

EZ Research Monograph Vol. III, 2013

English Language

No	Title	Abstract	School	Author
1	What do we know about USSR in Fengshan Primary School? Does USSR really works for English Language in Fengshan Primary School?	<p><i>“There is ample evidence that one of the major differences between poor and good readers is the difference in the quantity of total time they spend reading – Nation Reading Panel (2000)”</i></p> <p>This extract from the National Reading Panel has motivated Fengshan Primary School into utilizing Uninterrupted Sustained Silent Reading (USSR) as a means to meaningfully engage a large cohort of pupils from Primary 3 to Primary 6 in the morning between the times of 7:10 am and 7:25 am. This is the period just before the morning assembly and is 5 minutes before the formal lessons start at 7:30 am. This action research study is a search for the underlying principles that govern the reading habits of our pupils. It is a voyage that has lasted for 4 months. As such, it should not surprise readers that a certain progress has been made. But this action research journey has proved to be a difficult one, and real understanding has, for the most part, come but slowly. The understanding that I have of the principles that actually underlie the reading behaviours of our pupils indeed depends upon an appreciation of Model I and Model II by Arygris and Schön (Anderson, 1997)</p>	Fengshan Primary School	Abdul Haniff Bin Abdul Ghani
2	Strategies for Teaching Vocabulary-in-context in English Composition Writing	<p>This action research was conducted to improve the writing proficiency of English Language for a mainstream class of twenty-five primary five pupils in Singapore. English composition refers to a mandatory narrative writing task that pupils have to complete in Paper 1 of the English Language Examination Paper in the National Placement Examination, Primary Six Leaving Examination (PSLE). Pupils are given two options to choose from, namely, the picture stimulus option, or the option for continuation of a story based on a given context. This paper describes nine strategies that a teacher may employ for improving pupils’ performance in narrative writing. First, a teacher teaches the pupils a family of words that are commonly used in context of specific themes Second, these words are reinforced further through language-rich activities that induce new</p>	Pasir Ris Primary School	Sharifah Fatemah

		words and meaningful new contexts (Rupley, Logan, & Nichols, 1999; Misulis, 1999).		
3	Using Learning Styles in the Teaching of English Comprehension	According to studies conducted by Megan Carpenter (1998), everybody has a preferred learning style. Knowing and understanding our own learning style help us to capitalise on our strengths and improve our skills in acquiring knowledge. This in turn maximises our learning in class. Every pupil has a different learning style that is best suited to each individual. The pupils may not be even aware of their preferred learning styles. The question, "What is the best way to learn?" had motivated me to conduct this action research study. The teacher should be the one who makes his or her pupils aware of the various learning styles that help him or her to acquire and process information in class. Once this has been achieved in the classroom, it will have a big impact on the pupils especially on the amount of learning that takes place.	St Hilda's Primary School	Audrey Evangeline Teo
4	Reciprocal Teaching Empowers Pupils' Performance in English Comprehension	This action research study does three very interesting things. First, it gets to the core on how Reciprocal Teaching can be deployed to improve Primary Two (P2) pupils' performance in English Comprehension. Second, it illustrates a fascinating way of using the four-stroke reciprocal diesel engine as a metaphor to explain the essence of Reciprocal Teaching to P2 pupils. For metaphors are not mere poetical or rhetorical embellishments but are a part of everyday speech that affects the ways we perceive, think, and act. Finally, it demonstrates what one actually does when embarking on an action research journal with a view to show other fellow teachers what it would look like in their classroom with their pupils.	St Hilda's Primary School	Lim Tai Foon Freda Paul Islina Ismail Cheryl Ng Pei Yu Melissa Ng Mei Pao
5	Using Action Research to derive an English Integrated Curriculum with Social Studies for Primary Three Pupils	This action research study demonstrated that pupils learn and perform better for Social Studies when Social Studies is incorporated into the English Curriculum than when Social Studies is taught as an independent subject. This action research was conducted with a view to help any interested school for classes having English Integrated Curriculum.	St Stephen's School	Jaysree Ravindaran

