

## **Portraying Teacher's Metacognitive Knowledge to Promote EFL Young Learners' Critical Thinking in Indonesia**

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### **Abstract**

Since young learners have different characteristics than adults, EFL teachers for young learners should treat them differently and possess sufficient metacognitive to promote critical thinking skills. This paper aims to portray teacher's metacognitive knowledge in EFL young learners' classroom particularly in promoting their critical thinking skills. A case study was employed as a research design involving one class of fifth graders with one English teacher. Three instruments were used to collect data namely classroom observation, interview with the teacher and the students, and document analysis. The collected data were analysed and interpreted based on the theory of metacognition and stages in promoting critical thinking skills in EFL classroom for young learners. The findings reveal that the teacher performed three types of metacognitive knowledge, such as person, task, and strategic knowledge determining her strategies in running the class. Data from the classroom observation showed that the teacher implemented brainstorming in the opening session, showing flash cards to build students' vocabulary and understanding toward the topic, singing English songs and roleplaying in the main activity, while closing activity was done through giving some open-ended questions directing the students to promote their critical thinking skills. Moreover, the results from the interview with teacher refer that those strategies were selected by considering the students' characteristics, learning styles, and outcomes. Those statements were clearly strengthened in the document made by the teacher in the form of lesson plan indicating learning scaffolding started from the simplest to the most complicated activities as her belief in promoting the students' critical thinking skills.

**Keywords:** Critical thinking, EFL young learners, Metacognitive knowledge

### **Introduction**

Since children have different characteristics than adults, English teachers for young learners require specific strategies to achieve learning outcomes. Children are known to have a

limited attention span where they cannot maintain their focus in monotonous learning activities (Frey, Fisher, & Smith, 2019). As a consequence, English as a foreign language (EFL) young learners' classroom should not only focus on teaching language materials but also improve learning strategies through students' engagement in promoting their critical thinking and problem-solving skills (Yen & Halili, 2015).

In line with this, critical thinking as one of 21<sup>st</sup> century learning objectives needs to be considered in the academic life of the students (Saleh, 2019). So far, critical thinking has been incorporated into many schools around the world, but its concept and components are not clearly defined as its popularity (Paul & Elder, 2020). It is further elaborated by Cottrell (2017) who describes critical thinking as a complicated process of careful consideration requiring a wide range of skills and attitudes. To think critically, a person cannot achieve that immediately, instead, it requires complex cognitive process associated with prior knowledge and experience.

Moreover, some scholars of language learning have agreed upon the successful students and put their attention on some strategies used in different problems in EFL teaching practices (Tsang, 2017). The results of his studies showed that successful second language students and teachers may employ innovative strategies for different tasks and select them based on their specifications. They also believed that good language learners use some effective techniques to perform their learning tasks in a specific situation (Montaño, 2017).

To provide students with effective techniques in achieving learning goals, English teachers are encouraged to employ metacognitive knowledge in planning, developing, and evaluating the instructional process. Such a knowledge is known as thinking about thinking which helps a person understand and control his or her own cognitive performance (Jaleel & Premachandran, 2016). It also plays a more significant role than other strategies because when an individual understands how to regulate learning through the use of strategies, language acquisition should proceed at a faster rate (Teng, 2019). According to Yang, Potts and Shanks (2017), an individual with metacognition comprehensively knows very well what a task entails, organise strategies that best meet both the task demands, evaluate their strengths and weaknesses, solve complex problems, and make a good decision.

In addition, the concept of metacognition has been perceived variously, including self-management, meta-learning, and meta-components. Metacognition was firstly proposed by Flavell (1976) referring to information obtained from cognitive processes or anything relevant to them (Çakıcı, 2018). Metacognitive knowledge, in particular, entails thinking levels that allow an individual to take care of their cognitive process. It serves as a behavioural characteristic that allows both teachers and students to achieve their goals

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Metacognitive knowledge encompasses three areas of information, namely an individual, learning task, and process of learning. These attributes were then known as a person knowledge, task knowledge, and strategic knowledge (Kim & Stormont, 2020). Metacognitive knowledge frequently applies to higher-order thinking skills theory which involves active control of cognitive processing mechanisms (Kozikoglu, 2019). It also involves a variety of self-awareness mechanisms that enable learners to prepare, monitor, orchestrate, and manage their learning. By

using this knowledge, students are not only conscious of their knowledge and thinking but also in control of both of them (Mata, Ferreira, & Sherman, 2013).

There have been many studies investigating the importance of metacognitive knowledge in various subject learning, but few have concerned on second language learning. Therefore, this study attempts to portray teachers' metacognitive knowledge in teaching English for young learners to promote students' critical thinking skills. It aims to provide information about how metacognitive knowledge can affect the teacher to select learning strategies based on students' background and needs.

