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ESL TEACHERS' STRATEGIES TO FOSTER HIGHER-ORDER THINKING SKILLS TO TEACH WRITING

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ABSTRACT

Purpose - This study focuses on ESL teachers' strategies that foster higher-order thinking skills when teaching writing to weak ESL learners in two selected secondary schools in Malaysia. The ESL teachers' strategies that encourage higher-order thinking skills when teaching writing to weak ESL learners were recorded and examined to unsure that ESL learners are able to understand and master higher order thinking skills that can improve their writing.

Methodology – Qualitative descriptive research methodology was employed in this study. The samples were collected through the snowball sampling technique, and 4 ESL teachers were selected from two different secondary schools in Malaysia. The main data collection method was classroom observation while thematic analysis was used for data analysis. Each teacher was observed

twice. Classroom observation forms and video recordings were used as the main sources in data collection.

Findings –The results show that the ESL teachers' selected strategies encourage higher-order thinking skills when teaching writing, particularly for strategies that include the general procedures in implementing higher-order thinking skills for teaching writing and the major considerations at each stage of its implementation. The ESL teachers were able to educate the students on the general concepts of higher-order thinking skills, which subsequently helped the students to connect the concepts for writing. These strategies were able to help students to infer through real-life situations, by using graphic organizers and problem-solving skills.

Significance – These findings can be used to guide decisions on higher-order thinking skills training for ESL teachers, educators and curriculum developers on various thinking skills strategies that can be implemented when teaching writing.

Keywords: Higher-order thinking skills, L2 writing, ESL teachers, ESL learners, questioning.

INTRODUCTION

Today, teachers are more concerned and interested in witnessing the process of growing up that nurtures and empowers the students with information and capabilities to face new challenges. Since teachers are mandated to promote higher-order thinking skills in all curricula in pursuant to the national educational policy, further research is needed on the strategies that can be employed by teachers to foster higher-order thinking skills in the classroom. Moreover, the English language curriculum is developed for communication in daily life and its role includes; connecting people and promoting higher order thinking. ESL teachers use diverse teaching strategies to educate and nurture creative and innovative students who are adept at critical thinking and problem solving. ESL teachers are aware that students are increasingly expected to not only show but employ the knowledge and skills obtained during schooling, and more importantly, they are able to find alternative solutions and make better decisions. However, ESL teachers are facing great difficulties when teaching huge classes, where students come from diverse backgrounds, with limited English proficiency, differing interests and mixed emotions

on school culture and experience (Felder & Brent, 2003). Therefore, this study focuses on ESL teachers' strategies that foster higher-order thinking skills when teaching writing to weak ESL learners in two selected secondary schools in Malaysia. The ESL teachers' strategies that encourage higher-order thinking skills when teaching writing to weak ESL learners were recorded and examined to ensure that ESL learners were able to understand and master higher order thinking skills that could improve their writing.

BACKGROUND OF THE STUDY

Higher-order Thinking Skills in Malaysia's Higher Education: The National Context

The National Education Blueprint (2013-2025) aims at elevating the standards and quality of the Malaysian education system, and includes the development of cognitive skills. Since the 1990's, Malaysian students are encouraged to learn and project ideas and feelings into the text they read, which required thinking skills (Rajendran, 2004). The Ministry of Education have attempted to enhance higher order thinking among Malaysian students by introducing 'i-THINK' Thinking Map as a breakthrough project to be incorporated into the Malaysian school system (The Star Online, 2015). 'i-THINK' Thinking Map was introduced by the Malaysian Government and Agent of Innovation Malaysia (AIM) to produce Malaysia's next generation of innovative, critical and versatile thinkers of the future. The Thinking map (i-Think) program was initially developed by Hyerle and Yeager (2007) to boost and encourage thinking skills among students and to develop critical thinking outside familiar academic contexts.

Hyerle and Yeager (2007) proposed eight maps within the 'i-Think' Thinking Map; namely Circles Map, Bubble Map, Double Bubble Map, Tree Map, Brace Map, Flow Map, Multi-Flow Map and Bridge Map. The program was developed to assist teachers and students in the development of thinking and reasoning skills during teaching. Writing is a demanding task that requires various language capabilities and (meta) cognitive abilities. According to Zaky (2018), writing is a problem-solving and goal-directed activity. In the study conducted by Hyland (2003), writers switch from writer-based texts to reader-based texts when it involves three interweaving and composing elements, which are task environment, cognitive writing

process and long-term memory. Writing is one of the language skills that are taught and tested in the English Language Malaysian School Syllabus (*Kementerian Pendidikan Malaysia,* 2003). Most of the writing activities selected were taken from the lower secondary English language textbook. Different genres of writing were given to the students, such as descriptive, narrative, argumentative, report writing and informal letter. For argumentative essays, students were required to justify their opinion on whether they agree or disagree with the relevant points. Furthermore, to facilitate students' thinking, teachers provided assistance to the students by introducing the 'i-THINK' thinking map. The 'i-THINK' thinking map would enable students to visualise their thinking to create concrete images of abstract thoughts that are then discussed during the writing class. Students can use the thinking map to categorize their abstract thinking into the maps, and share their thoughts with their teachers and friends. It is assumed that the 'i-THINK' thinking map can assist students to attain higher levels of critical and creative thinking.

