

CRITICAL THINKING SKILLS FOR LANGUAGE STUDENTS

Patrisius Istiarto Djiwandono
(patrisius.istiarto@machung.ac.id)

*Ma Chung University
Villa Puncak Tidar N-01, Malang 65151, Indonesia*

Abstract: Recent developments in language teaching increasingly put a stronger importance on critical thinking skills. While studies in this area have begun to emerge, it is believed that a probe into the learners' mind when they process information can contribute significantly to the effort of identifying exactly how our learners think. This study was conducted partly to seek the answers to the issue. A brief training on critical thinking and critical attitude was given to a group of language learners who were studying Business Correspondence. Questionnaires were then used to capture traces of their thinking as they were preparing to accomplish a learning task and while they were listening to their classmates' presentation of ideas. The data show the change of their thinking process. After the training there is a tendency from the students to ask more critical questions with slightly higher frequencies. It is concluded then that the brief training has prompted their awareness of critical thinking.

Keywords: critical thinking, critical attitude, awareness, language students

In an era where information is a potential asset which presents itself in abundance, a scholar should not only have the ability to grasp the contents of the information but also exercise critical reasoning to select pieces that are most appropriate and valuable for his or her purpose. Such skill is high on the agenda of development of foreign language learners in the information era, especially in Indonesia where conformity to group, teacher-centered instructions, rote-learning and memory-based learning have been thought to constrain Indonesian students in exercising critical thinking (Richmond, 2007). Pioneering efforts and studies on this area have begun to emerge. Chandra (2004), for instance, concluded from a study on three ethnic groups in Indonesia (Javanese,

Minangkabau and Batak Toba) that while the obligation to respect authority figures may restrain critical thinking in those ethnic groups, the habit of open discussion and reaching collective consensus seem to promote critical reasoning. Egege and Kutieleh (2004) noted that Asian students are widely regarded as lacking critical attitude and ignorant of the principles of analysis and critique. In line with this, Soeherman (2004) also found that her Indonesian college respondents' critical thinking ability was lower than average college students in the USA. Taken as whole, these recent studies point out that the foundation of critical thinking education in Indonesia has yet to become stronger and more solid. Such endeavor to begin mapping out the current condition of Indonesian manpower's ability in critical reasoning should be greeted with positive responses and more empirical studies to establish data-driven principles of how to develop critical thinking skills in today's Internet generation.

The paper presents a report of a small-scale exploratory research on the implementation of critical thinking exercise for junior students of English as a foreign language. It describes how critical thinking skill is introduced to the students who are taking Business Correspondence class, presents how critical thinking proceeds in their mind after they execute some learning tasks, and discusses the results that bear implications for further research and instructional decisions.

There are two points of rationale behind the introduction of the new skill. First of all, the skill encourages the students to take on a more independent learning approach, where they decide on the learning goal, consider all the assumptions, plan the steps toward the goal, and calculate the consequences that may arise from each step before taking the initiative to proceed on their own. Second, it is felt that with information flooding from all kinds of sources practically at the click of their fingers, they stand the risk of being overwhelmed, and worse, select any kind of information that they happen to find, regardless the quality and credibility. Thus, arguably today's Net generation should be armed with the ability to handle information glut from the Internet, and it is for this purpose why critical thinking needs to be promoted and fostered in the students' ways of reasoning.

The first section of the paper presents the definition of critical thinking, presenting its primary features, and several examples of instructional situation where it can be applied. The second section puts the new approach into the classroom context. It describes the instructional objective of the Business Correspondence class, and the steps in introducing the critical thinking to the stu-

dents. Generally speaking, the approach gets the students to determine their goal or problem, check several things that have been assumed, think of some acts to reach the goal and/or solve the problems, consider the consequences for every act, and weigh the advantages and disadvantages for every consequence. In addition, particular emphases are placed on critical selection of Internet resources and critical reading. This section ends with a brief discussion of their opinions about the new teaching approach. From the entire study, implications are drawn concerning potential areas to be explored further, some caveats, and a few suggestions for other scholars interested in this topic.

THE CONCEPTION OF CRITICAL THINKING

The idea of incorporating critical thinking into educational practices was initiated by Greek philosophers, reinforced after the World War II, and enhanced by Bloom in the 1950s with his Taxonomy of Educational Objectives. It gained currency particularly in the 1980s. So, as an idea, it has stood the test of time and yet there is still a perceived need to strengthen the critical thinking skills in schools and colleges. Quite possibly, the common practices of simply transferring knowledge from textbooks and teachers to the students still prevail, as opposed to a growing intention to make students think more independently and learn for themselves beyond the boundaries of prescribed teaching and books. The latter concern was voiced in a Tbilisi Declaration over three decades ago, whereby it stated that the ultimate goal of education is to teach them critical thinking which will enable students to deal with social and environmental issues (Intergovernmental Conference on Environmental Education, 1978).

