

METHODOLOGY

This chapter comes out with the methodology applied in this study. It covers research design, setting, population and participant selection, data collection within procedure, instrumentation, and data analysis.

3.1. Research Design

This study engaged with the qualitative method which means that the researcher firstly identifies a text that is suitable for the analysis (Jackson, Drummond & Camara, 2007). The case study approach is applied in this recent study since the researcher wanted to develop an in-depth analysis of a case of one or more individuals (Creswell & Creswell, 2018). It was also limited by time and activity, and the researcher gathered detailed information using various data collection procedures over an ongoing period (Creswell & Creswell, 2018). The focus of this study aimed to explore how Grammarly as a medium can help raise students' self-directed learning in L2 writing in the scope of English Department students in the third semester.

3.2. Setting

The study was conducted in the Writing class in the English Language Education Study Program of the third semester in IAIN Kendari. This course was taught by one of the competent lecturers in its sphere and the researcher was helped by the lecturer on that Writing course in obtaining the data.

3.3. Population and Participant Selection

Based on the preliminary data that had been gathered, there were 24 students in the Writing class of the English Education Study Program in the third semester. However, there were only 20 students in the academic year of 2018 and the other four were the students of the academic year of 2015/2016. Hence, the four students were excluded from this research because the researcher wanted to focus only on one generation with the same background and proficiency and that was the 20 students of the 2018 academic year.

Out of 20 students, 15 were female and 5 were male and they were all about 18 and 19 years old. The students were included as the participant because they already familiar with Grammarly since they had been using it from their Writing II class to help them in self-correction or self-revision before submitting their writing.

3.4. Data Collection

The data was collected through the Writing III class where the students were requested to fill the questionnaires and reflections through an online platform, Google form. The data of this study was also gathered using an interview as supplementary data. The questionnaires, reflections, and interview questions were made by the researcher with the guidelines that were adapted from Williamson (2007). In making the questionnaires and reflections on Google form, the researcher did not find any difficulties, even though, it was the researcher's first time using Google form as assistance for spreading the instruments.

After completing the questionnaires and reflections, the researcher sent the link of Google form contained with the questionnaires and reflections to the lecturer in charge of the Writing III course to be given for the students or

participants. The questionnaires and reflections were given to the students to see their responses toward the use of Grammarly as an online correction tool on their self-directed learning. After the participant filled the questionnaire and reflection, the researcher read their responses and then analyzed the data through categorizing and coding. The interview which was held after analyzing the questionnaire and reflection was done with only two students as supplementary data that can strengthen the statements or claims from the participants. The two participants addressed as S1 and S9 were chosen based on the interviewer or the researcher itself because they seemed to be more active and full of ideas when giving their answers in the reflection. The interview was done by phone calling due to the situation and also time. The researcher recorded the interview and transcribed it manually, then analyzing the text to obtain more information from the two participants.

3.5. Instrumentation

The instruments used in this study were questionnaire sheets and reflection guidelines that were gathered using an online platform (Google form) in the Writing III class of the English Education Study Program.

3.5.1. Questionnaire Sheet

The questionnaire consisted of several statements related to the use of Grammarly and self-directed learning adapted from Williamson in 2007. This questionnaire used closed items where the range of possible responses was determined by the researcher to yield responses that could readily be quantified and analyzed easily by the researcher (Nunan, 1992) and that was a Likert scale. The Likert scale was a set of statements or items offered for a real or hypothetical

situation under study (Joshi, Kale, Chandel, & Pal, 2015); here the researcher used the scale value ranging from strongly disagree to strongly agree. Participants were asked to show their level of agreement whether they strongly disagree, disagree, neutral, agree, or strongly agree with the given statement or items on a metric scale.

All the statements in combination revealed the specific dimension of the attitude towards an issue that was interlinked with each other. Therefore, as Joshi et al. (2015) stated, the Likert scale was one of the most used psychometric tools in both educational and social sciences research as it made the researcher easier in collecting and analyzing the data (Nunan, 1992).

The total questionnaire that had been given to the participant was only six statements which consisted of the statement asking for their agreement about the use of Grammarly and self-directed learning in their writing. The statements related to the error in their writing and the intensity of using Grammarly, their awareness, learning strategies, and self-evaluation in writing.

3.5.2. Reflection Guideline

The reflection consisted of students' answers or responses to questions toward the use of Grammarly and self-directed learning in their writing. Reflection is often used by various disciplines, including education, professional development, and psychology to reorganize knowledge and emotional orientation to achieve further insight (Moon, 2006).

The reflective process, made people think critically which was important because it helped in creating new relationships between initial knowledge with what was obtained, and it made the process of writing reflection more effective

(Creswell & Creswell, 2018). The outcome from the reflection could be something expected or unexpected due to the complicated and ill-structured ideas (Moon, 2006). Therefore, from the reflection, we could gather a lot of different ideas or responses from the students that would be useful for enriching the data.

The question of reflection was categorized into two was about Grammarly and self-directed learning. For Grammarly, the question was about the error in their writing and the intensity of using Grammarly. Meanwhile, for self-directed learning, the students were asked about their awareness, learning strategies, and self-evaluation in writing. With the additional general question, there were a total of 10 questions for the reflection and it was adapted from Williamson (2007).

