



# Partnering with Automatic Writing Evaluation Exploring Teachers' Perspective

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## ABSTRACT

Formative feedback is an important element in writing instruction and benefits students' domain-specific skills as well as their overall writing development. As an instructional method, feedback is primarily delivered by teachers in many classrooms. Current technological advancements create affordances for Automated Writing Evaluation (AWE). While many studies explore students' perspectives, this study explores two vocational high school English teachers' experiences in appropriating Grammarly in their writing instruction. This research employed narrative inquiry and used oral narrative and narrative frames to gather the teachers' experiences. The data were then analyzed using content analysis. It is found that teachers value AWE positively because it allows students to be independent in learning. The teachers also could focus on giving feedback on content, while the machine generates feedback on forms. Nevertheless, the teachers apply different pedagogical approaches to the machine integration. Hence, AWE seems to continue to remain significant in the current digital era.

**Keywords:** *Automated Writing Evaluation (AWE), EFL writing, Grammarly, perspective, vocational high school.*

## 1. INTRODUCTION

Formative feedback is an important element in writing instruction. It brings benefits to students' domain-specific skills (Van Zundert, Sluijsmans & Van Merriënboer, 2010) as well as students' overall writing development (Wigglesworth & Storch, 2012). As an instructional method, feedback is primarily delivered by teachers in many classrooms (Bearman, Dawson, Bennet, Hall & Molloy, 2016). The focus of the formative feedback is also different from one classroom to another. Some writing instructors predominantly focus their feedback on students' grammatical errors (Ferris, Liu, Sinha & Senna, 2013; Sermsook, Liamnimitir & Pochakorn, 2017). Meanwhile, other studies suggest that focus on grammatical error does not necessarily contribute to students' writing development so feedback should focus on content (Truscott & Hsu, 2008; Valizadeh & Soltanpour, 2021). Nevertheless, due to the many contextual and individual factors, a balanced way and focus of feedback are advised to ensure the effectiveness of feedback (Chugh, Macht & Harrevel, 2022). Students and teachers prefer the combination of content and form-focused feedback (Elwood & Bode, 2014; Hyland, 2013; Kencana, 2017). In any case, students from various ESL and EFL tertiary education contexts admit the importance of formative feedback (Kahraman & Yalvaç, 2015; Tom, Morni, Metom & Joe, 2013; Wingate, 2010; Zhan, 2016). Likewise, teachers perceive formative feedback positively (Guadu & Boersma, 2018; Hamouda, 2011; Zhan, 2016).

Current technological advancements create affordances for technology-based feedback. Over the years, various Automated Writing Evaluation (AWE) tools have been created by applying computational methods to analyze texts and then automatically generate assessments of grammar, mechanics, and style. Student and teachers in different ESL and EFL contexts express their positive opinions about applying AWE in writing instruction (Jiang, Yu & Wang, 2020; Jiang & Yu, 2020; Z. Li, 2021; Prastikawati, 2021). However, several experiments to utilize AWE reported mixed results. For example, in an Iranian context, AWE integration resulted in significant student writing progress (Hassanzadeh & Fotoohnejad, 2021). In another study, students' grammatical knowledge increased while their writing

apprehension decreased (Waer, 2021). Meanwhile, a richer vocabulary was built after using AWE several times (Shang, 2022). Contrastingly, another study reported that their participants were cognizant of the generated feedback due to AWE's limitation (Bai & Hu, 2017). Similarly, critiques of AWE's lack of syntactical and collocational analysis (Dikli & Bleyle, 2014) and accuracy (Ranalli, Link, Chukarev-Hudilainen, 2017) were reported. Also, since AWE generates form-focus feedback, it is suggested that AWE should be utilized as an addition to teaching and peer feedback (Bayerlein, 2014; Engeness, 2018; Xu & Zhang, 2022). However, recent experiments show that AWE integration promotes students' self-regulation, especially self-efficacy, attitude, and motivation toward writing and goal calibration (Cruz Cordero et al., 2023; Wilson, Cordero & Myers, 2023).

