

Becoming Critical Thinkers: A Narrative Inquiry of Indonesian EFL Lecturers

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Abstract: *The study elaborates of becoming critical thinkers and some factors shaping the process. The study also discusses the strategies the critical thinkers used in processing information or knowledge to be analyzed and evaluated and illuminates of how to maintain having critical thinking skills. Narrative research design was implemented by interviewing some ELT lecturers than have been purposefully as critical thinkers. The finding shows that to become a critical thinker is not an instant process. There is a long process and routine attitude that should be well established such as reading a lot of qualified books, join debates, reflecting the current issues stated in journals, attending and contributing ideas in a group discussion, questioning the issue in seminars and conferences, proposing why and how questions, publishing ideas in articles, conducting action research, sharing ideas with people the same fields both formal and informal situation. Regularly doing those activities maintain their critical thinking as well. This study suggests that critical thinking can be developed by anyone differently through the long process by optimizing reading habit, social interaction activity, and conducting research.*

Keywords: *critical thinking, narrative inquiry, becoming a critical thinker*

Introduction

Thinking critically or critical thinking has been considered as a pivotal aspect of educational outcome (Alagozlu, 2007; Fliegel and Holland, 2013; Gul et al. & McGrath et al., 2014; Hillocks, 2010; Lai, 2011; Mulnix, 2012; Vyncke, 2012). Critical thinking is an indispensable indicator of being educated people. The ability to evaluate and deliver reasons to issues is the important aspect of critical thinking that is needed to interact to people in any aspect of life. It signals that the ability to think critically should be developed by those who want to participate actively and successfully in life.

The study of critical thinking has become majority in three disciplines; (1) philosophy, (2) psychology, (3) education (Lai, 2011). However, the philosophical tradition and psychological tradition occur in education. The process of constructing critical thinking is built in educational institution. The philosophical tradition initiated the foundation of critical thinking.

It was started by the Sophists in the fifth century BE. At that time, education has purpose to create a popular public image for their students that would be lead them to status and power (Ornstein & Levine, 2008 p.67). To reach to the power, the sophists believed that it should be reached by having the ability of effective speaking. The Sophists are well known with Socrates (469-399 BCE), Plato (427-346 BCE), and Aristotle (384-322 BCE).

The Psychological tradition or the cognitive psychological approach which focuses on how people actually think and proceed the information (Lai, 2011). In short this tradition believes that critical thinking is internally process. The third one is educational tradition, a critical thinking debates whether it should be taught implicitly or explicitly. The educational tradition put ideas that there is a need to teach critical thinking to students since basic education. Educational process should not only transfer knowledge, but also the ability to evaluate knowledge of what have been studied is important to do. The ability of raising how and why questions should be trained to students to challenge their critical thinking. In this case, teaching critical thinking presupposes teachers to be critical thinkers first before they teach their students.

The Bloom's Taxonomy of educational objectives (1956) has driven pedagogy for more than half century. The learning process is listed from the low level up to high level: knowledge, comprehension, application, analysis, synthesis, and evaluation. The highest level of thinking in Bloom's taxonomy is evaluation, and a major component of critical thinking involves examining internal evidence for logical consistency (Durrone, 2006). To this extant, critical thinking is a matter of level; lower order thinking and higher order thinking.

The three schools of thought above agree that critical thinking includes skills, disposition, and background knowledge (Lai, 2011). The critical thinking skills cover analyzing arguments, making inferences using inductive or deductive reasoning, judging or evaluating, making decision or solving problems, asking & answering questions for clarification. The disposition covers open and fair-mindedness, inquisitiveness, flexibility, a propensity to seek reason, a desire to be well-informed, and a respect for and willingness to entertain diverse viewpoint. The background knowledge is necessary but not a sufficient condition for enabling critical thought within a given subject.

A lot of research has been conducted to measure the effectiveness of critical thinking, finding the formula of teaching critical thinking, questioning whether CT should be taught explicitly or implicitly. Instruction that compels critical thought can be done either of two ways: imbedded (implicit) instruction with critical thinking skills woven into the content matter, or explicit instruction with lessons designed specifically to provide guidance in specific critical thinking skills, (Marin & Halpern, 2011).

