

CRITICAL THINKING: FROM PSYCHOLOGICAL PERSPECTIVES TO PEDAGOGICAL PROSPECTIVES IN EFL TEACHING CONTEXTS

Gunadi Harry Sulistyo gunadi.hs@um.ac.id
Fakultas Sastra, Universitas Negeri Malang

ABSTRACT

Critical thinking is necessary and therefore it is considered to be an essential mental attribute that students must master. It was once a means that was needed to be learned in order for a nation at risk not to degrade intellectually. Now, the teaching of critical thinking skills has shifted in orientation from saving a nation from intellectual degradation to equipping students with necessary skills required to survive in the next millenium. English as a school subject can contribute significantly to the empowerment of students in facing the 21st Century with critical thinking skills. Pedagogical approaches fitting the characteristics of critical thinking skills are there available. If so, then it is the critical role of EFL teachers to harness their students with critical thinking skills – the fifth skills in language learning – through their innovative and creative teaching delivery that really matters.

Keywords: English, critical, learning, skills, thinking

Introduction

Recently critical thinking has become the hot topic among teachers in which they are supposed to incorporate elements of critical thinking in their teaching in the classroom. This urge has been compellingly triggered by a number of host factors. Life entering the 21st Century becomes more challenging than ever. In order for individuals not to go ‘bankrupt’ or become ‘losers’ living in the century, they need to be equipped with 21st Century skills, learning skills, literacy skills, and life skills, under one of which critical thinking is a part (Trilling, & Fadel, 2009; <https://k12.thoughtfullearning.com>).

In the perspective of this paper, it is argued that life is learning; that is, as far as

you are truly alive along with illustriousness, there is no choice: you must learn at all time. Learning takes place incessantly as long as we live: it is life-long. However, we are often times forced to make smart and decisive choices on a critical situation so as to avoid calamity in life as far as possible on one side and most favorably to achieve affirmative consequences on the other side. Life is then also decision making. It is in such a circumstance that we need to think critically prior to taking actions. Anyone with critical thinking always assures that they are fully capable of situating an issue, analyzing the issue, and evaluating it objectively avoiding biases before they make a final judgment and take actions (cf. Murawski, 2014). Simply, critical thinking is an essential and latent attribute that one needs to possess in their lives with self-respect in any walk of life. In this perspective, critical thinking constitutes a part of essential life skills (cf. McKay, 2019), let alone to enter the 21st Century. This paper aims at reviewing the nature on the concept of critical thinking, critical thinking skills, characteristics a critical thinker, critical thinking and EFL classrooms,

Critical Thinking: What is it?

Critical thinking actually constitutes a technical term commonly used in psychology. It comes along with other terms like creative skills, metacognitive skills, higher-order thinking skills and other related terms. Critical thinking is used to characterize a prime quality an individual supposed to attribute for majestic living. This very term has become blooming in response to the concern on the degradation of students' learning quality in the American context since 1983 in conjunction with the publication of *A Nation at Risk* reporting the young Americans being unable to possess intellectual skills, which since then has invited calls for teachers to teach their students to think critically (Willingham (2007). The term critical thinking is then not novel.

With reference to the term 'thinking' as its name indicates, psychologically critical thinking is a process involving the activity of our mind. As such, critical thinking is essentially a mental activity (Ruggiero, 2012:4). In a similar vein, Cottrell (2005:1) states that critical thinking is a cognitive activity which involves the use of the mind. As such, critical thinking is more covert rather than overt activities. We cannot see directly the critical thinking process happening inside our mind if it really happens; however, we can only infer the presence of such processes through overt physical activities reflecting

and indicating the existence of such critical thinking processes.

Critical thinking is a mental process involving careful thoughts that are performed intentionally (Sieck, undated) toward taking a position to an issue. When the process is in operation in response to an issue, a number of skills to think critically are actively utilized. The output of thinking critically is then used as a basis to make a decision what to accept as true, or what to do next. In line with this, Willingham (2007) argues that critical thinking embraces three important characteristics: reasoning, decision making, and problem solving. Critical thinking requires the use of reasons and empirical evidence to argue. The soundness of logical reasons and empirical evidence will constitute a strong basis to make decisions on what to accept as truth which will also determine what to do next.

