

# Students' and Teacher's Perceptions towards the Implementation of ProWritingAid and Teacher Feedback

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## ABSTRAK

**Abstract:** This study investigated the students' and teacher's perception, as well as, the merits and demerits of implementing ProWritingAid and teacher feedback in class. The design of this study was a survey research directed in an exclusive classroom setting. Based on the data analysis, it was found that both teacher and students perceived the strategy positively as it can help the students detect, learn, and fix their errors through ProWritingAid and revise their content through teacher feedback. It also helped the teacher in saving time and reduce the teacher's workload.

**Abstrak:** Penelitian ini menyelidiki persepsi siswa dan guru dalam penerapan metode pemberian umpan balik dari ProWritingAid dan guru di kelas. Metode yang digunakan dalam penelitian ini adalah survei yang diarahkan pada satu kelas tertentu. Berdasarkan analisis data yang dikumpulkan, ditemukan bahwa baik guru dan siswa memiliki pandangan positif terhadap strategi yang digunakan. Penggunaan strategi dirasakan positif karena dapat membantu siswa mendeteksi, belajar, dan memperbaiki kesalahan mereka melalui ProWritingAid dan memperbaiki isi paragraf mereka melalui umpan balik guru. Strategi ini juga membantu menghemat waktu dan mengurangi beban kerja guru.

Writing activity in the academic field, especially in the higher education, does not mean merely as putting words using the alphabet or numbers to produce a text. Rather, it is an activity to convey a message through the composing process. The composing processes in writing include some stages such as developing ideas in writing, revising and or editing the texts, and producing the final writing product (Brown, 2000; Harmer, 2004). Helping the students through the composing process has been seen as the best way to help the students produce a better text. In fact, many teachers and researchers have tried to provide different practices to help the students get through the composing process and improve the quality of the students' compositions. Especially, in the revision process. Helping the students to revise or edit their compositions has been seen as an effective way to enhance the students' writing skills. Two common strategies used to help the students to improve their compositions in the revision process are teacher and peer feedback.

Teacher feedback is given by a teacher on the students' written works. Giving teacher feedback is universally acknowledged as the key element in writing as it helps the students to reconstruct their idea development (Forrer, Wyant, & Smith, 2015) and revise their errors so that they can learn and improve their texts (Wang, 2013). However, many teachers claim that giving feedback is time-consuming and exhausting as one teacher have to assess many elements of the students' writing (Attali, Bridgeman, & Trapani, 2010; Zupanc & Bosnic, 2015). Also, the teaching and learning process could not be highly effective because of the lack of time in class (Thi To Hoa & Thi Tuyet Mai, 2016). Not to mention the number of students' writings that needs to be assessed. There is also a need of teacher's effective feedback because it has been reported that the one-word comment, underlined words, checks, cross lines, or vague and general comments that are given by the teacher are not valued positively by the students (Crisp, 2007; Ferguson, 2011).

Thus, another strategy is proposed to complement teacher feedback which is peer feedback. Peer feedback is given by the students in pairs or group. However, it was found that not all students can give equal feedback (Li & Ye, 2016). Thus, many students feel that peer feedback is also insufficient. The insufficient knowledge and the lack of the student's confidence have made the students passive in giving feedback; hence, less feedback is given by the students (Li & Ye, 2016).

The drawbacks of teacher and peer feedback have made many teachers and researchers tried to find a better strategy in giving feedback to improve the students' writings. Concerning this issue, many technology developers have developed an Automated Writing Evaluation (AWE) software that can be used as a supplementary tool in class. Automated Writing Evaluation

(AWE) is software that can give automatic feedback to the students' writings (Hegelheimer, Dursun, & Li, 2015). Unlike the teacher or peer feedback that needs more time in generating feedback, AWE can give feedback instantly. If peer feedback is limited to the students' insufficient knowledge, AWE stores many writing and linguistics properties that can be used to give various feedbacks from many linguistics aspects of writing such as grammar, vocabulary use, mechanic, readability, and more. It is also designed to be convenient and accessible (Chen & Cheng, 2008). The students can learn and get the feedback individually at any time and everywhere because AWE can be accessed online through a computer, laptop, or even a Smartphone.

Certainly, a large and growing body of literature has found positive effects on the students' writing achievement after using the AWE program. It is reported that the students' writing quality, quantity, and revision have improved with the use of computer-generated feedback (Qiang, 2014). An AWE program has also been reported to reduce the grammatical errors in many of the students' final drafts or writings (Cotos, 2011). The students' positive attitudes were also discovered after writing and revising the text with an AWE program (Nobuo, 2014). With its merits, employing the AWE program has been seen as an alternative strategy to provide feedback and improve the students' writings.

In reference to the development of the program, there are a growing number of companies or institutions that have developed different AWE programs under different names and purposes. It is suggested that different AWE programs should be used to find their potentials (Stevenson & Phakiti, 2014). Having many kinds of research to compare the result of the studies can contribute to the development of the field and lead to the solution to any issues regarding the use of the program (Hegelheimer et al., 2015; Zupanc & Bosnic, 2015). In fact, from many AWE programs available, most researchers use Criterion or My Access! which were first developed in the 1990s. One reason for choosing the programs is that the researches were largely founded by the company (Warschauer & Grimes, 2008). Indeed, as many programs are becoming more developed, the researchers and practitioners cannot ignore the potential of many new AWE programs. Among many AWE programs available, one of the newest program is ProWritingAid.

ProWritingAid is a new web-based program to evaluate a text. It can be accessed through ProWritingAid.com. Unlike many commercial versions of the AWE programs such as My Access!, White Smoke, or PEG Writing, the ProWritingAid program can be used freely with a single account. This program gives an evaluation and score of a text based on many writing aspects such as grammar, spelling, style, overused words, or readability. It is competent to check any misuse of words or sentences as it provides the error evaluation or correction in many linguistic properties. The students can revise the misuse of words or sentences while also learning from the explanation given by the program (Ritter, 2016). In fact, the great depth of source or material that can explain the students' error in a very short time is beyond the scope of the human brain (Crusan, 2015). The example of using the program can be seen in figure 1.