Among the widely accessible AWE on the market, Grammarly is popular among university students because of its easy access and wide availability. It can be opened in popular web browsers and is currently available as a web application, as an extension to a web browser, Microsoft Word, as well as a native desktop application (Barrot, 2020). A body of research investigated various aspects of Grammarly integration in writing instruction. In some experiments, students who received automated feedback from Grammarly made fewer errors than those who received indirect feedback from teachers (Ghufron & Rosyida, 2018; Wang, Shang & Briody, 2013). Grammarly also might stimulate students' autonomy in learning (Nova, 2018; Umamah & Cahyono, 2022). Nevertheless, in other research, participants expressed mixed responses towards Grammarly that they acknowledged some inaccuracies (Ummah & Bisriyah, 2022) and discontinued using it (Ambarwati, 2021).

Regardless of the pros and cons, AWE seems to continue to gain significance in writing pedagogy in today's 21st-century education environment as it promotes students' learning as well as information, media, and technology skills. Indeed, instructors have begun to integrate AWE into their writing classes. Studies found that AWE reduced teachers' workload by providing lower-level writing skills, such as spelling and grammar (Jiang et al., 2020; J.Li, Ling & Hegelheimer 2015). Contrarily, teachers in another context utilize AWE as supplementary feedback (Koltovskaia, 2022).

Indeed, despite the many significant positive effects of AWE implementation towards different aspects of students' writing, it is important to note that feedback interacts with factors, such as learners' language proficiency, instructor's pedagogical approach as well and the socio-cultural contexts of language learning. As facilitators, teachers may have different perceptions and different pedagogical strategies. So, studying teachers' use of AWE continues to remain significant. While previous studies focus on the experience of teachers in tertiary education, the current research investigated the experience of teachers in different education settings, i.e., high school. Hence, this research aims to describe teachers' perception and use of Grammarly.

## 2. METHOD

This research used narrative inquiry where participants tell detailed stories of an experience (Barkhuizen et al., 2013). This study illuminates vocational high school English teachers' experience in integrating Grammarly into their classes. This study involved two female English teachers, Amanda and Ratu (pseudonym). They both have 5 years of teaching experience. They were recruited because they both integrated Grammarly into their writing class. Neither of them subscribed to Grammarly Premium but they are familiar with the features.

The data were collected from a variety of personal narratives, i.e., oral narrative in the form of interviews and written narrative in the form of narrative frames. The interviews mainly gather information about their encounters and familiarity with Grammarly as well as elaborate their strategies for integrating the machine. Meanwhile, the narrative frames allow the teachers to tell their Grammarly integration by filling the blank spaces with their views about feedback as well as the pros and cons of Grammarly. The data were collected in May 2023 which marks the end of the 2022 school academic year. Then, analysis for patterns and themes was conducted following the narratives. Last, to ensure the validity of the researchers' interpretation, member checking was done.

## 3. FINDINGS AND DISCUSSION

This study illuminates the experience and pedagogical strategy of two English teachers at a vocational high school in Indonesia. It was revealed that both teachers have a positive perception of Grammarly and mention some ways in which the machine empowers them in providing feedback. However, the teachers applied different pedagogical practices in integrating the machine. The following paragraphs elaborate on the findings and position them in the current discussion about AWE.

### ***3.1. Positive Perspective of AWE***

The teachers, Amanda and Ratu, usually give feedback on their students' writing. They believe that feedback is essential to show students' writing development. Likewise, they would proportionally provide feedback at both formulaic or lower-level writing skills and content or higher-level writing skills. Indeed, this belief resonates with another classroom context in which a balanced focus of feedback is provided to support the effectiveness of the feedback (Chugh et al., 2022; Elwood & Bode, 2014; Hyland, 2013; Kencana, 2017).

As the affordance of AWE arises, the two teachers supplement their feedback with the machine-generated for two reasons. First, Grammarly makes their time efficient as they both teach large classes and require many hours to check students' writing. As the nature of the form-focus feedback generated by AWE, teachers can efficiently use their time to evaluate higher-level writing skills (Bayerlein, 2014; Engeness, 2018; Xu & Zhang, 2022). Second, they aim to foster 21st-century skills in which students independently consult Grammarly before submitting their work. The teachers are confident with their students' capability to work with digital technology as they learn how to use Grammarly. The teachers also believe that students' interaction with the AWE fosters students' learning independence as they read the generated feedback and revise accordingly. Furthermore, the students can reflect on their writing problems and skills. Previous research has elaborated on the potential contribution of the machine to students' autonomy in learning (Nova, 2018; Umamah & Cahyono, 2022). Indeed, recent experiments confirm an increase in students' goal calibration, confidence in writing, and self-efficacy (Cruz Cordero et al., 2023; Wilson et al., 2023).