Many scholars in the field of ELT have been established research on the contribution CT to the improvement of students' English skill. Unfortunately, the research of how successful scholars (academic successful) build their affective domain--attitude, values, disposition--(critical thinking), and ethical perspectives. How the students construct their reflection in the process of commenting, ideas, and belief is important to investigate. Investigating strategies of critical thinkers develop their critical thinking is important to conduct. The success story of becoming critical thinkers will contribute to the probably new framework of teaching critical thinking or support what has been done by researchers. The study contributes to body of knowledge in term of: Perspective of building critical thinking (analyzing, evaluating, questioning, etc. to certain knowledge or information, the framework of teaching critical thinking to students. Therefore, the questions of this study comprise into three as follow.

1. How do ELT lecturers construct themselves as critical thinkers and what factors shape the construction?
2. How do they proceed information or knowledge to be analyzed and evaluated?
3. How do they maintain having critical thinking skills?

Definition of Critical Thinking

A critical thinking can be defined from many perspectives since it deals with one's abstract ability. Critical Thinking is a multidimensional concept that can be viewed as a tool, set of skills, process or outcome (Cassum et al., 2013; Moore, 2011). However, critical thinking is generally considered a subset of the reflective process that helps individuals make sound of judgments because it involves analyzing information and figuring out the information to come up with conclusions using the dimension of critical thinking: skills, disposition, and background knowledge (Bloom, 1956; Daly, 1998; Duron, 2006; Lai, 2011; Mulnix 2012). Critical thinking accompanies the people to identify other point of views and check the validity of others as disciplined, self-directed thinking (Facione, 1990; Paul, 1992). Similarly, critical thinking is useful to analyze complex data, evaluate situations and actions, and implement the most appropriate actions (Gul et al., 2014). Hence, it is a much to have critical thinking ability for effective problem solving and decision making in all walks of life—social including education, clinical, ethical, managerial, or political (Simpson and Courtney, 2002).

The definition above indicates that critical thinking needs intellectual resources that shape people to be a critical thinker. There should be a long process to have such kind of ability. To this extent, Bailin et al. (1999) identifies the intellectual resources to support competence of critical thinking which comprises into five foundation supports; (1) background knowledge, (2) knowledge of critical thinking standards, (3) possession of critical concepts, (4) knowledge of strategies or heuristics useful in thinking critically, and finally (5) certain habits of mind. Following the five foundations from Bailin et al. can be a basis to measure a critical thinking ability.

Indicators of Critical Thinkers

The learning process should be able to evaluate the progress of learners using some indicators. The same think occurs in a critical thinking ability. To be able to judge people as critical thinkers or not, there should be identification from the definition of critical thinking, then formulate them into indicators. Therefore, following the definition of a critical thinking stated above, the indicators of critical thinking can be articulated as follow.

- able to interpret information--categorization, decoding, clarification meaning
- able to analyze—scrutinize ideas, identify argument, analyze argument
- able to evaluate—evaluate claim (statement), evaluate argument
- able to make inference—question claim, think alternative solution, make conclusion, solve problem, make decision
- self-regulation---self reflection
- able to explain something—state problems, state results, state the correct procedures, express argument (Bailin et al., 1999; Facione,1990; Mulnix, 2012; Paul, 1992).

METHOD

Design

In pursuit of a better understanding of the experienced of becoming a critical thinker, I employed narrative inquiry design by interviewing some lecturers in Indonesia. Narrative inquiry is appropriate to collect data from people' narrative to tell about past experience. This study was completed over four months from January to April 2015 in nine stages of research activities—preparing the interview questions, contacting (text/ email/ meet) the participants to make an appointment, interviewing the participants (offline interview, online (Skype) interview, question interview), transcribing the records, comparing the result, coding the result, analyzing, discussing, and writing a report.

