Teachers' Perceptions of Automated Writing Evaluation Tools to Improve Writing Skill: Case of Teachers of Mohamed Lamine Debaghine Setif 2 University

تصورات المعلمين لأدوات تقييم الكتابة الآلية لتحسين مهارة الكتابة: حالة أساتذة جامعة محمد لمين دباغين سطيف 2

Sara BOUABDALLAH[1] *
Tayeb MEHDI[2]
1 TICELET lab, Hassiba Benbouali University of Chlef, Algeria, s.bouabdellah@univchlef.dz
2 TICELET lab, Hassiba Benbouali University of Chlef, Algeria, t.mehdi@univ-chlef.dz

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Abstract:
This study explores teachers' perceptions of automated writing evaluation tools as a solution to English language proficiency challenges, particularly in terms of grammar and word choice. An exploratory design was adopted, with quantitative data collected through an online questionnaire administered to 22 teachers at Mohammed Lamine Debaghine Setif2 University. The results from SPSS analysis highlighted teachers' positive perceptions of these tools. They viewed them as valuable additions to instruction and capable of assessing multiple aspects of writing and providing prompt feedback. Additionally, these tools enhance students' motivation, foster autonomy, and reduce grammatical, lexical, and mechanical errors. In conclusion, integrating automated writing evaluation tools into the editing process is recommended, as they save time and provide more practice opportunities for students.

Keywords: Technology; automated writing evaluation; perceptions; writing skills.

ملخص:

تستكشف هذه الدراسة تصورات المعلمين لأدوات تقييم الكتابة الآلية كحل لتحديات إتقان اللغة الإنجليزية، لا سيما فيما يتعلق بالقواعد واختيار الكلمات. تم اعتماد تصميم استكشافي، مع جمع البيانات الكمية من خلال استبيان عبر الإنترنت تم إجراؤه على 22 أستاذا في جامعة محمد لمين دباغين سطيف2. وأبرزت نتائج تحليل برنامج *SPSS* تصورات المعلمين الإيجابية حول هذه الأدوات. إذ اعتبروها أنها إضافات قيمة للتعليم وقادرة على تقييم جوانب متعددة من الكتابة وتقديم تعليقات سريعة. بالإضافة إلى ذلك، تعمل هذه الأدوات على تعزيز دافعية الطلاب وتعزيز استقلاليتهم وتقليل الأخطاء النحوية والمعجمية والميكانيكية. في الختام، يوصى بدمج أدوات تقييم الكتابة الآلية في عملية التحرير، لأنها توفر الوقت وتوفر المزيد من فرص التدريب للطلاب.

الكلمات المتاحية: تكنولوجيا ؛ تقييم الكتابة الآلي ; تصورات ; مهارات الكتابة

* Corresponding Author **Sara BOUABDALLAH**

1.Introduction:

Writing is one of the most pivotal skills for academic achievement; however, it is additionally one of the most strenuous skills to ace (Tillema,2012). Along with producing and organizing thoughts, grammar, vocabulary, punctuation, and word choice are difficult aspects of language to be mastered (Hapsari,2011). Moreover, Jackson and Singleton (2003) contend that writing is characterized as a process that necessitates substantial self-regulation and attention management. Writers must translate thoughts into language, organize them, and fix them while attempting to produce a cohesive message. Palanisamy and Abdul Aziz (2021) support this claim in their systematic review of 12 studies, which found that word choice, vocabulary, grammar, and poor thought organization are the most common difficulties that students face when writing. The review also provided insight on methods to tackle these difficulties from the perspectives of both instructors and students. Teachers can provide help by presenting sample essays, offering constructive feedback, and selecting an appropriate strategy based on students' needs. Meanwhile, students can improve their vocabulary and grammatical skills by practicing their writing repeatedly. In fact, research has shown that repeated writing assignments are pivotal for improving writing skills (Johnstone et al., 2002; Lauer and Hendrix, 2007).

