#### **CHAPTER I**

#### **INTRODUCTION**

## 1.1 The Background of the Study

In this era of globalization, the times are getting more advanced and now almost everything is technology-based. According to Hanafizadeh, et al, (2017), "technology such as computers, the internet, wireless devices, social networks have influenced people's lifestyles regardless of age and gender". With the existence of technology, human life is increasingly practical, for example, shopping online, working, communicating with other people, and so on. Technology does not only change human lifestyles, technology also changes people's thinking styles. According to Grabe, (2007), "current technological developments have gone through innovation and changed society from ways of thinking, working, and living". Where people are already dependent on technology because almost all daily activities use technology. For example, the use of a smartphone or laptop to make work easier.

In today's progress, technology has referred to the digital stage where every aspect has used technology which is useful to make it easier for us to work. Technology is also not only used in work but now it is used in education.

As one of the things that cannot be separated from humans, education has undergone many changes after the <sub>introduction</sub> of technology. According to Selwyn (2011) states that "digital technology has now begun to be used in educational institutions as a means of supporting learning, either as an information tool (i.e. as a means of accessing information) or as a learning tool (namely as a means of supporting activities". According to Alonso et al, (2005) "technology has changed the teaching process to be simpler and without the limitations of space or time". For example, during the Covid-19 Pandemic today, we have to do all activities at home, both work, study, and others, which must be done at home. In that case, the role of technology is needed, people can stay connected to work with technology as well as education, people also can use this technology as a learning tool or we can call it online learning.

Learning using technology makes learning more enjoyable because technology provides various ways to make students able to easily understand what they are learning. For example, learning English uses technology such as the use of YouTube to access videos related to English, some games that improve the vocabulary of the student, and many more.

Likewise, with writing, students also need technology as a tool to develop their knowledge of writing in English. Writing is one of the important components that students must be able to master in English. According to Pranoto (2004; 9), "writing means putting ideas into writing or telling others something through writing". Writing can also be interpreted as an expression or expression of feelings that are expressed in writing. In other terms, the writing process allows us to communicate indirectly. There are four abilities in English, namely writing, reading, listening and the last one is speaking. And among the four abilities, writing skills are the most difficult component to master.

There are several factors why writing skills are very difficult to master, namely the lack of known vocabulary and idioms, incorrect spelling, the use of punctuation marks, and grammar that are in order. Similar to students majoring in English education, they also have the same problem. Alfiyani (2013) states that "students of the English Education Department sometimes use the wrong grammar in writing". Many of them still use non-standard language so that it is not following the rules of writing in English. Chomsky (1960 in Richards, 1987: 144) also states that "grammatical knowledge underlies our ability to produce and understand sentences in a language". Therefore, students need technology that can check for errors in writing as well as provide the right solution to produce good and correct writing. Lately, "there are grammar applications that can check for errors in writing and it has become very helpful and it is touted as the most accurate English grammar checker in the world" (Cavaleri and Dianati, 2016:226). Many applications that can correct grammar errors such as English Grammar, Simple Grammar and Check Grammar, Grammar Checker, Grammarly, and others. But in this study, the researchers only choose one of the several applications, namely Grammarly, because this application is very good for students to use to correct mistakes when writing and to provide solutions for the mistakes in grammar that we make. Not only that, but this application is also able to make students' writing more interesting. There are so many advantages of this Grammarly application, not only checking for grammar errors, but this application is also able to detect the percentage of plagiarism in its premium application.

There are several previous studies related to this research. The first research conducted by Fitriani (2020) on the implementation of the Grammarly tool to boost students 'writing skills of analytical exposition text proves that there is a significant improvement of students' writing scores before and after implementing the Grammarly tool in writing class. The next study was conducted by T. Muhammad Aidil (2019) concerning exploring students' perception of the effectiveness of Grammarly software in academic writing which proves students agree that Grammarly is very effective to be used as a supporting tool in writing examinations. Then, the next study was conducted by Mohammad Nova (2018) on utilizing Grammarly in evaluating academic writing: narrative research on EFL students' experience which Grammarly still has some limitations and weaknesses in giving the service. The next study was conducted by Daniel Bailey and Andrea Rakushin Lee (2020) on An Exploratory Study of Grammarly in the Language Learning Context: An Analysis of Test-Based, Textbook-Based, and Facebook Corpora which provide that Grammarly was successful at identifying local level errors in L2 writing regardless of the writing genre.