Critical Thinking Skills

It is obvious now that critical thinking is a kind of intentional thought processes in which a number of thinking skills are involved in the processes. In terms of skills, Sieck (undated) lists a number of essential critical thinking skills. These are among other things not accepting a proposition directly as truth, considering an issue from a number of angles, considering the implications and consequences of holding a particular belief, utilizing reasons and evidence to back up propositions, and re-examining a perspective in the light of new data or information. Meanwhile, in a more general term, Scheffer & Rubenfeld (2001) characterize critical thinking into several critical thinking habits and critical thinking skills. To them, critical thinkers are those who habituate and are skilled in performing these activities: Analyzing, applying standards, discriminating, information seeking, logical reasoning, predicting, and transforming knowledge.

The quality of critical thinkers based on Scheffer & Rubenfeld (2001) can be elaborated further as follows. Critical thinkers analyze a case, situation, and/or a proposition in which they will break down the case, situation, and/or the proposition into smaller parts with the aim at identifying the aspects of the case, situation, and/or the proposition, the function, and the relationships. This way, critical thinkers try to learn 'the system' of the case, situation, and/or the proposition, the function, and the relationships as a whole as seen from its numerous facets. Not only this habit and capacity, critical thinkers also not only hold standards which they use as a reference but

also apply the standards to solve a problem. Simply, beside the ability to analyze a case, critical thinkers also apply standards based on their accurate and firm knowledge and understanding of the standards.

They make use of their knowledge and understanding on personal, professional, and social criteria to judge a case. Next, critical thinkers are those who can distinguish similarities and differences aspects in a case. They have the ability to categorize things into appropriate groups or classes. What is more, critical thinkers are able to put categories based on importance, prominence, and/or significance. They can rank or order things accurately based on categories. Critical thinkers are active information chasers. They do not just accept passively a proposition as a sole truth; they will make themselves become really informed by being vigorous in the hunt for pieces of information from a number of appropriate sources. They collect as much as possible relevant evidence, facts, and/or knowledge on a case. The other quality for critical thinkers is that they can reason logically. Equipped with adequate evidence, facts, and/or knowledge on a case, critical thinkers are able to make use of them as a basis on which to conclude or to make inferences of a case. The other important feature of critical thinkers is their ability to make predictions. They do not just predict blindly. Rather, they make use of their knowledge and understanding to predict the logical consequences of a case. Finally, anyone with critical thinking is the one who can transform their knowledge and understanding into a potential to make a situation or condition better. They can make changes; they make improvements; or, they make a difference based on their knowledge and understanding of a case. Critical thinkers are characterized with qualities that are operational to address not just academic, vocational, but also daily-life matters.

Similar to Scheffer & Rubenfeld (2001), in a more cyclical term Doyle (2019) lists features of critical thinkers within which particular thinking skills may be carried out. The difference however is that Doyle's features of critical thinkers are cyclical meaning that these stages take place recurrently as one cycle of the steps is accomplished. These stages are as follows: analyzing, communicating, creativity, being open minded, and problem solving. Several of these features are discussed in facets of critical thinking features set by Scheffer & Rubenfeld (2001) described previously like analyzing. Other important skills deemed essential for critical thinkers to be attributed to, according to Doyle (2019), is communicating, creativity, being open minded, and problem solving. A

critical thinker is the one who among other things can communicate their ideas effectively and efficiently, be they through spoken or written modes of verbal interactions. They are able to structure and express their ideas and opinions well based on valid and accurate data or information. They can explain an issue logically using sound evidence, knowledge, and information. More importantly, critical thinkers are the one who can raise important questions whose answers can contribute substantially to the refinement of concepts and the betterment of practice of performing things.