However, there are various factors that can hinder students from practicing their writing skills effectively. These factors include teaching methods and examination systems, lack of reading and writing practice, large classrooms, low motivation, and lack of ideas (Fareed, 2016). Therefore, it is vital to explore and utilize technology to find new solutions for improving writing skills.

2. Literature Review:

2.1. The use of technology in English Language Teaching:

In the era of rapid technological growth, students are considered digital natives (Prensky, 2001). The latter considers nowadays students unsuitable for the current educational system as they are not the ones the system is designed for. They are constantly living with technology as computer games, cell phones, internet and digital music players are crucial part of their lives. Therefore, it is paramount for teachers and the system to adapt to such an environment. Nawaila et al. (2020) assert that the use of technology in teaching and learning English has increased worldwide, as traditional technologies are considered theoretical, unexciting, unmotivating, slow, and teacher-centered. Thus, modern technology integration is vital and has a positive impact on the teaching-learning experience and on various areas of language learning.

Technology offers a variety of opportunities for language learners to practice and improve their language skills. Reinders et all (2016) found that technology can provide language learners with authentic and interactive language materials, which can help to improve their language skill Accordingly, Warschauer & Mathew (2011) asserted that online language learning can be effective in providing learners with opportunities to interact with native speakers, access authentic language materials, and receive immediate feedback on their language use. In same vein, DeKeyser and Lynch (2015) argue that technology can provide learners with authentic language input, opportunities for interactive language use, and opportunities for self-directed learning. This would increasingly improve students' motivation (Harris et al, 2016). In fact, technology makes students feel more confident, as it does not show individual (un)knowledge, permits them to study with pleasure, promotes social dynamics, and provides joyful moments that raise motivation and improve learning (Raposo et al, 2020).

Stockwell (2013) stated that motivation and technology form an intertwined relationship. Motivation to use technology is most likely to cause learners to develop language learning motivation. In contrast, the latter could eventually lead to a willingness to technology use. This could be one of the 'intra-individual factors' that affect student engagement. (Bond and Bedenlier 2019). Indeed, digital and educational technology may play a significant role in increasing student engagement, be it behavioral, affective, or cognitive engagement (Bond et al, 2020), through assistance and increased access to classroom material and learning processes (Rizk and Hillier2022).

2.2. Technology and English Language Skills:

Furthermore, CALL research has focused on the four language skills, in which it has provided various advantages (Blake, 2016). For example, the study of Lysenko and Abrami (2014) investigates the influence of two web-based apps (an interactive multimedia literacy software and a digital process portfolio) on the reading comprehension of early primary pupils. The findings contribute to the literature the efficacy of ABRA and ePEARL tools in increasing reading comprehension. Subgroup analyses of Fogarty et al (2017) in reading comprehension, silent reading efficiency, and state exam results demonstrated that children with poorer entry-level reading comprehension and with reading difficulties (Schiavo et al, 2021) benefited more from the technology-mediated reading intervention. In the same vein, Huang and Hong (2016) revealed that both English reading comprehension and information and communication technology (ICT) use among high school students benefited from the intervention of flipped English classroom.

Recently, researchers attempted to exploit the trendy platforms that are used by the current generation in the field of education. YouTube, for instance, has been proven to have a tremendous effect on students especially in their listening skill (Pratama et al, 2020). Research went further by examining the effectiveness of TED-TALK on students' autonomy in listening. It was found that along with an increase in listening skill score, an improvement on the level of learner control, critical reflection, motivation, and information literacy is also noticed (Puspita and Amelia 2020). Similarly, the findings of Mulyadi et al (2021) revealed that ESP students' Listening Comprehension and Speaking Performance are essentially affected by technology Enhanced Task-Based Language Teaching.

