Promoting Critical Thinking Skills among Students in KSSR classroom

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• Background of study
• Research method
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• Conclusion
BACKGROUND OF STUDY

- Students need to be equipped with critical thinking skills as they are the 21st century skills that will help students to face challenges in life ahead.
- The new curriculum, KSSR (Kurikulum Standard Sekolah Rendah; Primary School Standard Curriculum) introduced by the Ministry of Education in Malaysia was to inculcate critical thinking skills in students.
- Teachers themselves should be first to be equipped with the skills before they could teach students.
- Due to this development, various studies were found to suggest that critical thinking should be taught in classroom. **But none were found to study the process of teaching and learning in the KSSR classroom.**
Thus the objective of the paper is to investigate the teaching and learning process done in KSSR classrooms, specifically to explore the approaches teachers employed in cultivating critical thinking skills among students.
6 teachers from diverse background

Interview sessions before and after observation

Duration of interview – 30-45mins

Classrooms observations – twice for each teacher

Both data was transcribed and analyse through colour coding

RESEARCH METHOD
### Teacher as facilitator

Teachers only play the role as facilitators, giving guidance to students which indicate that the classroom is more student-centered and students have to search information on their own.

> “...student search for information...while teachers only give guidance as facilitators”

### Group discussions and presentation

A lot of group activities and group presentation

**Classroom layout - seating arrangements in groups**

### Equal opportunity for all students

Each student is given the equal opportunity to contribute to class activities

Students have done group discussions, it is fair to listen to all

### Lively classroom

Students are actively taking parts

Students benefited from group discussions – share info
• Student-centeredness was the most prominent theme that emerged from the data collected. Students were instructed to work in groups for activities, such as group presentation and group discussion.

• Student-centered learning has been found to promote critical thinking as compared to teacher-centered. This is congruent with Marin and Halpern (2014) who stated that student-centered approach supports the development of the 21st century skills such as critical thinking, problem solving and collaboration.
• According to the Ragoff (1998, as cited in Dwyer, et al., 2014) one way to engage students in learning is to focus on students, and teachers are as instructors to facilitate learning by providing scaffolding. The consistency between the literature and the practice of teachers in KSSR classroom is found when in the KSSR classrooms, teachers act as facilitators only.

• Group discussions and presentations exercised in KSSR classrooms influence student interest, which is also necessary to motivate learning. This is in line with Boomer (1992, as cited in Dwyer, et. al, 2014) who reports that teachers should engage student interest for quality learning. The goal of student-centered approach is to endure student engagement in learning and when they are engaged they actively participate in the teaching and learning process.
FINDINGS:
THEME 2- QUESTIONING METHOD

• Questioning method is encouraged in KSSR and students were trained to think more.
• Clues can be infused in questions, and teachers as facilitators helped students to think by giving questions.
• Another informant teacher added that those questions asked required students to think and to give ideas, as what he labelled as KBAT (Kemahiran Berfikir Aras Tinggi; Higher Order Thinking Skills, HOTS) questions.
• Some questions might be easy but they were twisted and manipulated by teachers in order to check students’ understanding of the subject matter as well as their apprehension on the question itself.
• Through the use of ‘why’ and ‘how’ questions, students had to think critically, such as to make comparisons and to analyze.
• This method is congruent to Socratic Method which promoted the uses of questions to study values, principles and beliefs of students and at the same time help students to think critically (Reich, 2003).

• This method is also noticeable during class observations. Teachers were spotted to recurrently asked questions and students were seen to be brave enough to reply, some answers were correct, while others were not.

• Although according to Costa and Kallick (2000) in their Habits of Mind (HoM) theory stated that in order for students to be critical thinkers, they should be able to manage impulsivity.

• This means that they should think before they act, and they need to strive for accuracy in answering questions. Above all, the most important thing is when students are willing to respond, it shows that they want to share their thoughts with others and this signifies that they are able to use language and communicate effectively, which the characteristics of critical are thinking skills (Paul & Elder, 2012).
FINDINGS:

THEME 3

Thinking Process:
Defining In Context

Proses Pemikiran:
Mendefinisikan
mengikut konteks

Circle Map
(Peta Bulatan)

Thinking Process:
Describing

Proses Pemikiran:
Menerangkan

Bubble Map
(Peta Buli)

Thinking Process:
Comparing and Contrasting

Proses Pemikiran:
Membanding Beza

Double Bubble Map
(Peta Buli Berganda)

Thinking Process:
Classifying

Proses Pemikiran:
Membuat Pengelasaan

Tree Map
(Peta Pokok)

Thinking Process:
Whole-Part

Proses Pemikiran:
Hubungan seluruh-bahagian

Brace Map
(Peta Dakap)

Thinking Process:
Sequencing

Proses Pemikiran:
Urutan

Flow Map
(Peta Alir)

Thinking Process:
Cause and Effect

Proses Pemikiran:
Sebab dan akibat

Multi-Flow Map
(Peta Pelbagai Alir)

Thinking Process:
Seeing Analogies
(similar relationships,
finding relating factors (RF))

Proses Pemikiran:
Analogi (hubungan yang sama,
memerlukan faktor penghubungan)

Bridge Map
(Peta Titik)
• Rosnidah, Haeidatul Nashrah, Norazilawati & Nik Azmah (2015) in their research on the use of i-Think maps in a science subject topic for Year 4 students found that students showed more interest in their learning process when teachers requested them to employ the maps.

• Furthermore, the students were also found to better understand the topic with the use of the maps. Norazlina (2013) also found that students could remember the subject matter better when teachers employed i-Think maps in classrooms.
• According to Sutcliffe (2014), among the purposes of i-Think program is to increase critical thinking skills and to equip future generations with higher order thinking skills.

• The development of i-Think maps requires students to have the understanding of what they read or heard the collection of knowledge that they have and then put that knowledge into writing, which suggests the transfer of training or knowledge has taken place as proposed by Halpern (2014).
The objectives of the study were to explore the approaches teachers employed to teach critical thinking skills in KSSR classrooms.

Qualitative study, mainly interview and observation, were used to gather the information.

The informants of the study were six primary school teachers and they were interviewed, and observed, and the data collected was analyzed using coding and emerging themes.

Findings suggested that teachers believed that the student-centered approach in KSSR helped a lot in terms of student participation in classrooms, where students had more opportunities to share ideas and present their ideas. Teachers only acted as facilitators and this increased liveliness in classrooms.

Furthermore, teachers used questioning method and i-Think tool in promoting critical thinking skills among students.
• Finally, it is believed that KSSR enables students to think critically as suggested by the Malaysian Blueprint.

• It is hope for future research, more schools with various achievements could be investigated in order to explore teachers’ methods and approaches in teaching students critical thinking skills.