## Literature review

### Metacognitive knowledge: general concepts

Metacognition is a vague concept found in different definitions and many studies have been conducted from different angles. The origin of the present metacognition studies was derived from the cognitive psychology, cognitive developmental psychology, and social developmental psychology (Norman, Pfuhl, & Sæle, 2019). It started with the validity of the assumptions made by adults about memory that show true predictors of actions (Koc & Kuvac, 2016). On the other side, Hatice and Akdag (2017) claimed that Piaget (1950) as the founding father of cognitive development and learning discussed knowing the understanding and learning of thought in the early years of cognitive development and epistemology of personal information. This is in line with the statement of Vygotsky (1962) who mentioned that consciousness and conscious control were basic contributors during school years (Hatice & Akdag, 2017).

Over the last 30 years, metacognition has become one of the major areas in cognitive developmental science. The term metacognition was initially denoted as knowledge and regulation of an individual's cognitive activities in learning process (Flavell, 1979 in Veenman *et al.* 2006).

This inclusive definition of the prevalence of metacognitive term has unravelled. It covers several categories depending on certain contexts to which these categories may act upon one's life, such as metacognitive beliefs, metacognitive awareness, metacognitive experiences, metacognitive knowledge, etc. Many related topics about metacognition which have been emerged, there is still a lack of coherence in the field of metacognition. Some terms refer to more general knowledge and skills in metacognition, while some others focus more specific on knowledge for certain age groups or types of tasks. Further, Veenman *et al.* (2006) stated that some metacognition aspects connect both cognitive and metacognitive processes (learning strategies and heuristic strategies), whereas some others are solely metacognitive in nature.

The most common distinction in metacognition emanates metacognitive knowledge from skills. The former researchers argue that a person's declarative knowledge explains the interactions between the characteristics of a person, a task, and a strategy (Flavell, 1979 in Veenman *et al.*, 2006), while the new researchers believe that a person's procedural knowledge describes the regulation of one problem-solving and learning activities (Brown & DeLoacher, 1978 in Veenman *et al.*, 2016). In practice, metacognitive knowledge about learning process may be correct or incorrect and it is resilient to change. Metacognitive skills, however, have a feedback mechanism built-in (Veenman *et al.*, 2006).

Some studies have established more specific components of metacognition, but they seem to struggle with the existence of these components. Metamemory is often analyzed from the point of view of declarative information, whereas measurement mechanisms are heavily involved in producing this awareness. Feeling of Knowing and Judgment of Learning have been studied as metacognitive mechanisms (regulated by metacognitive experiences or rather as a product

measures). Conditional knowledge describes about what to do and when to do the tasks which require thinking about real-life contexts (Veenman et al.,2006).

#### Metacognition: development and practices

Since metacognitive studies have highlighted to theoretical aspects, recently it varies to educational application. As a result, many scholars provided the educational relevance of metacognition theory to teachers and students, shift their attention from the theoretical to the practical (Louca, 2003). In addition, Borkowski and Muthukishna (1992) in (Louca, 2003) mentioned that metacognitive theory offers a considerable potential to assist teachers in their effort to build classroom environments focusing on strategic learning which is flexible and creative. Students may improve their learning through being aware of their own thinking after they read, write, and solve instructional issues (Paris & Winograd, 1990 in Louca, 2003). From teacher's side, English teacher can promote their awareness directly by informing students about effective problem-solving strategies and discussing cognitive and motivational characteristics of thinking.

Consequently, teachers may employ a variety of strategies to enhance metacognition depends on grade level and subject areas. The implementation of metacognition works well since teachers encourage and think aloud to their students, discuss the process, and generate questions in learning.

In order to promote students' metacognitive development, teachers should also provide them with opportunities fostering metacognitive experiences which in turn will provide input to permanent metacognitive knowledge (Louca, 2013).

#### Metacognitive knowledge in language learning

Some studies investigated the role of metacognitive awareness as learning outcomes and achievements in different school subjects. There is an extensive evidence telling that learning metacognition directly affects the process and the outcome of learning (Rahimi & Katal, 2012). Metacognitive knowledge can improve students' performance because it helps them achieve the intended learning objectives. Flavell (1979) in Rahimi and Katal (2012) argues that metacognition has a positive effect on learning in general since it leads students to select, evaluate, revise, and abandon cognitive tasks, goals, and strategies in the light of their relationships with one another and their own abilities and interests with respect to that enterprise.

