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ANALYSIS OF STUDENTS' CRITICAL THINKING IN WRITING ARGUMENTATIVE ESSAY

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Abstract

The purpose of this qualitative study is to investigate, classify, and analyse critical thinking in students' writing argumentative essays. The method used in this research is qualitative content analysis using the approach of Facione's (2009) holistic critical thinking scoring rubric (HCTSR). Data collection technique used in this study is by document observation of English education department students' blog-texts about teacher's welfare in Indonesia, in one of private universities in West Java, Indonesia. Data obtained are from students' writing emails submissions tasks; then, the data are analyzed by the researcher qualitatively based on coding frame document of writing. The results of this study indicate that in the the level of student's critical thinking in writing varies demonstrated by the students.

Keywords: Critical Thinking, Qualitative Content Analysis, Writing Argumentative Essays

The internet technology of communication and information progress has brought a new reform in higher education system of teaching learning writing from conventional to the digital practices. This practical use of internet technology should have opened up higher education students' mind to widen knowledges and learning experiences, especially in developing their critical thinking skills. Yet, a gap emerges in our university students' critical thinking skills in writing, while technology supports have involved.

As a research conducted by Phillips and Bond (2004) in which critical thinking is said to be a defining characteristic of a university graduate. However, they confirm that there is little research on university students' experiences of critical thinking. Experiences of undergraduate students, enrolled in a management course in which the main theme was critical analysis and communication, were explored through a modified phenomenographic approach and a problem- solving task using a 'think aloud' technique. Results include four experiences of critical thinking ranging from a prescribed process to an evaluation that looked beyond what is evident and a number of dimensional attributes. Students' experiences of criticality and the language they used to describe the experiences were limited, pointing particularly to a need for changes in the academic structures that exist outside the immediate classroom environment (Phillips, 2004).

Thomas (2011) mentions that critical thinking is a crucial skill that students need to develop while at university. It is important for a well-educated person to be able to make well-informed judgements, be able to explain their reasoning and be able to solve unknown problems. He concludes that critical thinking has been identified as one of the key skills of a university graduate and most universities specify the ability to think critically or use higher order thinking as a desirable

attribute of their graduates. A research from Thomas (2011) provides ideas of the skills the students need to develop and how we can integrate the students' understanding of those skills with their learning in the classroom and through their first-year assignments and activities. These examples and ideas have all been focussed on the first year student, and it would be expected that academics in the second and third year would build on these skills in order to produce graduates who are able to make good decisions, solve problems and evaluate solutions effectively (Thomas, 2011).

Critical thinking is arguably one of the central requirements and desired outcomes in 'Western' universities. The international student population is expected to adopt the established Western academic discourse in order to meet the requirements of successful writing at university and to be able to claim membership in that community. This means that they are required to show evidence of critical thinking in their academic essays in the form an argument, and by demonstrating related skills such as evaluation and analysis. However, students are either unaware of the importance of argumentation in writing or lack understanding of what is meant by the concept of argument, evaluation and analysis (Vyncke, 2012).

However, it is not enough for students to know that critical thinking is a key criterion of a high-scoring essay, they should also know why and how critical thinking is useful to their general development as a student. In this way, the student is not just blindly adopting the academic conventions of a Western university, but is consciously employing the critical thinking tools they are offered to gain most benefit from their studies. (Vyncke, 2012)

Facione (2013) suggests that to teach for thinking is to free minds-developing critical thinking skills and cultivating positive critical thinking habits of mind is the single most liberating aspect of becoming educated (Facione & Facione, 2013).

Chintia (2015) mentions that in fact, without critical thinking, essays would be highly illogical. Critical thinking allows you to dig under the surface to understand and articulate a subject or point of view. She adds that critical thinking is the application of decision making, deductive reasoning, critical analysis, evaluating, and problem solving. In other words, it's all the ingredients that makes for a great essay. Then, she breaks down the essential parts of critical thinking as summarized as follows: (1) Decision making is an important skill in critical thinking because it requires you to decide which choice is the best or most useful among the many available alternatives. You use decision making when you choose your topic and thesis statement, organize your essay, do research, and determine which information is relevant. Decision making is also important in problem-solution essays, because you'll have to decide which solutions will work best with the problems you're addressing. But decision-making also means choosing the best way to argue your opinions. After all, an incoherent opinion is about the same as having no opinion at all. (2) deductive reasoning. You use deductive reasoning every time you sit down to write an essay and whenever you make any important decision in your life. It allows you to determine how to arrive at a decision and how you feel or think about the essential aspect of any topic. Deductive reasoning makes specific conclusions from inferences through a singular line of thought. It's a logical way to understand very broad ideas. (3) Critical Analysis is the ability to analyze material and develop underlying judgments or opinions about it. Any time you explore ideas, opinions, information, or the creative works of others, you employ critical analysis. Let's look at two types of critical analysis that are common in essays: deep reading and empirical analysis. (4) Deep Reading. One form of critical analysis is deep reading. Used primarily in literary criticism, deep reading is the close examination of a literary text—a novel, short story, poem, etc.—for its symbolism, metaphors, characters, and plots. Deep reading is also the exploration of the historical, biographical, and political context in which a literary text was written to explain or understand its subtext. (5) Empirical Analysis. Another form of critical analysis is empirical analysis. Empirical analysis studies a case through the experience or observation of its subjects, i.e., testing the effects of a new