Therefore, in this study, the researcher is interested to research it because the second semester were at the right level to start mastering the correct writing technique. Researchers also want to know whether the Grammarly checker is effective or not on the quality of students' writing. In this study, researchers will use quantitative designs.

### 1.2 The Problem of the Study

Based on the background above the researcher formulated the problem of the study as follows: "Does Grammarly Application as Online Grammar Checker Effect the Students Writing Ability in the Second Semester at Nommensen HKBP University?

### **1.3 The Objective of the Study**

Based on the background and problem above, the objective of the study is to find that the effect of Grammarly application as online grammar checker toward students writing ability the Second Semester in Nommensen HKBP University.

### 1.4 The Scope of the Study

The scope of this research is used to avoid uncontrolled research. The scope of this research is the researcher focused on the students' writing, especially the progress of students' writing in structure when using Grammarly application. The researcher limits the scope of the problem to more specific areas, focusing on the second semester students of the English Department of Nommensen HKBP University.

# 1.5 The Hypothesis of the Study

A hypothesis is needed to show the researcher's thinking and expectation about what the outcome of the research will be. The hypothesis in this research is formulated as the following:

- Ha : There is a significant effect of Grammarly as an online checker on students' writing ability on structure and vocabulary aspect
- Ho : There is no significant effect of Grammarly as an online checker on students' writing ability on structure and vocabulary aspect

### **1.6 The Significances of the Study**

Based on the scope of the study above, researchers expect that the research will have certain advantages for students, teachers, and future or next research from a theoretical and practical perspective.

- 1. Theoretically
  - a. The main purpose of the impact of Grammarly on students 'writing skills is expected to be a medium to make students' writing better and more effective.
- 2. Practically
  - a. For the English Students

Researcher hopes that this research can be useful for students of English education, especially students who are having difficulty mastering writing. With this, they will make it easier to correct grammar and place punctuation marks and can also reduce plagiarism by using the Grammarly application.

b. For the English Lecture

Researcher hopes that this research can help lecturers to overcome writing problems that occur in students through the use of the Grammarly application.

c. For the Next Researcher

Researcher hopes that this research can become a reference material for the next researchers who want to research grammar problems that occur in students.

#### **CHAPTER II**

## **REVIEW OF LITERATURE**

#### 2.1 The Definition of Writing

The term written has several meanings. According to Nation (2009: 112), writing is an activity that can be useful to be prepared by working in listening, speaking, and reading skills. This preparation can allow words that have been used receptively into productive use. Hornby (1974: 996) pointed out that writing is the meaning of the verb "write". Writing is making letters or other symbols (ideographs) using tools such as a pen to write and paper as a place to write these letters and symbols. According to Troyka (1987: 3-4), writing is a way of communicating messages to readers with a purpose.

From the meaning of the writing above, there are several goals of writing, namely: According to Syafie'ie (1988: 51-52), the purpose of writing is to change the reader's belief, impart an understanding of something in the reader; stimulates the reader's thought process, please or entertain the reader, provide information to readers, and motivate readers. Writing is very important for students to master. Writing is a complex skill that requires students not only to dig their ideas or thoughts into words but also to apply strategies in expressing their ideas so that their thoughts can be seen (Ruhama & Purwaningsih, 2018).

Writing is one of the four skills that must be mastered in English and writing is important for students because writing will be needed when they are about to graduate from university. If the student cannot master the writing, it is possible students cannot graduate from the university; "Without the ability to express yourself in writing, you do not pass the course" (Brown, 2000:339).

Writing is one way to create language just like speaking but in writing, several things need to be considered such as the use of proper language, use of punctuation marks, continuity of sentences with other sentences, and so on. According to Raimes (1983: 76) which states that writing is a skill that expresses ideas, feelings, and thoughts into words, sentences, and paragraphs using the eyes, brain, and hands. In the sense that writing is a process in which the writer must put ideas or ideas into words, sentences, or paragraphs that produce good, and effective writing.

From several definitions of writing expressed by the experts above, the conclusion is that writing is a way to communicate using symbols. By writing, the researcher can pour the ideas or ideas that are in minds into a container such as paper. Writing also directs students or students to generate ideas, organize, use correct punctuation, edit text or words used under the language setting and also revise or improve into a good composition.

