

## Performing Critical Thinking: Evidence from Students' Stories

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### Abstract

The flourish of the disruptive era has defined critical thinking to be crucial element to be incorporated in the education. This article reports the exploratory efforts to reveal university students' preference and challenge to express their critical thinking skill in their learning process and social context. In conducting this exploratory research, the data are gained by interviewing senior students in the English department assuming that the students of that particular level have already been taught almost all of courses endorsing the critical thinking skill and experiencing various learning experiences. The data are then descriptively coded by the frame of grounded theory. The findings indicate that students tend to enact their critical thinking in writing, preference toward group discussion and familiar topic as well as the help of youtube. However it is hindered by the lack of language competence. Thus, this research recommends the need for more strategic efforts in education in order to engage students with developing their critical thinking

**Keywords:** Critical Thinking, Grounded Theory, Preference

### Introduction

The rapid changing of technology and innovation in various forms marks the existence of disruptions in unpredicted circumstances. People are flooded by the abundance of information, emerging technologies for communication, means of social media, and digital learning application and devices. All of these innovations have turned the feature of interaction and competition. Society is no longer mono dimension, yet it gains multi-challenge progress. Being literate, innovative and selective characterize an ideal individual of the disruptive era. Ironically the challenge of such individual comes from the explosion information and advance of technology themselves ((Kohzadi, Azizmohammadi, & Samadi, 2014). For instance, one of which is the fruit of media exploration and freedom of expression that is the flourish of fake news which is known popularly known as hoax. The report of Fighting Fake News Workshop warned, "the most salient danger associated with "fake news" is the fact that it devalues and delegitimizes voices of expertise, authoritative institutions, and the concept of objective data—all of which undermines society's ability to engage in rational discourse based upon shared facts.(Baron, Sandra. Crootof, 2017). Hoax or fake news threatens reasoning capacity. It is framed to mislead the truth by spreading poisonous information. It deconstructs realities into mass misunderstanding and doubt. The report further recommended, "Three corollary harms were noted: first, the problem of increasing fragmentation and politicization; second, the promotion of "safe news" at the expense of difficult or challenging news stories; third, the need for credible sources to allocate ever-diminishing resources to debunking inaccurate information"(Baron, Sandra. Crootof, 2017). Such harms highlight the urgent challenge or educational institutions to prepare and equip learners with critical thinking skills.

Critical thinking skills are central to higher levels of education. "Heightening a critical ability" of learners' mind means "heightening awareness of mental process" (Kohzadi et al., 2014) which would allow the learners to solve problems or to decide what to believe or to do. Amidst the threat of hoax, critical thinking is required as pedagogical aspects to be established. It deserves to be the core of learning process at higher level. By engaging themselves with developing of critical thinking skills, students are accelerating their readiness to deal with problematic information and knowledge. (Lihui, Huimin, Qun, Feng, & Yuqing, 2015) asserted that the importance of critical thinking skills due to its potential to "enable students to deal with social, scientific, and practical problems". In other words, acquiring knowledge and knowing information are insufficient without having ability to think critically.

In education, critical thinking is not new subject to discuss. Dewey and Bloom have long introduced critical thinking as one of the fundamental goals of a learning process. They both believed that critical thinking is at the heart of educational process. Numerous definitions are addressed to critical thinking. Yet, The American Psychological Association (APA) offers a general definition of critical thinking as "the purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation and inference as well as explanation of the evidential conceptual, methodological, criterion-logical or contextual considerations upon which that judgment was based. Critical thinking is essential as a tool of inquiry. Critical thinking is a pervasive and self-rectifying human phenomenon"(American Philosophical Association, 1990). In short, it can be synthesized that critical thinking is associated with the ability of "judging in a reflective way what to do or what to believe" (Yang & Wu, 2012). Thus, within the context of contemporary information overload it is increasingly pivotal to encourage students' critical thinking, in terms of evaluating the authenticity of claims of mass of online information and news. In so doing, the sensitivity and awareness as well as the identification of the cause of every situation or realities along with the truth behind them which are heard and read in digital media can be built and strengthened.

