

Empowering Second Language Writing Instruction with Automated Writing Evaluation

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Abstract:

Automated Written Evaluation (AWE) not only provides feedback on grammar and machine language in China today, but also aims to find inconsistencies and text errors and provide timely feedback and correction for independent and comprehensive writing tasks in these areas. It has provided services to more than 1400 universities and research institutions nationwide. Considering the effectiveness and significance of its problem-solving, the study has read a large number of professors' research literature and reviewed it. AWE has gradually become an auxiliary teaching method. Many literatures have proven their help to second language writing, but there are also a few problems and shortcomings. Only by combining various kinds of feedback (teacher feedback and AWE feedback; AWE feedback and peer feedback) can the paper effectively reverse the feedback effect of AWE. In addition, not only the advantages of AWE itself affect the correctness of learners' second language, but also the differences in the cognition and application of AWE between teachers and students will affect the effectiveness of AWE.

Keywords: Automated Written Evaluation (AWE); second language writing; students' feedback; teachers' feedback.

1. Introduction

Traditional teacher-teaching techniques were employed in the majority of the prior English writing classrooms [1]. The teaching environment of large classes also makes teachers unable to take into account each student and give them targeted feedback [2]. Research on automated writing evaluation (AWE) systems has grown significantly in the last few years. This trend is partly due to the development and popularization of new technologies and computer equipment [3]. AWE feedback has been able to conduct quantitative or qualitative evaluations of students, and it has gradually become an auxiliary teaching tool. It can be combined with teacher feedback to form intention complementarity [4]. AWE will also have different effects depending on the way users use it. Although a large number of experiments have proved that AWE can greatly improve students' review ability and writing accuracy, and provide students with the importance of learning [5, 6]. This does not rule out the possibility, though, that automated feedback systems, in contrast to teacher feedback, may not identify a significant percentage of errors and are ineffective in raising the caliber of student writing or that such feedback has no impact at all on learners [7,

8]. Some studies have pointed out that automated written correction feedback (AWCF) can provide feedback on students' performance. In addition, in the program, AWCF is more comprehensive than AWE, helping to improve students' accuracy [9]. Some studies have also pointed out that AWE can complement peer assessment activities in the second language writing class and cultivate students' more positive attitudes [10]. It can be seen that the combination of online automatic feedback and teacher feedback is the future development direction of AWE in promoting the effectiveness of second language learners' writing, and can also be combined with peer feedback.

2. The Influence of AWE on Students' Second Language Writing

The use of AWE can free up teachers' time and enable them to focus more on quality aspects such as the content, presentation and organization of writing instruction [4, 11]. The researchers found a lot of research to back that up. However, students at different levels often have significant differences in the complexity of lexical pragmatic and syntactic structures, such as the average usage rate of sentences, the average length of sentences, and the aver-

age use time of sentences [11]. Based on current research, this study concludes that error correction feedback significantly enhances writing correctness and is very helpful in correcting learners' low-level difficulties, e.g., grammar and mechanics.

So far, a large number of studies have demonstrated the effectiveness of corrective feedback in improving second-language writing skills [12]. It is worth noting that the feedback from automated writing evaluation systems is more objective than that from teachers [13]. In addition, AWE feedback has many other benefits. For example, feedback is timely, personalized, and selective. Researchers can choose qualitative feedback and quantitative feedback according to their own needs, and can also provide qualitative feedback on micro or macro aspects of the text content [14]. AWE also offers a variety of modification opportunities [15]. What is more, the beneficial effect of revising the text multiple times will improve the writing quality of subsequent submissions of similar texts [16]. In L2 writing class, AWE and other similar evaluation and feedback tools have been used more and more widely, and thereby students' writing ability has been comprehensively improved.

3. Users' Views on AWE Feedback

Most of the students gave good comments about AWE. The online automatic evaluation system focuses on word collocation and language authenticity, which can meet the higher language requirements of some students [17]. AWE-based explanations and recommendations are for every learner and user. Students believe that these explanations and suggestions make it easier for them to understand the principles of writing practice [18]. The system gives them constant feedback on their frequent errors, making them more aware of their mistakes and prompting them to correct them in time [19].

