CHAPTER II

LITERATURE REVIEW

A. Theory of Critical Thinking

1. Definition of Critical Thinking

Critical thinking can be said as a complex activity because it involves many aspects that must be considered. Critical thinking is a term for the various cognitive skills needed to analyze, identify, evaluate arguments and make sound decisions (Bassham, 2012). They come to impartial, well-informed, and objective conclusions. This thinking skill must be possessed by students because critical thinking will make it easier for someone to process and use the information found to solve problems by making better decisions in quality thinking. However, students cannot acquire critical thinking skills overnight. Critical thinking is a skill where the ability to execute will increase with practice (Gray, 2012).

Moreover, lately, it has become one of the main topics that are widely discussed and explored by experts. The teacher's most important role in developing students' critical thinking is to create application and learning environments that encourage critical thinking. It is critical to allow students to comment on subjects, incidents, conceptions, and events from various perspectives in order to improve students' critical thinking.

2. Critical Thinking Process

The critical thinking process stems from the activities of thinking itself. Delphi quotes citied (Facione, 2013) that critical thinking is a self-directed and self-regulating appraisal process reasoned consideration for evidence, context, conceptualization, methods, and criteria. They are Investigation, Interpretation, and Judgment.

a. An investigation is to probe the evidence or data related to the issue or the matter that arises. An investigation is an activity to get any evidence related to the matters that arise.

- b. Interpretation is to decide the meaning of the evidence.
- c. Judgment is to determine the conclusion about the issue or the matter that arises.

The Critical thinking process respectively encompasses the activity of investigation which is the activity to get any information relating to the problem that occurs. The activity of interpretation or the activity to determine the meaning of the evidence obtained from the investigation conducted and the activity judgment, that is, the activity of evaluating the issue by making a conclusion based on the interpretation and investigation conducted previously. All of the three activities are conducted gradually and respectively started from investigation to judgment. An investigation leads to the last product of the thinking process conclusion or judgment. Based on the explanation above, three are at least three activities that are included in the critical thinking process, namely investigation, interpretation, and judgment.

In this case, the investigation is an activity, basically comes first, which aims to find the evidence or information about the issue or matters that arise. Next, it goes on to the subsequent step or meaning of the evidence or information from the investigation conducted before. The last one is a judgment that is, making inferences or drawing the conclusion from the data or evidence as well as the information that has been obtained in the previous activities, investigation an interpretation about the issue.

3. The Benefit of Critical Thinking

The benefit of critical thinking through thinking critically, one may make precise consideration towards one's works, and one may obtain several benefits that will facilitate not only in terms of academic performance but also in terms of dealing with real-life problems. Critical thinking is an important factor that has a direct relationship with language learning and it is a very important component of education in this century (Golpour, n.d.2014).

There is the ability to determine something relevant in writing (noting) can be more accurate and specific. The ability to conduct problem-solving and project management can be done accurately. d. It can raise a feeling of confidence in a successful outcome in complex problems and projects.

4. The Importance of Critical Thinking

When they first enter college, students are sometimes surprised to discover that their professors seem less interested in how they got their beliefs than they are in whether those beliefs can withstand critical scrutiny. In college, the focus is on higher-order thinking: the active, intelligent evaluation of ideas and information. For this reason, critical thinking plays a vital role throughout the college curriculum. Besides the academic writing genre and its linguistic features that can reflect the students' CT capacity, an important feature in academic writing is responsibility in the academic writing practice (Aunurahman in Gillett, Nga, 2017)

In a critical thinking course, students learn a variety of skills that can greatly improve their classroom performance. These skills include

- a. Understanding the arguments and beliefs of others critically evaluates those arguments and beliefs.
- b. Developing and defending one's well-supported arguments and beliefs.

