

CRITICAL AND CREATIVE THINKING FOR YOUNG LEARNERS: ASKING QUESTIONS AND GIVING ANSWERS IN ONLINE LEARNING CONTEXT

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ABSTRACT

Critical and creative thinking are significant competences for 21st century skills. Young learners should be prepared to develop these skills at school to prepare them for life. Classroom, on-site or virtually, should be a situated environment to support critical and creative thinking development. Teacher and students should approach every problem or case using both competences (Birgili, 2015). To be able to create such an environment, teacher should be insightful on how to intentionally ignite both competences and develop them aligned with students' levels. One of the ways to do this is by asking questions to students. The questions being delivered in the classroom are not simple questions. They are deep and insightful questions. To be able to create such questions, teacher needs to possess questioning skill which could trigger critical and creative thinking in young learners. Moreover, teacher needs to be more concerned on how these skills are being developed in the context of online learning for young learners. This research aims to expose the descriptive accounts of teaching and learning process in online learning setting which is related to critical and creative thinking. This research will be a case study which uses observation and interview as data collection techniques.

Keywords: Critical-Creative Thinking, Questioning, Young Learners

INTRODUCTION

Creative and critical thinking are both essentials thinking skills for all individuals to prepare them for life. In fact, these skills are essential 21st century skills which is important for education (Donovan, Green, & Mason, 2014). People need creative and critical thinking to observe and solve

problems as well as create new ideas to develop qualities of life. Before going further, it is important to apprehend what essentially critical and creative thinking are.

Generally, critical thinking is a kind of ability to look at events, conditions or thoughts with a careful eye and making comments, decisions, studying on the reliability and validity of the knowledge according to standards of logic and the mind (Seferoglu & Akbıyık, 2006).

According to Birgili (2015), there are some characteristics of critical thinking which we can generally see from an individual, such as:

1. *Reasoning and suspecting*
2. *Looking at situations from multiple perspectives and dimensions*
3. *To be open to changes and innovations*
4. *To look at thoughts without prejudices*
5. *Being open minded*
6. *Thinking analytically*
7. *Paying attention to details.*

Those features above are very important to observe something with prudent eyes and from many perspectives to overcome problems with analytical thinking. This is in accordance with what Martincová and Lukešová said that critical thinking initiates idea production and innovation which are important for global competition (2015).

Meanwhile, creative thinking is a skill which has novelty characteristics in its notions and ideas. This thinking process is very special because the original and fresh thoughts could bring someone to a unique perspective.

In addition, the creative thinking process involves the ability to produce original ideas, to perceive new and unsuspected relationships, or to establish a unique and improved order among seemingly unrelated factors (Piaw, 2010).

This distinct feature of human ability will generate exceptional thoughts, ideas, solutions, and many more to overcome problems and make a better life. During their life, human will experience such a dynamic environment and different context. These two skills will help them adapt with the situation and even solve the problems. Essentially, critical and creative thinking can be used together. Sometimes, probably it is difficult to distinguished which is which because what we can see is the result or product in the form of ideas, thoughts, or opinions. According to Birgili (2015), both skills, sometimes, can be used interchangeably.

People may misunderstand that critical and creative thinking skills are mastered by adults because of their experiences and prior knowledge, but actually, children can be critical and creative as well. In fact, creative and critical thinking is important for children. Based on Natto-Shek (2017) children demonstrate great deal of innovative and insightful thinking. They are able to perform creative and critical thinking based on their level. Children should be prepared for being critical and creative as soon as possible. One way of preparing them to be critical and creative is through education. Teachers need to further develop young learners' ability through certain pedagogical strategies as best as possible. Teachers need to intentionally develop both skills through their teaching and learning process naturally in the classroom. In fact, both skills are important to be set as goals or young learners' enduring understanding for the future.

Critical thinking is the most valuable skill that can be passed on by the school to its graduates and becomes a learning goal at all levels of discipline (Thompson, 2011).

One of the ways in developing those skills is by asking questions to students. Questioning promotes creative and critical thinking in the classroom. It can dig, explore, generate new and logical ideas and thoughts for students as well as for teacher in order to train the students. The questions used are not simple questions but deep questions which ask for how and why. Through these types of questions, students are learning to be more creative and critical. In point of fact, questions can help students to understand the material more and generate new ideas (Matra, 2014). Thus, it is important to study how teacher ask questions to students and what questions being used in relation to creative and critical thinking.

In this pandemic setting, questioning by teacher to the student even becomes more important because it can build relationship even though teaching and learning process is conducted online. Teacher and students' relation can be maintained while making sure their understanding of the material. Questioning needs to be intentional and on point because in online setting, the synchronous time is more limited compared to face-to-face interaction. Thus, below are some better ways of asking using more precise and effective terms as follow:

Table 1.
Precise Terminology to Encourage Creative-Critical Thinking
(Kabilan, 2000)

Instead of Saying:	Say:
'Let's look at these two pictures.'	'Let's compare the two pictures'

'What do you think will happen when ...'	'What do you predict will happen when ...'
'What do you think of this story?'	'What conclusions can you draw about this story?'
'How can you explain ...?'	'What evidence do you have to support ...?'
'Let's work this problem.'	'Let's analyze this problem.'