In term of language teaching, the role of metacognitive knowledge determines the effectiveness of individual attempts to learn another language. As stated by Flavell (1979) in Rahimi and Katal (2012), the effective role of metacognitive knowledge in different learning activities was indicated by the clear language use, such as oral communication of information, oral persuasion, language acquisition and other forms of self-instruction. A study conducted by (Zhang and Goh (2006) underlined metacognitive knowledge and foreign language learning, specifically in learning strategies related to mutual influence in the field of second-language learning. It was found that metacognitive knowledge should be integrated into English classroom to make learning more efficient (Zhang & Goh, 2006).

Regarding this, researchers have attempted to specify the characteristics of good language learners and the type of strategies they use in a specific language task (Abbasian & Shad, 2015). They underlined that explicit metacognitive knowledge of task characteristics and the implementation of suitable strategies for the solution of tasks is a key determinant of effective language learning. It is due to the fact that metacognitive approaches allow learners to play an active role in the learning process, control, and direct their own learning, and ultimately find the

best ways to practice and improve what they have learned (Shehzad & Rawian, 2018). Metacognitive also brings them in a privileged position to process and store new information and leads to better test performance, learning outcomes and better achievements (Ordin, Polyanskaya, & Soto, 2020).

In addition, metacognitive knowledge embodies the approach of expert learners to learn and enhances learning outcomes since students are able to recall information, comprehends written texts, and completes new types of learning tasks. Consequently, metacognitive knowledge improves the progress rate in learning and the quality of learners' cognitive engagement (Rahimi & Katal, 2012). Some other studies apprehend on students' proficiency and successful in reading, writing, speaking, and listening related to the type of strategies they use and the conditions in implementing those strategies. The findings of these studies highlighted that proficient language learners take conscious steps to understand what they are doing by using a wider range of strategies than less proficient learners do (Mata, Ferreira, & Sherman, 2013). These findings indicated that higher degrees of metacognitive knowledge help learners to be better at processing and storing new information. Furthermore, it was also found that metacognitive knowledge contributed to find best ways to practice and reinforce what they have learned since it plays an important role in enhancing thinking and comprehension (Mata, Ferreira, & Sherman, 2013).

#### Teaching English to young learners in EFL context

Teaching English to Young Learners (TEYL) demands EFL teachers to recognize children's characteristics developing in social contexts to work effectively in primary classrooms (Darling-Hammond & Bransford, 2007; McKay, 2012). Teachers' understanding toward the characteristics of children play an important role to select appropriate teaching strategies, design syllabuses and language activities, and formulate assessment methods (Halliwel, 1992 in Copland, Garton & Burns, 2014). Young learners bring to the classroom "their special characteristics, preferences, and desires. In this case, teachers as the primary source of regulation should thoroughly analyse these characteristics to provide pedagogical implications (McKay, 2012). In detail, students of lower grades (year 1, 2, and 3) are at the pre-operational stage (Piaget, 1983 in Copland, Garton & Burns, 2014) in which their attention is very short, ranging from 10 to 15 minutes (McKay, 2012). They learn from direct experience in building an understanding of cause and effect and tend to think in concrete terms. Consequently, they are unable to engage in operational thinking (McKay, 2012). They are also more involved in the process rather than focus on the results of the learning (Brumfit, Pincas & Broughton, 2003).

Children of grades 4, 5, and 6 enter the concrete operational stage that their experience of the world is expanding and their ability to think is increasing as well as their ability to reason systematically and logically enhances (Karea, 2016). They are able to interpret the same thing in different point of views since they are viewing from direct experiences in different contexts (Slavin, 2011). The socio-emotional features of primary school children are essential to determine effective teaching of the EFL. As a result, EFL teachers should provide a learning environment that is psychologically safe and relaxed, free from anxiety but enable students to take risk in their learning (Karea, 2016). EFL teachers need to have a range of language experiences and delivery styles. It purposes to develop interesting and challenging language assignments, such as imagination materials and learners' participation (Anderson, 2012).

Another key feature of children is they possess various interests in learning. These interests influence their focus, dedication to learning and accomplishment (Halliwel, 1992 in Karea, 2016). Children come to school with an integrated set of interests. It should be recognized in the process

of curriculum design, material development and the selection of teaching strategies (Halliwell, 1992 in Karea, 2016). Lower grade children learn second language through listening and practicing in a manner similar to their acquisition of their first language (Kersten & Rohde, 2013). They learn language by playing in contexts to unconsciously absorb new language vocabulary (Browne & Keeley, 2007).