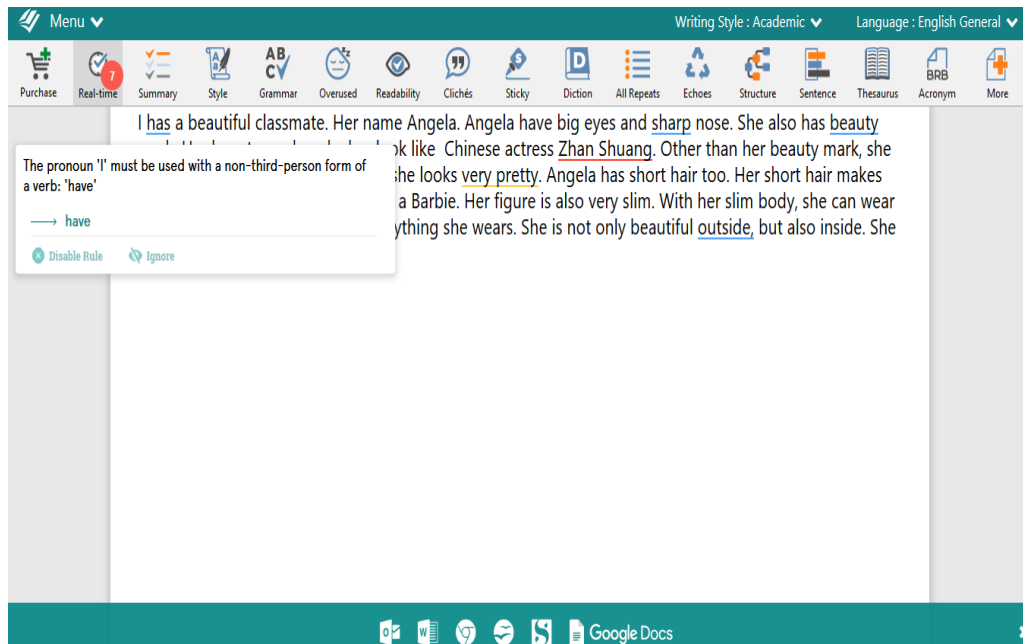


Figure 1. ProWritingAid Editing Page

Markedly, based on how the system works, ProWritingAid generates corrective or direct feedback on many language properties. The corrective feedback is a response to a learner's linguistic error which consists of the indication of an error, its correct form, and its metalinguistic information about the error (Ellis, Loewen, & Erlam, 2006). Indeed, ProWritingAid is competent in generating all of them in a very short amount of time. The program is capable of enhancing the students' writing

quality in terms of its accuracy on grammar, spelling, etc. with the indication of error that is underlined or highlighted. Most of the times, it also gives the correct version of the error and an explanation of why it is considered as an error. With this system, the students can autonomously learn grammar, punctuation, etc. and revise their works. In fact, ProWritingAid has been suggested to be used because the users can actually enjoy learning while editing (Ritter, 2016).

Nowadays, using such program is by means of combining it with teacher feedback. Nevertheless, many teachers and researchers still use many AWE programs without combining it with teacher feedback. In fact, the teacher cannot neglect the importance of teacher feedback completely when using the program (Grimes & Warschauer, 2010; Qiang, 2014; Ware, 2018). It was also highlighted that an AWE program is not favourable to be used as a tool to replace the teacher because the students also need help to enrich the content of their texts (Chen & Cheng, 2008). Thus, when the teacher feedback is absent, the learning and teaching practices will not be effective. As a computer machine, the AWE program cannot replace human feedback that is capable of responding the contextual changes of the students' writings. Indeed, the AWE program is limited to the semantic analysis of the language (Zupanc & Bosnic, 2015). None of the systems is capable of assessing the correctness of the given common sense or facts, thus the human feedback is also given.

Moreover, the researches on the AWE program nowadays have only focused on a certain topic and setting. Many studies about AWE have focused mainly on the outcomes or score of the students' writing (Qiang, 2014; Wang, 2013) and therefore shedding less light on how the students view the implementation of the program itself. In fact, the students' view is essential to find out whether the students valued the use of an AWE program or not. As there are many studies focus on the effectiveness of AWE, it was suggested to find out more about the potential and students' view on the implementation of different AWE programs (Cotos, 2011; Hegelheimer et al., 2015). Most studies about AWE also largely conducted in the English language major classes. Nonetheless, it was suggested that an AWE program might be best for the beginner level college student because the advance students need more feedback on the content or discourse level of writing (Chen & Cheng, 2008).

In response to the previous research findings and issues of AWE, this study aimed to investigate the students' and teacher's perception toward the use of a combined feedback practice using ProWritingAid and teacher feedback in an exclusive classroom setting. In line with the suggestion of using the AWE program in a beginner college level class, this study investigated the students' and teacher's perception in an ESP writing class; in which the students still learnt paragraph writing topic. Therefore, this study will expand the contribution of the research regarding the use of the Automated Writing Evaluation program in different subject and setting. Thus, the research questions raised in this study were:

1. How do the students' and teacher's perceive the implementation of ProWritingAid and teacher feedback in the paragraph writing class?
2. What are the merits and demerits of using ProWritingAid and teacher feedback in the paragraph writing class?

## METHOD

This study applied survey research that focused on presenting the students' and teacher's perceptions toward the use of the combined feedback practice of ProWritingAid and teacher feedback in an exclusive classroom setting. Both the teacher and students in this study were using this strategy for the first time before the survey was given. The data collected were presented both qualitative and quantitative to map out the result of the data obtained from the instruments (the questionnaire and interview guideline).

This research was conducted at one of the private university in Malang. Especially, in one of the English for Informatics Engineering class. The participants were 33 undergraduate students majoring Informatics Engineering (academic year of 2018/2019). These students took an ESP Writing course in their second semester. During this study, they were taking a descriptive paragraph writing. An ESP lecturer teaching the class also participated in this research.