Creativity is the other important feature of critical thinking according to Doyle (2019). By being creative, critical thinkers with their curiosity are flexible in their cognitive capacities, thus allowing them to see an issue from a number of important and different angles. They do not base their view from a mere single perspective. They are able to connect ideas from these different angles, then to synthesize the ideas that come up, and to make relevant inferences out of the data from different perspectives so as to establish a conceptual framework as a basis for them to hold a belief or an attitude and to act appropriately with respect to an issue. This feature of creativity necessitates that a critical thinker is curious, imaginative, and visionary in nature.

In addition to being creative, critical thinkers are open-minded. By being open-minded, critical thinkers are able to identify and evaluate objectively assumptions underlying a proposition. They are also not partial in terms of looking at contrasting sides and in those terms of comprising ideas of different angles or perspectives. Thus, critical thinkers are inclusive, not exclusive and are fair not irrational in assessing incoming opinions.

Finally, critical thinkers are essentially efficient problem solvers. By being problem solvers, it implies that critical thinkers can situate well an issue with all possible aspects in the issue. With this, as problem solvers, critical thinkers' solution to a problem or an issue is deeply grounded in the issue. In addition, critical thinkers not just recognize the standards together with their details but also apply the standards as a solution to a problem. So, the measures taken by critical thinkers to solve a problem are standard-based, be they conceptually, theoretically, or normatively. Also, with their creativity, critical thinkers are innovative problem solvers to a problem by using strategies unknown or not performed by others.

Critical thinking is the same as higher-order thinking (OU, 2008). This is true with respect to cognitive domains of thinking skills as proposed by Bloom (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, Pintrich, Raths, & Wittrock, 2001). With reference to this taxonomy, critical thinking embraces the cognitive domain in the levels of application, analysis, evaluation, and creation beyond remembering and understanding placed as lower-order thinking skills. Critical thinkers not only utilize their lower thinking capacities. Beyond these, they also systematically apply what they know and understand, analyze their knowledge and understanding, making necessary evaluation on their knowledge and understanding, and ultimately proposing an innovative and creative solution to a problem.

In terms of its use, critical thinking is generic which is applicable to many different aspects of life. McKay, (2019) lists a number of professions which require the use of critical thinking skills such as a judge, doctor, anthropologist, dietician, and a teacher as argued by Lau (2011). However, critical thinking is always specific to a particular domain (Martin, 2017). This implies that if someone is able to deal with matters in their expertise with critical thinking processes effectively, this ability does not make them automatically able to think critically that will be similarly successful in tackling challenges in other domains. This is related to the argument that critical thinking can constitute a part of metacognition (Magno, 2010) which is thinking about thinking (Livingstone, 1994). Metacognitive skills are essentially one's possession of higher-order thinking skills, and these skills can cut across different domains and are applicable in any particular domain (Willingham, 2007; Martin, 2017). Without adequate background knowledge and practice in a particular context, the functionality of one's critical thinking skills may not be deployable successfully (Willingham, 2007). For example, we may not be able to think critically on an issue on young English learners' accuracy in producing language if we do not have sufficient knowledge of English for your learners. Sieck (undated) argues that adequate mastery of knowledge on a particular theme contributes significantly to the production of the quality of critical thoughts in that issue.

What is Not Critical Thinking?

Based on the discussion on areas of critical thinking described in the previous

section, critical thinking highlights several essential features. However, there exist several misconceptions on the ideas of what critical thinking is. The section that follows discusses several points on What is NOT critical thinking.

As has been discussed previously, while they are closely linked, critical thinking is not a metacognition. Metacognitive skills are higher-level cognitive skills that involve thinking about thinking. As Martin (2017) argues, metacognitive skills and critical thinking skills share a number of characteristics. However, all of the characteristics of critical thinking shape the characteristics that define metacognition. The difference however lies in the function that having metacognitive skills means having the ability to think critically across different domains; meanwhile, having critical thinking skills is domain specific. Magno (2010) reveals that metacognitive skills play a significant role in the functioning of critical thinking skills.

