

The Use of Mr. Rasid Technique to Help Student in Memorising and Understand Long Description of Biology Concept

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MR RASID's technique is a learning technique that combines several learning techniques which involve the visual, auditory and kinesthetic aspects of helping students remember and understand long description for Biology facts. This study aimed to identify the effect of using MR RASID technique in assisting the students to remember and understand long biological descriptions or information. This technique provides students with the ability to master the low-level cognitive domains according to Bloom which enables them to interpret, classify, formulate, refine, compare and explain for use in mastering the domain of higher level skills. The use of this technique is in line with the 21st century education challenge, which provide students with skills that are needed to helps them think critically. Additionally, it can also help students remember facts over a longer period of time and is very useful to enable students to apply the information in the examinations thus improving their performances. This technique is built on several theories such as memory theory, cognitive theory which involves the use of long-term memory (LTM) in which the capacity is infinity based on past studies report. It is also support Vygotsky theory which emphasized the benefit of scaffolding process in assisting student's learning. This technique has been experimentally tested on secondary school students for biological subjects in several schools in Malaysia. Some students have also been interviewed for feedback on the use of this technique. The findings from this study show that there is an increase in scores in student performance test scores for objective questions, structures and essays. Additionally, it also shows better results than control groups when replicated over a longer period of time. Other than that, the findings also found that the length of time the student was able to remember the fact of the explanation was longer than the control group. The study also found that students are also more cheerful using this technique.

Using Lesson Study to Raise Teachers Lesson Design Ability and Improve Students Narrative Writing Skills in Flipped Classroom Model

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In a typical essay class, teachers just set a topic and students are told to write. The teacher may provide some help in the form of a vocabulary list and / or a short discussion on content or approach. However, many students still regard writing as the most difficult language skill to develop among the other language skills. It is because the process of writing not only writes what they feel but also need to convey a message to the readers.

Xinmin Secondary School Chinese Language teachers attempted to improve the current situation by adopting picture books as a stimulus during the essay writing process. The saying that 'A picture is worth a thousand words' is not mere folklore. Pictures are encoded both through visual and verbal mental processes (Paivlo, 1971), and require a greater level of conceptual processing than words, potentially leading to better retention of pictorial representations (McBride & Doshier, 2002). Thus, picture books are used extensively by this group of teachers as stimulus during guided essay writing. The existence of visual images not only encourage students to develop thinking processes, but also develop dispositions such as observation and connection of ideas. These are essential skills needed for narrative essay writing.

In general, Xinmin Secondary School has adopted the flipped classroom educational model over the past three years. The flipped classroom is a teaching and learning model that consists of two essential components: the crafting of pre-lesson materials to be delivered on an online platform and the design of interactive group-based activities to consolidate and reinforce learning. Many academic articles (Abeysekera, L. & Dawson, P., 2015) (Herreid, C.F and Schiller, N.A., 2013) have explicated on the effectiveness of flipped classroom lessons to promote active/engaged learning in students.

Professional Learning Teams (PLT) was formed within the Department and the members of the PLT would then collaborate to design pre-lesson instructional materials and in-lesson activities. Lesson study cycle was used as a collaborative tool to examine the effectiveness of the design and enactment of the flipped classroom lesson with the use of picture book as a stimulus and to make subsequent refinements to the lesson.

This study aims to find out whether the lesson study cycle has helped the teachers to design a more engaging lesson for students to learn how to write their essay better. This is done through interviewing students at the end of their lesson study cycle to gather qualitative data. Presentation was made during a 'learning fiesta' organised by the school where the PLT members share their reflections with regard to their lesson study cycle.

Abstract Number: 20262

Effect of Dialogical Pedagogy Practice in Science Lesson for Elaborating Junior High School Students' Thinking

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Students' crucial needs in the science learning is how to make them understand and use their knowledge to solve daily problems. These abilities can be developed by practicing student to propose their idea, challenge to think deeply and critically, and support to reflect in which position their understanding level are. Necessity of students in this global area are align with one of demands in 21st century education, critical thinking. One of the factor to achieve this goal optimally is dialogical pedagogy that well-implementing in the classroom. Dialogical pedagogy practice will happen if teachers and students can critically interrogate the topic of lesson, express and listen to multiple voices and points of view, and create respectful and equitable classroom relations. While quality of question, feedback and task design from teacher will contribute to how wide and deep the discussion in the classroom. Aim in this study is to describe the relation between teachers' dialogical pedagogy practice and students' achievement in how wide and deep idea in the learning process. Sample was collected in two public junior high school, one in Bandung and another in Sumedang Regency, West Java Province, Indonesia. Data was taken from two science topics i.e. Solar System and Newton Law about Motion. Both of those lesson was videotaped and transcribed. From transcription result, teachers' dialogue was analyzed by using coding system for teacher eliciting the question and feedback. Students' idea from the classroom interaction was analyzed qualitatively in the deepness and spaciousness aspect. Response of students in the lesson indicated the quality of teachers' dialogical pedagogy practice. Task design as supporter of the lesson was analyzed by formative assessment task rating item to reveal if the task was challenging enough to support well-implementation of dialogical pedagogy. Through this study, the deepness and spaciousness of students' thinking was influenced by teachers' capability to conduct the lesson, for instance how to elicit students' idea by using question, how to give feedback from the response and how challenging the task designed by teacher.

Keywords: Dialogical pedagogy, challenging task, students' thinking