#### Critical thinking in language learning

Critical thinking as one of the important 21<sup>st</sup> century skills is very suggested to be promoted to the students in the academic realm. It increases overall information acquisition and trains students to be more aware to the information they receive (Barnett & Francis, 2012; Tsankov, 2017). These skills also provide students with an opportunity to examine information applicable to certain subjects, including English, history, and biology (Barnett & Francis, 2012). In practice, the concept of critical thinking has been widely spread to different levels of education aiming at reinforcing development of cognitive skills and curriculum. Halpern (1999) in Alnofaie (2013) identified three components of critical thinking in education, as follows:

Critical thinking refers to the use of cognitive skills or strategies that increase the probability of an intended outcome. It is purposeful, reasoned, and goal-directed and involves solving problem activities, inferences formulation strategies, and making-decision behaviours. When students think critically, they are evaluating and adjudicating the results of their thinking process (to what extent their decision is and how well a problem is solved).

The definition above implies that critical thinking requires cognitive skills and dispositions as the two major components. The ultimate goal of employing these skills is transforming students' past learning experiences into the new applicable knowledge in different context (Rezaei & Derakhshan & Bagherkazemi, 2011).

In line with this, the implementation of critical thinking skills in foreign language teaching is a new area of study. Critical thinking pedagogies are proposed under the theory of critical language awareness claiming that the role of the learners' cognitive and metacognitive domains in developing his awareness of the new language and the world around him (Fairclough, 1999 in Alnofaie, 2013). By encouraging students to think critically enables them to communicate in the new language and produce different types of spoken and written language as well as demonstrate creativity in using the foreign language they learn. It is also found that critical thinking skills may facilitate students to draw inferences from the new language items and reflecting on the connections between languages (Bagheri, 2015).

The implementation of critical thinking skills in the classroom can be done by English teachers by following the theoretical framework proposed by Kern, Saraiva & Dos Santos Pacheco (2003). It covers four major stages, namely *situated practice*, *overt instruction*, *critical framing*, and *transformed practice*. Situated practice as the first component emphasize the immersion of students in language use. It involves students' lives and experiences, their thoughts, opinions and expectations (Kern, Saraiva & Dos Santos Pacheco, 2003). Overt instruction requires systematic, analytic and conscious understanding of the text. Some elements contribute to meaning will be identified, communicated thoroughly, and studied. Through this process, overt instruction promotes elements of conscious analysis which offers students to discuss about the meaning-making process (Kern, Saraiva & Dos Santos Pacheco, 2003). Critical framing as the third component presents the reflective dimension of literacy instruction. It triggers students to connect

the different elements of the linguistic system, communicative context, and socio-cultural context. Lastly, transformed practice comprises transformation and transduction. According to Kern, Saraiva & Dos Santos Pacheco (2003), the former concept refers to reshaping text within a single mode, while the latter deals with changing the form of representation from one mode to another. The following diagram presents the framework of teaching critical thinking skills in EFL classroom:

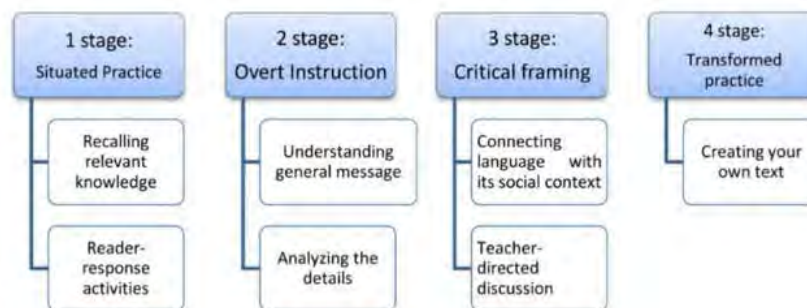


Figure 1 The Framework of Teaching Critical Thinking Skills in EFL Classroom (Kern, Saraiva & Dos Santos Pacheco, 2003)

Teaching critical thinking skills in the classroom also offers immense value for students as they are not only able to interpret and understand different viewpoints in the context of EFL classroom, but also create their own reflective learning styles. The integration of critical thinking skills and EFL learning model enhance the ability to construct and justify one's response and re-assess critically their expectations as to the meaning of the text (Alvarez, Calvete & Sarasa, 2012). A pedagogical model may include observation, description, interpretation, and production paves the way for future research on the possibility of integrating creative learning in the EFL classroom (Aliakbari & Faraji, 2011).

## Methodology

### Research design

This study is a qualitative study with a case study as a research design due to several reasons. First, case study seeks to provide a holistic description of complex phenomena (Hancock & Algozzine, 2017), as this study aims to analyse, describe, and interpret data in the form of English teacher's metacognitive knowledge to promote students' critical thinking skills. The main objective of such inquiry-based study is investigating inadequately presented phenomenon that cannot be quantified since it needs a direct description from the experienced respondent of such phenomenon. Therefore, in this context, the data were collected from an English teacher as respondent who has direct experience in teaching English to young learners.

