**LOGICAL FALLACIES**

**IN THE ARGUMENTATIVE WRITING OF INDONESIAN EFL LEARNERS**

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*ABSTRACT*

*The purpose of the study is to evaluate Indonesian EFL learner’s critical thinking performance as reflected in their argumentative essays. Using fallacy approach (as opposed to criterial approach), the study aims at identifying logical fallacies in students’ writing in an attempt to locate areas where students mostly have problems with their flow of logic. There were 40 students involved in the study, each of which was asked to write an argumentative essay on a certain topic related to their field of study. The results show that at least 35 fallacies were found in the students’ writings, ranging from the simple type like the use of emotive language to a more complex type like fallacy by distraction. The implication of the finding of the study for the EFL teaching is that more attempt needs to be*

*done to make sure that students have solid knowledge of how to argue effectively in their essays so that they are capable of not only following the criteria set for a good argumentative writing but also refrain themselves from committing fallacies in their writing.*

*Key words: argumentative writing, Indonesian EFL learners, logical fallacies*

**1. INTRODUCTION**

EFL practitioners seem to share the same view regarding writing: this particular skill has been perceived as the most difficult to master. For EFL learners, the challenge they face in writing an English composition will be even greater when they have to produce argumentative writings. The element of logic

is undoubtedly another ingredient that adds to the complexity of this skill.

In order to be able to argue effectively

in an argumentative writing, students need to learn about logic and therefore logical reasoning, so that they will understand that argumentative writing is not about winning a fight. In an attempt to win an argument, students are often trapped in a situation which is more similar to a disagreement rather than a formal argument. With the lack of an ability to support claims with valid reasoning, some students might in turn fall into developing arguments that contains some logical fallacies.

Logical fallacies in argumentative writing, especially in the context of EFL, have

not been adequately discussed. One factor that might contribute to this situation is the fact

that logic alone is in fact not an exclusive property of EFL. This however doesn’t reduce the fact that the knowledge on logical fallacy

is very important for EFL learners, especially those who want to able to produce a good

argumentative writing,

**Argumentative Writing in EFL**

Argumentative writing can be defined

as a type of writing that that attempts to change the readers’ mind, to convince the reader to agree with the point of view or opinion of the writer or to do an action as proposed by the writer.

For EFL learners, there is no difference in terms of the aspects of writing they need to master in producing an argumentative writing compared to other types of writing. In producing a good argumentative writing, they need to pay attention to the following areas: content, organization, vocabulary, language use and mechanics. In terms of content, a good writing should

display thorough development of the thesis. The idea presented is also relevant and

substantive, and at the same time shows that

the writer is knowledgeable about the issue.

The next aspect is organization. To achieve a good organization in their writings, students need to make sure that the ideas are clearly stated as well as supported. Points presented should also be arranged in logical sequence to achieve good coherence and unity. The third aspect is vocabulary mastery: a language learner needs to make sure that they use effective word/idiom choice and usage. When they can display an ability to use sophisticated range of vocabulary and mastery of word form and register, it can be said that the learners have good vocabulary mastery. The next

aspect is language use. Good language use is characterized by, among others, the ability to

use effective complex construction with only

few errors of agreement, tense, word order, etc. Finally, there is mechanics. This aspect governs the learner to write based on the convention. A good writer therefore should demonstrate mastery of convention, and makes only few errors of spelling, punctuation, capitalization and paragraphing.

As with other types of writing, argumentative writing also follows a certain

generic structure. It is best for beginner writers

to comply the basic structure, though it is also open to some variation, depending on the writer’s skills and way of reasoning.

Below is the common structure of argumentative writing, which consists of three

basic parts: Introduction, Body, and

Conclusion (Smalley and Ruetten, 1995)

I. Introduction General statement Thesis statement

II. Body

Support 1

Support 2

Support 3

Refutation

III. Conclusion

There are two elements in *Introduction*: general statement and thesis statement. General statement provide the context of our writing, while in thesis statement, our position is presented. Thesis is a very important element in argumentative writing, without which there will be no case to argue. The biggest task a writer needs to achieve in his/her argumentative writing is to

support his/her position as stated in the thesis through valid and logical reasoning in *the body paragraph*