## 2.1.1 The Importance of Writing

Writing is a complex process, which means that in writing, students must consider many things to create excellent writing. Harmer (2004: 31-33) pointed out that learning to write has much importance:

a. Writing usually does not have a time limit in the conversation. In writing activities, students have more thinking time than in speech activities. They can express their knowledge, and even students can use dictionaries, grammar books, or other reference materials to help them.

- b. Writing encourages students to focus on accurate language use. This is a good way to develop their language when students write down their thoughts or express inaccurate language.
- c. Writing is often used as a means to reinforce the language that has been thought of. In writing teaching, teachers often ask students to write sentences or paragraphs using the grammar they have recently learned. In the learning process, students should record what they have learned. It enables students to understand the language they are thinking about.
- d. Writing is often a useful tool for preparing for other activities.
- e. Writing can be used as an integral part of large-scale activities, and the focus of large-scale activities is other aspects, such as language practice, acting, or speaking. When students have short conversations, students can also practice and practice the conversation in oral activities.
- f. Writing is also used in question and answer activities.

In writing teaching, teachers often ask students questions. For example about their knowledge or previous materials. Students are prepared to find the answer first, then write down the answer, and then report the answer in front of the class. In the exam, students are also required to answer them in writing.

From the above explanation, the author can conclude that writing skills are very important for learning. Writing can help people explore their thoughts, feelings, and thoughts in written form. In addition, writing can help someone solve and improve other skills in learning languages.

#### 2.1.2 The Process of Writing

The writing process consists of several aspects or mechanisms used by writers to get their written works published. This method is used by writers to generate ideas, create an outline, revise their written work and create a format for publication. This writing process encourages writers to be oriented and able to create their composition mechanisms from their written works. This writing process applies not only to writers but also to students. Students are highly required to have effective writing skills. But often students feel confused about what they should do first in writing a piece of writing. Therefore students must have a complete basic understanding of the steps of writing. There are steps or processes in writing, namely:

## a. Pre-writing

In pre-writing, the first step that must be done is that the writer generates and compiles their ideas and thoughts. Pre-writing starts with one or two sentences that outline an outline of the topic to be created. 3 formats that can be used during pre-writing, namely Bubbling, Outlining, and Drawing / Writing.

## b. Drafting

This is a process in which students lower their ideas, organize them into a sequence, and develop supporting ideas on the subject. Two approaches that can be used when drafting, namely, Some students will fly in the planning phase of writing, with minimal effort for this, and flexibility to insert ideas when drafting. Others will be distressed by their pre-writing and see the draft as "filling the gaps" in an organized outline. In making a draft, students must write it according to the

information from their pre-writing, they also have to revise it and if there is a good idea and it is necessary it can be added to the draft.

c. Revising

The next writing process is revision. In this process, students often ignore it because they feel that revising writing is an additional job. In revising, students will learn the correct techniques in writing. After revising, students can see their writing before and after revision and students can compare them directly. "They will show themselves the specific elements that make up a better work" (Adams, 1991). Revision is a stage for students to evaluate their drafts to ensure whether the content and composition of their writing are appropriate based on the evaluation of their writing.

## d. Proofreading / Editing

Editing is the next writing process. Editing is the same as revising, however, revising refers more to evaluating their writing whether it is following the topic to be developed. Editing refers more to one area, for example, the placement of punctuation, spelling, and paragraphs. So the first step to take is to read their entire writing, then check for any doubts or problems that could lead to linguistic or punctuation structures. After that, if the words that do not match are found, the students must immediately replace them other, more suitable words. Students also have to remember grammar such as punctuation, capitalization, agreement, tense. At the end of proofreading, students must have an actual draft as a copy for their publication. After everything is neat and free from writing errors, the writing is ready to be published.

#### 2.1.3 Components of Writing

In the writing process, we must know what components must be considered. To produce good and correct writing, students need a lot of vocabulary and understanding of the correct use of language structures. According to Nurgiantoro (2001: 306-308), there are several writing components, namely:

a. Content

Content is a collection of information that supports the topic of writing. In this component, the writer develops ideas and detailed ideas that describe the main topic.

b. Organization

In this organizational component, students must organize their ideas. The idea pattern must be clear, well organized, sequential, and logical so that the writing is interesting.

c. Vocabulary

In writing, the writer needs to pay attention to the vocabulary used. The suitability of choosing the vocabulary in each sentence is very important for writers. Choosing the right words can move and enlighten the reader.

d. Grammar

Grammar is a language rule in combining languages so that the sentence structure in the writing is more meaningful.

e. Mechanic

In this component, the writer focuses on the way of writing. Where a good sentence requires correct spelling and punctuation to produce correct paragraphs.