Secondary school students are struggling to create excellent writing (Swaran Singh, 2018). Hence, to motivate students to write confidently, higher order thinking skills must be taught and applied (Muhammad Fareed, Almas Ashraf & Muhammad Bilal, 2016). Teachers have found writing to be one of the most challenging skills (Dar & Kahn, 2015) to teach in classrooms. To overcome this challenge, teachers must use suitable pedagogic approach to teach writing. Students must demonstrate their ability to respond to a writing topic that is being discussed. This ensures that students are able to activate their higher order thinking skills to provide reasoning and context of the topics discussed to real-life circumstances. With regards to English writing lessons in classrooms, it is observed that students do not put in the effort to think critically on the subject matter being discussed (Zuraina Ali, 2018). Teachers are required to produce students who are proficient in the English language to support the national aspirations, in line with the Blueprint "English Language Education Reform in Malaysia: The Roadmap 2015-2025". The main objective of this blueprint (English Language Education Reform in Malaysia: The Roadmap 2015-2025, 2016, p. 5) is to produce students who are able to converse and use the English language confidently for employability in the globalized world. Teachers play a crucial role to prepare and produce knowledgeable students who are critical and creative in their thinking that can compete at the international level.

LITERATURE REVIEW

Many teachers are familiar with Bloom's Taxonomy that encourages innovative forms of thinking in education today. These forms of thinking teach students to conduct thorough analysis and evaluation, rather than just recalling facts. Teachers are guided through three main domains of educational activities in Bloom's taxonomy, which are; Cognitive: intellectual skills (*Knowledge*), Affective: growth in feelings or emotional areas (*Attitude or self*) and Psychomotor: physical skills (*Skills*).

Teaching Higher-order Thinking Skills

Recent evidence have suggested that fostering students' higher order thinking has become a paramount education objective (Ganapathy et al., 2017; Rezaei et al, 2011; Mazer et al, 2008). This is further supported by Zohar (2013) and asserts that students' higher order thinking can be developed when teachers create creative learning activities that boost and promote students' thinking to the next level, namely comprehension, before students can progress to higher taxonomies of thinking that includes application, analysis, synthesis and evaluation tasks. Resnick and Schantz (2015) stated that a major educational challenge is to scale up the 'thinking curriculum' to develop proficiency among students (Abdullah et al., 2019; Tan & Siti Hajar Halili, 2015). Teachers are aware that it is crucial to teach students higher order thinking skills in schools (Yee et al., 2013). However, ESL teachers are ill-prepared to teach higher order thinking skills specifically for writing, as compared to other subject areas (Rajendran, 2013). Writing is regarded as one of the process skills required by everyone as our world is mainly text-based, rather than numerical data based (Hyland, 2003).

Students have found that productive skills, particularly writing and speaking, to be more difficult than listening and reading (Berman & Cheng, 2010). Moreover, it has been reported that students lack proficiency in writing, as compared to other skills (Nesamalar, Saratha, & Teh, 2001). Students are taught to practice their thinking and organise information through writing in schools. Writing critically requires higher level thinking skills as students have to go beyond their understanding of content knowledge and apply critical thinking. Mastering the knowledge of a topic is important before students can move to the next levels of thinking which are analysis, evaluation and synthesis. Many ESL teachers in Malaysian

classrooms face challenges, specifically when teaching writing (Alaa et al., 2019; Pour-Mohammadi, Zainal Abidin, & Lai Fong, 2012). Students are able to produce and write effectively when they are able to tap into their thinking skills to generate ideas critically and analytically. In addition, students who have developed higher-order thinking skills are more capable of finding new solutions and alternatives to solve their daily problems (Yee et al., 2013). This is further supported by Piaget (1970) and Vygotsky (1978), and suggest that children develop through their understanding of the world (cited in Jarvis, 2005).

Students generate ideas for writing when they are able to construct their own thinking (Singh et al., 2020). The role of the teacher is to motivate learning so students are able to learn independently (Jarvis, 2005), and through this process, students are able to develop their higher order thinking. According to Choy (2009), ESL teachers in Malaysian schools were taught to write in the traditional product-oriented way that focuses on linguistic features, rather than language skills. This is viewed as a core attribute to effective writing. As new innovations begin to emerge in writing, teachers must adopt various process techniques for teaching writing skills. Unfortunately, studies have shown that Malaysian teachers are still dependent on the traditional product approach. Conversely, studies have suggested that teachers are required to teach students new strategies such as self-evaluation, creative writing, and critical analysis practices. Wingate (2012) examined the impact of using model texts on student's writing and concluded that the model texts provided students with the necessary information prior to their writing activities. Wingate (2012) further suggested that the model text analysis is a good starting point for writing instruction, followed by the development of critical perspective. Teaching writing, especially L2 writing, is extremely difficult for teachers because weak learners struggle to write in a second language (Ambar Singh, 2019).