2.3. The Rational of the Use of Automated Writing Evaluation tools (AWE):

Feedback is a result of performance, as provided by an agent such as: adults, peers, self, or computers, concerning the qualities of one's performance or comprehension (Hattie & Timperley, 2007). Effective feedback is pivotal for enhancing writing skills (Graham, Hebert, & Harris, 2015). Plaindaren and Shah (2019) maintain that written feedback is fundamental in facilitating learning and teaching the writing skill. This feedback from teachers can help students understand their competence and shortcomings, considering their needs and objectives (Wulandari, 2022). Yunus and Chien (2016) stated that the mastery of the writing skill entails a deep understanding of grammar, vocabulary, writing mechanics, organization, and style. However, traditional feedback methods have limitations. For instance, teachers are hindered from providing the needed individual feedback to all students due to time constraints (Teig, Scherer, & Nilsen, 2019; Davis et al., 2022). In addition, despite being a source of feedback, peer feedback and self-reflection are constrained by the low quality of feedback, biases of reviewers, and lack of trust in feedback received from peers (Wang, 2015). Furthermore, teachers' feedback is marred by several straits pertaining to students' behavioral, emotional, and cognitive engagement (Astrid et al., 2017). Both low and high writing anxiety students are perceived to experience sporadic attention and boredom during the feedback process and suffer from teachers' appropriation and become passive recipients. In addition, these students may feel shy and reluctant to ask for feedback frequently, and may become solely reliant on teachers' detailed comments. Furthermore, some students with high

writing anxiety may struggle to comprehend and implement the written feedback they receive.

To overcome these limitations, automated writing evaluation (AWE) tools have been developed These computer programs and software are powered by artificial intelligence and natural language processing techniques to evaluate students' writing prose in terms of vocabulary, grammar, syntax, coherence, and style (Shermis & Burstein, 2013). AWE tools provide both summative and formative assessment, depending on the type of the program (Hockly, 2019). Wang and Han (2022) argue that the utilization of AWE tools is a compelling approach in enhancing students' writing proficiency over an extended period of time. Moreover, AWE tools are perceived to be of a low threat condition to learner's self- esteem, enabling them to be more attentive to the provided feedback without feeling anxious or shy (Hattie and Timperley, 2007). Moreover, AWE tools are timesaving for teachers, further increasing their potential utility (Lim & Phua, 2019). In short, while traditional feedback methods have limitations, AWE tools render an apt solution to augment students' engagement in the feedback process.

2.4. Teachers' Perceptions of AWE Tools:

Several research studies scrutinized teachers' perceptions of automated writing evaluation tools. However, this particular issue is subject to controversy. Negative perceptions were documented in various studies. Subsequently, Klobucar et al. (2013) conducted a two-year study at a US research university, surveying 19 full-time instructors. The findings showed educators had low confidence in automated assessment scores and skepticism about the accuracy of feedback. They believed students' engagement in the writing process was hampered by AWE tools, and that writing to a computer would not produce better work. Criterion's feedback on grammar, usage, and mechanics did not accurately reflect their assessment of the essays. Teachers had limited desire to use the system in composition classes and no plans to use the essays as graded assignments. They also expressed little faith that the tool would enable students to work independently to develop their writing skills.

Similarly, in a longitudinal study conducted by Link et al (2014), five ESL writing instructors were observed and interviewed at the Midwestern research university in the United States. It was demonstrated that instructors utilized AWE holistic scores as a diagnostic tool for assessing students' writing abilities. However, the study revealed that the limited reliability of the score reports led to a considerable decrease in teachers' satisfaction with the AWE tool, Criterion. Additionally, the establishment of specific requirements for achieving a minimum band score created tensions, as students themselves began to doubt the reliability of the scores, resulting in frustration for both instructors and students.

Another longitudinal study conducted by Li et all (2014) at Midwestern University in the USA analyzed the perceptions of ESL instructors and 67 students regarding Criterion scores. The results showed negative teacher perceptions, with instructors believing low scores indicate language and content issues. Even high scores, like six, were not significant, highlighting a disparity between Criterion scores and students' actual writing quality. This increased the workload for teachers, who had to manually reevaluate student writing due to the unreliable automated tools.

Moreover, Wilson et al (2021) have qualitatively explored the attitudes of teachers of elementary writing in the United States about the use of an automated writing evaluation system named MI Write. They used a focus group methodology and activity theory to know how teachers view AWE as a mediating tool between them and their students and how these tools can be a transformation in teaching in the elementary writing classroom. The findings revealed that AWE tools assist teachers but may create instructional challenges for them.