Critical thinking is not inborn capacities. Cottrell (2005:2) argues that thinking critically is neither natural traits nor innate capabilities. They are hard to learn. However, they are learnable, and therefore, are teachable (van Gerlder, 2005). By analogy, we can learn individual languages as the first, second, third, and soon due to the capacity inherited biologically in us to learn any languages, the so-called Language Acquisition Devices (LAD) as proposed by Chomsky (Kennison, 2013). However, LAD is not a language-specific learning tool. It contains universal grammar which will be activated when language learning takes place at a particular speech community. Individual languages are learned and sharpened in such a particular social context. So are critical thinking skills. These are context-specific the function of which is dependent on the knowledge of specific domain areas.

Learning a lot may imply knowing a lot. However, accumulation of knowledge is different from critical thinking (Lau, 2011). A critical thinker is not a knowledgeable person, or a well-informed individual of subjects or a subject. Knowing in Bloom's taxonomy ladder is just the basic requirement for somebody to apply the knowledge, to predict consequences in holding and using what they know, and to utilize their knowledge creatively to solve problems to make them think critically.

In addition to that, it is true that the root of the term 'critical' is the same as that of the term 'criticize'. However, being critical in thinking is not automatically the same as

criticizing others' ideas as it is commonly used in arguments. Being critical is not being argumentative. While being argumentative means having elements of persuading, compelling, and convincing (Webster, 2019), using critical thinking, as Lau (2011) argues, can be a useful tool to show mistaken beliefs and inappropriate logic. Critical thinking is also a useful tool to identify the logic behind in an insufficient argument (OU, 2008:12). More importantly, critical thinking skills have positive values in a number of important ways such as facilitation to knowledge learning, improvement of concepts, and reinforcement of our arguments.

Finally, Lau (2011) argues that it is commonly believed that critical thinking impedes the development of creative minds as being creative has a common connotation of breaking rules of logic. This idea is incorrect. Critical thinking accords creative minds – a thinking habit which is beyond the common one, thinking "out-of-the-box". Critical thinking challenges a common belief which may also have roads unpopularly taken by others.

What Characterizes a Critical Thinker?

As has been discussed previously, the existing body of literature on the characteristics of critical thinkers offers a number of essential measures. Other sources also describe similar characteristics of a thinker to be called critical. For instance, Patel (2018) synthesizes 16 characteristics of critical thinkers. Critical thinkers are those who are observant, curious, objective, introspective, analytical in thinking, able to identify biases, determinative in dealing with relevance, able to make inferences, compassionate and emphatic, humble, willing to defy the existing state of affairs, open minded, aware of common erroneous thoughts, resourcefully creative in thinking, effective in verbal communication, and vigorous in listening. Meanwhile, Wallen (undated) lists 10 indicators for somebody with critical thinking. Anyone with critical thinking is those who exercise among other things these conducts: collecting information from a wide variety of data sources, getting along rationally with people who disagree, willing to change own minds if wrong, get irritated with people who attack personal grounds, evolving as a person every single day, fascinated by how things work, possessing creative, innovative, original ideas, over-analyzing issues that only require a simple solution, expecting too much of yourself, and do too much thinking, and not enough doing. All the conditions for

anyone to have critical thinking described previously show that critical thinkers are positive in attitude.

Critical Thinking and EFL Classrooms

Unlike metacognitive skills that are generic essentially, that is they are not domain-specific, critical thinking skills are on the other hand domain-specific. English as Foreign Language (EFL) may be considered to be domain-specific. The distinctiveness of English as Foreign Language (EFL) is observable in a number of aspects that follow. In the first place, English as Foreign Language (EFL) deals with language which is necessarily English. Language aspects in conventional terms, be they language components comprising grammar, vocabulary, and pronunciation, and language skills covering listening, speaking, reading, and writing, differ essentially from other subject matters, for instance history or civics. However, it is argued that critical thinking skills will be most relevant to be applied to the learning of language skills in the language class: listening, speaking, reading, and writing individually or in integration, for example, in which the orientation of learning English is emphasized in meaning rather than form of language.