Meanwhile, some studies have pointed out that evaluation feedback activities have different effects on students' language psychology and motivation, which may be related to students' personal experiences and perceptions of activities [10]. The paper holds that students' individual differences will also affect the feedback effect. Students' own writing level is medium to high level, and AWE has a good influence on students. Students' writing level is low and the effect is not high [19]. So far, many studies have proved that students are more receptive to AWE, more willing to participate in experiments, more trusting of the AWE system, and more willing to correct the mistakes pointed out by AWE, such as vocabulary and grammar problems [20, 21]. After improvement, the students wrote at a higher level than the experimental control group,

using more advanced vocabulary and more complete language. It can be seen that the effectiveness of AWE in second language learning and writing is also greatly affected by students' personal factors.

Students' language cognitive ability will affect the processing methods of the system, and people with limited language knowledge will also become dependent on the system [17]. Having a better understanding of their own writing level will also promote students' independent learning, which may affect the effectiveness of the AWE system in promoting learning [22].

In order to reduce the workload of teachers, the school will actively introduce the AWE system to improve students' writing competencies [23]. It is possible that after receiving feedback, students do not know how to use it or ignore it completely, with low initiative whilst teachers are unable to understand students' perspectives and use feedback to correct teaching. This situation has been improved after the schools effectively participated in the introduction of the AWE system to daily teaching activities [17].

It is also crucial to hear primary and secondary school teachers' perspectives on how successfully the AWE system can be implemented in the classroom and whether they can dedicate themselves fully to teaching [15]. Due to the imperfection of the current AWE system, teachers should actively accept and understand the AWE system while criticizing the problems with the AWE feedback, and use the feedback results of AWE to assist their own teaching; and practice more to help students write [24]. This is also conducive to the promotion of diversification feedback effect in the future.

The paper found that in today's era of rapid development of AI technology, AWE appears in a very timely manner. They provide timely feedback, can quickly identify errors, and have played a certain role in teaching at home and abroad. Students must firmly grasp the opportunity to receive feedback, carefully consider and identify the problems it points out, and revise their writing. Teachers should try their best to correct mistakes and give feedback on students' writing. In the case of senior grade or high learning pressure, AWE will be used as an auxiliary teaching tool to help students realize their comprehensive problems in writing and how to improve their writing level.

4. Suggestions

According to numerous academic references, experimental data demonstrates the positive effects of the automatic evaluation system on instruction. However, due to technical processing and educational practice challenges, educators and policymakers must work together to care-

fully address these issues before the automatic evaluation system can be used to support and encourage high-quality instruction. The process of learning bestows new powers. For instance, teachers can be adequately taught, students can be directed, and the setting may be made as transparent and interpretable as possible to assist the automatic assessment system to integrate into the educational environment efficiently. In order to satisfy the educational requirements of the automatic assessment system and safeguard students' rights and interests, more academics should be encouraged to continually assess and improve these systems.

With the rapid development of artificial intelligence technology, the automatic writing evaluation system is regarded as more efficient than the traditional writing evaluation method of teacher evaluation. AWE's efficient, accurate and personalized characteristics will greatly improve the efficiency and quality of writing, and meet the needs of users for automatic writing evaluation. It is suggested that teachers should actively use AWE to integrate human wisdom with technology. In this way, the writing guidance for students will be more detailed and accurate. From the perspective of students, it is suggested that students take the initiative to accept the feedback given by AWE. At the same time, it is also suggested that students can actively and consciously use AWE. When students accept the feedback from AWE with subjective initiative, students' writing accuracy will be improved. Since technology is still evolving, AWE should pay more attention to the evaluation of writing content and context in future development. For example, AWE pays more attention to the logic of the writing content, the degree of correlation between the writing content and the topic, and whether the words are used in accordance with the context.

5. Conclusion

With the development of the times, the automatic writing feedback system pays more attention to grammar, syntax and sentence meaning. It can timely retrieve students' questions above, allowing teachers to spend more time on students' high-level problems, such as content organization. However, from the perspective of the three factors of students' behavior, cognition and emotion involved in feedback, some scholars believe that there are still some problems in AWE's participation in writing feedback. Through the research, it is found that the feedback effect is affected by individual factors of students. If AWE can pay more attention to students' participation in the correction process in the future and make corrections in the process, the feedback effect may be better. In recent years' research on automatic writing feedback, the study found

that only single feedback, such as teacher feedback, automatic writing evaluation and peer feedback, has certain limitations. In the process of English writing teaching in the future, innovative ways to combine various feedback and other teaching methods may become the direction of future research and development.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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