The biggest portion of an argumentative writing, *the body*, contains

several supports necessary to back up our

position in the thesis statement. This part is extremely important, since our audience will

mainly seek for the evidence or supports of

our position from this section. Gocsik (2004) states that there are several questions we need to ask when presenting evidence or support for our position. First, we should not suppress any facts. This is because in argumentative

writing, the opponent's point of view needs to be reckoned with, not ignored. Second, we should not manipulate any facts, since it is not fair to stretch the information to suit our own purposes. Third, we should give enough evidence: we should not rely on rhetoric alone to make a point. We need to review the main points of our argument and consider whether or not each point is convincing based on the evidence alone. Fourth, we need to bear in mind that giving too much evidence, for

example by quoting too many research results, will make our own point buried under the

arguments of others. Finally, we need to make

sure that the evidence we give is current enough and comes from reputable sources.

Though dated sources might be used, but by

doing so, we run the risk of not considering more current information that might challenge our point of view. The reputability of the source is another important issue, especially today when everything –including junk information- can be found easily on the Internet.

Still in the *Body*, there is an important element in argumentative writing, which is

called *refutation*. While its position in the

*body* of our writing may vary, refutation is something that should be present in a good argumentative writing. Gocsik (2004) already mention that we may not ignore any facts in our argument. When presenting our argument, we need to be aware at all times that we are actually talking to somebody who does not agree with us. Their position as well as their supports and evidence need to be acknowledged and later responded to. Refutation therefore involves the effort to identify and understand our opponent’s point of view. Smalley and Ruetten (1995) remind argumentative writers to be aware of the

importance good refutation in our writing. They say that while our reasons to support the arguments might be very good, there is a possibility that these points are probably not the points on which our opposition bases its argument.

A conclusion is a final and crucial part of an argumentative writing. A conclusion

contains the summary of what is presented in

the body, the restatement of the thesis, and might also contain a statement or a closing remark that will support our position. However, we should remember not state a fresh claim or argument in the concluding paragraph which needs further support and evidence.

**Elements of Argument in an Argumentative**

**Writing**

In several occasions where I gave the students the freedom to choose their own topic

for the argumentative writing, some of them ended up writing about something which was not quite “argumentative”, such as, for

example, “the food in XX is much better than the food in YY” or “we have to protect our

forest”. When given the explanation that their writing was not “argumentative enough”, they seemed to be confused, because according to

them, they also “argue” in the essay.

So, what makes a piece of writing

“argumentative”? To begin with, it is important to discuss the definition of “argument” that works for our purpose. Cottrel (2005) claims that argument is not the same as disagreement. We can disagree with someone else’s position without explaining the reason

or without persuading them to think

differently. Arguments, however, need reasons for the position held. In addition, argument

also has the final objective of persuading

others to believe in what we say or to do what we recommend doing.

In relation to the distinction between “argument” and “disagreement”, Smalley and Ruetten (1995) concludes that there are at least

three areas that cannot be effectively dealt

with in the formal arguments: the arguments of preference, the arguments of belief or faith,

and the arguments of facts. It is therefore very

likely that the debate within those three areas will end up in mere disagreement. Using this

guideline, it should be obvious why a thesis

statement such as “the food in XX is better

than the food in YY” cannot be developed into an effective argument.

Some students, in addition, have problems to understand why a thesis like “we

have to protect our forest” is not quite argumentative. In responding to this question, Smalley and Ruetten (1995) claim that an

argument should start with an assumption that we are writing to someone who does not agree

with us. In the case with the above thesis, it is very unlikely that there will be someone who will come forward and say, “No, I don’t agree

that we should protect our forest”. Position is therefore crucial in argumentative writing: one

should have a clear position and s/he has to try to persuade people (of a different point of

view) to finally see things they way s/he does.