Nevertheless, teachers acknowledge the limitations of the machine, i.e. inability to understand the context of the essay (Bai & Hu, 2017; Dikli & Bleyl, 2014) and inaccuracy (Ranalli et al., 2017; Wilson et al., 2021). The teachers occasionally find their students confused with the feedback generated by the machine. However, both teachers view this as rather a hopeful prospect because it allows them to discuss it with their students. They believe that this occasion allows students to develop their critical thinking and communication skills. One teacher, Ratu, would allow one class meeting for a discussion session in which students can clarify and/or raise questions about the machine-generated feedback with fellow students or teachers.

All in all, teachers perceive AWE positively. As they usually provide balanced feedback, they supplement AWE to generate form-focus feedback. They also praise the contribution of the machine to the students' overall 21st-century skills development, such as information, media and technology skills, critical thinking, and communication.

### ***3.2. Partnering with AWE: Teachers' Pedagogical Strategies***

AWE has become an integral part of the teachers' strategy as the two teachers use AWE as their "partner". The participants confirm that the machine to a certain extent reduces their workload (J. Li et al., 2015). They have been integrating Grammarly for 2 years and find the machine helpful. Interestingly, they have slightly different pedagogical strategies for integrating the machine. One teacher divides the labor of providing feedback, in which the teacher allocates more time to provide content-focused feedback and form-related feedback is handled by AWE. The teacher admits that this strategy is helpful as she teaches a large class whose main problem is grammar. Delegating the task to provide form-related feedback to AWE is efficient. This finding, however, is different from previous research where despite the use of AWE, such division of labor between the machine and teacher should not exist (Jiang et al., 2020). This is the case because research demonstrated that teachers' feedback is generally more facilitative compared to that of the machine (Tian & Zhou, 2020).

Meanwhile, another teacher still provides form-focused feedback to the students despite the use of AWE. This is partially because the teacher anticipates the inaccuracy of the machine feedback (Wilson et al., 2021). She also elaborates that the AWE feedback serves as a diagnostic assessment to measure her students' ability and problems in writing. The same strategy is applied by teachers in another classroom context where teachers positively provide feedback to avoid students being discouraged following negative feedback generated by the AWE (Koltovskaia, 2022). Indeed, the participant worries about the discouraging effect on the students in the long run, so she follows up on the student's work and interacts with the students about their mistakes or revisions.

So, teachers use AWE as a partner in providing feedback. While one teacher divides the division of labor between giving form and content feedback, another teacher does not divide such labor. It is suggested that regardless of the automated feedback, teachers to continue review or deliver feedback because theirs are facilitative and encouraging.

## **4. CONCLUSION**

The present study highlights the experience and pedagogical strategies of two vocational high school teachers about AWE through their shared narratives. The conclusion is limited to the context of the participants with no

attempt to generalize the findings beyond the current participant and research context. It was found that teachers positively perceive AWE. They generally praise the machine as a supplement to their feedback. They also believe that the machine would instill students' motivation, confidence, and efficacy in writing. Regarding their pedagogical strategies, although not recommended, one teacher divides the labor with the machine. Meanwhile, another teacher does not apply labor division. Considering the potential contribution to the student's writing and teachers' pedagogical practice, AWE seems to continue to remain significant in the current digital era. However, a teacher development program is required to equip teachers with the necessary information and practice inefficient integration of AWE.

## AUTHORS' CONTRIBUTIONS

The authors confirm contribution to the paper as follows: (1) study conception and design: Evi Karlina Ambarwati; (2) data collection: Praditya Putri Utami, Alvin Yahya Makarim, Bela Ardianti Simbolon; (3) analysis and interpretation of results: Indah Purnama Dewi, Evi Karlina Ambawati; (4) draft manuscript preparation: Indah Purnama Dewi, Evi Karlina Ambarwati, Praditya Putri Utami, Alvin Yahya Makarim, Bela Ardianti Simbolon. All authors reviewed the results and approved the final version of the manuscript.

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