Strategies to Foster Higher-order Thinking Skills

Problem-solving skills

Teachers can use the problem-solving technique to foster higher-order thinking skills among students. They can teach a step-by-step method for solving problems. Mohd et al. (2016) argued that when students are involved in the problem-solving process, they are able to make inferences to address the problem. The teachers' role is to guide students in formulating a new plan. This is further supported

by Jerome, Lee and Ting (2017) that suggested student should be taught evaluation techniques that include coordinating, detecting, monitoring, testing, critiquing and judging. Therefore, students that are engaged in these activities will learn pattern recognition, and would aid them in identifying patterns that would solve the problem. The students could gather the information to devise effective solutions (Singh et. al., 2020; Tajularipin et al., 2017)

Comparing and contrasting

Teachers can foster higher-order thinking skills through comparing and contrasting. This is carried out by asking the students questions that relate to the bigger picture. Students will then answer the questions by relying on previous knowledge. This strategy enhances higher-order thinking as students are able connect previous knowledge with newly acquired information (Chidozie, 2014).

Reasoning

Teachers guide and teach their students to elaborate on their answers. Reasoning is one of the strategies that teachers can employ to elicit student feedback. When students are reasoning on their answers, they require an in-depth knowledge of the concepts to elaborate, and enable them to decipher and extract the meaning of these concepts (Margana & Widyantoro, 2017). They will be prompted to discuss what they understand. Instead of accepting a 'yes or no' answer, teachers would require a more detailed response from the students. Initially, students should be supported and gradually be allowed to operate independently (King et al., 2011).

Using i-Think Maps to foster higher-order thinking skills

According to Lidawan (2019), mind maps are associated with creative and critical thinking as it emphasizes key concepts and its associations between the ideas. 'i-Think' Maps are tools to organise information. They also help to organise ideas thematically. 'i-Think' Maps are visual representations that allows students to alter their background knowledge by understanding the connections between current knowledge and new information (Sam & Rajan, 2013).

Inferring

Inferring is a strategy that assists students in critical thinking. Inferring is a method used to generate a useful conclusion by

presenting evidence and facts. Teachers should encourage students to understand real world problems, and promote discussion between students on current or trending incidents. Inferring is also known as a 'foundational skill' that is essential for higher-order thinking (Marzano, 2010). Inferring is one of the thinking skills that requires considerable time to teach, however, is in fact achievable through direct instruction.

Connections between concepts

Good thinking skills in students are developed when teachers illustrate the ways to form connections between concepts. Willingham (2007) stated that the thinking processes are intertwined with the content of thought, and is known as the main knowledge. This implies that students will be able to associate the knowledge that they possess with the new knowledge that they will learn. When students are able to do this, they will gain a clearer understanding of a concept. According to Salikin and Tahir (2017), connecting concepts include discussing ideas and doing exercises that are suitable for the whole class, group and individual activities by using a wide range of learning styles. Clear guidelines, examples and sample questions would provide a step-by-step introduction to conceptual analysis in the classroom (Pillay, Singh & Yunus, 2020).

Ganapathy and Kaur (2017) investigated students' perceptions of HOTS (Higher Order Thinking Skills) questions in English writing at the lower secondary school level. The study focused on descriptive writing that are in accordance to Bloom's taxanomy. The study concluded that students showed great enthusiasm and interest in the teaching and learning process that relates to all the six levels of Bloom's taxonomy. The researchers used HOTS as a theoretical framework to teach writing skills within a constructivist learning approach. Writing in L2 includes the cognitively demanding task that utilizes the constructivist-oriented pedagogical approach to encourage transformation of teaching from teacher-centred to student-centred learning. However, studies have also suggested that teachers in Malaysia found it difficult to infuse critical teaching (Azian Abdul Aziz, 2017). This further validated the findings from Chee and Pou (2012) and concluded that teachers are in the opinion that critical thinking skills need to be taught, however, teachers also lack the knowledge on the strategies to incorporate higher order thinking during the teaching and learning process.

Siti (2016) reported that teachers are unable to incorporate higher order thinking into teaching and learning, and has continued to be an unresolved issue in Malaysian classrooms. Tan and Halili (2015) asserted that the teachers' lack of knowledge, confusion over the definitions of thinking skills and difficulties in distinguishing the levels in thinking have affected the teachers' ability to assess students and to teach higher order thinking. The findings by Tajularipin et al. (2017) concur with Tan and Halili (2015), and further concludes that teachers are unaware of the methods to develop students' thinking skills. Tajularipin et al. (2017) contended that teachers need to understand the concepts behind higher-order thinking skills before they can apply this knowledge when teaching HOTS, while focusing on the development of productive skills.