The depth interview was used to the targeted participants after contacting them comprising nine questions. The interview itself has been done through two kinds of interviews (1) off-line interview-direct interview or face to face, (2) on-line interview through answering questions using Facebook (one of the social media) and using Skype. The duration of the interview lasted for 20 up to 30 minutes.

Participants

I selected ELT lecturers considered as critical thinkers with two considerations; their reputable lecturers who involve and active in international publications, and their accessibility to be involved in this study. Since so many ELT lecturers can be considered as a critical thinker, this study is impossible to ask them as participants. Therefore, I investigated lecturers who have been considered as productive lecturers in publishing their writing published in international reputable journal, in this case I obtained three lecturers, and only two lecturers were willing to be

a participant. Another lecturer concerns with critical thinking as his research topic and once wrote a book on a critical thinking activity for university students. The other two participants are those who have participated in the formal training for a critical thinking and have been considered a critical thinker in their university by having good position and have also wrote articles published international level, and being presenters nationally.

The lecturers varied in their teaching experience. From the five lecturers, they are four male lecturers and one female one. As I mentioned before, they were selected based on their ability in publishing their scientific writings, such as journal publication, book chapters, doing research, and becoming presenters of scientific meeting, and their accessibility. They are Awang, Joni, Didik, Edo, and Tyas (pseudonyms), henceforth participant 1, participant 2, participant 3, and participant 4 . They were considered to be the participants due to the empirical facts that showing their critical thinking ability.

RESULT

Construction of Critical Thinkers and Factors Shaping the Construction: Three Big Themes

Awang, Joni, Didik, Edo, and Tyas (pseudonyms) are working in English Department in different universities in Indonesia. Each is portraying the construction and factors shaping their critical thinking which is categorized into three themes (reading a lot, involving in social interaction, and conducting research).

Theme I: Improving Reading Habit and Reading a Lot

Awang is a young lecturer, and at the time of interview he is writing his dissertation in one of universities in overseas. When I interviewed him in his house, he was very enthusiastic in answering my questions. He explained that the construction and factors of being a critical thinker by reading qualified texts and always curious to know further about the message behind the text by always questioning the validity and trustworthy of the given information.

I will emphasize that a critical thinking is not an instant process. This is a long process. A critical thinking should be constructed by reading qualified texts and always curious to know further by questioning the truth of the information stated in the texts. Becoming a critical thinker, I read a lot. What I like from reading is communicating with the authors. I am not a passive reader. I always question the truth of the information.

The same thing happened to Joni, Didik, Edo, and Tyas. They mention that critical thinkers should be sensitive to the trustworthy of information, not accepting any information got. Reading a lot is a must to store information in our mind, and do not forget of being open-minded

to different perspective, but still keep questioning when reading and to contextualized to Indonesian context.

Becoming critical thinker has to be sensitive to the trustworthy of information, not accepting any information we get. To construct a critical thinking, reading a lot is a must to store information in our mind. Critical thinking should be developed through reading a lot of information from different sources and being open-minded to different perspectives. And we should keep questioning what we are reading and contextualizing with the situation.

The reading activities done by the participants simply place emphasis on the ability to question what is read. Questioning could be derived from the validity of the information and the context of the ideas stated in texts. As mentioned by the participant, being open-minded to different perspective while reading will construct the ability to think critically. The answer listed above can be simplified as in figure 1.

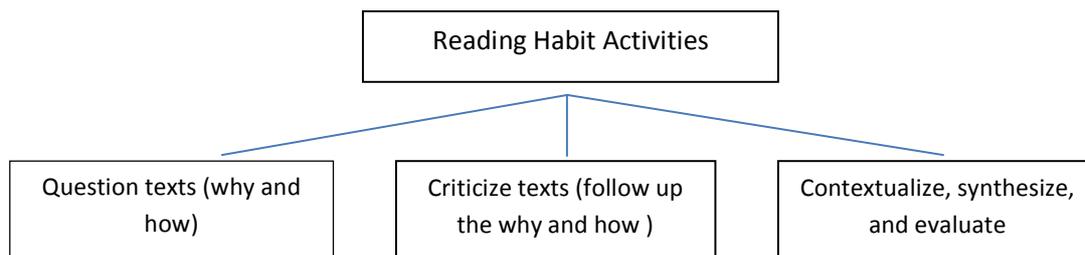


Figure 1. reading habit activities as a factor of shaping and constructing a critical thinker.