The instrument used to collect the data were a questionnaire for the students and interview guideline for the teacher. Firstly, the questionnaire was divided into three parts. The first part consisted of eight statements with four Likert scales: strongly agree, agree, disagree, and strongly disagree. The four scales were used as it could pose a specific characteristic per item so that it was clear what the student is responding to. Moreover, the second part of the questionnaire was an open-ended section where the students were asked to write the merits or demerits of using ProWritingAid and or teacher feedback. This section was developed to provide an explanation of the strategy based on the student's experiences so that it can suggest the improvement of the strategy. Meanwhile, the last part of the questionnaire was one multiple-choice item. In this section, the students were asked to choose one from five choices of feedback strategies, such as having teacher feedback or ProWritingAid only, using ProWritingAid feedback before the teacher feedback only, or using ProWritingAid before and after the teacher feedback. Secondly, the interview guideline was administered. The interview was in the form of a semi-structured one. It aimed to direct the teacher to reflect the use of the strategy and its merits and demerits. During the interview, the teacher's responses were recorded.

Furthermore, the data gathered from the questionnaire and interview were analysed. The students' responses for the Likert scale and multiple choice items were counted and analysed. For the Likert scale items, the students who responded strongly agree were coded with point 4, agree with point 3, disagree with point 2, and strongly disagree as 1. Then, to analyse this data, the descriptive statistics was used to see the frequency, standard deviation, and percentage of the students who responded to each scale. Then, the students who agreed and strongly agree were categorized as having a positive response, while those who disagreed

and strongly disagree as having a negative response. Further, the result of one multiple choice item was analysed based on the frequency of the students who chose each choice. At last, the students' responses to the open-ended part of the questionnaire were coded into some statements. The statements were not made by the researcher, instead, they were based on the students' notions. Hence, the researcher recorded the frequency of occurrence in each notion. Then, the frequency and percentages of each statement were calculated. Meanwhile, the data from the teacher interview was discussed qualitatively.

Other than the method, subject and setting, questionnaire, and data analysis, the implementation of the strategy were elaborated. It was delineated so that it is clear how the teacher implemented the strategy in class because the strategy in class contributed to the research findings. Thus, the implementation of ProWritingAid and teacher feedback in the teacher's descriptive paragraph writing class is delineated.

### The Implementation of ProWritingAid and Teacher Feedback in Class

The teaching and learning strategy with ProWritingAid and teacher feedback were developed by the researcher and teacher using the Genre Based Approach (GBA) processes adapted from Hyland (Hyland, 2008). The implementation of the strategy was done in five meetings. The material was a descriptive paragraph describing the students' laptop physical appearances. Overall, the implementation of the strategy can be seen in table 1.

**Table 1. The Implementation of ProWritingAid and Teacher Feedback in Class**

Meeting	The use of ProWritingAid	Teacher Written Feedback
Meeting 1: BKoF and MoT	1. ProWritingAid is introduced for the first time and used as an exercise to evaluate the errors on a descriptive paragraph model	- Given after the first draft submission outside of the class session
Meeting 2: JCoT (writing a descriptive paragraph in a group)	1. Before the first draft submission in class 2. Before the final submission/ after the revision based on teacher feedback if the students make any changes to the sentences i.e adding some sentences or descriptions (only compulsory for some students)	Given after the first draft submission outside of the class session
Meeting 3: ICoT 1(writing a descriptive paragraph individually)	1. Before the first draft submission in class 2. Before the final submission/ after the revision based on teacher feedback (only compulsory for some students)	Given after the first draft submission outside of the class session
Meeting 4: ICoT 2 (writing a descriptive paragraph individually)	1. Before the final submission/ after the revision based on teacher feedback (only compulsory for some students)	-
Meeting 5: Achievement Test	-	-

The strategy consisted of four stages namely, BKoF (building knowledge of the field), MoT (modeling of the text), JCoT (joint construction of the text), and ICoT (independent construction of the text). The BKoF and MoT stages were the first stages in the strategy. At this stage, the students were directed to build their knowledge about the text with a model text so that they knew the structure and linguistic features of a descriptive paragraph. Meanwhile, in the JCoT stage, as it was a joint construction activity, the students were directed to construct a descriptive paragraph with their friends. After the students were finished in making the descriptive paragraphs, they were asked to give comments on the other groups' works. Then, in the ICoT stage, the students were asked to make a descriptive paragraph individually. In this study, the ICoT stage took two meetings because the students were asked to make two descriptive paragraphs with different topics. It aimed to cover the materials that should be discussed such as different laptops' brand and style. For example, a high-end or hybrid laptop. Then, in the fifth meeting, there was a test to measure the students' writing achievement after the implementation of the strategy.

In regard to the use of ProWritingAid and teacher feedback, the teacher directed it exclusively during the JCoT and ICoT stage. One reason because the composing process happened at these stages. In addition, the students were told to access ProWritingAid using either their laptops or smartphone; whichever felt easier for the students. It can be seen from Table 1 that the ProWritingAid was used in Meeting one until four. During the first week (BKoF and MoT stage), the program was used as a practice for the students to learn the correct use of grammar, mechanics, or vocabulary choice in a descriptive text. It was also to make sure that the students had enough experience in using the program. In the second (JCoT stage) until the fourth week (ICoT stage), the program was used to give feedback and correct the students' errors in grammar, mechanics, or vocabulary. In the first ICoT stage or Meeting 3, the first descriptive paragraph was produced prior with ProWritingAid. Nonetheless, in the second ICoT stage or Meeting 4, the students were asked to use ProWritingAid before the final submission only. It was done to reflect the students' progress after using the program several times. In addition, the use of ProWritingAid before the final submission was optional. If the students made any changes to the text, especially when the teacher suggested them to add some sentences or change the content of their paragraphs, they were asked to use ProWritingAid to check their errors again.