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If the placement of the punctuation marks is not appropriate, it will result in a confused and very difficult paragraph to understand.

## 2.1.4 Criteria of Good Writing

Tarigan (1994: 6) explains some good writing standards:

- a. Good writing results show that the author can organize the materials into a good structure.
- b. Good writing results show that the author can write clearly (definitely) and good at using sentence structure, language, and example sentences, thus making it easy for readers to understand the explicit and implicit meanings.
- c. Good writing results show that the writer can write: it can make readers interested in the main ideas of writing; it can describe the main ideas clearly and logically.
- d. Good writing shows that the author can criticize his writing draft and then revise it to get a better draft. The key to writing success lies in the author's willingness and ability to revise the manuscript.
- e. Good writing results show that the writer is proud of his writing.

#### 2.1.5 **Problems of Learning Writing**

For college students in the second semester, learning to write English in a foreign language is not easy. According to Nurigiantoro (2001: 298-299), "students will encounter some problems when learning to write". These problems are organizational concepts, insufficient vocabulary, and grammatical accuracy.

a. Organizing Ideas

Generally, the question students have in the writing process is how to organize ideas into sentences. Nation (2009: 119) pointed out that "some learners can say

what they want to write, but it is difficult to write it in written form". This is because students encounter difficulties in developing their ideas, and sometimes they do not know what to write. When writing, students usually write content that does not match the topic.

#### b. Insufficient vocabulary

Vocabulary has also become an important part of writing. Insufficient vocabulary will cause students to write sentences that are not easy to communicate and will encounter difficulties in expressing their thoughts, especially if students cannot master the vocabulary well, they will encounter difficulties in writing. They often choose the wrong words.

### c. Grammatical accuracy

When students try to write, they are often confused about whether their sentences or grammar are correct.

## 2.2 Grammar

#### 2.2.1 Definition of Grammar

There are many definitions of grammar. According to Coghill and Stacy (2003:26), "the grammar of a language is a set of rules that control the structure of the language".

Grammar shows the arrangement of words to produce meaningful units. Grammar describes the form and structure of words (called morphology) and how they are arranged in a sentence (called grammar). In other words, grammar provides rules for both spoken and written language, so we can understand each other more easily. The best writing follows grammatical rules and is clear, coherent, and consistent.

#### 2.2.2 The Importance of Grammar

Incorrect use of grammar, such as the use of verb tense, word order, passive voice, subordinate clauses, and personal structures can make the meaning of the text ambiguous. As Penny Ur said, "grammar not only affects the combination of language units to be "correctly seen", but also affects their meaning." It is obvious from this statement that grammar is an important part of English. One of the content because is not only to make a good sentence but also to refer to its meaning. As long as the appropriate grammatical rules are followed, the sentence is correct. Since the function of language and the purpose of communication are reflected through grammar, for students to need to obtain good manners. Good grammar comprehension skills will help students express their thoughts, information, and feelings to others. With this in mind, in the digital age, people can use these tools to learn grammar. One of them is to use a grammar checker.

#### 2.2.3 Students' Difficulties in Grammar

Learners often think that the main problem in learning English is grammar. This is the most frightening thing in English because most EFL students have trouble making grammatically correct sentences. Grammar provides the correct meaning of formulaic sentences so that others can understand these ideas. Through the study of Puspitasari, students made mistakes in grammar (such as the use of articles). For example, some students did not put the article in the words that should provide the article. Another study also found that most students have many errors in grammar, especially in the use of verbs. The study found that even if the adverb of time changes, students will not change the language form. In addition, students cannot understand how to use past forms correctly.

### 2.3 Technology

The term technology is not unfamiliar in our lives. According to Longman's dictionary technology, it can be a new machine, equipment, and way of doing things based on modern knowledge about science and computers. Technology-based is the actual use of knowledge and a way of accomplishing tasks, especially the use of technical processes, methods, or knowledge. The use of technology is not only in terms of machines (computer hardware) and instruments but also about other people, machines, and the environment.

Reisman (2006) pointed out that "technology is the development and application of tools, machines, materials, and processes that help solve human problems". This means that technology and human life are connected and inseparable. In addition, Kumar et al. Al (1999) and others defined "technology as composed of two main components, which are physical components and information components". The physical components include products, tools, equipment, blueprints, technologies, and processes. And the information part including expertise in management, marketing, production, quality control, reliability, skilled workers, and functional areas.