The ideas in critical thinking are compatible with the principles of several teaching approaches, three of which are obvious. The learning of English that emphasizes meaning negotiation is obvious in the Communicative Language Teaching Approach (CLT) (Richards, 2006), Contextual Teaching and Learning (CTL) (Sears, 2003; Hudson and Whisler, 2008). In the national context, the so-called Scientific Approach (Permendikbud 22 Tahun 2016), albeit disagreement on the terminology, its applicability to teaching learning context, and incongruence with the international term (Sukoco, 2017), also goes parallel with the ideas expressed in the teaching based on critical thinking. For instance, in the Communicative Language Teaching Approach (CLT), the principles that embrace among others these: audience, authenticity, context of social use, integration of skills, meaning focus, and production (Sulistyo, 2015) are compatible with the ideas articulated in critical thinking. Similarly, the seven principles associated with Contextual Teaching and Learning (CTL) that cover constructivism, inquiry, questioning, learning community, modelling, reflection, and authentic assessment (Muslich, 2011: 44) are also in congruence with critical thinking application. Steps in the so-called Scientific

Approach (Permendikbud 22 Tahun 2016) that cover these activities: observing, questioning, experimenting, associating, and communicating, are also fitting in the principles of critical thinking. These three approaches to EFL teaching focus on not only language skills in isolation or in integration but also meaning. These two important features: language skills and meaning pedagogically imply the need of particular themes that will allow the learning of language skills: listening, speaking, reading, and writing through meaningful learning to take place in the classroom. This current learning practice is desirable for the optimum mastery of not just communication skills but also critical thinking skills.

The integration of language skills, meaning, and critical thinking in the post truth era (for instance Keyes, 2004) is highly relevant. If this is the case, then critical thinking skills may be considered as the important fifth language skill that needs to be nurtured to students. So, while equipping the students with functional language skills - listening, speaking, reading, and writing – on one side, integrating components of critical thinking skills in language classes, including English is highly desirable. Angeli & Valanides (2009) provided empirical evidence from their experiment students learned critical thinking skills most readily learned when these skills are embedded in a specific subject through the so-called the infusion method. A similar finding is also observed in studies reviewed by Tiruneh, Verburgh, & Elen (2013) in which the learning of critical thinking skills was evident in academic disciplines.

Empirical Evidence of the Merits of Critical Thinking Skills in Classrooms

It is obvious from the discussion on the construct of critical thinking skills presented in the previous section than critical thinking skills are pedagogically teachable. Several studies reveal the effectiveness of English classroom practice incorporating critical thinking. A study by Devi,

Musthafa, & Gustine (2015) showed that, for vocational school students, cooperative learning was found to facilitate students' critical thinking. In addition, the learning model improved student's critical thinking in reading in which the subjects of their study were encouraged in student-student interaction, provided with group purposes, and facilitated with stimulus so they developed their thought and ideas. Also another study by Stefanova, Bobkina, & Pérez, (2017) revealed that the teaching model on the

combination of reader-centered critical reading and critical literacy pedagogy with critical thinking was highly effective particularly in terms of self-reflection with EFL learners. In addition, students were intrinsically motivated in learning activities on current social issues.

Also, a study by El Soufi and See (2019) discovered that explicit instruction with general critical thinking skills was evidenced to be most effective in augmenting the critical thinking skills of English language learners in higher education context. These studies are just samples to show that critical thinking skills are teachable to students of different levels of education, be they abroad and domestic. Nevertheless, intricacies in developing an instructional model within which critical thinking practices are deployed need to be emphasized in further studies as the instructional syntax of the teaching strategies used in studies will constitute the clarity on how critical thinking may be teachable to students.

Projections of Critical Thinking onto Language Classrooms

It has been demonstrated previously that critical thinking is teachable in the classroom.

Although previous studies reveal positive sides of the incorporation of critical thinking elements in the language classroom, still pedagogical concerns that need exercising by EFL teachers and researchers in EFL context alike for classroom practices is designing workable yet effective learning strategies. Approaches to teaching as discussed previously - the Communicative Language Teaching Approach (CLT) (Richards, 2006), Contextual Teaching and Learning (CTL) (Sears, 2003; Hudson and Whisler, 2008), and the so-called Scientific Approach (Permendikbud 22 Tahun 2016) – have provided EFL teachers and researchers with open and conceptual corridors within which EFL teachers and researchers in EFL context can experiment with appropriate teaching strategies which are plenty in number, let alone in the digital era where digitalization of delivery strategies are open wider.