Other than the feedback given by the program, the teacher feedback was also given. Teacher feedback was given in the form of written feedback. For the content-focused feedback, it included some comments or suggestions related to the content and organization of the paragraph. For the form-focused feedback, it consisted of both direct and indirect feedback with its metalinguistic explanation. One thing to be noted was the teacher's weekly reflection in class. Starting from meeting three to five, the teacher would discuss what kind of errors that most of the students made in their paragraphs and how to correct it. The review would contain a reflection on the students' paragraph organization, content, grammar, etc.

## FINDINGS

To answer the research questions, the teaching and learning strategy with ProWritingAid and teacher feedback was enacted. After the implementation of the strategy, the instruments were used to obtain the findings. Thus, this section revealed the research findings obtained from the research process. The research result was gathered through the questionnaire and teacher interview. After the analysis, it was found that the data indicated the students' and teacher's positive responses toward the implementation of ProWritingAid and teacher feedback. Although there were some negative responses claimed by the teacher and some students, it was found that all students chose to have both ProWritingAid and teacher feedback to be used in their writing class. Further, the detailed findings are presented below.

### Questionnaire

#### Likert Scale Items

The students' positive and negative responses on the Likert scale items spread in some areas. It should be noted that the students who responded to *strongly agree* and *agree* were categorized as Agree and *totally disagree* and *agree* were categorized as Disagree. Based on the result of the analysis, the students were found to have positive responses towards the teaching and learning strategy using ProWritingAid and teacher feedback. According to table 2, almost all the students gave positive responses to the statements. There was an average of 32 students (98%) that gave positive responses to the statements given.

In reference to table 2, the students' positive and negative responses spread in some areas. Firstly, there were 33 students (100%) agreed that accessing ProWritingAid in class was easy. It was also found that there were three students (9%) mentioned that they had difficulty in accessing the program outside of the class. Secondly, there were 33 students (100%) who agreed that ProWritingAid alone was needed to help the students improve their descriptive paragraphs. Although all students agree that ProWritingAid was needed, it was found that two students (6%) disagreed that the feedback given by ProWritingAid was understandable. Nonetheless, 33 students (100%) chose to use ProWritingAid again in the future despite there were students who claimed that the feedback given by the program was not understandable.

Appertaining to the students' perception of the teacher feedback, none of the students gave negative responses. All students (100%) chose to agree that the teacher feedback was understandable and needed. Also, 33 (100%) students chose to agree that the combination of ProWritingAid and Teacher feedback was needed. The result of the Likert scale items, indeed, had proven the students' positive responses towards the implementation of ProWritingAid and teacher feedback. This result is also supported with the result of one multiple choice question that asked the students' preference about feedback strategy.

**Table 2. Likert Scale Item Result**

Statements	Agree		Disagree		Mean	Std. Deviation
	N	%	N	%		
1. Accessing ProWritingAid in class is easy	33	100	-	-	3,5	0,5
2. Accessing ProWritingAid outside of class is easy	30	91	3	9	3,6	0,6
3. Using ProWritingAid is needed to help me improve my descriptive paragraph	33	100	-	-	3,7	0,5
4. The feedback from ProWritingAid is understandable	31	94	2	6	3,4	0,6
5. I am willing to use ProWritingAid again in the future	33	100	-	-	3,5	0,5
6. The teacher feedback is understandable	33	100	-	-	3,5	0,5
7. Teacher feedback is needed to help me improve my descriptive paragraph	33	100	-	-	3,6	0,5
8. The combination of ProWritingAid and teacher feedback is needed to help me improve my descriptive writing skill	33	100	-	-	3,5	0,5
<b>Average</b>	<b>32</b>	<b>98</b>	<b>1</b>	<b>3</b>	<b>3,5</b>	<b>0,5</b>

*Open-Ended Section of the Questionnaire*

The open-ended part of the questionnaire asked the students to reflect on the merits and demerits of ProWritingAid and teacher feedback implementation. It was separated into two, the merits and demerits of ProWritingAid and the merits and demerits of teacher feedback. Firstly, table 3 shows the students' responses toward the merits and demerits of ProWritingAid.

**Table 3. Students' Responses of the Merits and Demerits of ProWritingAid**

Responses	Frequency	Percentage
<b>Merits</b>		
1. ProWritingAid helps the students to learn grammar	10	30%
2. ProWritingAid helps the students to improve their descriptive paragraph as a whole	10	30%
3. ProWritingAid helps the students to know, fix, and learn the errors that they made	22	67%
4. ProWritingAid helps the students to re-construct their sentences through sticky sentence feature	2	6%
5. ProWritingAid is easy to be accessed	4	12%
<b>Demerits</b>		
1. There were undetected grammatical errors (i.e wrong tenses usage and subject-verb agreement)	16	48%
2. Some comments were not clear so they were difficult to be understood	4	12%
3. There were misleading comments (i.e the name of a person or laptop brand was considered vague if it is not familiar)	4	12%
4. There were some errors without the correct version	6	18%
5. ProWritingAid cannot be accessed offline	3	9%

It was found that there were a total of 48 responses toward the merits and 33 responses towards the demerits of ProWritingAid found in reference to Table 3. The students' positive responses were mostly related to the program's main function to improve a text. For instances, to re-construct poor sentences which were mentioned by 2 students (6%); and to know, fix, and learn the errors that they made which were noted by 22 students (67%). Although 10 students (30%) mentioned that ProWritingAid helped them to learn grammar, other 16 students (48%) also mentioned that there were undetected grammatical errors found in ProWritingAid. Moreover, in regards to the comments or explanation given by ProWritingAid, there were 14 students (42%) noted the demerits of the program; there were 4 students (12%) mentioned that the comments of certain errors were sometimes misleading, another 4 students (12%) also mentioned that some comments made by the program were not clear so it was difficult to be understood. Finally, the last responses were about the accessibility of the program. Although 4 students (12%) noted that the ProWritingAid was easy to be accessed, there were 3 students (9%) who noted that the program can be accessed online only. According to the above result, we can see that the students' responses toward the merit and demerit of ProWritingAid were spread evenly. Unlike the students' various responses toward the program, the students' responses toward the teacher feedback were weighted to one side.