METHODOLOGY

This study is based on a qualitative case study research design that investigates the methods employed by ESL teachers to incorporate higher-order thinking skills when teaching writing to weak leaners. Qualitative studies are carried out to understand the human experience (Merriam, 2009). The case study methodology was chosen to examine in detail the effectiveness of higher-order thinking skills taught by ESL teachers when teaching writing to weak learners, particularly within a classroom setting. The classroom setting provided a real life experience in determining the development of higher-order thinking skills when teaching writing. According to Merriam (2009), a case study is widely used in education to observe and study the processes, development and underlying forces of practice. The case study helps to gain a better understanding of the selected subject. The main data collection method in this study is classroom observation. Classroom observation is a crucial data collection method for qualitative enquiry (Merriam, 2009). The data obtained were analysed thematically. The classroom observations were carried out during the English language lessons. The observations were conducted to examine the effectiveness between ESL teachers' and students' communication in the classroom. The classroom is a control setting that creates the right environment for ESL teachers and students to be observed.
An example of the observational checklist used for data collection is shown in Table 1.

Table 1

Example of Observational Checklist 1

A. Analysing	Yes	No	Remarks
1) Students are asked to analyse the information taught and simplify them			
2) Teacher asks students to compare two ideas			

The teachers' classroom observation was video-recorded for triangulation, and to extract samples of higher order thinking strategies that are described by observers in the observation protocol. Each teacher was given a worksheet that had to be completed, with a description of the strategies used to foster higher order thinking skills when teaching writing. Four teachers that were assigned to teach the English Language had participated in this study, as shown in Table 2. The assigned teachers taught only the lower secondary school students during the period of this study.

Table 2

Classroom Observation Schedule

Number of Observation/ Teachers	Subject	Number of Students involved	Number of Researchers involved	Descriptions
Teacher A (2 observations)	English	41	2	Field notes
Teacher B (2 observations)	English	45	3	Field notes
Teacher C (2 observations)	English	32	2	Field notes
Teacher D (2 observations)	English	30	2	Field notes

Data obtained from the classroom observations were validated with the researchers' field notes, and was then verified by the

participating ESL teachers. The observational and reflective notes were meticulously studied to ensure that repeated patterns/themes were discerned, and would provide a clear and holistic picture of the findings (Denzin & Lincoln, 2005).

RESULTS

The findings obtained from the classroom observations revealed that ESL teachers had used several strategies to foster higher-order thinking skills when teaching writing to weak ESL learners. The strategies that were employed by the ESL teachers are as follows; explaining to the students on the necessity of mastering higher-order thinking skills and its importance, assisting students to connect the concepts in writing, assisting students to infer through real-life situations, the use of graphic organizers, teaching students problem-solving skills, and encouraging students to be imaginative.

Explaining to Students on the Importance of Higher-order Thinking

Through the observations, teachers explained the concepts of higher-order thinking to their students. It was important to create the awareness and provide students with the skills and strategies to think critically on the topics given for writing. This finding is further supported by Rajendran (2013) and Ganapathy et al. (2017), and asserts that thinking skills require practice, are gradually developed and can be taught by teachers with experience. Zohar (2013) suggests that higher-order thinking skills can be taught through general strategies across various subject domains, similar to the findings from this study where ESL teachers were able to cultivate higher-order thinking skills through writing. Moreover, to encourage students to think independently, the teachers allowed students to brainstorm ideas on the given writing topics. For instance, the teachers instructed students to write down their ideas on the topic of occupation before their writing exercise. Tan and Halili (2015) concurred that it is important for teachers to have techniques that are effective in teaching to facilitate the development of higher-order thinking skills.

The teachers instructed the students to list and write down as many occupations as they can. Thereafter, the students reviewed a list

of information on topics related to occupations. As students were collecting information on occupation, there were weak students who were unsure of the meaning of words such as 'list', and the English spelling for the words 'police' and 'fashion'. Zaky (2018) agreed that students need sufficient knowledge to participate in the decision making process and to actively share their opinions before the can start to write. Subsequently, the teachers moved on to the next level by asking students to pick one topic on occupation. The teachers then asked the following questions:

Do you have an ambition?
Who does not have an ambition?
Write down five good things about your ambition.
Who wants to be a doctor?
Who wants to be a teacher?
Who wants to be a nurse?
Who wants to be stewardess?
Which ambition is better? Doctor or lawyer? Can you tell me why?
Who thinks that being a doctor is the best?
How about a soldier?
What is so good at being a soldier?
What are the benefits of being able to defend the country?

These example questions allowed the teachers to assist students by guiding and encouraging discussion among students to gather ideas for their writing. Essentially, the teachers help guide the students to think and transfer their thoughts into ideas that could help justify the choices they have made. The teachers that participated in this study were determined to use the modules to teach writing as a way to develop higher level thinking skills. The teachers started by building their students' confidence to write. The teachers were well aware that writing can help develop higher-level thinking skills, and hence, guided the students to develop and express their ideas in a clear and organised manner. These findings are in line with the study conducted by Prastyo et al. (2020), and further supports the use of various learning media that can facilitate students' thinking skills. These learning media include applications, teaching materials and textbooks (Prastyo et al., 2020).