6	Using Action Research to derive an English Grammar Lesson Package	<p>Grammar teaching has always been one of the most debatable and least understood aspects of teaching. While many teachers remain obsessed by it, the teaching of grammar to its learners are far from easy. For most practising teachers, the decision as to what to teach, and in what order, has been largely made for them by their scheme of work. In fact, the teaching of grammar remains elusive as it is a part of a new syllabus requirement that has not been clearly defined to teachers in terms of how we should impart these grammar skills amidst the other required skills (reading, writing, viewing, listening) to students. This paper shed lights on how a group of teachers embarks on two teaching pedagogies, namely, the whole-part-whole approach and the Inductive Approach, to teach a targeted grammar component, through the use of Preposition, to the Secondary 2 cohort of students of Zhonghua Secondary School. Experiences and knowledge gained in this study is described as a series of four action research cycles with a view to show fellow teachers what it would look like in their classroom with their students.</p>	Zhonghua Secondary School	<p>Chua Fang Yee Isabelle</p> <p>Lum Shu Wei</p> <p>Tan-Ling Yuet Ping Crystal</p> <p>Zhong Meixuan Nadia</p>
7	Students' Self-Monitoring Writing Log Approach on Teacher Written Feedback	<p>Whenever a teacher marks a General Paper essay, she tries to craft written feedback that is both constructive and helpful for students so that they can make improvements to their current and subsequent essay(s). However, how much does the teacher's written feedback influence students' subsequent performance? What effects does teacher's written feedback have on students' essay writing skills after a series of written comments are given to them? Of great concern in Temasek Junior College General Paper Department is that, teachers find that their students do not act upon the written feedback given and that students do not monitor their own essay writing skills/process. This action research study addresses the concerns by explicating a Self-Monitoring Writing Log approach that can empower a student to improve and monitor his essay writing skills/process. Our findings showed that the experimental group performed significantly better after the Writing Log had been implemented 4 times over a period of 5 months. The Writing Log allows the student to choose 3 different pieces of written feedback for each essay and prioritise them in order of importance. The student then reflects on the written feedback and prognosticates what the feedback tells about his writing</p>	<p>Anglo-Chinese Independent School</p> <p>Jiemin Primary School</p> <p>Woodgrove Secondary School</p> <p>Temasek Secondary School</p>	<p>Dalwinther Kaur</p> <p>Harjit Kaur</p> <p>Paramjit Kaur</p> <p>Rebecca Loke Chee Keong</p> <p>Salama Ishak</p>

		skills/process. The student then pens down the action he intends to take when writing his next essay. This encourages the student to be reflective of his writing choices and have a stake in his own progress.		
8	A Heutagogical Peer Education Approach via Communicative Technology for Enhancing Confidence of Students from People's Republic of China in English Language	This paper aims to examine the impact of peer education using modern communication technology on the confidence of students from People's Republic of China (PRC) in reading, writing and speaking English. Through the communication platform of instant messaging and conversations, each PRC student was instructed to hold regular online discussions with a local peer. Confidence was measured in terms of students' level of comfort, ease and confidence as well as their increased competency in their academic studies and in oral presentation. The improvement in their confidence level in communicating in the English language in the presence of Singaporean students was substantial: 93%. This increased confidence level resulted in the PRC students being more willing to speak up in class. In addition, this study also uncovered the need for PRC and local students to be able to form good working relationships that would enhance their learning as well as friendships. This would encourage them to cooperate with their peers in class as the school curriculum focuses very much on cooperative learning.	Temasek Junior College	Goh Wee Suan Tan Su Ling Serene

9	Improving Low-Ability Pupils' Attitudes Towards Open-Ended Comprehension Passages	<p>This action research project explores comprehension teaching strategies used to help low-ability Primary Four pupils overcome their reluctance towards, and lack of confidence in, dealing with open-ended comprehension questions. The quantitative data for this action research consists of a comparison of the quality of answers given by two classes of Primary Four pupils to open-ended comprehension questions before and after these teaching strategies were employed. The qualitative data comprises observations of pupil behaviour made by teachers during the comprehension lessons carried out using the above-mentioned teaching strategies. An analysis of the data collected revealed an improvement in both the attitudes as well as comprehension scores of the pupils who were exposed to these comprehension teaching strategies. This action research demonstrates the underpinnings of a model approach for teaching comprehension. The increased positive attitude towards approaching open-ended comprehension questions, as well as the improved scores in the classroom-based comprehension exercises, could translate into higher test scores in the open-ended comprehension segment of the examination paper.</p>	Tao Nan School	Shanti Prakash
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Maths

No	Title	Abstract	School	Author
1	Use of Children's Literature to Engage Pupils in learning Mathematics	This research study explicates the fact that using children's literature help to engage pupils in learning Mathematics. The action research project was conducted as an evaluation study (Taylor, 1994) whereby the primary focus is to explore and evaluate the different types of action associated with children's literature in helping pupils overcome their difficulties in learning the topic on "Circles". The study involved six Primary 6 classes with a total of 228 pupils participated in the study.	St Anthony's Canossian Primary School	Siti Noorhannizah, Magdalene Koh Soo Khim, Norashikin Abdul Khalid, Nor Aisha Mohamed Ismail, Koh Kim Siang Aerita , Catherine Tan How Kheng, Agnes Tan Lay Chiat, Ashley Mong Mien Hui, Jasmine Seing Jee Ching, Dawn Tan Thian Ser
2	An Action Research Study on Developing Problem Solving Skills Through the Use of ICT	Problem solving skills plays an important role in the mathematics curriculum. With the availability of mathematics handheld software technology such as TI-nspire, innovative ways of developing these skills can be designed. With the interactive features of the software, students learn through dynamically linked multiple representations. Different mathematical concepts can be uncovered in learning during which skills such as pattern observations and geometric visualisation can be developed. The presence of such new technology also provides teachers with an alternative means to assess students' problem solving skills. It also serves as an alternative tool for students when solving non-routine problems.	Temasek Junior College	Yeo Chiu Jin Hsi Han Yin Jonathan Lau Wee Lip