In fact, the responses towards the teacher feedback (See Table 4) were weighted more on the merit rather than the demerit aspect. It was found that there were 57 occurring responses about the merits and 20 responses about the demerits of teacher feedback. Meanwhile, there were 18 students (55%) who gave no response towards the demerit of the teacher feedback which was categorized as the student's positive response toward teacher feedback.

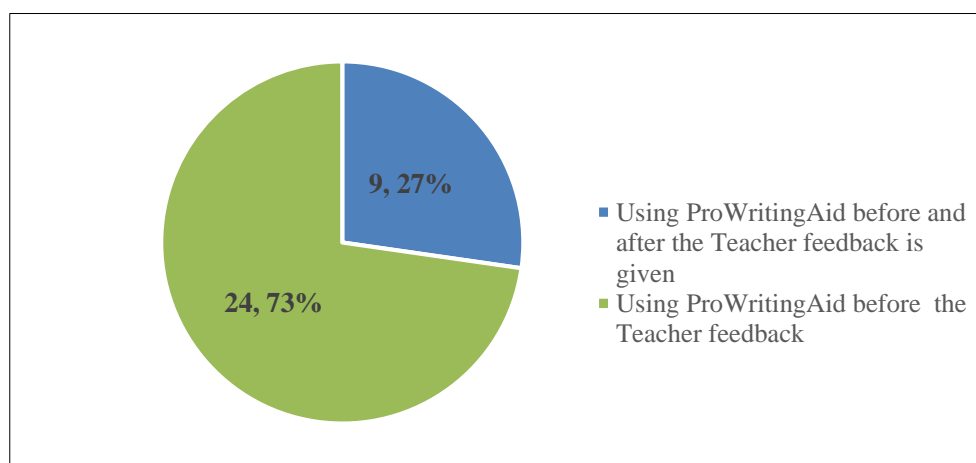
**Table 4. The Students' Responses toward Teacher Written Feedback**

Responses	Frequency	Percentage
<b>Merits</b>		
1. The feedback explanation from the teacher was clear	11	33%
2. The feedback from the teacher added the feedback from ProWritingAid	20	61%
3. Teacher feedback helped the students to understand the role of ProWritingAid and teacher in class	6	18%
4. Teacher feedback helped the students to revise their paragraphs to be better, especially about the content	5	15%
5. Teacher feedback helped the students to organize their paragraphs better	15	45%
<b>Demerits</b>		
1. Sometimes, the students felt that it was difficult to arrange the sentences based on the teacher's suggestions	11	33%
2. The students have to wait for a few days to get teacher feedback	9	27%
<b>No Negative Response</b>	18	55%

The findings of the students' responses based on Table 4 can be interpreted as follow. Firstly, in regards to the content of the students' writings, there were 5 students (15%) who noted that teacher feedback helped them to make the content of their paragraphs better and 15 students (45%) mentioned that the teacher feedback helped them to organize their paragraphs. Meanwhile, there were 11 students (33%) who felt that it was difficult to arrange the sentences based on the teacher's suggestions. Secondly, unlike the ProWritingAid comments that were claimed by some students as not clear and difficult to be understood, 11 students (33%) mentioned that the teacher feedback was clear or understandable. Thirdly, in reference of combining ProWritingAid and teacher feedback, 20 students (61%) mentioned that teacher feedback helped the students to revise the undetected errors by ProWritingAid. Six students (18%) also mentioned that through teacher feedback, the students could understand the role of using ProWritingAid in class. The result of the open-ended questionnaire indicated that although there were many weaknesses in the program, some of the problems can be solved through teacher feedback. Especially when the teacher also corrected the students' errors. To sum up, the result of the open-ended part of the questionnaire was used to help the researcher see the weakness and strength of the strategy.

#### **Multiple-Choice Item Result**

The multiple-choice item asked the students to choose one of the following options: First, using ProWritingAid only to edit paragraphs without teacher feedback; second, using ProWritingAid before teacher feedback is given; third, using ProWritingAid before or after teacher feedback is given; fourth, using ProWritingAid only after teacher feedback; and fifth having teacher feedback only without ProWritingAid. From Figure 1 it can be seen that all students (100%) chose to have both ProWritingAid and teacher feedback to be implemented in class. There were 24 students (73%) chose to use ProWritingAid before the teacher gave the feedback to their writings, while 9 students (27%) chose to use ProWritingAid before and after the teacher feedback was given, which also means that they chose to check their writings again before the final submission to the teacher. The minority choice might be supported by the teacher explanation who stated that "some students were asked to revise the content of their descriptive paragraphs because some of the ideas were either incomplete or unneeded. Those students who were revising a lot of their content were encouraged to use the ProWritingAid again to check their errors because after the revision process based on the teacher feedback, the students needed to submit their final descriptive paragraph".



**Figure 2. Students' Responses toward the Multiple-choice Item Result**

#### **Teacher Interview**

The result of the teacher interview have found that the teacher perceived positively to the implementation of ProWritingAid and teacher feedback. Although there were some demerits of the strategy that the teacher had experienced during the implementation process, the teacher chose to continue using the strategy again for her writing class. The teacher mentioned "I will use this strategy again because I have found many benefits in my teaching practices". The teacher also mentioned that "Using both ProWritingAid and teacher feedback had certainly improved the way I gave revision session in class because I used to have an individual conference session which took so much time in class. Now, I can directly ask the students to write and use ProWritingAid, then give my feedback outside of the class session. It certainly saves more time in class that I can use as any writing practices". The teacher also noted that "using ProWritingAid can be done both or either before and after the teacher feedback is given, especially for students who need to revise their contents". In regards to the students' improvement, the teacher also mentioned that "using both kinds of feedback helped the students to improve their paragraphs in many aspects". Further, the teacher's responses were delineated under the next heading.