The teachers have revealed that it is important for students to understand the reasons for mastering higher-order thinking skill and

its importance. Both teachers and students have their part to play in the writing process. Teachers are responsible to provide students with feedback and modelling essays, and present clear guidelines for each writing task. Studies have shown that students are more comfortable with rote memorisation. However, teachers prefer students to move beyond rote learning and towards gaining a deeper understanding of the content. Hence, through writing, teachers are able to encourage students to manipulate information in creative ways. For example, the teachers in this study asked their students the following questions on a dengue campaign:

How many have been suspected with dengue? (18 students raised their hands)
How many were admitted in the hospital? (10 students raised their hands)
What do you do when you are bitten by a mosquito?
After killing the mosquito, what do you do?
After that, do you put some spray in your house?
Do you remember that mosquitoes breed in certain places?
How do we prevent this problem, dengue fever?
Teacher asked students to recall the drama acting organized by the school

The questions above helped the students gain an understanding of the content (dengue fever) based on their experiences and information they have acquired. The teachers asked these questions to help the students to manipulate the information that they are familiar with, and is then shared in the classroom. Based on the findings gathered from this exercise, the questions imposed by the teachers to help in writing had increased the students' comprehension and analysis. This finding concurred with Zaky (2018), Brookhart (2010) and Retnawati et al. (2018), and suggests that students have the ability to differentiate lower order thinking skills from higher-order thinking skills through the reinforcement of writing. Writing task can increase the understanding of a topic, evolution of thinking and the development of critical thinking skills. Apart from that, teachers encouraged students to ask more questions in class, which subsequently led teachers to present the methods on connecting concepts in writing. In addition to asking students questions regarding the topics discussed for writing, the teachers ensured that the students were involved in group projects and was given the

opportunity to challenge and explore each group member's ideas as part of the writing process. The teachers encouraged students to connect the concepts, particularly on related topics that were being discussed, for example:

Student: Teacher Society tu apa (what)?
Teacher: The people staying in that area
Student: Teacher how they help the society?
Teacher: Yes you tell me what they do to help people around?
Student: Give medicine when sick
Student: Rawat (Treat) dia.

The student in the example above was not sure of the term 'society'. The teacher provided the meaning for the term 'society'. The teacher gave the meaning of society and the type of people who live in a particular society. Upon understanding the meaning of society, the student was able to grasp the concept of society and asked the teacher on the ways they could help the society. The teacher did not directly answer the question, but instead, rephrased the question and asked the students on how a doctor helps the society. The question directed by the teacher created an opportunity for the students to think and reflect on the ways a doctor can help the society. The teacher encouraged the students to use their background knowledge through discussion for their writing. The teacher asked many questions to encourage students to connect the concepts. The teachers in this study were continuously monitoring the students' work and progress throughout the duration of this observation. The finding is in line with Talib and Cheung (2017) as teachers were able to increase students' mastery of higher order thinking, based on the questions asked. This is further supported by Latawiec, Anderson, Ma and Nguyen (2016) and asserts that feedbacks and writing tasks provided by the teachers can improve student's performance.

In a separate observation, the students were able to connect the concepts of wild and tame animals. When the teachers asked the students to list down the animals, the students were able to provide the right answers. The teachers had to explain and question the students on their understanding of wild and tame animals and the ways to differentiate them. After the discussion, the students listed the animals correctly in their respective category.

Table 3

Categorization of Wild and Tame Animals

Wild animals	Tame animals
– lion	– fish
– snake	– dog
– tiger	– hamster
– monkey	– cat
– orang utan	– bird

One of the students argued that dogs could not be categorized as tame, and suggested that some dogs could be categorized as wild animals. The researchers further questioned the student to understand this perspective. The student shared that he used to watch the National Geographic channel and discovered that not all dogs are tame. According to Lidawan & Chua (2018), Lidawan and Gabayno (2018), Lambright (1995) and Allamnakhrah (2012), digital materials that students can access, via YouTube or television, can help transform the prior knowledge obtained and reinforce the students' understanding into real-life contexts. The student mentioned Rottweilers; a breed of dog that can be very aggressive and ferocious. This student was engaged in higher-order thinking process as he was able to recall and share information about these animals from prior experience, as supported by Lidawan & Chua (2018).

Moreover, he was able to compare and contrast the differences between a tame and wild dog. The student analysed and assimilated the information he obtained from the channel, and informed his teacher on the dangers of keeping a dog as a pet. The student was able to make critical interpretations and demonstrated a higher level of thinking. This is supported by (Singh et al., 2020) as the teachers' questioning strategy was able to strengthen students' mastery of higher-order thinking skills. Teachers must encourage students to infer, conclude, apply their knowledge to novel situations, and connect thoughts with other situations and with their existing knowledge (Zaky, 2018). From the observations made, the student shared that his mother, a nurse, would buy books for him so that he

will gain knowledge and improve his writing. This is supported by Rosli and Maarof (2016) and suggests that prior knowledge plays a vital role for students to improve their thinking skills. This will ensure that they will be more confident and motivated to share their opinions on certain topics among peers in the classroom.

Teachers Leading Students to Infer Through Real-Life Situations

Teachers must educate and lead students to infer by extracting lessons from real-life situations. Thinking is an order sequence process that can be taught, and teachers play an important role to assist students to progress towards higher level thinking (Rosli & Maarof, 2016). During the classroom observations, the ESL teachers distributed cue cards to all the students. The teachers told the students to take out a pen or pencil, and continued to ask the following question:

T: In your life (thirteen years old), have you encountered any incident that happened in your life that you cannot forget. You have to choose one incident and write.