Cottrell (2005) nicely summarizes the elements of argument, as can be seen in the

following chart:

**Elements of Arguments**

|  |  |
| --- | --- |
| ***Elements*** | ***Explanation*** |
| Position | Authors have a position, or  point of view that they attempt to persuade their  audience to accept |
| Reason/prop ositions | Reasons are provided to support the conclusion. Reasons are also referred to  as “contributing arguments”  and “propositions” |
| A line of  reasoning | A line of reasoning is a set of  reason, presented in logical order. It is like a path leading  the audience through the  reason, in steps, towards the desired conclusion. It should  be ordered so that it leads  clearly and logically from one reason to the next. In a poor line of reasoning, it is  difficult to see how each reason contributes to the  conclusion. |
| Conclusion | Arguments lead towards a  conclusion. The conclusion would normally be the position that the author wants you to accept. |
| Persuasion | The purpose of an argument  is to persuade the audience to a point of view. |
| Signal | These help the audience |

words and phrases

follow the direction of the argument

syllogism is made up of three statements: the major premise, or general observation; the minor premise, or particular observation; and

The above chart is very helpful in giving a guideline of what should be present in an argumentative writing, to distinguish it

from any other types of writing. One element however needs to be added to make our

argument even more convincing, namely *refutation* or rejecting the opposite point of view by showing the weak points. This way,

the persuasion will be even smoother.

**A line of Reasoning: Inductive and**

**Deductive**

A good argument needs a sound

reasoning. In the world of logical reasoning, we know two types of reasoning: inductive and deductive.

Rottenberg (1997) defines ***inductive reasoning*** as the form of reasoning in which

we come to a conclusion on the basis of observations of particular instances. The

reliability of the conclusion depends on the quantity and quality of our observations. This

type of reasoning nonetheless has a limitation: no matter how sound our conclusion seems to be, it can only be probable, not certain.

Inductive argument therefore can be summarized as a line of reasoning that

proceeds by examining particulars and arriving at generalization that represents a probable truth. Below is an illustration on how we can

come into a conclusion by examining individual cases.

Instance 1

Instance 2 conclusion

Instance 3

Due to its characteristics, reasoning inductively is quite challenging, because when observing something, the possibility of making mistakes is always open. Sometimes the evidence we have to work with isn't complete, which makes it difficult to draw persuasive conclusions.

While inductive reasoning can only attempt to arrive at the truth, ***deductive***

***reasoning*** guarantees sound relationship

between statements. If the series of statements

–or the *premises*- are true, then the conclusion must also be true. It is within this line of

reasoning that we learn the term *syllogism,* the

classic form of deductive reasoning. A

the conclusion, which is something that one might rightly deduce from the premises given.

Below is an example of a syllogism.

 Major *premise* : All watchdogs bark at strangers.

 Minor *premise* : When X was

murdered, the dogs did not bark

 Conclusion : X was not killed by a stranger.

It's important to note that many of the major premises used in syllogisms are often arrived at through inductive reasoning. Gocsik (2004), presents an interesting case of Ebola virus investigation using both approaches. The major premise in a *deductive reasoning* which says “Ebola always kills” was the result of *inductive reasoning*, i.e. researchers needed to study the virus carefully and observe what happens to people who were infected.

**Twisted Logic: Logical Fallacies**

What would happen if one fails to

comply with the rules of logic as prescribed in the inductive and deductive line of reasoning? The result will be what is known as ***logical fallacies***. Logical fallacies can simply be defined as defective conclusion (Sinnott- Armstrong and Fogelin (2010)). Interestingly, these mistakes in reasoning may be intentional or unintentional (Gocsik, 2004; Cottrell,

2005). In either case, however, the mistakes undermine the strength of an argument.

How can a “mistake” be deliberately made? Cottrell (2005) has a very good explanation on this. According to her,

argument may be flawed because (1) the author did not recognize that their own

arguments were flawed, and (2) the author intended to mislead their audiences and

deliberately distorted the reasoning, or manipulate the language use to create a certain response. The knowledge on this deliberate

mistake is important for students to make them more alert to flaws in other people’s argument.

If students are successful in spotting these flaws, they will have a good weapon to attack their opponents in the refutation part of the

argumentative writing.

There are many kinds of logical fallacies, which can be classified on the basis

of their source of flaws. Below is the

classification of fallacies adapted from Gocsik (2004). Some new sentence examples have been supplied in order to give a more clear understanding of the fallacies, since some of the original examples are culture-specific.