Second, this qualitative study deployed the researchers as the main instrument of the study by collecting the data themselves through observing, interviewing, and analysing related documents. Moreover, since this study analyse how the teacher used her metacognitive knowledge in teaching English to young learners to promote students' critical thinking skills, then this study could be considered as a case study design (Cresswell, 2013). A case study would be done to get an in-depth exploration about how teacher's metacognitive knowledge might be beneficial to promote students' critical thinking skills. This study also limited the case to specific participants

in which the participating teacher was considered to have experience in teaching English to young learners. It also aimed to focus on investigating teacher's knowledge and strategies in teaching the students so that the critical thinking skills would be well-promoted.

#### Research participants

The participants of this study were one English teacher and fifth graders students in one public primary school in Bandung, West Java, Indonesia. The selection of these participants was done by considering several points. First, the English teacher involved in this study had been teaching English for young learners for more than twenty years. It means that she had more experiences to share and certain perspectives toward the process of teaching English in young learners' classrooms including the trends and challenges. Secondly, the selected students were a class of fifth grade students consisting 23 students. The students were randomly selected without considering specific aspects related their levels of thinking, family backgrounds, etc. It aimed to help the researchers gaining fruitful data especially in terms of metacognitive knowledge of the teacher and students' critical thinking skills.

#### Procedure of data collection method

This study made use of three instruments to collect data, namely classroom observation, interviews with the teacher, and document analysis in the form of lesson plan made by the teacher and teaching sources. Classroom observation was done by using observation guide, audio-video recordings, and field-notes to capture all single details of learning. By doing so, the researchers intended to get description of comprehensive and on-going process of learning. During the classroom observation, the researchers conducted informal conversations to the teacher participants of this study. It aimed to provide an opportunity to discuss, explore emerging issues or ask questions about unusual events in a naturalistic manner.

Moreover, interview as another research instrument was employed to gather the participants' responses to their participations in the classroom and identify the benefits of their learning. It is in line with the aim of this study which sought to expose the metacognitive knowledge of the teacher applied in teaching English to young learners to promote students' critical thinking skills.

Although the classroom observation and interview with the teacher had been utilized, they were not the only ones that help to answer the research question completely. Therefore, another research instrument was used to support the data gained from the classroom observation and interview, such as document analysis. Teaching document is an artefact which has its central feature which is produced by individuals and groups in the course of their everyday practices. It is geared exclusively for their own immediate practical needs and usually written with a purpose and based on particular assumption. In regard to the context of this study, some documents were analysed to obtained the data, such as lesson plans, students' written works, and learning sources.

#### Data analysis procedure

After the data from three instruments had been obtained, the data analysis was conducted to answer the research questions of this study. Qualitative descriptive analysis was employed as the main approach of this study since it focused on how teacher's metacognitive knowledge would be implemented in teaching English to young learners which required detail description and interpretation about teacher's and students' experiences.



The process of analysing the data were done both during and after the promoting of critical thinking skills in the classroom. Ongoing data analysis is essential to ensure that data are clean and free from incompleteness. Therefore, the data gained from the classroom observations were analysed during the process of the study while the data from the interview and documentation were done after completing the data collection procedure.

### **Finding and discussion**

Based on the data analysis results from the three research instruments, this study found that the teacher performed three types of metacognitive knowledge in teaching English to promote students' critical thinking skills, such as *person*, *tasks*, and *strategic* knowledge. The person knowledge was gained from the interview results showing that the teacher understood well the characteristics of the students. Such understanding was believed by the teacher to influence how she could systematically design learning activities that fit the students' needs, organize learning activities, and assess students' work. In designing the learning strategies, the teacher firstly identified students' backgrounds, levels of thinking, and learning styles. These components acted as the main determinants in designing learning strategies to promote students' critical thinking skills. The teacher mentioned that the students were coming from different backgrounds and brought different experiences to the classroom. Most of them came from middle to upper-class families whose parents worked as full-time workers and civil servants. Students tended to spend their time in school and additional courses with their friends and were exposed to their school environment. These experience and background stimulated the teacher to select learning approach which was close to the students' daily life context and could be easily understood. Therefore, the teacher selected a contextual approach to be implemented in the classroom since it eased her to promote their critical thinking skills.

The teacher also identified the students' level of thinking in order to determine the learning objectives which promoted students' critical thinking skills. The identification was done by giving the students a case example that required them to think beyond normal. From the students' comments on the case, the teacher justified that the students were only able to understand the context of what happened in the case and remembered explicit information explained. In contrast, they have not been able to critically analyse and evaluate the case given. It led the teacher to teach critical thinking skills in her classroom.