DEFINITIONS OF CRITICAL THINKING

Before delving into the issue further, it is best to be clear about what critical thinking really is. Ennis (1987, p. 10) defined it as “reasonable, reflective thinking that is focused on deciding what to believe or do”. Years later, there was even a greater concern to focus on the process of critical thinking. Elder and Paul (2001), following a convention of several researchers in an effort to see the components of critical thinking (Facione, 1990), maintain that the following skills make up critical thinking, namely: (1) Interpretation: the ability to comprehend information; (2) Analysis: the ability to identify the main arguments presented; (3) Evaluation: the ability to judge whether this argument is

credible and valid based on the logic and evidence given; (4) Inference: the ability to decide what to believe or do based on solid logic, and to understand the consequences of this decision; (5) Explanation: the ability to communicate the process of reasoning to others; and (6) Self-Regulation: the ability to monitor one's own thinking and correct flaws in logic.

Kurland (2000) adds open-mindedness as another important dimension of critical thinking. Being open minded requires that a critical thinker adopt the following characteristics, as to: (1) evaluate all reasonable inferences; (2) consider a variety of possible viewpoints or perspectives; (3) remain open to alternative interpretations; (4) accept a new explanation, model, or paradigm because it explains the evidence better, is simpler, or has fewer inconsistencies or covers more data; and (5) accept new priorities in response to a reevaluation of the evidence or reassessment of our real interests.

Hofreiter (2005) maintains that there are four basic principles to follow when teaching critical thinking skills. First is that critical thinking should be taught explicitly; second is the need for a model by the instructor; third is the use of real-world examples to put the teaching in context, and the last is starting with students' initial beliefs and opinions before moving on to logic-based reasoning.

METHOD

As stated at the beginning, the main objective of this paper is to report the effectiveness of an instruction of critical thinking in a content class. Using a one-group quasi experimental design, a class of juniors (third-year students) consisting of 8 students at the English Letters Study Program taking Business Correspondence was taken as the subject of this exploratory study. The critical thinking instruction was designed primarily to train the students to be independent in their learning. It trained them to engage in the main features of critical thinking when they went about their learning tasks, which in the long run would enable them to adopt a more or less independent learning. More specifically, it trained them to adopt the following sequential skills: setting objectives, identifying assumptions, checking the validity of the assumptions, determining several alternatives to attain the objectives, weighing the consequences for each alternative, and choosing particular ways to attain the objectives.

Because the students were engaged in an independent learning, in which they searched and found for themselves the learning materials, they were also

trained to critically evaluate the sources that they obtained. They were taught to make sure that the materials they found were trustworthy, complete, and could be used to achieve the goal they set up at the outset.

In addition to that, they were also trained to adopt a range of open-minded attitude that is typical of a critical thinker along the points suggested by Kurland (2000): being willing to consider new alternatives and others' viewpoints, and being humble enough to revise own perspectives and/or ways when necessary. To promote this attitude, the students were assigned to do a class presentation of some sub-topics of the course, whereby they can attend to each other's ideas, exchange arguments, and be open to feedback and correction from their peers. The outline of the activities in the course is shown in Table 1:

Table 1. Activities in the Course

Session 1	Activities
	Students filled out the questionnaires Students were taught critical thinking skills, i.e. what acts are to be taken to study parts of business letter themselves. They were then assigned to start their independent learning to find a model of business letter and learn its parts themselves.
Session 2	Students presented parts of business letters, giving feedback to each other. Students were taught how to adopt critical attitude toward their classmates' presentation. Students were assigned the next topic, i.e. writing an enquiry, which they had to study independently by searching from the Internet and library. Students were given questionnaires asking them how they would set about accomplishing the task.
Session 3	Students presented letters of enquiry, giving feedback to and commenting on each other. Students filled out questionnaires asking them what their attitude was toward others' presentation of ideas.

The respondents were eight (8) fifth-semester students from English Letters Study Program of Ma Chung University who were taking a Business Correspondence class. The data were collected at the beginning of the course through questionnaires. There were three questions asked to the respondents: the steps that they took when they were about to learn a certain topic in Business Correspondence, the questions they asked when learning a model letter that they obtained themselves, and questions they asked by heart when listening to a classmate's presentation about a business letter.