Theme II: Involve actively in Social Interaction

Besides reading a lot from various texts, involving in social interaction (formal and informal meeting) contributes to the construction of being a critical thinker. Table 1 resumes the participants' (Awang, Joni, and Edo) voice concerning the construction of a critical thinking ability which is related to the social interaction.

Table 1 Social Interaction activity

The Participants	Participant's voice on Social Interaction
Awang	I usually interact with people who can provide sufficient knowledge. I was active in the interaction with people in organization in my campus and outside campus. I used to participate in debate competition.

Joni	I like to participate in a group discussion either formal or non-formal. Non formal activities such as having light discussion while break in routine activities. The other interaction I attend in seminars, conferences in which I can exchange information. In the interaction, I should be open to others.
Edo	There are myriad factors in the construction of critical thinking. Knowledge (perspectives) and experience (social participation) are two key factors, which shape the way we think critically. If you are always open-minded to different perspectives, you will learn a lot and can think of different worlds critically.

The voice as shown in table 1 put emphasis that the participants involve in social interaction activity. Sharing ideas (proposing and accepting or might be rejecting ideas) commonly happens in the social interaction. This activity will improve the disposition of people to become more a critical thinker. As Edo highlights that If you are always open-minded to different perspectives, you will learn a lot and can think of different worlds critically. The detail can be seen in figure 2.

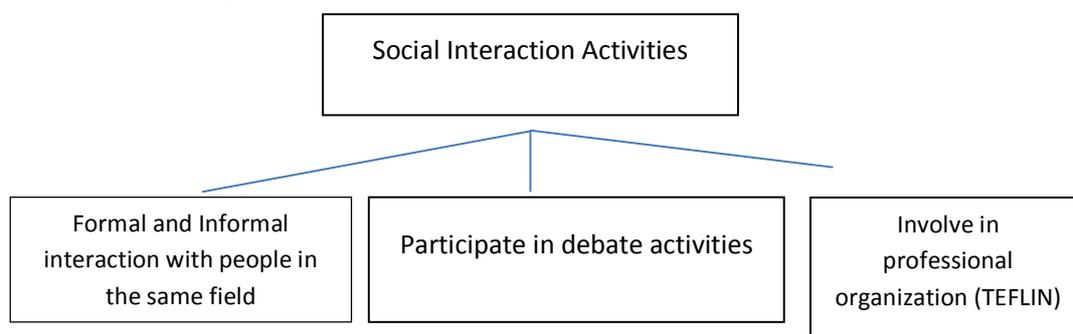


Figure 2. social interaction activities in shaping a critical thinking activity.

Theme III: Conducting Research

Conducting research means doing a scientific work. This activity is solving problem using research methodology systematically. Tyas as one of the participants highlights the important of doing research in shaping her critical thinking. She told me about it as follow.

I love journaling, publishing articles, and conducting action research. Those activities help me to be a critical thinker. Journal is not reading a lot, but it is writing a lot.

This is true that conducting research should be based on the journaling activities (reading and writing for journal publication) as a basis of finding the discrepancy of the current status of related field to fill the gaps. The activity of conducting research should be done not only on the process of doing research but also be disseminate to others. The detail can be seen from figure 3.