In the teaching sphere, for instance, the use of a teaching strategy based on KWHLAQ is advisable. KWHLAQ is an extension form of the widespread KWL strategy. KWHLAQ is an abbreviation of K – What students have already KNOWN about a topic, W – WHAT students want to learn, H – HOW they will find the information they want to learn, L – What students have LEARNED about the topic after

performing actions, A – How will students APPLY the knowledge they have learned, and Q – What QUESTIONS they still have or have thought of as a result of the learning exercise (Groupmap, undated). KWL is the traditional KWL (What do I Know, What do I Want to know and what have I Learned) (Langwitches, undated). To perform such a strategy involving a KWHLAQ chart, a theme needs to be set up, which is compatibly in congruence with the theme-based learning (Brinton, Snow, & Wesche, 2003) and the so-called CLIL (Dale, & Tanner, 2012). In this teaching strategy, students learn not only language skills, content, but also critical thinking. When properly designed, this strategy also introduces students to the development of affection in learning English such as responsibility, time management, and other affective values.

A simple example of a theme that may be used with KWHLAQ for the lower or upper level of education is ‘kite’. The teaching strategy in performing the KWHLAQ strategy may be performed in steps as follows. With the step on the letter ‘K’ - knowledge, the teacher may start the session by showing a picture of a kite. Following the picture display, the teacher raises questions regarding the picture to first check students’ understanding about the picture. Following this, then the students are asked their personal previous experiences pertaining to kites. These questions are raised to address what students already know about kites. They may work individually, in pairs, or in groups. In the next step on ‘W’, the teacher stimulates students to raise their inquisitiveness about kites. This section is intended to gauge what students want to know about kites – that is the information about kites unknown to the students. This stage is very critical as the success of the next phase will depend on the success the teachers engage students to raise questions in this stage. A number of questions are normally raised. The teacher can facilitate students to classify the questions based on a particular category. Or, the students are asked to discuss in class to prioritize the questions they really think is important. When this critical stage is done, students are asked to work in groups of probably maximum 5 students in each group. The next phase – the H stage – requires the students to discuss their plan which is their way to answer the question(s) chosen to be answered. They need to consider data sources and instruments they need to collect information.

When the planning is accomplished, the students begin to act to collect information with respect to the questions they raise. When they finished collecting the information needed,

the class comes to the next stage – the L stage. This is the step in which the students basically report the answer to the questions they have prompted whether they learn anything from their activities to collect relevant data in conjunction to the answer to the question(s) they hold. In the next step – the A step – the students are challenged to apply if any what they learn from the step L. In the final stage, the Q step, the students are to reflect areas they have not satisfactorily met, and probably their next plan to accomplish areas not yet covered.

What follows are typical questions the teacher may raise in each step:

No	Stage	Teachers' Typical Questions
1	K	What picture is it? What can you see in the display? How do you know it? Do you have experiences with this? Was it good? Etc.
2	W	What do you want to know more about it? What do you not know about it yet? What is not known about it? What is most important about it you want to know? Etc.
3	H	What will you do to know more about it? How will you plan to know more about it? What is your plan to discover more about it? Etc.
4	L	What do you learn from your observation? What does the source tell you about it? What information do you get from the interview with the expert? What internet sources do they tell you? Etc.

- 5 A Based on your understanding, what possibly will you do with it?
 What is your future plan to do about it?
 Is there anything you will do about it in the near future? Etc.
- 6 Q What do you learn from our activity?
 What parts do you feel you are not yet satisfied? What do you
 want to know further about?
 Have you got satisfactory answers to your inquiry/question?
 Etc.

A key to success in implementing classroom activities that engage students actively and intelligently in critical thinking lies in an important role of a teacher to facilitate students' learning. A way to do this is by providing students with a guideline on which to accomplish the task systematically. It should be obvious from the start that the task is authentic tasks (cf. Nunan, 2001), that is the tasks that require students to perform real life activities as they happen in response to answering they raise. With such a kind of authentic tasks, teachers hand over the responsibility to their students. With the authentic tasks at hand, students now assume the responsibility to accomplish the task.