FINDINGS AND DISCUSSION

Tables 2 and 3 sum up the frequencies of the respondents' responses to the questions.

Table 2. The Acts Taken When Wanting to Learn about a Certain Topic

No	Steps	Frequency
1	Determining definition and goal	1
2	Understanding contents	2
3	Looking at a model letter	4
4	Writing a letter on her own	1
5	Identifying the theme/topic	2
6	Browsing Internet to obtain materials or seek answers	3
7	Listening to a lecture	1

As shown in Table 2, act number 1, which is a major characteristic of critical thinking, was done by only one of the eight respondents. Most of them jumped to the model letter right away, or browsed the Internet to obtain materials. While these acts are arguably manifestation of critical thinking, it could have been preceded by a conscious setting of the goal.

Table 3. Questions Asked when Reading a Model Letter

No	Questions	Frequency	Type of critical thinking acts
1	When is this expression used?	1	Analysis
2	For whom is the expression?	1	Analysis
3	What is the meaning of the expression?	2	Analysis
4	What must be included in a business letter?	1	Analysis
5	What is the most frequently used model?	2	Analysis
6	Which type of letter is most effective?	2	Evaluation
7	What expression is most appropriate?	1	Analysis
8	Is this model letter appropriate/accurate?	1	Evaluation
9	What is the structure of a business letter?	1	Analysis
10	Where did the writer get the appropriate business expressions?	1	Evaluation
11	What is the writer's purpose?	1	Analysis
12	How to write a proper letter that attracts the attention of the readers?	1	Inference
13.	Is this model valid?	2	Evaluation
14.	Is the expression applicable to all types of business letters?	1	Evaluation

Even before the instruction on critical thinking was started, the students showed a considerable awareness of critical reasoning. Indeed, as Wolcott et al. (2002, p. 87) maintained, "...the whole college experience has a significant effect on critical thinking." Thus, by virtue of being members of the academics, the students' ways of thinking have been shaped so as to be critical in their approaches to learning. As Table 3 above shows, quite a number of acts can be identified as reflections of critical thinking. Thus, questions number 1, 2, 3, 4, 5, 7, 9, and 11 are apparently analytical acts applied to critiquing a model letter. Questions number 6, 8, 10, 13 and 14 are reflections of their evaluating attitude, and number 12 is an inferential act that clearly marks the critical attitude of the student.

Table 4 presents their mental questioning when critiquing a classmate's presentation:

Table 4. Questions Asked When Listening to Classmate's Presentation

No	Questions	Frequency	Type of critical thinking acts
1	Is this letter applicable widely?	1	Evaluation
2	What are the examples?	1	Analysis
3	What is the difference between model A and B?	1	Analysis
4	Why using this model letter?	1	Evaluation
5	What is the purpose of this letter?	1	Analysis
6	Where is this taken from?	2	Evaluation
7	How are the ideas organized?	1	Analysis
8	Is that kind of letter likely to be considered acceptable by the addressee?	1	Evaluation
9	What method is used by the business to make it run well?	1	Not a critical thinking act
10	What plan has been made to build the business?	1	Not a critical thinking act

In Table 4, the acts are predominantly characteristics of critical thinking that were outlined by Facione (1990) above. As shown in the table, the students claimed to have performed several acts that reflect their critical attitude. Acts number 1, 4, 6 and 8 are evidence of evaluating attitude toward their classmate's presentation, while acts number 2, 3, 5, 7 are evidence of analytical attitude.

However, it is clear from here that the students have yet to exercise open-mindedness. It should be understandable at this stage why they did not perform such acts because they had never received any instruction or training on open-mindedness.

Progress

The report on the students’ ways of thinking after a brief teaching of critical thinking (henceforth “CT”) is presented in Table 5 as a comparison between their acts prior to the CT teaching and those after the teaching. This way, a picture of progress in their ways of thinking can emerge.

Table 5. Changes of Acts When Wanting to Learn about Enquiry Letter

Respondent: AH		
No	Before the CT Teaching	After the CT Teaching
1	Reading materials	Finding the definition of “enquiry letter”
2	Using Internet to find answers	Seeking the goal of such letter.
3	--	Finding parts of the letter.
4	--	Trying to write an enquiry letter.
Respondent: TA		
No	Before CT Teaching	After CT Teaching
1	Looking at a model	Finding definition of “enquiry letter”
2	Browsing Internet	Finding parts of such letter.
3	--	Finding how it is written.
4	--	Searching from various sources.
Respondent: SH		
No	Before CT Teaching	After CT Teaching
1	Identifying the definition of Business Correspondence	Knowing the model of Enquiry Letter
2	Identifying the objective of Business Correspondence	Knowing the relationship between Enquiry Letter and Business Correspondence
3	Understanding the contents of the chapter	Knowing the aim of Enquiry Letter