Based on the above explanation, it can be concluded that technology can be a form of physical and information components that can help people's lives through the practical use of knowledge. Moreover, technology and human life are connected and inseparable.

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### 2.4 Grammar and Spelling Checker

In writing, you need to use a grammar and spell checker to edit and correct grammatical errors, punctuation, spelling, style, and sentence structure. According to Techopedia, a grammar checker is a software application or part of a software application that can help check the correctness of text grammar. In addition, the grammar checker is used to identify errors and other language errors, and it works by using natural language processing and grammatical rules.

In addition, Stedman (2012) pointed out that "the spelling and grammar checker provides benefits for students, teachers, professionals, businessmen, and researchers who are busy editing and revising their writing quickly".

There are some of the benefits of spelling and grammar checker software according to Stedman (2012):

- Spelling and grammar checkers help to find out the mistakes both of grammar and spelling of written works. It offers a great way for writers to correct their writing and it also shows the way to correct.
- 2. It checks the writing error quickly so that the writers do not need to wait.
- Spelling and grammar checker software is offering the wonderful opportunity of saving money for proofreading.
- 4. Spelling and grammar checker software can help to create unique and best quality text for people who are not experts with spelling and grammar.
- 5. A businessman to ensure error-free message, text, website contents, and other writings to catch sight of the visitors at first sight. Spelling and grammar checker software is a must here to create error-free writing for your business.

6. Those who are seriously busy with their several activities can use the software to create their necessary writings fast, easy and error-free.

### 2.5 Grammarly

### 2.5.1 The Definition of Grammarly

A grammar checker is an application used to correct writing errors (such as grammatical errors, spelling, punctuation, style, etc.). Moore (2018) defines "grammar as an application that automatically detects grammar potential errors in grammar, spelling, punctuation, word choice, and writing style". Grammarly is a free writing application that will make messages, documents, and social media posts clear, error-free, and impactful (Grammarly.com).

Grammar checks the spelling, grammar, and readability of written materials. Users can easily resolve spelling errors, grammatical errors, and other punctuation errors, such as apostrophes, comma splicing, etc. Users can also upload a copy of it to its online platform to complete the proofreading, and you can also use the free browser extension to immediately proofread their social posts, emails, etc. In addition, it also provides some other powerful functions features in the premium version include vocabulary enhancement and plagiarism detection.

#### 2.5.2 How to Use Grammarly Checker

There are several ways to use grammar. The user only needs to log in to the Grammar account through a web browser. On the dashboard, the user can find the grammar editor and the menu on the left. The user only needs to open a new document and paste its work and check for errors. In addition to these, users can even install extensions on their browsers and install plug-ins for MS Word.

a. Ways to use the Grammarly browser extension

- Download the Grammarly extension. Please visit grammarly.com for the download.
- 2. After installation, try to enable the Grammarly extension in the settings on the green icon in the toolbar section.
- 3. Then create a free account. The registration form will be displayed as soon as you download the extension. Listed by name, email address, and password, and then click Sign Up.
- 4. Click the Grammarly icon on the toolbar. If it asks you to log in, do so with the credentials you just entered during registration. Soon, the New Document link will only be visible in the window that opens when you click the toolbar icon.
- 5. Clicking on New Document will take you to the Grammarly editor. There you can type or paste the content. Alternatively, there is an option in the left sidebar that allows you to upload a Word document or a text file.
- 6. Everything is now ready for error checking. The bottom bar displays the quality of the content along with the rating and number of errors made. He grammatically underlines each mistake with a green line. Clicking on it will bring up the details of the problem and a suggestion to fix it. Follow the suggestions consciously.
- b. Ways to use Grammarly for MS Word
- 1. Open and type app.grammarly.com. You will see the Grammarly Dashboard there. Log in to your account.
- Now you can see the Grammarly Dashboard. Look at the right sidebar and click on Applications.

- There you can see three options, Grammarly for Chrome, Grammarly for Microsoft Office, and Grammarly for Windows. Choose the second one. The download process will begin immediately.
- 4. Open the download folder and run the plug-in installation. Follow the onscreen instructions.
- c. Ways to use Grammarly
- 1. Go to app.grammarly.com. You will see the Grammarly Dashboard there. Log in to your account.
- Now you can see the Grammarly Dashboard. Look at the right sidebar and click on Applications.
- 3. Click there Grammarly for Windows. The download will be visible to you.