### ***Merits and Demerits of Implementing ProWritingAid and Teacher Feedback based on the Teacher's Perception***

First of all, the merit of implementing ProWritingAid and teacher feedback was discussed on its effect on the students' paragraph writing quality. The teacher who had been interviewed mentioned some points in regards to the students' writing quality. Firstly, the teacher claimed that "Most of the students' paragraph composition became more straight forward and simple. At first, many students had composed poor sentence constructions in their paragraphs. Their sentences had contained a lot of grammatical errors that make the students' paragraphs were poor in quality. Most of the students had also used many complex sentences. However, the students were not ready and capable to use complex sentences with the correct composition at that time. Teaching the students to use the *sticky sentence* feature in ProWritingAid has helped the students to produce simpler and correct sentences". Because the students produced more correct sentences, less grammatical errors were made. The teacher added that "It was also reflected on the students' final writing quality"

Secondly, the merits mentioned by the teacher was linked to the feedback or revision session in class. Using ProWritingAid before teacher feedback had certainly decreased the teacher's workload and save the teacher's time. The teacher claimed that "Because the students had corrected their errors before giving their paragraphs to me, I could save time and focus more on the students' paragraphs organization and content. When the student' content was incomplete, I told them to revise it and use ProWritingAid again because it is impossible to have the second teacher feedback session. Hence, the students can be at ease to know that ProWritingAid will still help them again to check their errors if they change or add more content to their paragraphs". Moreover, because there were undetected errors in the program, the teacher always reviewed the most common errors in the students' paragraphs in each meeting so that the students could be aware of their mistakes. The teacher added "The reviewing stage in each meeting was essential because it helps me explain the students' errors to all of the students instead of having an individual conference. It is more effective and faster than the individual conference feedback because I mostly only explain those undetected errors made by ProWritingAid, which is mostly the same in each student's composition."

On the other hand, the demerits of the strategy based on the teacher interview were mostly seen from the ProWritingAid's weaknesses. It was found that there were undetected grammatical errors in the program, thus, the teacher also gave error correction or feedback to the students' grammatical errors which were undetected by ProWritingAid. The teacher stated that "Mostly, the ProWritingAid were unable to detect the error if the students' sentence composition were very poor. Such as the result of translating Indonesian language structure directly into English". Thus, the teacher mentioned that "To use ProWritingAid, I think the students must have mastered the basic English grammar first. Besides, all the explanation are in English. Thus, my students who have low English proficiency may not be benefited from the program". The teacher also added "We do not use ProWritingAid to make the students' paragraphs free from errors but to minimize the errors in grammar, spelling, or vocabulary choice"

## **DISCUSSIONS**

### **The Students' and Teacher's Positive Perceptions toward the Strategy**

This discussion was delineated based on the first research questions. The first research question of "How do the students and teacher perceive the implementation of ProWritingAid and teacher feedback in the descriptive paragraph writing class?" focused on the overall perception (positive or negative) made by the teacher and students. In fact, based on the data obtained from the interview and questionnaire, the teacher and students perceived the implementation of ProWritingAid and teacher feedback positively.

The teacher's positive response can be seen from the teacher's statement of wanting to use the strategy again in the future because it benefited both the students and teacher. It was found that the teacher's overall positive perception was linked to the result of the students' writing quality and teacher's revision session in class. It was found that although ProWritingAid yielded some weaknesses, it can help the teacher in saving her time in giving feedback. This result supports many studies who claimed the same findings, yet with different subjects and AWE program (Warschauer & Grimes, 2008; Wilson & Czik, 2016). Moreover, the teacher could also provide more feedback on the content or idea development. It was also mentioned that using an AWE program, the teacher can focus more on the students' content, thus helping the students on their higher-level writing skills (Wilson & Czik, 2016).

Meanwhile, the students' positive responses could be seen in many parts of the questionnaire. The first part of the questionnaire, which deals with the eight items, shows that 98% of the students responded positively towards the implementation of the strategy. Although some students felt disagree on certain statements, all of them are willing to use the program again. All students also agreed that the combined practice is needed to help improve the students' descriptive paragraph. The third part of the questionnaire also supported the students' positive view of the strategy. It was found that all of the students chose to have ProWritingAid and teacher feedback in class, although, their choices may be different in the way of using ProWritingAid. For some students who need to revise their contents, ProWritingAid was needed to check their compositions again. Indeed, because of its merits in helping the students to revise their errors, an AWE program is chosen by the students to be used again and again (Xu, 2018).



### **Potential Factors that Contributed to the Students' and Teacher's Positive Responses**

It should worth to mention that there are several possible explanations that contributed to the teacher's and students' positive responses towards the implementation of ProWritingAid and teacher feedback in this study. The first potential factor that contributed to the students' and teacher's positive responses was the selection of using ProWritingAid. The selection of the AWE program alone could contribute to different students' experiences. It was due to various features and capability of different AWE programs. Using the ProWritingAid, the students could get feedback and learn from their errors; through the comments, examples, and explanation given by the program. In fact, some AWE programs could not give an explanation of the students' errors (Weigle, 2015), thus they failed to give a learning effect to the students. It should also be noted that the students are unlikely to make use of the AWE program that causes them to feel baffled (Zhang, 2016).

The second explanation was the students' and teacher's readiness to use ProWritingAid. Many previous studies have explored that the students' and teacher's skill or readiness to use the AWE program took into account in their perceived value and willingness to use the program (Chen & Cheng, 2008; Cotos, 2010). In this study, the students and teacher were digital literate. The students themselves were the informatics engineering major students who always interacted with computer and program. Thus, the result of the study might be different if the teacher or students involved were not digital literate or ready to use such program. Further, although the program yielded some weaknesses, the teacher showed strong trust for the program in reducing the students' errors. Thus, instead of abandoning the program due to the trust issue (Chen & Cheng, 2008), the teacher in this study still reviewed and give more feedback to the students' errors. Thus, it was found that the students could understand the role of ProWritingAid and teacher in class.