5. Criteria of Critical Thinking

As standard criteria of Critical Thinking, there are 6 basic elements in critical thinking, abbreviated as FRISCO19: Characteristics of critical thinking according to (Ennis, 2011), ideally students who think critically have several basic criteria or elements which are abbreviated as FRISCO (Focus, Reason, supporting reason, integration, Conversation, and Organization) namely:

a) Focus

The focus is more a thesis statement and/ or listing of subordinate points. This feature examines whether the subject/issue of the paper is clear and the position/ opinion is explicitly announced in the opening and

maintained thought the paper. Multiple positions are focused only if there is an umbrella statement. In the opening of the paper, the writer must indicate the intent to support one or more positions/opinion and preview major points of support. The paper will close with an effective conclusion. This assumes at least a forty minute writing period. Degree to which main idea/theme or point of view is clear and maintained:

- 1) Unclear, absent, insufficient length to ascertain
- 2) Confusing attempted main point unclear or shifts.
- 3) Under promise, over deliver, overpromise, under deliver: infer: two = position/o unifying statement.
- 4) Bare bones: position clear: main point previewed.
- 5) Position clear, generally previewed.
- 6) All main points are specified and maintained.

b) Reason

This feature incorporates the strength of three different types of reasoning, the recognition of alternatives viewpoints, and the degree of clarity. The three types of reasoning are generalizing, best explanation inferring, and value judging, often interdependent in the same paper.

a) Generalizations

Generalizations are inferred from the supporting examples or evidence. When papers draw inferences beyond the data, the small group or sample must be typical of larger group. Personal examples and anecdotes are acceptable provided they represent the widespread experience of other. Good warranted generalization are usually agreed upon by experts and promoted as acceptable interpretations of supporting reasons or fact.

b) Best explanation

Best explanation inferring is solid it plausible and consistent with the pacts. The conclusions should help to account for the facts or reasons, and they should be better than alternatives explanations of the same facts or reasons. If a best explanation conclusions is asserted, alternative explanations must be refuted.

c) Value statement

Value statement are statement that place value on the way something wa, is, or could be. We might, for example, judge that was wrong for killing y: Here we evaluate a past action. This judgment is deduced from the acceptable principle that it is wrong to kill another human being. Another way in which value judgment can be supported is by specific example and situation. The judgment that drugs are bad might be supported by precise and vivid personal examples of a family member's deterioration because of drugs. In this section, we also judge the sufficiency of supporting reasons. The sufficiency or supporting reasons depend upon its amount, significance and thoroughness. Support scores for longer papers will depend on the proportion of reasons or sub points developed by more specific detail and reasons and evenness or balance of support for key points. Obviously, short papers will have fewer opportunities to develop reasons or to support points. Degree to which conclusion supported by reasons/evidence, alternatives addressed, and argument clear.

- 1. Conclusion unsupported, no reasoning attempted, insufficient
- 2. Conclusions minimally supported, alternatives unmentioned, muddled confused.
- 3. Some insufficient support, alternatives prejudicially mentioned, key terms underlined.
- 4. Moderate support, alternatives mentioned fairly, some vagueness.
- 5. Conclusions well supported, alternatives well recognized; clear.
- 6. Strong supported, alternatives thoroughly addressed; Clear.

c. Integration

The purpose of this rating is to provide a general evaluation of how clearly the paper achieves the assigned task The holistic rating assumes that the effectiveness of the paper depends upon the skill with which the students orchestrates the fundamental features to complete the assignment. The judgment is limited to the combination of the features and does not include contributions of other factors such as humor or originality. It reflects the view that the paper is a total work, that the whole is greater than the sum of the parts.

This "focused" holistic judgment is not the reader reaction to the work as art, it is the reader reaction to the work as craft how adequately the work achieves the purpose. To arrive at the judgment, raters read the paper through from beginning to end thinking. "Does this paper develop the assignment clearly and coherently and in standard English?"

- 1. Doesn't present most features, insult.
- 2. Attempts address assignment, conclusion.
- 3. Partly developed, one features not develop.
- 4. Essentials present.
- 5. Features present, but not all equal.
- 6. All features evident and equally wail developed.

d) Supporting reasons

This feature focuses on the quality and detail or sub points. Supporting reasons are usually more specific than conclusions. The quality of support depend on its specificity, accuracy and credible. Specificity is usually achieved thought the use of concrete details, example, and reasons. Accurarancy or credibility of support is judged be deciding whether sources are credible and whether the reasons, examples, and details are factual or plausible.