#### 2.6 Essay Writing

An essay is a set of paragraphs that develop a central idea. An article is a set of paragraphs based on a topic and consists of three main parts: introduction, body, and conclusion.

## 2.6.1 Parts of Essay

According to Allice (1983), the part of the thesis writing can be seen in the chart below:

#### a. Introduce

The introduction usually consists of one paragraph, but you can also write the introduction in two or more paragraphs. It introduces the topic to be discussed and the central idea of the thesis (thesis statement). The introduction is divided into two parts, as follows: 1. General description

It provides readers with background information about the subject of the paper.

2. Thesis statement

It introduces the main idea of the article. It states a specific topic and lists the main subtopics that will be discussed in the organization in chronological order or importance.

## b. The Development

The development paragraph can also be called the paragraph body. These paragraphs develop various aspects of the theme and the central idea. It can be said that the development paragraph is the core of the thesis, which has the function of explaining, explaining, discussing or proving the statement of the thesis. The main points of paragraph development are as follows:

- 1. Each development paragraph discusses one of the main aspects' topic.
- 2. The control thought in the development paragraph should be placed every idea in the thesis statement.
- 3. The development paragraph should be coherent and unified.
- c. Conclusion

This paragraph summarizes the ideas developed in the article. This is concluding remarks. Here, learners can pass write their summary words. It can be their opinion or summary of essay they had written. In addition, according to Langan (1986:7), a good example of a standard short essay that you will write in college English is a composition of slightly more than 500 words consisting of an introduction and three paragraphs of the text. This means that a standard short essay should contain 500 words in one paragraph. Introduction and text three paragraph introduction.

## 2.6.2 Types of essay

When choosing a suitable essay type, students need fully understand the difference between each type. There are many types of essay writing. According to Alice (1983:91), there are four types of essays. Take a look at the explanation below:

- a. The chronological order is chronological; it is used for almost all the academic field describes historical events and writes biographies and autobiography. This can also be used to write scientific papers. The emphasis in this type is chronological order. We can write many things according to the process, such as cake making, the process of Indonesia's Independence Day, etc.
- b. Causality allows us to interpret one point as the cause of something, or interpret one point as the result or consequence of another point. We can explain the reasons of things to answer why questions, and the effect of answering what questions. It often attracts the reader's attention.
- c. Comparison and contrast of writing prose, we can compare or contrast anything, such as historical period, characters, types of equipment or qualifications of two things.
- d. Information is divided according to our logic. The only rule is that your division and subdivision system must be consistent. We can start by selecting topics and listing them into many categories and subcategories.

### 2.7 Previous Studies

There are previous research related to this topic. First research entitled, *Students Perceptions of The Using Grammarly as An Online Grammar Checker in Thesis Writing written by Hafni Iqbalil Lailika and published on August 14<sup>th, 2019.</sup>* The result of this research shows that there are two perceptions when using Grammarly as a grammar checker namely positive perception and negative perception. When positive perception shows that Grammarly provides direct and indirect feedback for students when checking grammar. Through indirect feedback, students know which one is correct or incorrect. The direct feedback shows the correction of the students' mistakes. If the student agrees, just click on the suggestion given by "Grammarly". While the negative perception shows that they don't believe that grammar also has shortcomings. For example, some students say they need good Internet accessibility. Not only that, but users also need to understand the grammar well, because the correction of the grammar is not always completely correct.

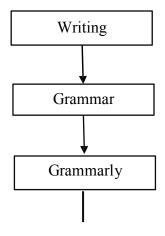
The second research entitled, *Effectiveness of Grammarly Application for Writing English Abstract written by Umu Fadhilah, Lizawati, Hotmaria Julia Dolok Saribu and published in December 2019*. This research used an experimental design. The research results show that the Grammarly application can provide students with comprehensive feedback on grammatical errors, thereby saving students and lecturers' writing time, while also training students to learn independently.

