitioners. Focus group interviews were conducted with teachers who have embarked on Practitioner Inquiry. The data sheds light on the motivations and challenges faced within this ecosystem, enabling further refinements to it. This research therefore, offers an insight into the value of Reflective Practice for enhanced student learning. It also emphasizes the empowerment of teachers as strategic thinkers who gain greater understanding not only of their content area but also of their professional selves and the students they teach. Organizations interested in creating their own research ecosystem can apply this information to their context.

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Session Code S22

Presenter(s) : Wong Fui Yen  
 School : Junyuan Secondary School  
 Title : 'Mobile technology', the new wave of learning  
 Subject Area : Science

**Synopsis**

Within the school context, there is a rising trend in students carrying their personal mobile devices with them at all times. Most of the students are actively hooked on their mobile devices mainly for social purposes. For example, they will either be using them for chatting, playing games, listening to music and making social calls.

Traditionally, smartphones have a bad reputation as a distraction in schools, but that is starting to gain acceptance. So we asked ourselves, 'Mobile phones in the classroom: a boon or blight? It's a question many educators like us are facing these days. Instead of banning smartphones per se, it was suggested that they be used as a new platform for learning, in the same way a laptop or a desktop was a new platform (Kharif, 2008).

The Biology teachers examined some of our previously held beliefs about teaching and learning, models of course design and pedagogical approaches. This helped us to look at mobile learning from different perspectives than usual, which may lead to reconfirming powerful potentialities of mobile learning or realising the other potentialities in lesson routines. Having such idea in mind, we are keen to find out how this technology can be optimally used to improve students' communication and ownership in learning. We are currently allowing students to explore the use of mobile devices for taking notes, using quick response (QR) bar codes, capturing and uploading images and video, collecting personal responses, downloading reference materials, as well as sharing their comments across teams as a form of assessment for learning. We will also be guiding the students to record, organise and reflect their customised mobile learning experiences through an online collaborative learning platform, which enables students to communicate with one another beyond the classroom context.

Session Code S23

Presenter(s) : An Fengyun  
 Wang Yanchun  
 Zhang Weidong  
 Liu Zhiqiang  
 School : Dunman High School  
 Title : Using self and peer assessment checklists to enhance students' thinking and writing abilities.  
 Subject Area : MTL

**Synopsis**

This is a data-driven action research project, which focuses on using self (and peer) assessment checklists to enhance students' thinking and writing abilities. Self-assessment plays a crucial role in developing students' thinking skills and academic development, therefore the team designed the self-assessment checklist and conducted the research. This research was done with pre-test, post-test and control group for comparative purposes. The data collected includes students' survey forms, interviews with participants and their test results.

This self-assessment checklist pulls both assessment and learning closer as it is an important tool for student's development. This activity also aids their growth as it allows the students to identify their strengths and reap the rewards, helping them to discover problems/questions and rectify them promptly. Through this, students will take ownership of their learning and become active participants in the learning process. Tutors are no longer transmitters of information and knowledge but leaders that inspire the students in their learning process.

Session Code S24

Presenter(s) : Eunice Chew Shuhui  
 Tan Jinsha  
 Joel Lim Lymin  
 Chan Chow Syan

School : Chung Cheng High School (Main)

Title : Action Research - The "Flipped Classroom" Approach

Subject Area : Maths

**Synopsis**

The objective of the action research project is to study if the use of the "Flipped Classroom" approach will promote students' level of engagement. Close reference to literature reviews on the "Flipped Classroom" approach and students' level of engagement provided the theoretical framework. Two cycles were conducted; the first cycle acted as a springboard to the second cycle, which was refined and implemented to the Secondary 3 Mathematics classes on the topic of trigonometry. Data was collected and analysed in the second cycle for two "Flipped" classes and two "Traditional" classes. In the "Flipped" class, students acquire content knowledge first by watching assigned videos at home, then come to class to clarify their doubts and complete classwork or learning experiences individually or collaboratively with the teacher's guidance. Both quantitative and qualitative instrumentations, in particular pre-survey and post-survey, post evaluation on level of understanding, perception survey, focused group discussion and classroom observation were adopted, to measure the validity and reliability of students' level of engagement. After analysis, conclusive results showed that the Flipped classroom approach does to an extent promote students' level of engagement. However, to make it more effective, it needs refinement and improvement for the next implementation.

Session Code S25

Presenter(s) : Tay Su-Hui Fiona  
 Premani Minashi Logaraj

School : Damai Secondary School

Title : Monotonous No More: Developing Confidence in Oracy through Storytelling

Subject Area : English

**Synopsis**

While students have interesting and impassioned opinions, they hesitated in expressing them. As the language of choice for conversations veered away from English with the changing racial profile in the classrooms, the situation worsened with many students having difficulty articulating their thoughts in Standard English. Recognizing oracy as a critical 21<sup>st</sup> century competency, the EL department embarked on Storytelling to provide students with increased, focused and content-enriched opportunities to speak with confidence and ease in front of the class. Thus, the department set out with a research project which involved morphing Damai's Project Storytelling (pilot) to the use of monologues centering on the *Holocaust*. As part of the development process, students were presented with a scenario and worked in groups for enhanced collaboration and self-directed learning while researching and drafting their monologues. A set of rubrics was provided so students were aware of the success criteria. Groups delivered a final presentation of their monologues and a perception survey was administered pre-test and post-test to measure their confidence level in speaking in front of an audience.

Session Code J21

Presenter(s) : Ali Sharif Arshad  
Jaclyn Cheng Lin Lin  
Oon Yongfu

School : Tampines Junior College

Title : The use of ICT to enhance the teaching of historical argumentation via the mode of Lesson Study

Subject Area : Humanities

**Synopsis**

The research seeks to examine the effect of ICT on student participation and their ability to present complete and well-supported historical arguments. What began as a preliminary experiment that made use of Facebook Groups and Glogster with a class of H2 students in 2012 has since been modified to include an additional H1 class into our research scope.

This has provided an opportunity to compare and contrast the effect of ICT on H2 classes across both years, but also to compare and contrast its effect across different groups of students within the same year.

The research has thrown up interesting results that confirm some commonly held perceptions about the effect of ICT on students, while refuting some commonly held misperceptions as well. Simultaneously, it has also thrown up some questions that future researchers would do well to consider. The research has been in two cycles over the period of two years.

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