Finally, it was revealed that the integration and the efficacy of these tools are affected by the instructional activity system.

Additionally, The aim of the study conducted in Estonia by Hunt et al (2021) was to compare teachers' perceptions when provided with feedback in a web-based e-portfolio that is enhanced by automated feedback learning analytics with those when provided with feedback in a conventional method by other teachers in this e-portfolio. A questionnaire was submitted to both the 38 teachers in the experimental group who received feedback from automated feedback and the 28 teachers in the control group who received feedback solely from the electronic portfolio with feedback from other teachers. The findings revealed no significant differences in quantity, timing, or quality. However, the entire feedback experience is reported to be significantly higher in the experimental group. Therefore, human interaction is needed despite the effectiveness of the e-portfolio in providing feedback.

Another study by Koltovskaia (2022) attempted to explore teachers' perceptions of AWE as a supplementary tool to their feedback of higher-order concerns since these tools are known for their effectiveness in providing lower-order concerns. A semi-structured interview was conducted with seven post-secondary writing teachers at the US university. The findings revealed that despite the use of Grammarly, which is an example of AWE tools, the workload division was still on teachers' shoulders. Moreover, teachers' beliefs about AWE, feedback, and course objectives as well as their use of Grammarly reports are factors that have been reported to influence teachers' feedback.

Nevertheless, several scholars have reported more positive perceptions. Ghufron (2019) aimed to investigate teachers' perceptions towards the utilization of Grammarly and the provision of teachers' corrective feedback. Close-ended questionnaires and interviews were utilized as data collection for this study in Indonesia. The results revealed that Grammarly is perceived to outperform teachers' feedback in terms of vocabulary, grammar, and mechanics. Yet, it needs to exhibit more efficacy in providing feedback on both content and organization.

In another study by Wilson and Roscoe (2020), the authors investigated the same context of middle school students and teachers in an urban/suburban school district located in the mid-Atlantic region of the United States. The authors surveyed three teachers to evaluate the usability, effectiveness, and desirability of the AWE system in comparison to Google Docs. Three teachers reported providing more feedback on lower-level writing skills to students using Google Docs and slightly more on higher-level writing skills to students using the AWE system (PEG). Teachers 1 and 3 found PEG to be easier to use, more effective, and more desirable than Google Docs in terms of usability, effectiveness, and desirability. However, there was less agreement on whether PEG helped with teaching, grading, and differentiation of writing instruction. All three teachers recommended PEG to other teachers, and two expressed a desire to continue using PEG in the future.

Palermo and Wilson (2020) conducted a study in the United States in which 14 teachers in five districts were given semi-structured interviews with open-ended questions. These teachers were split into two groups. The first group used NC Write along with their normal process writing instruction (NC + TRAD). The second group used NC Write along with strategy instruction in the form of SRSD instruction (NC + SRSD). The collected data implies that the AWE system, particularly the NC Write program, was positively perceived by teachers. The qualitative data analysis indicated that teachers perceived the NC Write software to be a beneficial instrument in their writing instruction, enabling them to achieve efficiencies that would have been unattainable without the utilization of this technological tool. Teachers reported that this tool saved them time and allowed them to focus on other aspects of instruction as well as monitoring their students' progress over some time.

Li (2021) aimed to scrutinize teachers' perceptions of the automated feedback evaluation tool, mainly Criterion. Moreover, this study aims to investigate teachers' practices in the technology-enhanced setting and the effects of their behaviors on students' writing

performance. Accordingly, Three English as a second language (ESL) teachers at the University of Midwestern U.S. were interviewed using semi-structured face-to-face interviews. Additionally, students' actions and writing performances were tracked through the archive data in Criterion. The frequency of assignment submission, the number of committed errors, and the quality of both the first and the final drafts of the writing tasks were analyzed. Results revealed that despite these teachers being aware of the limitations of Criterion, they still hold positive perceptions towards the automated feedback evaluation tools. Moreover, the variance in teachers' approaches to integrating these tools inside the classroom was reported to influence students' interplay with Criterion and their grammatical and learning achievement. For instance, the teacher who perceived these tools to be an additive assistant and a feedback generator reported the highest task submission frequencies and error rate reductions among her students.