Regarding students' learning styles, the teacher considered four categories of learning styles, including *verbal*, *visual*, *musical/auditory*, *physical/kinaesthetic*. The teacher claimed that students who had verbal learning styles responded to learning activities that involved words. They grasped the meaning from what was read or delivered by the teacher in the classroom. They were better at completing assignments emphasizing on reading skill. Meanwhile, students who were categorized as visual learners constructed information from what they saw – usually manifested in the form of pictures and diagrams. This type of students was different from auditory learners who were happy to hear the rhythm of words and memorized facts with jingles or rap. Lastly, kinaesthetic learners builded information from movements and motoric activities, so they could not learn by sitting on their chair and listening to the teacher's talks.

The person's knowledge of the teacher was then associated to the teacher's strategic knowledge as can be seen from the results of classroom observations and supported by the teacher's opinions in the interview. Previously, the teacher had determined the contextual learning as an approach that was suitable to the students' characteristics. The selected topic was about the animals in English and their features. From the classroom observations, the teacher was observed

using several strategies to teach the students such as brainstorming, singing English songs related to the topic, doing focused-group discussions, and using gestures to gain students' attention. The brainstorming activity was firstly done by providing the name of a place (a very lush and green forest). Then, the teacher asked the students to imagine and think about what the place was like, what animals were available there, and how they survived. Once they have ready with the answers, the students were asked to mention the objects and animals they might find in the forest. To help visualize their thoughts, the teacher drew a thinking map on the board that contains a diagram of the results of the students' answers. From the map, the students selected some animals which were familiar with them and have met in their real life.

During the interview, the teacher explained the reasons for using brainstorming as one of the strategies to promote students' critical thinking skills. According to her, through brainstorming, students' schemata could be applied by connecting their previous experiences and knowledge with new information they were going to construct. The teacher apprehended that such a strategy required students to think creatively and analytically because it fostered safe spaces where ideas and innovations could develop. The following extract shows the teacher's opinion about the benefit of using brainstorming in promoting students' critical thinking skills:

I am really sure that brainstorming can promote students' critical thinking skills because it provides opportunities for students to be creative in expressing their opinions without any fear of making mistakes. Students can connect their past experiences and prior knowledge with new information so they do not just memorize the learning materials.

(Interview with the teacher/Sept, 2019)

Moreover, the teacher was using a strategy to sing an English song related to the topic they were learning. The song contained a description of the animals in the topic including their features. Initially, the teacher sang the song, then the students were encouraged to sing together. The lyrics of the song did not explicitly refer to the name of a particular animal, but rather the students required to guess the names based on the characteristics described in the lyrics. It aimed at promoting students' critical thinking skills in which they have to analyze the meaning delivered in the song. From the interview results, the teacher acknowledged that learning by using songs was appropriate to meet the young learners' characteristics, especially for those who categorized into auditory learners. Song taught skills that apply to the students' future and produce various solutions to problems. The students could evaluate their learning outcomes and adjust their ideas. Learning delivered through songs enabled students to develop critical thinking skills since they processed the information provided and produced new solutions.

The next strategy implemented by the teacher that appealed to the students was focus-group discussion. It was believed by the teacher as a good strategy to promote students' critical thinking since it facilitated students to interact both with the teacher and their peers exchanging opinions in depth. In its implementation, the teacher divided students into some groups consisted of 5 persons. Then, she gave a worksheet contained some opinions about the characteristics of certain animals (e.g. eagles, orangutan, and other primates). Students discussed whether the statements were true based on the real-life situations. During this process, the teacher observed the group discussion and helped to direct the students when their opinions were out of the topic. From the students' written work, it was seen that the ideas delivered by the students were the results of critical thinking. It was because they listened to the opinions of their peers, analyzed and evaluated the arguments, and constructed them into new ideas. Through this strategy, the teacher underlined that she trained the students to be open-minded persons and critically evaluate any information they

received. It was one of the learning objectives to be achieved in the learning activities. Students did not only learn the linguistic features of English, but also used their language skills to encode and decode information through thinking.

Gesturing as the last strategy implemented by the teacher was done by mimicking the animal's movements. The teacher moved her body to follow the animal's behavior and students discussed the name of the animal according to its characteristics. The main purpose of this strategy was introducing verbs in English that demonstrated in motoric forms, such as flying, jumping, climbing, and running. The teacher claimed that the students would get bored if they learned vocabulary in a monotonous way. Gesturing helped students to holistically internalize the meaning of vocabulary and exposed them to the concrete form. Also, kinaesthetic learners would understand the meaning of vocabulary easily because they used all their body parts through practical movements. Once they have finished, the next activity was guessing a story about animals through wordless movements. The teacher selected some students from the kinaesthetic category to come forward and mimicked the animals to make a story. The main reason for selecting these students was due to the teacher's belief asserting that kinaesthetic learners would do better than those who were classified as visual or verbal learners. In the end, the other students had to tell what they have imagined by using their language.