In Indonesia context, critical thinking has been stipulated as one of the educational objectives as stated in Government Regulation Number 17 Year 2010. It is also advocated by Ministry of Education and Culture (2013) in the launch of 2013 Curriculum emphasizing the turn from passive learning into critical learning (Fadhillah, 2017). However, critical thinking is not the result of short time process. It requires efforts to activate learning activities that endorse development of critical thinking. In the case of language learning class, teachers are obliged to take pivotal role in managing classroom in the frame of learner oriented process and making use of the materials and variety of interactive strategies. The learning activities should be intended to build learners' awareness and appropriate response toward current issues and prejudices not only in educational context but also in socio-practical context. Some researchers have carried out the quantitative assessments toward learners' achievement in critical thinking, yet few of whom did qualitative inquiry on learners' critical thinking skill. This is significant regarding the need to map learners' view on their critical thinking and evaluate teachers' strategy to appropriate with the need of the learners and to anticipate the potential challenge of the disruptive era for critical thinking.

This study reports a qualitative inquiry on the way the learners perform their critical thinking in language class. This study obtains its data upon the interviews with learners by asking how they perform their critical thinking in the learning process. It is so doing in order to listen to learners' experiences in implementing their critical thinking. The researchers interview 60 senior students in English Education department in Universitas Negeri Manado on the ground of the assumption that senior students have already completed the skill subjects and most of the content subject by which they have already developed critical thinking skills as well as had semester GPA in the range of 3.1-3.5. The data are then coded in the formula of the grounded theory which follows the phase of open, axial and selective coding.

## Discussion

The notion of bringing critical thinking into educational practices has “stood the test of time and yet there is still a perceived need to strengthen the critical thinking skills in schools and colleges” (Masduqi, 2011) . It implies that despite it has long been part of learning process, it remains necessary to questions its continuing dynamics. Critical thinking is not part from the ongoing circumstance. Learners are encouraged to gain the abilities to utilize their intellectual tools in order to determine the underlying reason or truth of incessant information from digital media and online application. It leads them step out of the boxes of teaching resources and become critical to incoming fake news. Having interviewed the senior students, this study comes to the findings that, as learners, students performed their critical thinking in several ways as follows

### *a. Preference toward Writing*

Students’ critical thinking is easier to be performed in writing skill. Students see the writing activity provide them more opportunities to cultivate information and resources. Representing other similar perspectives, one of the students admitted, “assignments in writing, like essay or paragraph writing, drive us to think and browse information” (student 43). This reflects the synthesis that writing can be part of cognitive activity, “associated with using mind” (Masduqi, 2011) which links to the essence of critical thinking activity. Students gather references and process them into an argument. It is then developed into writing product. According to students, they have “time to reason” (Student 7) compared to express themselves orally. It means that the writing skill subject supplies the space to be rational before responding or communicating even negotiating a message. Being rational indicates the involvement of reason to decide certain issues to elaborate. (Cottrell & Cottrell, 2005) argued that reasoning includes; “having reasons for what one believes and do, being aware of what they are; critically evaluating one’s beliefs and actions, and being able to present to other its reasons”. Putting in other way, time to reason is the phase of critical thinking which students unconsciously perform. It is not surprising as they perceived writing as “a stage for argument” (Student 25). They obtain media to express their like and dislike to a particular assigned issues or free choice topic without worrying of their peers’ criticism and then offers problem solving. On the other side, this seems to point out the hole of weakness of developing critical thinking in writing. Despite students can structure their arguments by critical reasoning, the absence of debating as that of oral practice of expressing oneself may cause the less dynamic critical thinking activities. The debate rises controversies that force students to be more active in evaluating and exchange ideas. Few students who prefer speaking skill for showing critical thinking asserted that oral expressions gives them chance to immediately respond toward their peers’ opinion. The activity allows the growing tensions of critical communication within which “thinking about thinking” (Lihui et al., 2015) takes place and produces a particular agreement for a particular problem solving

### *b. Preference toward Familiar Topic*

“It easier to be critical when I know the topic”, (Student 5). This statement comes from the interviewed student. Some researchers have actually detected this tendency. (Rohmani Nur Indah & Kusuma, 2016) presented listed some previous finding such as a research in Australia shows that “for a successful critical writing, learners at the primary level in Australian classroom are encouraged to take responsibility for their own writing based on what they know”. Similarly Japanese students show that “the content familiarity is proven to powerfully shape both the range and depth of argumentation as part of critical thinking “. Not different, Students in one province of Indonesia shows that “those who do not have prior knowledge or subject matter mastery gained through critical reading on the topic, will have problem to develop their critical thinking skills”. This implies that the coverage of importance of topic familiarity is an important factor for critical thinking skills. It in fact goes back to the schemata theory. The pre-existing knowledge structures influence the depth and width of students’ comprehension and elaboration of certain given topic. A new and unfamiliar topic corners students to stagnancy of idea as admitted by one of the students, “I’m afraid when a new

topic is given, my brain stop working” (Student 19). Ignoring his comic response, such words underline the need for students to be familiar with the assigned issues in order to critically discuss them. It is further interpreted that students are able to perform their critical thinking as they have adequate knowledge. They can draw build logical arguments, take logical evidence and prescribe conclusion as long as they have been previously exposed or engaged with the topic.