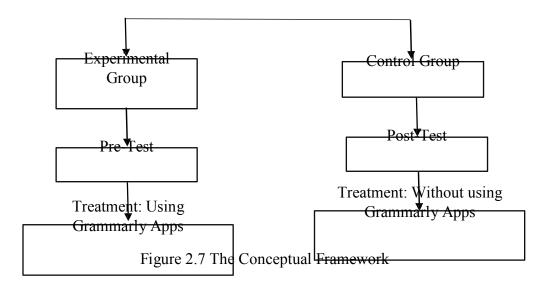
The third research entitled, *Improving Students Writing Ability Through The use of Spelling and Grammar Checker in Microsoft Word 2007 At MAN 2 Tulungagung in Academic Year 2014/2015 written by Ibnu Wijayanto and published on December 1st, 2014.* This study used the CAR design. The research results show that the grammatical ability and motivation of writing.

The fourth research entitled, *Grammarly as a Tool to Improve Students' Writing Quality: Free Online-Proofreader Across the Boundaries written by Laksnoria Karyuatry, Muhammad Dhika Arif Rizqan, and Nisrin Adelina Darayani published in June 2018.* The study used an Action Research design. The research results show that the use of Grammarly is successful to improve students' writing quality.

As can be seen from the previous research above, the studies have similarities with this new study namely they are focused on grammar checker written and the difference with this study is that this study will focus on the effect Grammarly application in students' writing skills.

### 2.8 Conceptual Framework





#### **CHAPTER III**

## **RESEARCH METHODOLOGY**

### 3.1 Research Design

The first step before conducting research is to make a research design. Research design is systematic planning and preparation before conducting research. Therefore, before researchers conduct research, researchers must first make plans to get an appropriate design.

This research was conducted using a quantitative approach. According to Khotari (2004:3), "quantitative research is the measurement of quantity or amount. The design of this research is the experimental research design". Experimental research is a method to find the causal relationship between two factors proposed by the researcher. Creswell (2003) stated that "experimental research is most appropriate for answering a research question about the effect of a treatment". When conducting experimental research, there was two groups are usually involved, and comparisons will be made to discover the effects of treatment.

The writer used pre-test and post-test on the experiment class and control class, to see the effectiveness of Grammarly by looking at pre-test, and post-test measurement and comparing the gained scores between both classes. The score will be taken by the researcher after the students are given some treatments and from the comparison of both classes. The experimental class used the Grammarly checker and the control class without using the Grammarly checker. The research design is as follow:

Table 3.1 Nonrandomized Control Group Pre-test – Post-test Design

Group	Pre-Test	Independent Variable	Post-Test
A	Y <sup>1</sup>	Х	$Y^2$
В	Y <sup>1</sup>	О	Y <sup>2</sup>

Where:

- A : Experimental class (which receives the treatment of using of using Grammarly checker
- B : Control class (which without using Grammarly)
- Y<sup>1</sup> : Pre-Test (to see the students' writing ability)
- $Y^2$ : Post-Test (given after treatment)
- X : Treatment by using Grammarly checker
- O : Treatment by not using Grammarly checker

# 3.2 Source of Data

In taking the data, the researcher needed resources to get the available data. Data sources are research topics from which data can be obtained. The data source is an important part of the research. The source of data was the students. The data was the grammar and focused on students writing ability. So the data was taken from students in the second semester of English education in Nommensen HKBP University.

### **3.3 Population and Sample**

### 3.3.1 Population

The population is entire subjects where data was collected. According to Ary et. al. (2010:148) state, "the population is all members of any exact category of people, events, or objects". In conducting this research, the research will choose the second semester of the English education program of Nommensen HKBP University. The researcher will choose the second semester because the researcher wants to know the students' writing quality.

### 3.3.2 Sample

Sampling is a technique and process of selecting a fixed sample. This research chose A group and B group as the sample. And the A group is the experimental group and the B group was the control group.

# **3.4 The Procedure of the Research**

The procedure of this research as follows:

- Observe the research place to know the total of classes that will become the population then will be used as the sample
- Deciding the sample of research using the non-random sampling technique.
- 3. Give the pre-test
- 4. Give the different treatment for experimental and control class
- 5. Give the post-test

## 3.5 The Instrument for Collecting Data

In this study, the data will be collected by using quantitative data. The quantitative data will be collecting by using a writing test that will be made by the

teacher. The teacher will ask the students to write a text without using Grammarly and at the last of the test, the teacher will ask the students to check their text by using the Grammarly application.