Specificity is usually achieved thought the use of concrete details, example, and reasons. Accuracy or credibility of support is judged be deciding whether sources are credible and whether the reasons, examples, and details

are factual or plausible. Degree to which supporting reasons and evidence are clear, believable, and from credible sources:

- 1. No support, no credible sources, unbelievable vague, confusing.
- 2. Attempted, dubious sources, inaccurate, vague.
- 3. Some sources and/ or reasons/ evidence dubious, some vagueness.
- 4. Some sources credible: reasons/ evidence generally believable, sometimes second level, specific.
- 5. Most sources credible: most reasons/evidence believable, often at second level, specific.
- 6. All sources credible: all reasons: all reasons/evidence believable, second level/beyond spec.

e) Conversation

Evaluations of the paper is use of conventions should take into account the following: how seriously the errors interfere with communication: the number of errors in relation to how much was written (there errors in three sentences is a lot different from three errors in three paragraphs) and the kinds of errors are listed following the scale. The evolution of conventions takes into account the papers proximity to a final draft in the writing process.

For example, if a student has had three weeks to do assignment with multiple drafts, more stringent criteria may be used in assigning a convention score than for an in class writing assignment. Use of conventions of Standard English:

- 1. Many errors, unreadable, confused meaning, problems with sentence construction, insufficient length to ascertain maintenance.
- 2. Many major errors, confusion.
- 3. Some major errors, many minor, sentence construction below mastery
- 4. Developed, few major errors, some minor, meaning unimpaired, mastery of sentence construction.
- 5. A few minor errors, but no more than one major error.
- 6. No major errors, one or two minor errors.

f) Organization

This feature examines whether the composition exhibits a clear structure or plan of development (beginning, middle) and whether the points are logically related to each other. Organization has a vertical dimension (coherence) indicated by the use of paragraphing and transitions to signal the relation of the support to the position. Organization also has a horizontal dimension (cohesion) evidenced by the connection of one sentence to the text. The writer may employ varied methods to achieve coherence and cohesion, repetition, pronouns, synonyms, parallel structure, connectives and transitions.

Fully developed papers will use paragraphs and transitions to signal the plan or text structure. Less developed papers will fail to use paragraphing or will use it inappropriately. These papers may also use few cohesive ties or transitions to cue the logical relationships. Some less developed papers may have digressions, or the train of thought may resemble free associations or stream of consciousness. Position papers may be organized by announcing the subject/issue and the position in the paper is opening followed by the presentation of support and its elaboration. The methods of development may include simple enumeration, cause to effect, and part to whole, and most important to least important.

- 1. No plan, insufficient length to ascertain maintenance.
- 2. Attempted plan is noticeable.
- 3. Not knowledge able in paragraphing.
- 4. Some cohesion and coherence from relating to topic, plan is clear.
- 5. Most points connected, coherent, cohesive, using various methods.
- 6. All points connected, signaled with transitions/ other cohesive devices.

In conclusion, the FRISCO model presented above is only one of the many models of critical thinking proposed by some experts that can be used as one of the alternatives to structure the critical thinking assessment. This model is given here to provide the overview of the scheme of the critical thinking test used in this study.

B. Hortatory Exposition Text

Hortatory exposition text is one kind of non-fiction text. It is included in the persuasive text in the form of exposition. There are two kinds of exposition text, namely analytical exposition, and hortatory exposition. Analytical exposition text aims to inform the reader something about the generic structure of the text such as a thesis, argument, repetition, or conclusion. A hortatory exposition has these following language features: discuss scientific issues with precisely logical arguments; use mental process words (realize, think, feel, believe, consider); use simple present tense, modals, as well as action verbs; and use temporal connectives firstly, secondly (H. Wijaya, 2015).

Meanwhile, the hortatory exposition has the purpose of explaining to the reader that something should or should not happen. Because of this purpose, the generic structure of hortatory is different from analytical exposition text. The general structure of a hortatory is a thesis, argument, and recommendation. Both are almost similar, the difference is in the last paragraph. That is, the exposition of the text persuades the reader by providing information and arguments about the problem.

Analytical exposition, the last paragraph contains reiteration, while the hortatory exposition contains recommendations for students.

Hortatory exposition text is the text that serves to win over readers that they ought to lie with one thing for the advantage of others a hortatory text aims to convince the reader that something should or shouldn't happen. Within the hortatory exposition text, the author provides many arguments to strengthen their opinions or ideas. Argument or reason is to support opinion who sometimes discuss current problems around us whose argument supported facts or theory.