T: Teachers repeated the question again but they have modified the structure of the question here.
In your life, when you were small/young, when you were in the primary school, did you go through any incident. Incident means 'kejadian'. *Anything that happened which you cannot forget.*

S: What does 'incident' mean?

T: 'Incident means something happened in your life.

T: shares an example of an incident. Your father took you on a bike ride, you fell.
Maybe you went for a holiday, you went swimming. You drowned in the pool because you didn't know how to swim.

T: Teacher gives a situation and tried to get some feedback from the students:
Situation 1: You are very hungry. You went to the canteen. You bought 'nasi lemak'. Suddenly, while you were eating, you saw some maggots crawling in the 'nasi lemak'. What will you do?

S1: I will throw the 'nasi lemak'. I will also inform my teacher. I will then go to the canteen and change to a new 'nasi lemak'.

T: informs the students that as a student, they have the right to demand for their money paid for the 'nasi lemak'.

The above transcript shows an example of a teachers' strategy to teach students to deduce inferences by providing 'real-life' examples that may or may not be encounter in their daily lives. The teacher started the lesson by asking the students to think of a real-life incident that is unforgettable. The teachers wanted the students to share the details of the incident. Then, the teachers asked them to make inferences based on their understanding of the situations given. The teachers demonstrated ways for the students to deduce an inference. The teachers asked the students about an unforgettable incident. They then ask the students to describe the incident and infer the impact of that particular incident had on their lives. The teachers' strategy that allowed students to infer through real-life situation, is an example of facilitating the promotion on the inquisitive mind (Tang & Tan, 2015). Students are exposed to critical thinking and learning skills that would help them in the workplace (Hashim et al., 2019; Jalal, 2017). This finding is in line with Malini et al. (2017), Mohd et al, (2016) and Chiew et al. (2016), and suggests that students that were guided to infer had improved their thinking skills.

i-Think Thinking Maps

The teachers observed in this study made use of graphic organisers for writing tasks. The teachers believed that graphic organisers provided students with a proper method to structure their thoughts systematically. When the teachers instructed students to draw diagrams or mind maps, the students were able to connect the concepts and study the correlations. This strategy assisted students to develop a habit of connecting the concepts for better understanding.

The graphic organiser used by the teachers in the classroom showed the ways to prevent dengue fever. This graphic organiser served as an information checklist for the students; they were able to easily remember the ways to prevent dengue fever from the concise mind-map. Using the process mind map, the teacher were able to ask of the stages for which *DEET* should be applied to prevent mosquitoes from breeding.

Students used the graphic organiser as a way to connect complicated concepts as it portrays a visual learning style (Smith, 2010). The teacher used two types of graphic organisers for this activity. One of which relates to information on the main themes and ideas.

The students are asked to discuss the ideas within their respective groups. The teacher then collects their ideas and produce a mind map. The teachers encourage the students to use graphic organisers to ensure that they integrate pedagogical practices with the subject matter during the writing process, and that students are engaged with the higher thinking skills and are motivated to write (Tam & Linh, 2017). The graphic organisers developed by the students in this study helped them understand the importance of using HOT skills.

Example 1: Topic – Ways to prevent dengue
Bloom's Taxonomy level: Remember, Understand, Apply, Analyse, Evaluate

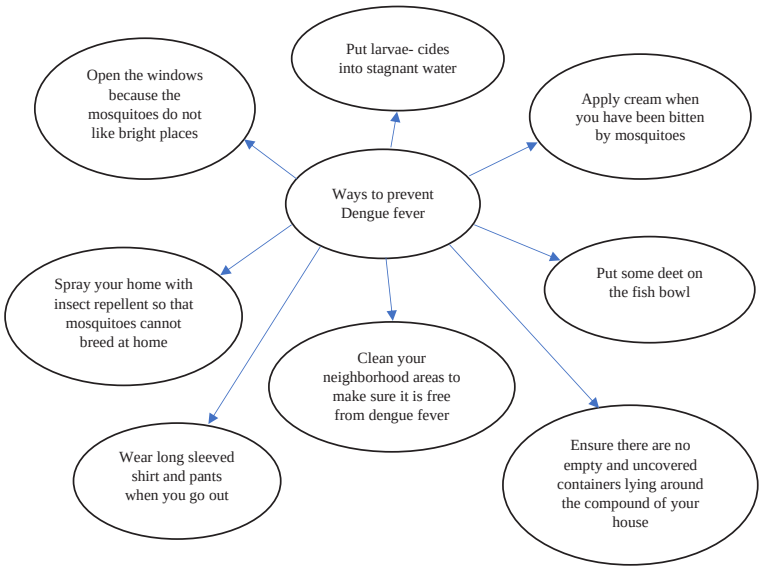

Figure 1. Ways to prevent Dengue fever.

