

**THE USE OF COMPUTER-MEDIATED  
COMMUNICATION  
(ELECTRONIC DISCUSSION FORUM) TO DEVELOP  
AND INCREASE STUDENTS' CRITICAL THINKING  
SKILLS**

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- A classroom action research on “The integration of the aspects of critical thinking skills in Reading V (Extensive Reading) to develop and increase students' critical thinking (CT) skills in the English Department, Faculty of Language and Art, Yogyakarta State University”

## Background of the Study Problem

- Critical thinking has become one of the important educational goals over the last two decades.
- The indication that the vast majority of the 5<sup>th</sup> semester students are incapable of empowering their higher level of thinking. This is also shown on the low grades achieved by students in content-based courses that usually advance analytical questions.
- This incapability hampers students to take active participation in classroom discussion and presentation.
- Cultural values that hinder students to take risk for expressing their ideas or arguments. Students need a medium to break this shyness or to rehearse their self-confidence.
- Reading is an entry point for gaining critical thinking skills as stated by Crescimanno (1991) below:  
*“... critical thinking can be gained by inviting students into the depth of teaching materials lecturers have prepared. Reading is therefore undoubtedly a powerful weapon to lead students to move beneath the surface information or knowledge.”*

## THE ASPECTS OF CRITICAL THINKING SKILLS INCORPORATED IN READING V INSTRUCTION

- recognizing assumptions,
- identifying explicit and implicit arguments,
- making interpretations,
- making inferences, and
- evaluating arguments

## WHY READING V?

- Critical reading that is determined as the main focus of Reading V class as stated in the study program curriculum, is in line with the development of critical thinking skills.
- Second, reading is regarded as the starting point of gaining critical thinking.

- Crescimanno (1991)

*“... critical thinking can be gained by inviting students into the depth of teaching materials lecturers have prepared. Reading is therefore undoubtedly a powerful weapon to lead students to move beneath the surface information or knowledge.”*

## THE PHENOMENA IN READING V CLASSES

- The 5th semester students' incapability of analyzing, synthesizing, and evaluating problems
- The low frequency of the students' participation in classroom discussions

## THE FOCUS OF THE RESEARCH

- The inability of the 5th semester students in empowering their analytical and critical thinking skills affects the frequency of their participation in solving questions requiring the process of analyzing, synthesizing, and evaluating.

- The integration of the five aspects of CT skills into Reading V learning instruction is expected to be able to help the students to maximize their critical thinking skills.
- The presentation of the input texts integrating the CT aspects on the Electronic Discussion Forum can hopefully generate more dynamic, interesting, and challenging teaching-learning process.

## THE AIMS OF THE RESEARCH

- To improve the quality of the teaching-learning process in Reading V class by integrating the elements of CT into Reading V learning instruction and taking advantage of discussion forum as the medium of the presentation of the learning instruction integration

- develop and increase the students' critical thinking skills by training them to analyze, synthesize, and evaluate the problems presented on the selected input texts
- develop the students' self-confidence in advancing their ideas, opinions, arguments, analysis, synthesis, and evaluation

## WHAT IS CRITICAL THINKING?

- McPeck (1990)  
the ability resembling verbal ability or intelligence
- John Dewey (1982)  
“reflective thought” that involves suspended judgement, maintenance of a healthy scepticism, and the exercise of an open mind

- Russel Crescimanno (1991)  
critical thinking in class basically deals with how teachers invite their students into the full depth of the material they teach.
- So, critical thinking is the ability to think clearly and rationally-to intelligently analyze, interpret, synthesize, and evaluate any input or information we receive.

## READING AND CRITICAL THINKING

- **Reading is an interactive mental process that requires a reader to engage in the process of using knowledge, skills, and strategies to encode meaning.**

## THE READER'S KNOWLEDGE, SKILLS, AND STRATEGIES

- **linguistic competence** that covers the ability to recognize the elements of the writing system, knowledge of vocabulary, knowledge of how words are structured into sentences;
- **discourse competence** that comprises knowledge of discourse markers and how they connect parts of the text to one another;
- **sociolinguistic competence** that requires a reader to gain knowledge about different types of texts, their structure and content;
- **strategic competence** that signals the ability to use top-down as well as bottom-up strategies.

## WHO IS A CRITICAL READER?

- **He must be able not only to meet this requirement, but also to evaluate the credibility of the piece of writing s/he is reading**



## THE MODEL OF CRITICAL THINKING

### **Bloom's Taxonomy of Higher Thinking**

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

## COMPUTER-MEDIATED COMMUNICATION (DISCUSSION FORUM)

The five reasons why the use of internet  
reasons why the use of internet  
(Warschauer et.al. (2003: 7)

- Authenticity
- Literacy
- Vitality
- Interaction
- Empowerments

## CATEGORIES OF CMC

- *asynchronous computer-mediated communication,*
- *synchronous computer-mediated communication, and*
- *hypertext*

## ASYNCHRONOUS CMC

- This CMC does not require the people communicating to sit at the computer at the same time
- Examples :
  1. email, and
  2. web bulletin boards

## SYNCHRONOUS CMC

- This CMC demands all participants to sit at the computer at the same time.
- Examples:
  1. chat rooms,
  2. online discussion forum,
  3. instant messaging, and
  4. videoconferencing

## HYPertext

- Hypertext is a nonlinear, linked form of information organization in which documents in database are connected via hyperlinks.

## SOME POINTS TO PONDER IN USING ELECTRONIC DISCUSSION FORUM

Warschauer (2000)

- The use of electronic discussion forum in language teaching needs a careful planning and arrangement.
- Teachers must be active and do not dominate.
- The idea of integrating electronic discussion must be combined with other classroom activities.
- In electronic discussion forum, the direct error correction on the web must be avoided.