The last and most important factor was the used of all stages in the implementation of the strategy, including the Genre Based Approach (GBA) stages. Surely, the choice of the strategy on how the AWE program should be used in the class took part in the success of the strategy. Indeed, the successfulness of using an AWE program is also based on the strategy used in class (Cotos, 2010; Crusan, 2015).

### **The Merits and Demerits of Implementing ProWritingAid and Teacher Feedback**

The discussion of the merits and demerits of ProWritingAid and teacher feedback is based on the second research question. The second research question of "What are the merits and demerits of using ProWritingAid and teacher feedback in paragraph writing class?" was discussed from many point of views. For the students, this strategy allowed them to have the best of both worlds; to learn, revise, and improve their descriptive paragraphs from ProWritingAid and teacher feedback. Through ProWritingAid, the students can learn and fix their errors with the help of the explanation given by the program. Especially in reference to the students' errors in grammar, vocabulary, or spelling. This finding supports countless literature that claimed the students' positive responses of AWE program to help the students to locate errors in many linguistic aspects (Luo & Liu, 2017; Wei, 2015; Xu, 2018), learn from the explanation of the errors (Ritter, 2016; Wei, 2015) and overall to revise their texts to be better (Chen & Cheng, 2008; Nobuo, 2014). Meanwhile, having teacher feedback, the students can revise the meaning and content of their paragraphs more. It was also stated that having the computer feedback to help the students with their form-focused errors, the teacher can focus on the content of the students' compositions (Crusan, 2015).

For the teacher, this strategy certainly helped to reduce the teacher's workload and improve the teacher's feedback practices. Indeed, combining ProWritingAid and teacher feedback can make the teacher focus more on the content of the text (Wilson & Czik, 2016) because most of the students' errors had been corrected through the program. It was also pointed out that using the combined feedback practice of AWE and teacher can save the teacher's time to give feedback, especially to all of the writing aspects such as organization, content, grammar, vocabulary, and mechanics (Warschauer & Grimes, 2008; Wilson & Czik, 2016). Furthermore, the demerits of the strategy were mostly seen from the ProWritingAid weaknesses. The data obtained showed that the use of ProWritingAid can help the students to improve their paragraphs, but to some extent, because the program still has many weaknesses. That is why, as it was explained previously, there were students who failed to gain the usefulness of the program because of their low English level or proficiency. In fact, although the AWE program was perceived positively by the lower English proficiency level students, it does not necessarily result in an observable improvement in the students' compositions (Huang & Renandya, 2018). The demerits of the program obtained in this study supports many previous researchers that stated although many AWE programs detected many errors related to the linguistic accuracy, there were sometimes undetected or misleading errors (Crusan, 2015; Nova & Lukmana, 2018) and poor or faulty explanation (Nobuo, 2014; Zhang, 2016) made by the program. Thus, it is important to be noted that the strategy may not be best for students with low English proficiency level because these students need more help from the teacher.

The AWE program might lose its function to help these students to learn and improve their writing skills. Although some researchers believed that the AWE program should be used for the low or basic-level students' (Chen & Cheng, 2008), it should be also noted that these type of students are also vulnerable with the explanation of the program. In any case, if the AWE program was used for the students with the poor sentence construction skill, the teacher might need to scaffold the students or give more consideration to the design of his or her activity to minimize the demerits of the AWE program (Huang & Renandya, 2018). Just like many computer programs, there is also incompatibility found in the program (Zupanc & Bosnic, 2015). An AWE program is not a lifetime-fixed program since it is always under development and revision. In fact, many AWE programs have not yet been perfected (Crusan, 2015).

## CONCLUSION

Appertaining to the research findings and discussions, it can be concluded that implementing ProWritingAid and teacher feedback in class was perceived positively by both teacher and students. They also preferred to have ProWritingAid and teacher feedback to be implemented in their paragraph writing class. In fact, using ProWritingAid and teacher feedback caters the needs of both teachers and students. First of all, it helped teachers to compensate for the lack of time and explanation in the feedback related to the linguistic accuracy. It also assisted the teacher in providing feedback and allowing the teacher to devote more time to the content and organization of the students' paragraphs. Furthermore, it assists the students as it can give the best of both worlds to help the students detect, learn, and fix their errors from the program and to help the students revise the content and organization of their descriptive paragraph through teacher feedback. Although the strategy was perceived positively due to its merits, the strategy also yielded many drawbacks. The drawbacks can be seen from the ProWritingAid weaknesses in detecting some errors, giving faulty or misleading feedbacks, and giving a comprehensible explanation to some errors. With the limitation of the current program, ProWritingAid, as an Automated Writing Evaluation program, requires teacher feedback to fill-in its weaknesses.

Finally, some suggestions for the English teachers, future researchers, and ProWritingAid developers were added. For the English teachers and future researchers, it is suggested to not using ProWritingAid to EFL students with low English proficiency level as ProWritingAid cannot be the best choice to help students with poor sentence construction skill. Thus, the students must have basic English grammar in the first place. It was also suggested for the future researchers to investigate the strategy with the same or different AWE program because as far as the researcher has found, there are limited numbers of literature that investigates this combination feedback in different AWE programs. Moreover, since the implementation of the strategy in this study was restricted in only several meetings, due to the teaching schedule in class, it was suggested to do a similar research in more meetings to see its effect. It was also suggested to use the combined feedback strategy in different level students. Finally, for the ProWritingAid developers, this study can be a reference or feedback to see how the implementation of ProWritingAid in class yielded to the merits and demerits of the program. The result of this study could be an important reference in developing the program.