**Types of Logical Fallacies**

|  |  |  |
| --- | --- | --- |
| ***N***  ***o*** | ***Fallacies*** | ***Definition*** |
| 1 | Hasty  Generalization | A generalization based  on too little evidence, or on evidence that is biased |
| 2 | Either/Or  Fallacy | Only two possibilities  are presented when in fact several exist |
| 3 | *Non Sequitur* | The conclusion does not follow logically from the premise |
| 4 | *Ad Hominem* | Arguing against the  man instead of against the issue |
| 5 | Red Herring | Distracting the  audience by drawing attention to an  irrelevant issue |
| 6 | Circular  Reasoning | Asserting a point that has just been made Sometimes called  "begging the question." |
| 7 | False Analogy | Wrongly assuming  that because two things are alike in  some ways, they must  be alike  in all ways |
| 8 | *Post Hoc,*  *Ergo Propter*  *Hoc* | The mistake of  assuming that, because event *a* is followed by  event *b,* event *a*  caused event *b.* |
| 9 | Equivocation: | Equates two meanings  of the same word falsely |

important, they add, is to get a feel for the most common and most tempting kind of fallacy.

In EFL context, this knowledge will greatly help them to identify the fallacies and later to

avoid getting trapped in the same spot when

producing their own argumentative writing.

**METHOD**

The current study tried to evaluate 40 argumentative essays written by Indonesian

EFL learners in terms of the fallacies committed. All students were in their 6th

semester of their undergraduate program, and

they had all passed the course of argumentative essay writing taken in the previous semester. It is therefore assumed that the subjects in the study had mastered the basic knowledge of argumentative writing as well as other language skills/components necessary to express themselves in English based on the convention of academic writing.

The subjects were asked to write an argumentative essay with the topic related to

students’ enrolled course. The time given for the completion of the test was 60 minutes.

Students’ work was evaluated on the basis of fallacies found, which were then classified following a classification developed by

Mayfield (2007), which divides fallacies into 4 different categories: (1) fallacies that

manipulate through language, (2) fallacies that manipulate emotions, (3) fallacies that

manipulate through distraction, and (4)

fallacies of inductive reasoning.

With regards to the types of fallacies, Sinnott-Armstrong and Fogelin (2010) believe that there is little point in trying to construct a complete list of fallacies, because the number and variety are limitless. What is more

**RESULT**

The results of the study show that

there were 35 fallacies found in the students’

work.

Example of fallacies produced by the subjects: (1) Fallacies that manipulate through

language:

*I think it is ridiculous based on some reason* (the use of emotive language)

(2) Fallacies that manipulate through emotion

*Supposed English is totally erased from the curriculum, then what is our knowledge for? What do we have to do*

*in the future?* (emotional appeals to fear and pity)

(3) Fallacies that manipulate through distraction

*It is so unfair for the children that they*

*cannot have English in their primary school education. Why English? Why not other subjects?* (Red Herring)

(4) Fallacies of Inductive reasoning

*But when young learners study new language in this case English and their mother language also still under*

*development, it causes young learners prefer English than their mother*

*language. It also gives impact on the culture preference too. Young learner*

*prefer western culture than their own culture* (hasty generalization)

Below is the complete list of fallacies produced by the students:

*I think it is ridiculous based on some reason*

*The government feels reluctant to solve the problem of teaching English and prefer to just remove it*

*For me, rather than banning students to learn a new culture, it will be better if the government put more concern on giving more education on character building and religion which will guide the to face the new culture*

*Supposed English is totally erased from the curriculum, then what is our knowledge for? What do we have to do in the future?*

*If English is really erased from the curriculum then what we are doing now is wasting our money, time and energy*

*It is so unfair for the children that they cannot have English in their primary school education. Why English? Why not other subjects?*

*But when young learners study new language in this case English and their mother language also still under development, it causes young learners prefer English than their mother language. It also gives impact on the culture preference too. Young learner prefer western culture than their own culture*

*As we all know, Indonesia has a really messed up curriculum.*

*It is embarrassing to see the citizen of Indonesia put the foreign in the top and put aside their national language. So I think it is enough for the learners to start learning English in their Junior High School not in the Primary School*

*The fact that nowadays English is taught since kindergarten, support the argument that English should be taught in primary school as well*

*It is better to remove regional language other than English.*

*All people have understood the urgency of using English in their daily lives Even parents prefer to send their kids to school where the instructional language is English” As the time goes by, the English skills will grow just like the kids grow.*

*Seeing a parrot in Junior High School is not a good scenery*

*Giving new language skills to the teenager is more complicated especially when they have no English background.*