Furthermore, the students' work will be evaluated using Cohen's writing scoring system (1994:328-329). The following is the scoring rubric:

Aspects	Score	Indicators
Content	5 (Excellent)	The main points were stated clearly and properly, and the shift in viewpoint was evident.
	4 (Good)	The main ideas are conveyed fairly clearly and precisely, and the shift of attitude is fairly obvious.
	3 (Average)	The main principles are a little hazy and imprecise, and the shift of viewpoint is a little shaky.
	2 (Poor)	The main concepts lacks clarity and accuracy, and has a limited ability to change one's mind
	1 (Very Poor)	Main ideas are not always obvious or true, and there is a lack of change of view.
Organization	5 (Excellent)	Perfectly ordered and coherent
	4 (Good)	Generally well-organized and coherent.
	3 (Average)	The fundamental ideas are evident, but the organization is sloppy, and the sequence is logical but incomplete.
	2 (Poor)	Ideas are disjointed, and there is no logical order to them.
	1 (Very Poor)	There is no organization, and it is incoherent.
Vocabulary	5 (Excellent)	Excellent word choice and use of idioms and word patterns
	4 (Good)	Use of idioms and word forms, as well as effective word choice
	3 (Average)	Appropriate word choice, but some misapplication of terminology, idioms, and word form

Table 3.2 Cohen's scoring system (1994:328-329)

	2 (Poor)	Limited vocabulary, perplexing usage of idioms, and word formations	
	1 (Very Poor)	Limited vocabulary and idioms, as well as a lack of understanding of word formations.	
Grammar	5 (Excellent)	No mistakes, complete control over a complex structure	
	4 (Good)	There are almost no faults, and the structure is well-controlled.	
	3 (Average)	A few flaws, but good structure control	
	2 (Poor)	There are a lot of mistakes, and the structure isn't well-controlled.	
	1 (Very Poor)	Errors rule, and the structure is uncontrollable.	
Mechanics	5 (Excellent)	Spelling and punctuation mastery.	
	4 (Good)	There are few spelling and punctuation mistakes.	
	3 (Average)	There are a lot of spelling and punctuation mistakes.	
	2 (Poor)	Frequent grammatical and punctuation errors	
	1 (Very Poor)	Inability to control spelling and punctuation.	

# 3.6 Validity and Reliability of the Test

Validity and reliability indicate the quality of the test. Every measuring instrument has two important characteristics, namely the process of checking validity and reliability. According to Arikunto (2006: 168), "validity is a measure that indicates the level of validity of the instrument". Allison (2002: 85), "the validity of a test concerns whether it measures what we think and say it is being measured". It can be concluded that the tool for measuring how valid an instrument is by disclosing precise variable data. There are three types of validity: content validity, criterion-related validity, and construct validity. In this research,

researchers used content validity. Content validity is a kind of validity, which depends on careful analysis of the tested language. If the content of the test constitutes a representative sample of language skills, structure, etc, then the test has content validity. Researchers will use scoring methods to evaluate students' academic performance. This validation can be seen as follows:

Competence	Form of test	Indicators
Making a text	Written test	Students will be able to
(short story)		understand the short story
		Students will be able to
		choose a suitable theme to
		write the short story
		Students will be able to
		compose the short story

 Table 3.4 Content of Validity

# 3.7 The Technique of Collecting Data

This research includes quantitative data collection. Quantitative data was taken from the form of scores collected from pre-test and post-test. The data will be collected from some of the technologies used. The techniques used are described below:

1. Observation

In the process of carrying out this action, the researcher will observe and record the situation of learning to write English as a whole Grammarly tool and does not use Grammarly.

2. Pre-test and Post-test

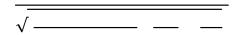
Pre-tests and post-test were the tools for obtaining information on student writing performance. A pre-test was a test performed before treatment. It provides information about the student's writing performance before treatment. In addition, the post-test is to measure the writing performance of the students after treatment. Both tests will be measured how treatments affect students' writing skills.

3. Documentation

These documents was written by students as a reference. They are used to observe the progress of students' abilities. The researchers also will record the teaching process before and after the action. This technique produces observation tables and field records.

### 3.8 The Technique of Analysing Data

The data in this study was analyzed by quantitative techniques. The data will be obtained from the experimental group and control group. The data will be analyzed by using the t-test formula.



Where:

t= t-testMx= mean score of the experimental groupMy= mean score of the control group

- dx = the deviation square of the experimental group
- *dy* = *the deviation square of the control group*
- *Nx* = *the sample of the experimental group*
- *Ny* = *the sample of the control group*