A simple guideline to deloping authentic tasks deals with these points what and how:

No	Wh- and Hw -	Description
1	What to do	The task should clealy outline the activities that students should perform, for instance: <ul style="list-style-type: none"> • You will need to do neighborhood walk • You will need to interview an expert • You will observe out side the classroom Etc.
2	How to do it	Specific tasks outline the procedures to do them: <ul style="list-style-type: none"> • Work in pairs please • Please go out side the classroom • Make an observation please

		<ul style="list-style-type: none">• Take pictures if necessary. Etc.
3	How long	<p>The tasks have time constraints that limit students to accomplish the tasks</p> <ul style="list-style-type: none">• To do it, you are given 15 minutes• The time to do the activities is 10 minutes• You will work on the task no more than 15 minutes Etc.
4	What to submit	<p>The task should clearly define the product that students must hand in, for example</p> <ul style="list-style-type: none">• Please write it in a written report.• You will need to present your results in a ppt presentation Etc.
5	How and when to submit	<p>The task should clearly specify the form of the product to hand in and the time to do it</p> <ul style="list-style-type: none">• The report consists of three parts: planning, data collection, results• The ppt presentation is for about 10 minutes• Your report should be handed in no later than Friday 10, at 10.00. <p>Etc.</p>

In a multiple-choice format of assessment, the one that is still dominant in testing practices, it is also possible to develop items assessing critical thinking. There are a number of testing orientations that can be used to assess students' critical thinking particularly in reading comprehension. For instance, an item is developed to assess students' critical thinking in analyzing arguments or propositions. Students are given a situation or, one or two propositions. They are then to identify in the options that challenge the students several reading skills: to infer the conclusion of the arguments/propositions, provide reasons to support the arguments/propositions, or to provide reasons not to support the arguments/propositions. In such a test item, the

stimulus is in the form of situations or propositions. Of the options, there are three different items in this example, the students select the answer that infers the argument, supports the argument, and does not support the argument. In other examples, the stimulus of the item may be in the form of a case described in the paragraph form, or the item may be in the form of a table, chart, or a graph.

Another example of a case in which a multiple format is used is the so-called 'considering trustworthiness'. Students are provided with a stem containing arguments, labels, advertisements, or results of experiments and their interpretation, students determine the parts that are considered trustworthy/not trustworthy, and provide the reasons. Or, students may also be posed to a case in which students determine the assumption underlying the statement given with several options implicitly containing underlying possible assumptions. There are many other techniques in the multiple-choice format that may be usable to assess students' higher order thinking skills.

Concluding remarks

Critical thinking has been considered to be a thinking tool that will equip us with skepticism and suspicion upon responding to propositions. Similarly, the tool also will provide us with careful thoughts on building up our propositions. Critical thinkers are not those who are argumentative; nor are they who criticize others. Critical thinkers are necessarily analytical, quick-witted, imaginative, and creative.

Critical thinking is not innate; nor is it a general capacity. To be critical thinkers, critical thinking skills which are naturally teachable need to be learned through practice in a specific domain. In EFL context, there are teaching approaches that can serve as a medium for students to learn critical thinking skills. The basic principle in the teaching strategies adopting recent approaches to EFL instruction is problem posing and solution offering in which meaning and language skills are integrated and emphasized. When traced back further, these teaching strategies essentially follow the scientific procedures of conducting inquiries.

Do we have all these elements of critical thinking in our national curriculum? The answer is positive. As a normative document, to some extent, our national curriculum formally outlines competence in English associated with critical thinking

elements as seen in the level three of cognitive processes. In addition to that, formally a number of learning strategies are available like performance, project-based, task-based, experiential learning, portfolio, and extended response, which are commonly put in the authentic assessment region.

There is call for empirical studies and creative designs on instructional delivery strategies by practitioners – teachers – that really suit best their classroom context. Make a try although it will be erroneous. It is better to make errors than do nothing. Then, share the best practice.

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