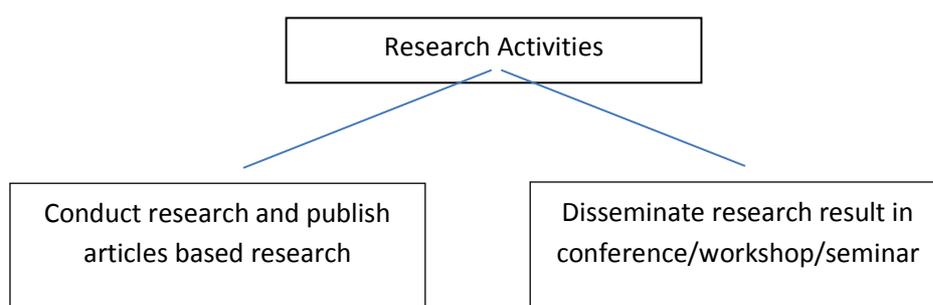


Figure 3. research activities for shaping a critical thinking ability.

Analyzing and Evaluating the Issue

A critical thinker should be able to analyze and evaluate issues from one perspective that is viewed correct. The following is the answer of the participants in answering the questions related to the information process of knowledge to be analyzed and evaluated by people. Table 2 provides the answers from the participants.

Table 2. Ways of Analyzing and Evaluating the Issue

The Participants	Analyzing and Evaluating the Issue
Awang	Information should be seen from many perspectives. To evaluate any information I obtained, I need to have genuine of reasoning, and most important is be honest. Without honesty, it is impossible to see the appropriate answer.
Joni	What I need to do when evaluating information is that I need to check and recheck the information by investigating some evidence that support the information by optimizing the critical questions (why and how questions).
Didik	To evaluate knowledge, I need to see from many angles. I normally choose one convinces me. If it convinces me, therefore it will be my decision.

	Agreement and disagreement have a lot do with how much I value a particular perspective. Both should be viewed as a continuum.
Edo	
	Analyzing issue is part of being reflective, especially because the word issues itself is difficult to understand especially when you want to contextualize.
Tyas	

Maintaining Critical Thinking

Table 3 summarizes the lecturers' activities to maintain their critical thinking. This issue is important to know since many people tend to decrease their ability in thinking due to the grow-up. Knowing the activities of what ELT lecturers have done in developing and maintaining their critical thinking will provide insights for students to do at least the same thing as they have been done. It is encouraging to note that reading activities still to be the dominant activities in maintaining a critical thinking ability.

Table 3. Activities of Maintaining Critical Thinking

The Participants	Activities of Maintaining Critical Thinkig
Awang	To maintain CT, obtained good input such as watching valuable TV program (e.g. talk show), read qualified books such as Derida and Micheal Foucoult who proposed the deconstruction of knowledge.
Joni	I read, I keep doing research project, and write for publication.
Didik	By doing research, by writing, find information, try to process not to receive but think critically, convincing, expression
Edo	Always make sense of worlds from different perspectives and be open-minded to different perspectives.
Tyas	I write journal articles and book chapter, and conduct research.

Discussion

Overall, the results of this study show that the construction of being a critical thinker is done in various aspects. And it agrees that reading activities becomes the most predominant

factors of shaping a critical thinker. As Mulnix (2012) states that critical thinking is the same as thinking rationally or reasoning well. In order to reason well, a thinker must be able to give reasons for what she believes, and these reasons must actually support the truth of the statement or belief they are claimed to support. The basic foundation of doing that is having sufficient information obtained from the reading activities.

Therefore, the level of thinking as stated by Bloom (1956) with his taxonomy which provides level of thinking (lower order thinking and higher order thinking) underlines the need to master the lower critical thinking before going to higher thinking ability. It seems that it is impossible to a critical thinker without passing an adequate comprehension of information being discussed. In addition to that, there is a need to have deliberate practice of in the arena of critical thinking (Mulnix, 2012). It is correct what has been stated by Joni and Didik that it is crucial to always ask the validity of the information and develop awareness of synthesizing and evaluating many sources.