Using precise terms as explained in the table above, will help teachers to be more intentional, defined, as well as effective in asking questions to students to promote their creative and critical thinking. Teacher can set some goals in planning the lesson and then approach the lesson with appropriate strategy for initiating and developing critical and creative thinking. Driven by such an urgent need of critical and creative thinking for students especially young learners, it is important that this study descriptively expose the teaching and learning process in online learning setting which is related to critical and creative thinking, especially teachers' questions.

METHODOLOGY

This research aims to expose the descriptive accounts of teaching and learning process in online learning setting which is related to critical and creative thinking. This research will be a story-telling case study which uses observation and interview as data collection techniques (Bassey, 1999). The data were collected from observation during teaching and learning process and interview after the lesson with the teacher. This research is also an educational case study type which improves and adds more ideas for educational practices through the development of theory or thought through logical and thoughtful documentation of data. The data for this research was chosen on purpose. Researcher is able to choose samples purposively where he/she can find samples who are willing to give data (Mulyana, 2010). In this case, the sample will be 1 kindergarten teacher who teaches 15 students (age 5-6 years old). Researchers analyzed the data by examining all the data collected through three steps of qualitative data analysis which are data reduction, data presentation and conclusion drawing.

FINDINGS AND DISCUSSIONS

To promote critical and creative thinking in the classroom, teacher told the story entitled "The Lion and the Mouse" and checked students' understanding of the story by asking some questions. Those questions are intentionally and clearly asked to check students' critical and creative thinking. This was the first time; the students were told about this classic story. Teacher

supported her story with picture of Lion and Mouse to ignite students' prior knowledge. Below is displayed the result of questions and answer session between teacher and students in the classroom followed with confirmation questions if needed as well as students' responses towards the questions.

Table 2.
Q and A of “The Lion and The Mouse” between Teacher and Students
 (Source: Author)

No.	Questions	Responses
1	What happen to the character (e.g: Lion)? Why? How do you know?	Lion is angry because the mouse is disturbing him Lion is not happy, the mouse woke him
2	Can you guess what happen next?	Lion will run and catch the mouse
3	Can you tell me where the character lived? How do you know?	Jungle, many trees, plants, other animals, no building and road..
4	Have you ever seen (certain character, e.g. Lion)? Can they live at your house?	Yes, I have. No, they can not. They are too big, wild, belong to the jungle...they will be not happy if they stay at home and they cannot meet their family..
5	Do you like (certain character, e.g. Lion)? Why or Why not?	I like the Lion because so strong and kind I like mouse because so clever and brave

From the table it can be seen that the students' responses can be grouped into some categories of critical and creative thinking (Birgili, 2015; Piaw, 2010), such as:

Critical Thinking:

1. Reasoning and suspecting : Student are able to guess how the lion feels and what will happen next from the details of the story. They can explain the rationale why the lion feels happy or angry.

2. Looking at situations from multiple perspectives and dimensions : Students are able to observe the setting and context and then connect them with the characters for example they can think of the jungle with all the details and then house with different details.
3. To be open to changes and innovations : They are able to imagine what would happen if the setting is changed and what implication will follow towards the characters.
4. To look at thoughts without prejudices : They listen carefully to the story and look for details or evidences to guess what will happen.
5. Being open minded : They are open with all possibilities in the story when they guess the story. They also tell the teacher about their preferences.
6. Thinking analytically : They understand sequence and cause and effect. They analyze the details in the story
7. Paying attention to details: They can mention the details in the story and connect them with the setting or characters.

Creative Thinking:

1. produce original ideas : They come up with new ideas about the story and what they think will happen
2. perceive new and unsuspected relationships: They can answer questions which seem unrelated to the story for example “can they live at your house?”. They come up with rationale and logic answer and connect that with setting and characters of the story.
3. establish a unique and improved order among seemingly unrelated factors: They can answer questions which seem unrelated to the story for example “can they live at your house?”. They answer the questions with more unique and personal answer which related to physical and emotional dimension (too big, not happy).

Meanwhile from what Observation, there are some initiatives and strategies which the teacher used, as follow:

Table 3.
Strategy used by Teacher for Q and A to Promote Critical and Creative Thinking
 (Source: Author)

No.	Activity	Strategy
1.	Pre	Prepare questions based on students’ levels
		Prepare short but meaningful questions

2.	While	Provide enough wait time
		Minimize language barrier, for example by providing vocabulary or high frequency words
		Repeat the questions or highlight important part
3.	Post	Review, wrap-up, and reflect together with the students for their enduring understanding

Based on the strategies in table above, it is important to make sure that teacher is aware of the right pedagogy to deliver the questions. It is because in the online setting, there are some variables which need teacher's consideration such as time, teacher and student relation, connection, interruption, and many more. To be able to maximally promote young learners' critical and creative thinking through questions, teacher should consider appropriate and effective strategy clearly and intentionally.

CONCLUSION

There are some highlights of this research related to critical-creative thinking for young learners and how to promote them in the online classroom using questioning method, as follow:

1. Young learners should be prepared to develop creative and critical thinking to prepare them for life.
2. Teachers needs to possess questioning skill which could trigger critical and creative thinking in young learners
3. Teachers need to come up with some questioning strategies which are suitable for students' levels and online learning context

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