1. The Generic Structure of Hortatory Exposition Text

Every text has specific structures that differentiate it from others. A hortatory exposition text consists of these following structures (Gerot and Wignell, 1994:209):

a. Thesis

A thesis is the announcement of the issue of concern. A thesis is put in the beginner paragraph that consists of the introduction of the main idea that will be discussed. In this part, the writer takes their position in the text.

b. Argument

Arguments contain the reasons for doing something. The argument here is supporting details of the text that consist of argumentations, opinions, reasons to concern. Those are is used to strengthen the thesis

c. Recommendation

A recommendation is a statement of what ought to happen. A recommendation is put in the last paragraph that contains a statement of what something should or should not be the case.

2. Generic Features

Generic features of hortatory exposition text are (Gerot and Wignell, 1994:210)

- a. A Hortatory Exposition focuses on generic human and non-human participants, except for the speaker or writer referring to self.
- b. It uses mental processes. It is used to state what the writer or speaker thinks or feels about something. For example: realize, feel and appreciate.
- c. It often needs material processes. It is used to state what happens, for example: has, is polluting, and should be treated.
- d. It usually uses Simple Present Tense and Present Perfect Tense.
- e. Enumeration is sometimes necessary to show the list of given arguments: Firstly, secondly, finally.

3. Common grammatical patterns in hortatory exposition include:

- a. Abstract nouns, e.g. culture, etc.
- b. Action verbs, e.g. value, etc.
- c. Connectives, e.g. first, second, etc.
- d. Modal auxiliaries: Should, ought to, had better

Table 2.1 Example Hortatory Expositions Text

The Importance of Deeding	
The Importance of Reading	
Thesis	I think that reading is a very important activity in our
	life. Why do I say so?
Argument I	Firstly, by reading we can get a lot of knowledge about
	many things in the world such as Science, technology,
	sports, arts, culture, etc written in either books,
	magazines, newspapers, etc.
Argument II	Secondly, by reading we can get a lot of news and
	information about something happening in any part of
	the world which can we see directly.
Argument III	Another reason, reading can give us pleasure too. When
	we are tired, we read books, novels, comics,
	newspapers, or magazines on the entertainment column
	such as comedy, short story, quiz, etc. To make us
	relaxed
Argument IV	The last, reading can also take us to other parts of the
	world. By reading a book about Irian Jaya we may feel
	we're sitting in the jungles not at home in our rooms
Recommendation	From the facts above, it is obvious that everyone needs
	to read to get knowledge, information and also
	entertainment. Or in summary, we can say reading is
	truly important in our life.

Adopted by (Karimah, Fifin Nuril. 2019)

C. The Measurement of Writing Skill

In scoring the test of this research, the researcher applied the writing scoring technique recommended by (Jacobs *et al*). The scoring technique of writing is the question and the answer are given to the students in writing form.

The technique applied five indicators of the writing hortatory exposition text. The five indicators are content, organization, vocabulary, language use, and mechanics.

a. Content

Scoring the content is based on the students" ability to write their ideas and information in the form of logical sentences.

b. Organization

Organization refers to the student's" ability to write their ideas and information such a good logical order to the topic and supporting sentences are clearly stated.

c. Vocabulary

Vocabulary refers to the student's" ability in using words or idioms to express ideas logically. It also refers to the ability to use a synonym, antonyms, prefixes, and suffix exactly.

d. Language Use

Language use refers to the students" ability in writing the sentence, simple, complex and compound correctly and logically. It also refers to the ability to use agreement in the sentence and some other words such as noun, verb, and time signal.

e. Mechanics

Mechanics refers to the student's ability to use words appropriately and function correctly, such as punctuation and spelling. Paragraphs and text can be read correctly. For all components, students got a score of 100 points, in which the score for content is 30 points, the organization is 20 points, vocabulary is 20 points, language use is 25 points, and a mechanism is 5 points.

D. Previous Study

Studies related to this research have been done by other people researchers related to the variables of this study consisting of critical thinking

skills and writing skills. The researcher will explain the difference between the research and previous research

1. An Analysis of Student's Critical Thinking Skills in Writing Argumentative Essay

The first research has been conducted by (Sabu & Vernandes, 2019) (Universitas Negeri Padang). The population of this research was English department students on the second academic year at STKIP Abdi Pendidikan Payahkumbuh, and there were 13 sample students. In gathering the data, the instrument used was a written test.