## REFERENCES

- Attali, Y., Bridgeman, B., & Trapani, C. (2010). Performance of a Generic Approach in Automated Essay Scoring. *The Journal of Technology, Learning, and Assessment*, 10(3), 17.
- Brown, D. (2000). *Principles of Language Learning and Teaching* (4th ed.). New York: Longman.
- Chen, C.-F. E., & Cheng, W.-Y. E. (2008). Beyond the Design of Automated Writing Evaluation: Pedagogical Practices and Perceived Learning Effectiveness in EFL Writing Classes. *Language Learning*, 12(2), 19.
- Cotos, E. (2010). *Automated Writing Evaluation for Non-Native Speaker English Academic Writing: The case of IADE and its formative feedback* (Doctor of Philosophy, Iowa State University, Digital Repository). <https://doi.org/10.31274/etd-180810-802>
- Cotos, E. (2011). Potential of Automated Writing Evaluation Feedback. *CALICO Journal*, 28(2), 420–459. <https://doi.org/10.11139/cj.28.2.420-459>
- Crisp, B. R. (2007). Is It Worth the Effort? How Feedback Influences Students' Subsequent Submission of Assessable Work. *Assessment & Evaluation in Higher Education*, 32(5), 571–581. <https://doi.org/10.1080/02602930601116912>
- Crusan, D. (2015). And then a Miracle Occurs: The Use of Computers to Assess Student Writing. *International Journal of TESOL and Learning*, 4(1), 13.
- Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and Explicit Corrective Feedback and The Acquisition of L2 Grammar. *Studies in Second Language Acquisition*, 28(02). <https://doi.org/10.1017/S0272263106060141>
- Ferguson, P. (2011). Student Perceptions of Quality Feedback in Teacher Education. *Assessment & Evaluation in Higher Education*, 36(1), 51–62. <https://doi.org/10.1080/02602930903197883>
- Forrer, D. A., Wyant, N. A., & Smith, M. G. (2015). Improving Writing Through The Peer-To-Peer Evaluation Process. *Journal of Business & Economics Research (JBER)*, 13(3), 137. <https://doi.org/10.19030/jber.v13i3.9285>
- Grimes, D., & Warschauer, M. (2010). Utility in a Fallible Tool: A Multi-Site Case Study of Automated Writing Evaluation. *The Journal of Technology, Learning, and Assessment*, 8(6), 44.
- Harmer, J. (2004). *How to Teach Writing*. Essex: Pearson Education.
- Hegelheimer, V., Dursun, A., & Li, Z. (2015). Automated Writing Evaluation in Language Teaching: Theory, Development, and Application. *CALICO Journal*, 33(1), I–V. <https://doi.org/10.1558/cj.v33i1.29251>
- Huang, S., & Renandya, W. A. (2018). Exploring the Integration of Automated Feedback among Lower-Proficiency EFL Learners. *Innovation in Language Learning and Teaching*, 1–12. <https://doi.org/10.1080/17501229.2018.1471083>
- Hyland, K. (2008). Writing Theories and Writing Pedagogies. *Indonesian Journal of English Language Teaching*, 4.
- Li, L., & Ye, M. (2016). A Study of Language Expression Feedback Difference in College English Writing. *Shandong Foreign Language Teaching*, 37, 58–64.
- Luo, Y., & Liu, Y. (2017). Comparison between Peer Feedback and Automated Feedback in College English Writing: A Case Study. *Open Journal of Modern Linguistics*, 07(04), 197–215. <https://doi.org/10.4236/ojml.2017.74015>

- Nobuo, T. (2014, March 15). *Implementing Criterion (Automated Writing Evaluation) in Japanese College EFL Classes*. Retrieved from <https://doi.org/10.14990/00000561>
- Nova, M., & Lukmana, I. (2018). *The Detected and Undetected Errors in Automated Writing Evaluation Program's Result*. 2, 7.
- Qiang, Z. (2014). An Experimental Research on Applying Automated Essay Scoring System to College English Writing Course. *International Journal of English Language Teaching*, 1(2), p35. <https://doi.org/10.5430/ijelt.v1n2p35>
- Ritter, L. (2016). *Police The Grammar. Becoming an Academic Writer; Exercises for Paced, Productive, and Powerful Writing*. California: Sage Publications.
- Stevenson, M., & Phakiti, A. (2014). The Effects of Computer-Generated Feedback on the Quality of Writing. *Assessing Writing*, 19, 51–65. <https://doi.org/10.1016/j.asw.2013.11.007>
- Thi To Hoa, N., & Thi Tuyet Mai, P. (2016). Difficulties in Teaching English for Specific Purposes: Empirical Study at Vietnam Universities. *Higher Education Studies*, 6(2), 154. <https://doi.org/10.5539/hes.v6n2p154>
- Wang, P. (2013). Can Automated Writing Evaluation Programs Help Students Improve Their English Writing? *International Journal of Applied Linguistics & English Literature*, 2(1), 6–12. <https://doi.org/10.7575/ijalel.v.2n.1p.6>
- Ware, P. (2018). Automated Writing Assessment. In J. I. Lontas, T. International Association, & M. DelliCarpini (Eds.), *The TESOL Encyclopedia of English Language Teaching* (pp. 1–7). <https://doi.org/10.1002/9781118784235.eelt0543>
- Warschauer, M., & Grimes, D. (2008). Automated Writing Assessment in the Classroom. *Pedagogies: An International Journal*, 3(1), 22–36. <https://doi.org/10.1080/15544800701771580>
- Wei, M. (2015). An Empirical Study into the Effects of Feedback on College English Writing. *Journal of Tianjin Foreign Studies University*, 50, 43–50.
- Wilson, J., & Czik, A. (2016). Automated Essay Evaluation Software in English Language Arts Classrooms: Effects on Teacher Feedback, Student Motivation, and Writing Quality. *Computers & Education*, 100, 94–109. <https://doi.org/10.1016/j.compedu.2016.05.004>
- Xu, Y. (2018). *Investigating the validity of using automated writing evaluation in EFL writing assessment*. 11.
- Zhang, Z. (Victor). (2016). Student engagement with computer-generated feedback: A case study. *ELT Journal*, ccw089. <https://doi.org/10.1093/elt/ccw089>
- Zupanc, K., & Bosnic, Z. (2015). Advances in the Field of Automated Essay Evaluation. *Informatica*, (39), 14.