The utilisation of higher-order thinking skills to teach students writing can also enable teachers to be more creative and innovative in their pedagogical practices. Students showed increased interest in writing when they were able to implement HOTS through the various writing activities developed in the module. This study found that less proficient students showed increased interest in learning and were more motivated to write. This was further supported by Mursyid and Nia Kurniawati (2019), where the teacher's creativity

in their pedagogical approach, in relation to higher-order thinking skills, could assist students to create new ideas to write. The use of different types of graphic organisers helped enhance and promote student thinking skills. The different types of graphic organisers used were able to change the students' conceptual knowledge (Zulnaidi & Zakaria, 2010). When the students were given a task or worked in groups to present their mind maps, they were more excited. Similarly, Zaini, Mokhtar, and Nawawi (2010) stated that graphic organisers enhanced students' understanding, which in turn increased students' motivation to learn.

Teaching Students Problem-solving Skills

The teachers in this study applied Bloom's taxonomy Level 4 (Analyse), by asking the students the following questions:

T: How many of you still have paternal and maternal grandparents?
T: Why are we talking about grandparents?
T: Have you seen any old folks' home nearby?
T: How do you feel? (students said very sad)

The teacher shared her own experience of what she had seen when visiting an old folks' home in Seremban, where there were elderlies that were given proper care while some were beaten and abused. Some students agreed with the teacher and shared similar incidents that were posted on YouTube. The teacher then instructs the students to go back and ask their parents the questions; (Would they like to be sent to the old folk's home?), and (How would they feel?). The teacher tells the students to reflect upon their own life, and share their own thoughts and feelings. Indirectly, the teacher was instilling good values in her students. Higher order thinking skills can be defined in many ways, but the teachers have categorised them into 4 groups. The first group is application, and involves problem-solving and experimenting. In a language classroom, this involves experimenting through writing, solving problems using hints, and performing role-plays. The findings from these observations concurred with Mohd et al. (2016), and concludes that teachers employ problem-based skills to encourage and promote students' higher-order thinking skills in the classroom.

Teachers Encouraging Students to be Imaginative

The following writing activity requires students to be imaginative. Teachers encourage students to analyse a given situation for their writing task. The activity consists of two pictures. The teachers gave the students sufficient time to look at the pictures, and are then told to present their opinion on the pictures to the whole class.

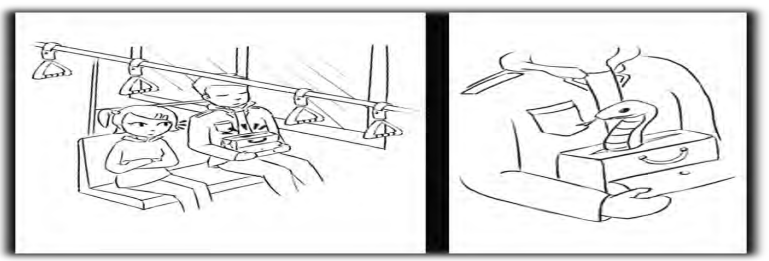

Figure 2. A girl observing a man with a box.

(*Source: Higher-order thinking skills Module, 2019)*

T: Please share what you understand from the picture
S: A girl on train
T: Electric train
S: Then one man come. Got bag
T: Okay came a man and sat near the girl. He carried a bag. Okay next.
S: A girl and a boy sitting [in] the bus
S: The girl hear snake sound
S: The girl see the peti (Container)
S: What is peti?
S: Box
S: The snake come out from the box
T: That is a bag. Then?
S: The girl [got] scared.
T: Okay you tell me.
S: One day one man [was] going to work. His wife make breakfast. He kept his bag outside and suddenly a snake go inside the bag. Man take snake bring to bus stop. He enter bus a girl sit beside him. The beside girl heard a "hiss". He cannot hear the sound,

he is sleep. He went to work. The snake run. The man share story with his family.
T: Okay. Interesting.

The students shared their versions of a story of what could be in the box. The teachers gave the students time to analyse the situation and waited for their response. The teachers did not provide any guidance and allowed the students to share what they felt was inside the box. They provided an opportunity for students to use their creativity and ideas to expand their writing.

T: Open activity 10. Look at the first picture. How many people are there?
S: Two boy
T: Okay good. Can you name the dog?
S: Mani
T: Okay the second picture
S: The boy see flower
T: See or saw
S: Saw
T: Okay then?
S: He wants to pick the flower
T: No not pick, it is pluck (demonstrates the action). Picture c? What happened next?
S: The boy fell and fainted
T: Okay what happened next?
S: The friend call people for help
T: Okay he called for help. Where did the snake come from?
S: Forest.