drug on a controlled group of patients. Empirical analysis is especially useful in problem solving essays both to bolster and even refute solutions to specific problems. (6) Evaluation. Evaluation is an extremely important skill in critical thinking. When you make an argument, you have to back it up with facts and examples, but your argument is only as strong as the information you provide. This means you have to evaluate whether the statements, opinions, facts, and figures you use are valid and logically sound. The research you use shouldn't be biased or slanted, (i.e., cherry-picking data to fit the conclusions). Nor should it mislead readers with information that is erroneous or has been debunked. The statements you use should also have some basis in logic.

METHOD

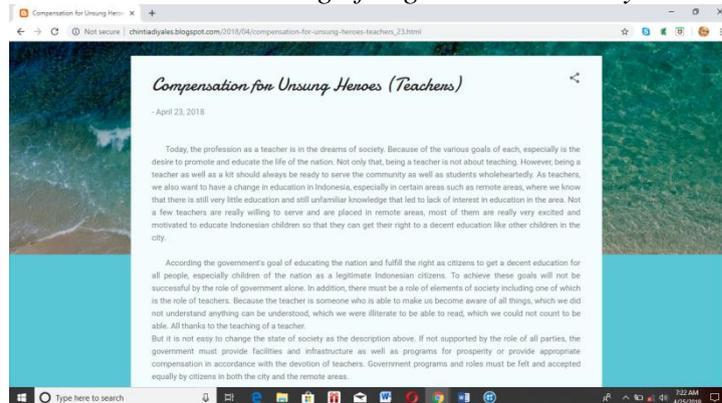
The method used in this research is QCA (qualitative content analysis) which in Shreier's (2012) definition is a method for systematically describing the meaning of qualitative material. It is done by classifying material as instances of the categories of coding frame. In this research Shreier's (2012) qualitative content analysis method is combined by Facione's (2009) holistic critical thinking scoring rubric (HCTSR). The procedure of research in this study is using 8 (eight) steps of qualitative content analysis of Shreier: (1) deciding a research question; (2) selecting material; (3) building a coding frame; (4) Segmentation; (5) Trial coding; (6) Evaluating and modifying coding frame; (7) Main Analysis; (8) Presenting and interpreting the findings. To expose the quality level of critical thinking, Facione's (2009) holistic critical thinking scoring rubric (HCTSR) is used which consists of four quality level of critical thinking from the high level to the low level, namely: (4) strong level; (3) Acceptable level; (2) Unacceptable level; and (1) Significantly Weak level. Data collection technique used in this study is by document observation of English education department students' blog-texts of argumentative essays in one of private universities in West Jawa, Indonesia. The sample data obtained in this research are blog-texts about teacher's welfare in Indonesia which is selected from 30 respondents' blogs using random purposive sampling. The Table below is sample list of student's blogs-text titles.

Table 1: *The sample lists of students' blogs titles*

<i>Respondent</i>	<i>Title of Blogs</i>
<i>R1</i>	<i>Compensation for unsung heroes (teachers)</i>
<i>R2</i>	<i>Equity of teacher as a bridge be success</i>
<i>R3</i>	<i>Prosperity teacher in Indonesia</i>
<i>R4</i>	<i>Teacher as role models of students and society</i>
<i>R5</i>	<i>Teacher is noble</i>
<i>R6</i>	<i>Teacher's Prosperity in Nation's Prosperity</i>
<i>R7</i>	<i>Teachers welfare in Indonesia</i>
<i>R8</i>	<i>The difference teacher salary in Indonesia</i>
<i>R9</i>	<i>The prosperity is not only about the financial</i>
<i>R10</i>	<i>The teacher as a bridge be success</i>

The following is a sample picture of student's text-blog.

Picture 1: Student's blog of argumentative essay



Data analysis is conducted by the researcher qualitatively based on coding frame documents of writing. Then, the researcher presents and interprets the findings.