3.5.3. Interview Guideline

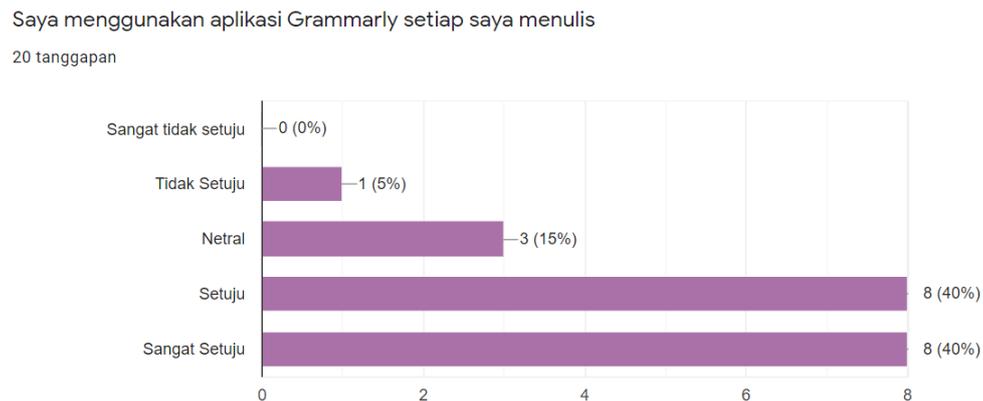
Using an interview as an instrument in research is a way to gain in-depth information from the participant. It gives the researcher access to the people's behavior to know the meaning beyond all their behavior. Where, in its process, the researcher has to conceptualize the project, contact participants, interview them, transcribe the interview, and then work with it to gain the conclusion from the interview (Seidman, 2006).

The interview question went with a total of 12 questions that asked participants about Grammarly and self-directed learning. All given question was based on self-directed learning aspects, that was about awareness, learning strategies, learning activities, self-evaluation, and interpersonal skills of the participants. The question was a more detailed explanation of the question contained in the reflection. It was because the researcher wanted to verify some questions that were not fully answered or a little bit ambiguous in the reflection.

3.6. Data Analysis

In analyzing the students' questionnaire for several statements, firstly the researcher looked at the result gave by the Google form in the graph below.

Figure 3.1 Students' graph answer for questionnaire



But, since the result showed by the Google form made the researcher had to look over again and again for each statement on Google form, the researcher then simplifies the data by recapitulating the whole six statements in the form of a table in excel then calculated into percent. The questionnaires were aimed to see the students' agreement about their opinion on the use of Grammarly on their self-directed learning in writing with the Likert scale of strongly disagree, disagree, neutral, agree, and strongly agree. After calculating and analyzing the data of questionnaires, the result was then interpreted and explained along with graphs.

While for the students' reflection, the gathered data was analyzed using the technique of analyzing data by Miles, Huberman, and Saldana (2014). To begin with, in data condensation, the researcher decided which data chunks to code and which to pull out, after that, data then summarized, highlighted, and created into groups and partition (categorized), and also took note for several important answers (coded) to obtain several similar perceptions from the students.

Miles, et al. (2014) pointed out that data condensation included writing summaries, coding, developing themes, generating categories, and writing analytic memos. This stage of analysis also supported by Jackson, et al. (2007) who stated that qualitative content analysis involves interpreting, theorizing, or making sense of data by first breaking it down into segments that can be categorized and encoded, and then building patterns for the entire data set by linking categories to each other.

For the interview that was done after analyzing the students' answers on the questionnaire and reflection, firstly, the researcher used help from Seidman (2006). He stated, in an interview the first step that needs to be done is looking over the transcript and marking the interesting part of the statement from the participants that could be analyzed later on. Mark all things that catch the attention and after that focus on what has been marked. As the next step, it was just the same as the technique of analyzing the data from Miles, et al. (2014) which included classifying the data and others.

The next part of the data analysis was displaying the data. It involved the presentation chart of data and summaries of various statements from the participants to strengthen the data display in finding. Miles, et al. (2014) stated, data display consisted of deciding on the rows and columns of a matrix for qualitative data and decided which data, in which form, should be entered to support the data display.

The last part was drawing or verifying the conclusion. The conclusion appeared when the data collection was over and it depended on the coding, storage, used method, the sophistication of the researcher, and any necessary

deadlines to be met (Miles, Huberman, & Saldana, 2014). Below is a sample of coded data from reflection.

Table 3.1 Samples of Data Coding

Question: If you are experiencing developments in your writing after using Grammarly, explain in what ways?

Students	Students' Answer	Progress in terms of				Note	
		Grammar	Spelling	Punctuation	Tenses		Vocabulary
S1	Perkembangan nya yaitu tulisan saya jadi lebih sedikit kesalahan grammarnya karena grammarly membantu saya melihatnya dan memberikan saran kata pengganti yang lebih baik sehingga tulisan saya lebih jelas.	1					Grammar
S3	Ya, yaitu dalam hal penggunaan grammar dan spelling yang tadinya mengalami banyak kesalahan, tapi setelah dibandingkan antara tulisan-tulisan yang terdapat di semester 2 itu lebih banyak kesalahan di banding semester 3.	1	1				Grammar Spelling
S10	Yang utama dalam hal penempatan tanda baca , selain itu di aplikasi Grammarly juga memperbaiki bentuk tenses yang saya gunakan.			1	1		Punctuatio n Tenses
S14	Dalam hal penempatan tanda baca, grammar serta kosa kata atau vocabulary yang pas dalam tulisan saya.	1		1		1	Punctuatio n Grammar Vocabular
Total		3	1	2	1	1	