Respondent: PP		
No	Before CT Teaching	After CT Teaching
1	Identifying the theme	Browsing Internet
2	Listening to the lecture	Find many good samples of Enquiry Letter
3	Browsing Internet	Comparing one to the others
4	--	Asking friends what they have found
Respondent: KI		
No	Before CT Teaching	After CT Teaching
1	Searching for the model in various sources	Finding parts of Enquiry Letter
2	Comparing and contrasting the models from the sources	Finding from 2-3 sources how such letter is written
3	--	Learning the format
Respondent: ME		
No	Before CT Teaching	After CT Teaching
1	Identifying theme	Knowing the definition of "enquiry letter" Searching for steps to write an enquiry letter.

A general trend among these students is the increased number of acts that they executed after they received a short training on Critical Thinking. As the Table above shows, on average there are additional one or two more steps after the CT teaching. This could be an indication of their awareness of planning more acts to attain the goal in hand.

None of the respondents explicitly reported the acts on which they had received training shortly before they filled out the questionnaires (setting objectives, identifying assumptions, checking the validity of the assumptions, determining several alternatives to attain the objectives, weighing the consequences for each alternative, and choosing particular ways to attain the objectives). Two alternative causes can be offered for this finding. First, the training was simply too brief to raise their awareness of such critical thinking acts. Second, they might have done those acts in their mind but did not report them in the questionnaires. Arguably, if the second point holds true, the respondents still performed those critical thinking acts which did not surface in their report but which might have been implicated in the acts that they reported explicitly.

Thus, for example, the act of finding definition of “enquiry letter” may have implicated the act of setting the goal, or the act of finding from 2 – 3 sources may have involved checking assumptions, as refelected in Table 6.

Table 6. Changes of Acts When Studying A Model Letter Independently

Respondent: AH		
No	Before the CT Teaching	After the CT Teaching
1	What are the most frequently used type?	How are these expression used?
2	Which is the most effective business letter?	What expressions must be used?
3	What are the most effective expressions?	
Respondent: TA		
No	Before CT Teaching	After CT Teaching
1	Dealing with unfamiliar terms	Detailed explanation about how it is written
2	Learning the outline	Why some things must be stated in a business letter
Respondent: SH		
No	Before CT Teaching	After CT Teaching
1	Where did the writer get the right expressions?	What is the source from which this is taken?
2	What is his purpose/goal?	Have you learned something about enquiry letter?
3	How to make a proper business letter?	What is enquiry letter?
Respondent: PP		
No	Before CT Teaching	After CT Teaching
1	Is this model still valid?	What is the most common expression in an enquiry letter?
2	What model is most frequently used?	Is it still valid?
3		Is it possible to have American and British expressions for an enquiry letter?
Respondent: KI		
No	Before CT Teaching	After CT Teaching
1	Is this model accurate?	Is the source of this model accurate and trustworthy?
2		Which one from many models is the most appropriate?
Respondent: ME		
No	Before CT Teaching	After CT Teaching
1	Is this model understandable by readers?	Are the expressions that I am

reading appropriate and proper?
What important parts have not
been stated in the model that I
am reading?

A few respondents tended to ask more questions after they received the CT training. The questions they asked after the CT briefing tended to be more probing. Respondent TA, for instance, addressed the need to know more detail, asking the reason why some expressions are used. Respondent PP was even concerned about the validity of the model; KI and ME were wondering whether the model was accurate and trustworthy. Taken together, the respondents asked more or less the same number of questions but with a higher sense of being critical in their questions after the CT training.

Table 7. Changes of Acts When Listening to Other's Presentation of Ideas

Respondent: PP		
No	Before the CT Teaching	After the CT Teaching
1	What's the difference between model A and B?	Is the model being presented still valid?
2	What are the examples?	What is the source of the model?
3	--	What makes the first example differ from the other examples? Why is it possible to have many formats of an inquiry letter?
Respondent: TA		
No	Before CT Teaching	After CT Teaching
1	What is the source of the model?	What is the source of the model?
Respondent: SH		
No	Before CT Teaching	After CT Teaching
1	Where did you get the model from?	Is there any difference between a business letter and an enquiry letter?
2		What is the aim of enquiry letter besides asking for information?
Respondent: KI		
No	Before CT Teaching	After CT Teaching
1	What source did he get it from?	Does the company really pay attention to the form of my

2	Is that type of letter acceptable by the addressee?	business letter? Is the business letter really useful for me when I graduate from the university? How many types of letters exist? Which one should I use in the real-world?
Respondent: ME		
No	Before CT Teaching	After CT Teaching
1	What method is to be used to make the business run well?	Why does an enquiry letter have to use brief sentences?
2	How's the planning?	Do we have to give details about our achievements and experiences in our previous job? How to make a letter more appealing to the readers?