The third type of teacher metacognitive knowledge found in this study is task knowledge. The data from the classroom observations showed that the teacher sorted the easiest strategies to the hardest ones. It was confirmed by the teacher in the interview claiming that sorting strategies into a set of learning sequences aimed at helping students to get a meaningful learning because the students were allowed to build confidence in handling more difficult tasks and motivates them more proficiently. The teacher also mentioned that when the students become more proficient, they desired to learn more about the subject. For example, the teacher often provided specific strategies (songs, games, roleplaying) before starting the class purposing to shape the students' mindset that learning English is not as challenging as they thought previously.

In detail, the implementation of teacher's metacognitive knowledge to promote students' critical thinking skills can be seen in the following diagram:

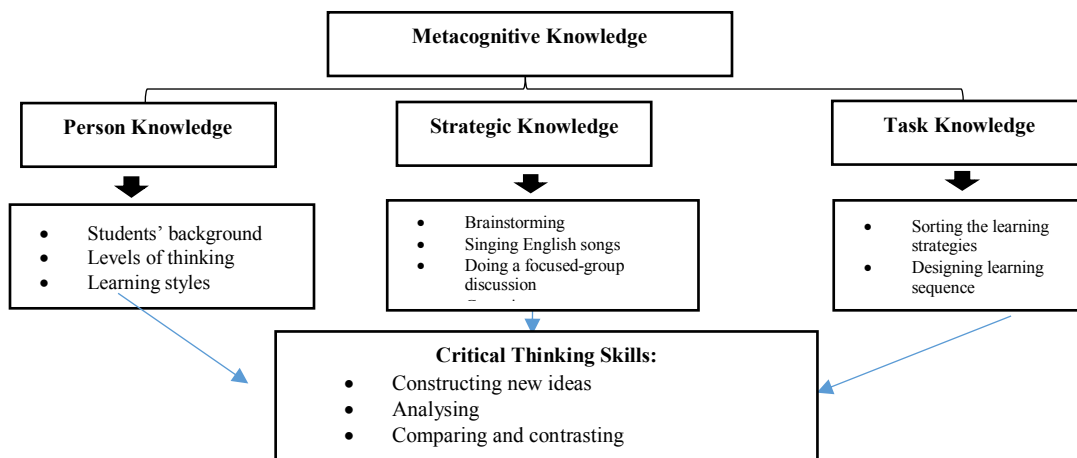


Figure 2 Teacher's Metacognitive Knowledge in Promoting Critical Thinking Skills

## Discussion

Over the last two decades, psychologists and educators have acknowledged that metacognition offers a great power to portray the progress of the learning process. As an essential

aspect of human experience, metacognition plays a key role in leading individuals throughout the learning process (Oz, 2005). Metacognition is generally referred to as “thinking about thinking” aiming at helping both teacher and students to achieve the optimal learning outcomes. It also influences an individual’s belief about attitudes towards learning that may affect their behaviour. Some studies have shown that metacognition directly affects language learning and can be introduced to pupils (Sen, 2009).

Regarding the scope of this study, the findings revealed that the teacher performed three types of metacognitive knowledge to promote students’ critical thinking skills in learning English, namely person knowledge, task knowledge, and strategic knowledge. It includes beliefs about the factors or variables influencing the entire cognitive process (Zhang & Goh, 2006). This kind of knowledge depicts strategies that may be helpful in performing different tasks since it explains the circumstances under which these strategies could be used, the degree to which the strategies are efficient, and self-knowledge (Flavell, 1979 in Pintrich, 2002).

The person knowledge of the teacher-participant in this study can be seen from the recognition of the teacher claiming that she identified and comprehended the students’ background, levels of thinking, and learning strategies. It leads her to determine the strategy in planning the learning activity, formulating learning objectives, and selecting learning methodologies to be implemented in the classroom. From the interview, the teacher mentioned that the students were categorized as young learners who had short attention span which consequently required her to provide various learning strategies. Such information led the teacher to arrange the strategy in promoting critical thinking skills. According to Georghiades (2004), the person knowledge frequently applies theories of critical thinking due to its active control of cognitive processing mechanism such as analysing, evaluating, comparing, and contrasting by connecting previous information to the knowledge. It means the teacher did not merely think about what best strategies to be implemented but she offered self-awareness on how to implement these strategies to prepare, monitor, and regulate students’ critical thinking skills. The teacher also admitted that she tried to analyse, evaluate, and justify critically for the components of the lesson plan which were suitable with the learning objectives and students’ characteristics. She believed that the person knowledge is not only understanding students’ background but rather transform their experiences in meaningful learning activity.