The reading process of being demands to question texts by using why and how questions. Besides that criticizing texts as the follow up questions of why and how need to be developed by readers. And what is more important of being a critical is contextualize, synthesize, and evaluate the information obtained. These findings coupled with the results from some previous studies (e.g., Craig & Page, 1981; Wink, 1993) affirm that educators need to improve their questioning skills. Formal training and coaching sessions can help them improve these skills. Though the level of questions has to be appropriate with the learners' level of familiarity with the content (Phillips & Duke, 2001), it is the higher level questions that promote students' CT (Redfield & Rousseau, 1981). In line with that, Elder and Paul (1997) proposed that the art of questioning is essential to the art of learning and that, to the extent that if they fail to ask genuine questions and seek answers to those questions, students are not likely taking the content seriously.

The previous results done by Shim and Walczak (2012) asserted that the development of CT in students requires the teachers to balance the cognitive challenges with support, which necessitates good facilitation skills. In line to that, Behar-Horenstein and Niu (2011) maintained that to emulate CT in their teaching practices, teachers must be able to differentiate ordinary thinking from critical thinking, and they must be able to "understand process that constitute critical thinking" (p.27), and employ instructional strategies aimed at developing these processes.

The previous research Paul (1992) and Paul & Elder (2008) have developed taxonomy of Socratic questions that can be used by students to organize their thinking, and used by teachers to guide student learning critical thinking. The taxonomy questions derived from Socrates as so called later as Paul's taxonomy of Socratic questions are made up of (1) questions of clarification, (2) questions that probe assumptions, (3) questions that probe reasons and evidence, (4) questions about viewpoints or perspectives, (5) questions that probe implications and

consequences, and (6) questions about the question. Similarly to this, Mathies (1991) identified a spectrum of leading questions what so called full-spectrum questioning that constitute to the five categories; (1) 'so what questions, (2) questions that clarify meaning, (3) questions that explore assumptions and sources, (4) questions that identify cause and effect, (5) questions that plan a course of action.

Another construction of a critical thinking activity is social interaction. It is an activity of expressing ideas to other people both formal and informal situation. In interaction it is usual to occur different point of views of certain issues so that it is common to argue and propose an alternative ideas. In education context, the social interactions among students can be built using cooperative activities to develop a critical thinking. According to Durrón (2006) cooperative learning as a pedagogical approach to encouraging critical thinking can be very effectively used in conjunction with lectures. In interacting, people can make an inference—question claim, think alternative solution, make conclusion, solve problem, make decision—and also can interpret information—categorization, decoding, clarification meaning (Bailin et al., 1999; Facione, 1990; Mulnix, 2012; Paul, 1992).

Social interaction activities can be done at least in three arenas, (1) with people in the same field formal and informal interaction, (2) participate in debate activities, and (3) involve in organization related profession. In addition, Ennis (1985) highlights the important of be openminded process while interacting to others. Ennis lists three aspects under this (injunction to have a) disposition: consider seriously other points of view than one's own (dialogical thinking), reason from premises with which one disagrees-without letting the disagreement interfere with one's reasoning (suppositional thinking), and withhold judgment when the evidence and reasons are insufficient.

A critical thinking ability can also be developed by conducting research consistently. Doing research means solving a problem to certain gaps in which can sharpen a critical thinking. In Bloom taxonomy, doing research is optimizing knowledge by synthesizing and evaluating. Figure 3 above shows that research activities involve two mainstreams, (1) conduct research and (2) disseminate research result. Relating to the research activity, Swartz (2000) suggests teachers to encourage creativity in classroom by giving a project. He mentions that providing a wide variety of materials and give very broad instruction. And Zygmunt and Schaefer (2006) put emphasize that “the transition from being inclined to thinking critically and actually having the skill” (p. 260) requires a combination of time, experience and mentorship.

Conclusion

The study reveals that a critical thinking ability can exist to any people if they want to hone and sharpen it. The process of becoming a critical thinker has general process in common

that is reading habit, socializing, and conducting research. However, the process doing those things might be different to anyone. Everyone has different ways to develop their critical thinking because thinking is always divergent. Thinking is always open to different interpretations. Therefore, it suggests that students improve their reading comprehension and develop their critical thinking through reading a lot of information from different sources and being open-minded to different perspectives.

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