*c. The challenge of language competence*

Another aspect related to students’ performing their critical thinking is being hindered by the lack of language competence. Most of the interviewed students confessed that their English is the main obstacle to interact and express their critical views on an issue. “How can I present my perspective if I do not know the terminologies or even some simple expressions” (Student 50). It is true that in language classroom is not always occupied by those who are fluent in using the language. The depth of students’ critical thinking depends upon their mastery of the language (Rohmani N Indah, 2017)The language competence serves to be condition to be met in order to make the knowledge as the reflection of the critical thinking to be accessible for other students. It is worsened by the propensity of having fear of making mistake or being laughed by other students. This is in fact a traditional feeling that is always accompanying the speaking practice of foreign language learners. A student claimed, “ Actually I have already had my opinion, but my classmates’ eyes to me dropped me down” (Student 38). This expression represents most of students’ reason to be reluctant to show their critical thinking. It causes them as if unable to solve problems due to the failure to communicate. The look of his friends has turned to be ‘ terror in a daylight”. At this point, the role of a teacher becomes fundamental. The teacher is required to be a model. teachers must take a directive role in initiating and guiding critical thinking (Lu, 2004). If the educators elaborate critical thinking, students are committed to learn by role modeling (Kohzadi et al., 2014). This, as matter of fact, summarizes whether language competence can be a hindrance or not depends upon teachers’ ability to invest knowledge and activate the learning atmosphere.

*d. The preference to group discussion*

This is not apart from previous tendency. Student prefers to enact their critical thinking in a group discussion. “It is only between us, not many”, student 3. The number of students participating in the discussion might be one factor affecting the willingness to express their critical thinking. The group discussion consisting of close friends appears to be a good laboratory of practicing not only language competence but also critical thinking. Togetherness and tolerance nurture confidence and open-mindedness. It can be capitalized for more interaction and exchange of ideas. “In group, we are challenged to discuss with less risk of being embarrassed” (Student 26). It is obvious that, in terms of critical thinking, group discussion may act as the arena of stimulating peer tutoring and minimal anxiety. Students may negotiate problem solving as they become critical to the topic. The feeling of being humiliated by peers can be minimized since more often group members are self determined, not by teachers’ decision. The implication is that they may create critical thinking within which multi-layer views and complex understandings occur as well as tolerance is established. In other words, group discussion constitutes an open point of performing critical thinking.

*e. The Help of Youtube*

This aspect is regarded as typical disruptive era. It is interesting when the researchers heard the confession of students that they gain their critical thinking through watching youtube. “Since youtube content is educating, entertaining and creative, easy to understand” (Student 3). This reveals “synergy of technological advancements with developments in pedagogy (Yang & Wu, 2012). Youtube which is usually viewed as popular entertainment and youth’s self media of expressions has entered deeper into the making of serious aspects of education that is the establishing of critical thinking. The image of youtube as the means of escapism is now added by its recognition as an educational instrument for engaging students’ with critical thinking. The phrase “easy to understand” seems to be the entrance key to understand the reason why such media come to the core of educational objective. Here,

students enjoy its light and creative show and make an advantage by starting of interpreting activity and ending it with analysis; activities which are associated with the acts of critical thinking. The use of youtube for language skill improvement may have been familiar. The climb to high order thinking activity has brought youtube as a technological application into vital educational media that facilitates the performing of critical thinking.

## Conclusion

Having discussed the students' views in performing their critical thinking, it can be synthesized that critical thinking as mental process in utilizing logical evidence and information, and seeking the underlying truth of realities in order solve problems and make decision is essential in education in this disruptive era. Critical thinking seems to be a cognitive activity that is performed by students through preference toward written way, familiar topic and group discussion, yet it hinders by the lack of language competence. Not to neglect, the contribution of youtube in stimulating and accelerating the establishing of critical thinking. However, this study requires a further investigation on the role of cultural constraints in group discussion and the depth of the influence of youtube to the level of critical thinking.

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