*The statement saying that English will make students have many more complex materials is totally wrong. English materials taught to young learners are actually enjoyable.*

*First of all, there is no strong reason why should be English. There are many subjects that can be removed as consideration.*

*Compare[d] to local language, not all students can learn English in their surrounding. Therefore they should learn English in their school.*

*Removing English as required subject in primary school, our education is move backward. Our education will be back to the era when English is taught in Junior High School, and it was more than ten years ago.*

**Fallacy approach vs Criterial approach in evaluating argument (and possibly in teaching it)**

There are two different methods of

argument assessment strategies, namely

*fallacies approach* and *criterial approach*. The fallacies approach, which is considered more traditional, focuses on the identification of specific fallacies that weaken the strength of

an argument. Using this approach, assessment of argument works by determining if an arguments contains fallacies. A more recent *criterial* approach, on the other hand,

evaluates arguments by determining if a given argument satisfies certain criteria, which

include criteria of acceptability, relevance and

adequacy (Hughes, 2008). The two seemingly distinctive approach, however, differ mainly

on the focus of the attention. As can be

summarized from Hughes’ further explanation, the criteria of a sound argument involve three aspects that should be present. The failure to satisfy the criteria can be identified, among other things, from the use of fallacious statements to support the argument. For example, he mentions some particular fallacies under each criteria (as used in the *criterial* approach), such as fallacies of acceptability, fallacies of relevance, and fallacies of adequacy.

Even though the two approaches are basically similar at the conceptual level, the

fallacy approach has been under strong

criticism for its failure to evaluate an argument based on a more comprehensive context.

Hundleby (2010) neatly summarizes the

debate around this issue by asserting that fallacy approach relies too much on the fallacies taxonomy to judge an argument. Such taxonomic technique, according to her, begins with the assumed fallaciousness and aims at rationalizing the argument’s defeat simply by identifying it according to the fallacies taxonomy. Based on her study involving 20 books on critical thinking, Hundleby (2010) also discovers that with regard to fallacy, more than 50% books use short examples of a few sentences, removing the premise and conclusion from the dialectical context in which they occur. In addition, the discussion is limited to labeling fallacy or judging if a statement is fallacious or not without actually discussing the acceptable counterparts for fallacies listed.

Despite the criticism that fallacy approach is too mechanical and less contextual

in judging an argument, it goes beyond doubt that the knowledge about logical fallacies

needs to be (explicitly) taught to students to equip them with some basic understanding

about fallacies. Such knowledge, according to Mayfield (2007) will give at least three advantages: (1) we learn more about the rule of good reasoning, (2) we avoid using them ourselves, and (3) we are not influenced by arguments that contain them. With regard to fallacy, Stapleton (2001) also points out an important fact that it is not something exclusive to non-native speakers. He claims that fallacy problem are also common in the writing of L1 students by referring to the fact that critical thinking textbook for L1 students usually also include prominent sections on fallacies. Following his argument, it is

therefore very important for L2 learners to also learn about fallacy so that they will not be trapped in making statements which are fallacious by western standard of critical thinking.

**CLOSING REMARKS**

In EFL setting, the teaching of writing skill -including of argumentative writing- has so far been emphasized on aspects related to

the generic structure of the essay and/or the elements of academic writing e.g content,

grammar, organization, and punctuation. With argumentative writing, an additional section

on what is meant by “argument” and therefore

“argumentative writing” is usually present to give students a clear understanding about this type of writing. However, an explicit and comprehensive session on logic and logical reasoning are rarely found in books on EFL writing. The explanation about logic is usually limited to the introduction of lines of

reasoning –deductive and inductive- with some instances of each approach. One factor that might contribute to this situation is the fact that logic is not an exclusive property of language learning, let alone of foreign language learning. References related to logic are usually available for general audience, in full-fledged English designed for native speakers.

Introducing logical fallacies to EFL

students who are learning argumentative writing can be seen as a practical step to

bridge the gap in their knowledge on logic. By observing examples of sentence containing logical fallacies, students will be made aware

of several categories of logical fallacies and refrain themselves from making similar

mistakes in their own writing. This approach, combined with the basic writing skill teaching,

will result in better writing products which not only comply with all the conventions of argumentative writing but also display sound claim as the result of fallacy-free reasoning.

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