In addition, the teacher strongly held the positive impact of students’ schemata in learning English. Since every student brought different stores, it was a good opportunity for the teacher to ask the students to think critically. The teacher assumed that inviting students to think critically through direct instruction was not an easy job because they had no idea about the information they just received. Therefore, the teacher should gather data about the students including their background, levels of thinking, and other characteristics before introducing new concept.

The task knowledge, on the other hand, was perceived by the teacher as a recognition of the complexity degree involved in executing the task. As stated by Oz (2005), the teacher should identify what information or resources required to undertake certain tasks based on their degree of effort and difficulties in performing them. From the classroom observation, the teacher arranged different learning strategies starting from the easy to the difficult level. She sang some English songs about animals in the opening section to gain students attention and introduces new concept in a joyful way. After that, the teacher did a brainstorming activity to connect students’ prior knowledge and experience to the new information. Brainstorming is believed as a strategy in which a person or a group of people participates in critical thinking activity to produce broader concepts and innovative solutions to the problems (Owo, Idode & Ikwut, 2016). The teacher asserted that

during the brainstorming, the students explored their ideas without disparaging other comments. To visualize students' thoughts about the topic, the teacher drew a thinking-map on the board which eases the students regulated their ideas. It is in line with the idea of Ware (2008) who claimed that thinking-map in brainstorming helps speed up the absorption of information process, recall and retention as it exploits the brain capability to rapidly parallel process sensory information like colour, shape, size, orientation, and patterns. The students tend to use this visual graphic to link mental and emotional associations that arrange information into patterns they use (Kosslyn, Thompson & Ganis, 2006).

Lastly, the strategic knowledge refers to the teacher's awareness and application of metacognitive strategies in executing a task. It relies on the assumption that the teacher knows what strategies are appropriate to be implemented in the classroom and the benefits for their students (Ismael, 2015). The teacher for example, realizes that singing English songs about the topic may appealed to young students because she believed that songs almost always contain authentic, natural language. For the teacher, using songs in teaching English for young learners may provide vocabulary, grammar and cultural aspects. She did not necessarily introduce linguistic features in a direct and monotonous way.

On the other hand, according to Menz and Xin (2016), the involvement of metacognitive knowledge in teaching English enables students to think critically in the learning process. Through metacognitive knowledge, the teacher firstly analysed the students' needs and identified their level of thinking skills to design student-oriented learning strategies. Referring to the framework of teaching critical thinking skills in the EFL classroom proposed by Kern, Saraiva & Dos Santos Pacheco (2003), the teacher integrated her metacognitive knowledge in every learning stage. In the stimulated practice stage, the teacher stimulated the students to recall their previous knowledge and experience to respond to the text. It derives from her belief that each student brought varied experiences which were very advantageous to be associated with the learning topic, so they will absorb the information delivered. In the overt instruction stage, the teacher began with general discussion then moved to a specific one by using her task knowledge. The critical framing as the third stage, the teacher explained the relationship between the linguistic features they learned and the real-life context. The teacher applied a focus-group discussion strategy to facilitate students to exchange ideas with one another and collaborate in accomplishing the tasks. Finally, the transformed practice stage as the most complex in learning critical thinking required students to make their personalized text relevant to the topics discussed previously. By doing so, the level of students' thinking was increased from memorizing and understanding information to analyzing, evaluating, and creating new texts gradually.

## **Conclusion**

Teacher's metacognitive knowledge plays an important role in promoting the critical thinking skills of young learners in the EFL classroom. This knowledge consists of three categories, including the person knowledge, task knowledge, and strategic knowledge. The person knowledge helps the teacher in defining her students including their background, levels of thinking, and learning styles. Based on the analysis results of these three aspects, the teacher formulated learning activities that fit their needs and promote their critical thinking skills. The strategic knowledge relates to the strategies designed and implemented by the teacher in the classroom referring to the results of the analysis of the students' backgrounds and needs. To arrange which strategies should be taught first, the teacher used the task knowledge to deliver the learning materials effectively and help the students thoroughly absorbed the information. The

findings of this study also showed that learning through several stages such as stimulated practice, overt instruction, critical framing, and transformed practice also helped the teacher integrated their metacognitive knowledge in designing learning strategies that may promote students' critical thinking skills (from remembering and understanding information to analyzing, evaluating, and creating new discourse).

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