Again, a trend similar to the previous one was observed during the respondents' listening to others' presentation of ideas. In general, they asked more questions than they did prior to the brief CT training. The quality of the questions also improves. PP, for instance, asked about the validity of the model her classmate was presenting. Her questions about the difference between examples, and about why many formats are possible clearly reflect an analytical reasoning. Likewise, respondent SH also demonstrated similar questions. Respondent KI went so far as to question the practical value of studying a business letter in the real world. All in all, the brief training on CT may have prompted some of the respondents to take on a more critical stance toward their classmates' presentation.

In short, all the findings seem to suggest that the brief training on CT is rendered less impactful on the students' ways of reasoning critically. Yet, a closer observation reveals that this may not be the case; the brief training may have promoted their awareness of their own thinking, which in turn contributes to improved quality of their questioning and attitude toward tasks, materials that they read, and their classmates' ideas.

Learners arguably think more or less critically as they are actively engaged in learning activities. The interaction with their peers and lecturers, their exposure to the scientific ideas and discussion, their execution of academic

tasks may have facilitated their critical thinking ability. More importantly, these critical thinking skills may have manifested without them being aware or at least being able to articulate them clearly. Cosgrove (2009, p. 23) points out this environment-induced critical reasoning below:

Even students who have never thought deeply (or, indeed, even superficially) about the term “critical thinking” may nevertheless have hosts of strategies they use to study and learn effectively (such as so-called “coping mechanisms” used by disadvantaged or disabled students). Similarly, even professors who have not examined explicit theories of critical thinking or made systematic attempts to integrate it into their tutorials may be implicitly, perhaps even systematically, fostering key skills (such as the questioning of assumptions).

In other words, even without explicit teaching on critical thinking, it is quite possible that learners have been performing critical thinking skills in their mind, applying them to their assignments or when attending classes. Thus, the critical thinking skills the learners perform from time to time may have existed implicitly. The explicit instruction on CT will serve only to raise their awareness about the critical thinking.

The most recent opinion in this area was by Errihani (2012) who contends that among language students critical thinking may not be pronounced very strongly because their main aim is to gain fluency and accuracy in language use. It seems that when the learning goal is the enhancement of language proficiency, critical thinking does not take on paramount importance.

On the contrary, another research finding seems to encourage an opposite view. Arum and Roksa’s study (2011) on the critical thinking skills of 2000 college students in USA reveals that 45 percent of them do not progress in the quality of their critical thinking, reasoning or writing skills during the initial two years of study. About the same percentage of them do not improve after four years of study. If this holds true everywhere else, steps must be taken to ensure that college graduates undergo special training on critical thinking, either as a separate course or integrated in the curriculum.

At this point it is very tempting to conclude that explicit instruction on CT offers little benefit to the educational activities in college. Yet, as the findings above suggest, an explicit critical thinking instruction has arguably evoked more critical questions and more critical standpoint on the part of the learners. If conducted with greater intensity and frequency, CT training that is integral

with the courses may generate even more impressive outcome. Learners equipped with solid skills of thinking critically may even be more prepared to take on independent learning.

The small-scale classroom research can serve as a basis for research of a larger scale involving more learners and using a more rigorous approach in the research method. Following Hofreiter (2005), investigation into the role of critical thinking will have to be conducted in a considerably long period during which teachers can model many different facets of critical attitude and logical reasoning to solve some problems or accomplish given tasks. Also, since the critical thinking covers broad areas of cognitive activities, attempt should be made to limit the types of critical thinking that are specifically orientated to specific learning tasks.

CONCLUSIONS AND SUGGESTIONS

The paper sets out to explore the critical thinking that supposedly was performed by a group of learners who were studying Business Correspondence after they were given brief training on critical thinking and open-mindedness. The data gathered from questionnaires indicate that they asked more critical questions with better qualities than they did before the training. The critical questions asked, however, were not necessarily related to the essential points of the training. Therefore, at best it can be concluded that the training has succeeded only in raising the learners' awareness of thinking critically. However, it is believed that with much more intensive and prolonged period of training that comes with trainer's modeling of the critical thinking, other research in the same area would yield a more convincing and encouraging result.

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