In the following activity, the teacher applied Bloom's taxonomy level 5 (Synthesis) that engages the students' imagination and ability to predict or infer. This is particularly useful when students are asked to write. Students should predict a conclusion for their writing before they finish their essays, and try to infer the key concepts based on the pictures given. During the activity, it was observed that the teacher initially gave an example, and then asked the students to give another example with a similar situation to ensure if they understood the concept. The second set of skills, 'analysis', is comprised of identifying patterns and organising ideas. Students are

often encouraged to do this through a teaching method called 'guided discovery'. This allows students to identify language structures in a text in order to work out the rules for it without guidance from the teacher. Students are also encouraged to keep well organised notes through mind maps and colour-codes that could be used for revision before exams. The final group, 'evaluation', covers the skills of assessing, comparing, and judging merit. Participating in discussions and debates, rating study strategies and assessing their own work will help students hone these abilities. Teachers could also ask 'cause and effect' questions to students. Cause and effect questions are one of the techniques that integrates HOTS into writing lessons. Siti et al. (2016) stated that being able to use higher-order thinking skills would allow students to apply and connect these facts to create solutions for various situations. Therefore, in this regard, 'cause and effect' questions encourage reflection and elaboration.

T: Even a cleaner is important. What happen if there's no cleaner in the school?
S: The school will be dirty

Based on the observations in this study, it is noticeable that the ESL teachers incorporated the teaching of higher-order thinking skills through their pedagogical approach to develop the thinking capacity of their students. The strategies used by the teachers include an understanding of the reasons to master higher-order thinking skills and its importance (Prastyo, Gembong, Masfingatin & Maharani, 2020) and Zohar (2013), educate the students to connect concepts in writing, lead students to infer through real-life situations Malini et al. (2017), Mohd et al, (2016) and Chiew et al. (2016), incorporate the use of graphic organizers Lidawan (2019), teach problem-solving skills Mohd et al. (2016), and encourage students to be imaginative Siti et al. (2016). Teaching higher-order thinking has its various challenges and warrants due consideration (Tan & halili, 2015). There are several issues that can affect the successful learning and development of higher-order thinking skills among students (Coffman, 2013).

Therefore, it is crucial for teachers to develop and enhance students' higher-order thinking skills as they are expected to uphold and fulfil the national aspirations in education by effectively fostering higher-order thinking skills (Tan & Halili, 2015). In this study, the teachers were aware of the importance of assisting students to develop higher-

order thinking skills that would enable them to think independently and proactively (Singh et al., 2020; Chen, 2016; Krishnan, 2014; Chidozie (2014). Teachers in this study instilled higher-order thinking skills to teach writing to the weaker students by assisting and guiding these students from the lower order thinking level to a higher level, as suggested by (Sukadaria et al, 2020; Rosli & Maarof, 2016), and stipulates that the students should be taught to remember, understand, and apply the knowledge they have learnt to reach the next cognition. Moreover, in assisting the students to write, the use of brainstorming can help develop students' higher order thinking skills through HOTS (Malini et al., 2017; Mohd et al., 2016; Chiew et al., 2016). Students have to be guided by teachers during brainstorming sessions to ensure that they are able to rekindle their views to produce ideas. The findings of this study suggest that ESL teachers are aware of the various strategies that they can adopt to foster higher order thinking skills when teaching writing in the classroom. The findings obtained from classroom observations provided a clear overview of the integration of higher-order thinking skills when teaching writing. These findings can be reviewed for further studies on higher order thinking skills when teaching English. However, this study should not be generalized to all levels and ESL learners. This study would significantly contribute to the development of strategies that could improve higher order thinking skills, particularly from a qualitative approach. The strategies applied in the classroom practices used by the ESL teachers could provide insight for educational boards and government bodies to recognise the need for strategic training that could assist students in their writing.

DISCUSSION AND CONCLUSION

The teachers in this study were aware of the importance of developing higher-order thinking skills when teaching writing. It is crucial to educate students on how to think, and guide them in cultivating their thinking skills. Some of the ways used to inculcate higher-order thinking skills were through inferring, reasoning, comparing and contrasting, problem-solving skills, paraphrasing, providing examples, analysing, using graphic organisers, creating connections between concepts, and questioning when teaching writing. For each writing task, the teachers applied Bloom's taxonomy Level 1: Remember, Level 2: Understand, Level 3: Apply, Level 4: Analyse, Level 5: Evaluate and Level 6: Design. The aim was to produce

knowledgeable, critical and creative thinkers who will be able to compete at the international level.

By teaching students to use and apply higher-order thinking skills when learning the English language, the students were encouraged to apply these skills to analyse, evaluate and think creatively. The classroom observation findings revealed that students showed more enthusiasm for writing, where writing task and activities of higher-order thinking provided students the opportunity to engage actively in the learning process, and to be able to share and discuss ideas with their peers. The students felt they were given autonomy as learners towards personal discovery and self-expression. The students were able to record and reformulate knowledge and developed ideas for the writing tasks given. They also shared that writing tasks were essential in critical thinking as it promoted self-reflection and expanded perspectives when engaging in oral expressions. In addition, the students felt that the teachers respected their ideas and feelings during the writing tasks on certain topics. Moreover, this study affirms that teachers play a fundamental role in developing higher-order thinking skills among students. Thinking skills are highly regarded in the 21st century as they are crucial in supporting economic prosperity. Higher-order thinking skills have always been considered a vital component for any student by employers. Therefore, students are required to improve on the necessary skills that would help them make creative and critical decisions that could benefit companies, societies, and countries.

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