Physical Education

No	Title	Abstract	School	Author
1	Using Action Research to derive a Games-based Fitness Training Program for the 2.4km NAPFA Station	This action research study shows us how a games-based fitness training can be adopted to help students with low aerobic fitness to complete the 2.4 km run. Sixteen students were assigned to a games-based fitness training consisting of 2 bouts of 10 minutes with 5 min active rest periods, completed twice a week. The 2.4 km timing will be measured at baseline (Pre) and after 4 weeks of training (Post). Training load, as quantified by Rating of Perceived Exertion (RPE) were recorded during all training sessions. The result of this study showed that there was significant improvement in the 2.4 km timing in response to the 4 weeks of training. This paper demonstrated that games based fitness training can be employed to improve the timing of 2.4 km run among secondary school students.	Saint Patrick's School	Irfan Ismail Noel Loh Kelvin Yee

Sciences

No	Title	Abstract	School	Author
1	Approaching the Concepts in Acids by "Learning Stations"	In line with the Science Curriculum framework for Singapore Secondary Schools that is based on inquiry-based learning, the school has initiated "Learning Stations" as a platform for students to actively construct knowledge with the help of scaffolding. "Learning Stations" involve dividing the sample students into groups to perform a set of tasks on a rotation basis. The scaffolds facilitate a student's ability to build on prior knowledge and internalize new information. This action research study was carried out on two sample groups (third year combined Science students from the Express and the Normal Academic streams) for the topic on Acids. Normal stream students take five years to complete their secondary school education in Singapore whereas the express stream students takes four years to complete. Two pedagogical approaches were applied: the first sample group was taught using expository teaching followed by "Learning Stations", and vice versa for the second group. The study shows that both pedagogical approaches were effective. For the Express stream students, "Learning Stations" seems to be more effective, though not significant at 5% level; whereas for the Normal Academic stream students, the expository approach is significantly more effective statistically. Furthermore, based on pre and post perception surveys, "Learning Stations" was rated favorably by students from both streams.	Siglap Secondary School	Yoong Jin Ing Wee Suat Hwa
2	Application of Problem-Based Learning in Physics	At first reading you might be tempted to see this research paper as peripheral to Physics teachers' interests. Ostensibly, it is about the teaching of a Physics Topic on Electromagnetic Induction. However, this research study does three very interesting things. Firstly, it gets to the core of what the research team is trying to do – revealing an innovative approach for developing students' soft skills through the use of face-to-face Delphi as the group learning approach in a two-week Problem-based Learning (PBL) program. Second, a midway tutor session is inserted to clarify any technical misconception that a student may have. Besides, this session also provides tutors an opportunity to enhance students' soft skills further by helping them in understanding dialectic processes and enabling them to distinguish dialectic processes from two other	Tampines Junior College	Elvin Yeo Boon Heng Jeremy Ng Kiat Soon Tan Kia Hock

		forms of processes in general use, namely, the adversarial and consensual processes. Lastly, it demonstrates what one actually does when embarking on an action research journey.		
3	Lesson Study : Shapes of Molecules	Chemical bonding is an important topic in Chemistry as it is the foundation for the teaching of other topics in the subject. It is a major component in Physical Chemistry and this topic is widely tested at the General Certificate of Education Advanced level (GCE A level) examination. However the concepts in this topic, especially the shapes of molecules, are not easily imparted to students as it is abstract and involves good visualization skills. Students are required to visualize shapes of molecules in three dimensions, and this is generally difficult for students to grasp. In this paper, we introduce a chemical bonding lesson involving shapes of molecules whereby students derive key concepts of the Valence Shell Electron Pair Repulsion (VSEPR) theory through the construction of balloon models. The THINK Cycle pedagogy, an in-house adaptation of Problem-Based Learning (Barrett & Moore, 2011), was utilized for this lesson. Lesson study was carried out to investigate students' learning using this approach with students' learning attitude was assessed using a survey and a teacher's observation checklist.	Temasek Junior College	Cheng Boon Wah Li Xuanjun Low Kian Seh Nam Aileen Tan Kuang Shing Rita Wong Yeow Chern Ee