RESULTS AND DISCUSSION

The data are analysed into coding frame which include main category and sub category. The main analysis includes the material unit case which demonstrates student's critical thinking from the topic of "Teacher Prosperity in Indonesia."

The followings are the description of the data collected indicated in Table 1. Coding Frame of Student's Argumentative Essay.

Table 1: Coding Frame of Student's Argumentative Essays

NO	RESPONDENT'S BLOG-TEXT	ANALYSIS DESCRIPTION	CATEGORY AND SUB CATEGORY			
			4	3	2	1
R1	P#1 Teachers are patriots without merit. They not only teach new generations about school subjects, but also discipline them to be a better person in the future that will bring prosperity and pride for the nation. So, they should have get the highest payment in the nation. But in fact, not everyone appreciates what they have done, especially in Indonesia. Teachers get low payment for their unlimited dedications. Even so, they still full with spirit and always happy when they come to the classroom to teach their pupils new knowledge and life lesson. For them, teachers, the biggest achievement they can get is if their students get the message and knowledge that they give to them. Nothing more delightful than to be a teacher that success in making their students not only smart, humble and competence, but also can bring a good change for the next generations.	The author starts her thesis statement by conveying general statement that the teacher as patriot without merit. She gives an argument in background information about the appreciation for teacher not only to teach but also to disciplinize students to be better life in the future According to the author, the appreciation should be initiated by high payment. But in reality is happy and spirited to know her students understand about the knowledge given.				

Then, the data obtained from students' blogs and email collections are paraphrased by and analyzed by the researcher qualitatively based on coding frame documents of writing. The results of analysis are classified into 4 (four) categories of findings.

Finding #1. Strong (quality level of strong critical thinking)

This level consistently does all or almost all of the followings: Accurately interprets evidence, statements, graphics, questions, etc.; Identifies the most important arguments (reasons and claims) pro and con.; Thoughtfully analyzes and evaluates major alternative points of view; Draws warranted, judicious, non-fallacious conclusions; Justifies key results and procedures, explains assumptions and reasons; Fair-mindedly follows where evidence and reasons lead.

Finding #2 Acceptable (quality level of acceptable critical thinking)

This level does most or many of the following: Accurately interprets evidence, statements, graphics, questions, etc.; Identifies relevant arguments (reasons and claims) pro and con.; Offers analyses and evaluations of obvious alternative points of view; Draws warranted, non-fallacious conclusions; Justifies some results or procedures, explains reasons; Fair-mindedly follows where evidence and reasons lead.

Finding #3. Unacceptable (quality level of unacceptable critical thinking)

This level does most or many of the followings: Misinterprets evidence, statements, graphics, questions, etc.; Fails to identify strong, relevant counter-arguments; Ignores or superficially evaluates obvious alternative points of view.

Finding #4. Significantly Weak (quality level of Significantly Weak of Critical thinking)

This level consistently does all or almost all of the followings: Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others; Fails to identify or hastily dismisses strong, relevant counter-arguments; Ignores or superficially evaluates obvious alternative points of view; Argues using fallacious or irrelevant reasons, and unwarranted claims; Does not justify results or procedures, nor explain reasons; Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions; Exhibits close-mindedness or hostility to reason.

In this research, from 30 respondents' blogs, the level of strong critical thinking is only obtained less than 2 respondents. It indicates that students still have more practices in writing their critical thinking into writing argumentative essays. The ways of think critically of students as in their *thesis statements* tend to view that the rewards for honorary teacher should be paid high as equally as civil servant teacher. This reflects generic argument as weak thesis statement that should be supported by strong arguments and evidences. Also, in responding the textual assumptions, arguments and bias especially in evaluating aim, structure, and logic in a text most of the students demonstrate weak awareness of the author writing in critical context discussed.

CONCLUSION

This research concludes that the quality level of student's critical thinking skill varies from acceptable level to significantly weak. No Strong level is found based on Facione's HCTSR. These results indicate that in viewing the critical issues, higher education students in this one of the private universities in West Java, Indonesia, are still in the weak level of critical thinking. It means that they are still weak in representing their critical thinking skills in writing. The students still misinterpret evidence, statements, graphics, questions, etc. Some of them identify relevant arguments, but ignore or superficially evaluate obvious alternative points of view. They argue using irrelevant reasons, and unwarranted claims. Regardless of the evidence or reasons, they maintain or defend views based on self-interest or preconceptions; exhibits close-mindedness or hostility to reasons. The students think less critically and less curiously in viewing and questioning critical

issues or problems around them. This reseearch recommends that in teaching learning writing in higher education, students should understand first the critical thinking conceptualization in practicing their writing and the institution should include critical thinking subject in curriculum to support students' understanding of critical thinking.

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