The method which is used by the writer is descriptive quantitative. The instrument in this research has content validity based on SAP from SKTIP Abdi Pendidikan Payakumbuh 2017/2018 academic year. The researchers used inter-rater reliability and coefficient reliability from two scorers to analyze students' critical thinking in writing an argumentative essay. The result revealed the student's critical thinking skills in writing an argumentative essay was 60, which belong to the "average to good critical thinking skill category".

2. Effects of Critical Thinking on Writing Cause and Effect Essays by Iranian EFL Learners

The goal of the current study was to investigate the effects of critical thinking skill on EFL learners' cause and effect essay writing and their attitudes towards it. To achieve this goal, 60 Iranian upper-intermediate EFL learners were randomly divided into two equal control and experimental groups. After evaluating their knowledge of writing, the conventional teaching methods were used for the control group while an eight-step method was used to promote the critical thinking skill for the experimental group. Then the participants sat for the second test to assess the effect of critical thinking instruction and to compare the groups with each other. Elicitation of their attitudes towards the method was done by the questionnaire. The results revealed that the critical thinking instruction had meaningful consequences on the cause and effect essay writing of the

participants, and the participants had positive attitudes towards the training. The findings of the research can recommend useful suggestions for the instruction of writing and critical thinking skills.

3. Exploring EFL Students' Critical Thinking In Writing Analytical Exposition Text: an SPG-Based Analysis

This study was conducted to explore students' critical thinking skills in writing analytical exposition text. The aim of this study is to describe the element of critical thinking reflected in students writing analytical exposition text. The research design used content analysis case study. The data were obtained from five students' text in Class XI. The instruments used in this research were the students' writing artifacts which main instrument. The data were analyzed with transitivity system of systemic functional grammar and critical thinking indicators from Watson Glaser II (2010). The study found that: First, students' ability in writing the argument is still weak and irrelevant with the topic and thesis. Second, the students' texts are not in line with the language feature of analytical exposition text that is relational process. Based on the results is teacher can more concern to help students in producing a good text by using critical thinking.

4. Teaching Critical Thinking through Academic Writing to Tertiary EFL Students in Pontianak Indonesia.

Last a previous study is conducted by Aunurrahman, Fuad Abdul Hamied, & Emi Emilia (2020) in the Asia EFL Journal Quarterly. Which the title is: An Utilization of a Genre-based Approach. The research aims to determine the uses of academic writing activities under a systematic functional linguistic genre-based approach to help improve students' critical abilities of English as a tertiary foreign language. Participants in their research consisted of 36 students from Private teacher training and education institution in Pontianak, West Kalimantan, Indonesia. The data collection technique used the text analysis byusing the functional grammar framework for the three selected texts produced in the independent construction stage in the second cycle of the course. The text represents

the low, medium, and high achievers' performance which are then analyzed textually. The results showed that the students had mastered the exposition text genre. The students also use various linguistic features that reflect their critical thinking capacity. Furthermore, the research shows that lecturers must provide an equal portion of explicit teaching to their students in writing and critical thinking.

In comparison with the related previous studies discussed and reviewed above, this study has the position and similarity or difference from those related previous studies above shows the similarity between the previous studies and this study. The darker the color, the more similar the previous study with this study. In this case, this study is more specific and detail than other investigations conducted by other researchers. First, although. First, although the research variables in this study and previous studies are the same, namely critical thinking and writing, the research design used, the type of test text is different and the data collection tools are also different. Their research design is mostly categorized as an experimental design because this research is intended to determine the impact or influence of critical thinking on writing skills. While the design of this research is descriptive quantitative because the researcher focuses on analyzing the critical thinking level of students in writing hortatory exposition texts.

The next difference lies in the research objectives, previous research on the effect of critical thinking on writing skills. Meanwhile, in this study, the researcher wanted to analyze the students' critical thinking level through a hortatory exposition text. If it is known that the level of critical thinking resulting from this research can be used as evaluation material for education in Indonesia, especially at IKIP PGRI Pontianak to change for the better.

Considering the review of previous related studies above, it can be considered that this research is not a replica of previous studies, but is an extension and more specific research that focuses on critical thinking skills of this research.