Moreover, Wilson et al. (2021) conducted a study to examine the implementation of MI Write, which is an automated writing evaluation software program, in 14 elementary schools located in the mid-Atlantic region of the United States. The study surveyed 135 written expression teachers and 1935 students to assess their perceptions of the tool. The results showed that the software program is not being used to its full potential, but both teachers and students expressed positive attitudes towards AWE system.

A similar study conducted by Koltovskaia (2022) attempted to explore the experience of six L2 written expression post-secondary teachers from the Southcentral US university, in integrating Grammarly as a supplementary tool for their instruction and feedback provision. To further understand the effect of Grammarly on teachers' feedback practices, the participants' feedback was examined. In addition, a semi-structured interview was conducted to view teachers' perceptions of Grammarly as an addition to their feedback. The findings indicated that despite the limitations, such as having to address sentence-level issues, positive attitudes were reported by the teachers.

Accordingly, it can be noted from the aforementioned studies that there is scarce research conducted within the Algerian context. Specifically, there is limited investigation into teachers' practices concerning these tools, the barriers that impede their integration, teachers' perceptions, and their intentions to use AWE tools in the future. Consequently, this study endeavors to explore this subject in Algeria, aiming to address this gap in the existing literature.

3. Research Methodology:

3.1. Research Question:

1. How do teachers demonstrate their practices concerning the integration of Information and Communication Technology (ICT) within the classroom setting?
2. What are the primary barriers impeding the successful integration of ICT within the classroom according to teachers' perspectives?
3. How do teachers perceive the effectiveness of Automated Feedback Tools as supplementary aids for providing feedback to students?
4. What factors influence teachers' intention to adopt and utilize automated feedback tools in their classrooms?

3.2. Research Design:

To achieve these objectives in answering the research questions, an exploratory case study research was employed. Accordingly, a semi-structured questionnaire of mixed-nature questions, including multiple-choice questions, Likert scale questions, binary "Yes" or "No" questions, and open-ended inquiries. To ensure the validity and the reliability of the research instrument, both piloting and the calculation of Cronbach's alpha coefficient were undertaken. Dornyei (2007) emphasized the significant importance of piloting the research tool prior to its

administration. Accordingly, the questionnaire was administered to a group of seven teachers who are well-versed in research methodology and the written expression module, thereby ensuring that the tool accurately measures its intended constructs. Moreover, Cronbach's alpha coefficient of the questionnaire was calculated using SPSS. Through excluding 3 items of the demographic information, the Cronbach's Alpha value reached $\alpha \approx 0.901$ which suggests that the 20 items in the questionnaire are highly correlated and demonstrate strong internal consistency. Therefore, the questionnaire is considered reliable.

Table1. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of items
.901	.891	20

3.3. Data Collection and Research Instrument:

The questionnaire was structured into three main sections, comprising a total of 23 items. The first section sought to elicit essential background information from the participants, encompassing details regarding their gender, teaching experience, as well as the nature and level of the classes they taught. Subsequently, the second section focused on determining the teachers' familiarity and experience with automated feedback evaluation tools, while concurrently investigating the barriers encountered in the integration of these tools within their instructional practices. The questions in this segment were posed as binary 'Yes' or 'No' queries, followed by open-ended prompts designed to elicit detailed insights into 'what' specific ICT tools and automated feedback software were used and 'why' these tools were not used, as well as 'why' these challenges were encountered. A total of 06 items constituted this section. In the final section, the study sought to capture the teachers' perceptions of Automated Writing Evaluation (AWE). Employing a five-point Likert scale, ranging from "strongly disagree" to "strongly agree," this section encompassed 14 items. These items were further categorized into distinct subsections, namely, assistance, motivation, independence, and error reduction, providing a comprehensive understanding of the teachers' viewpoints on the matter.

3.4. Population and Sampling Procedures:

The sample for this study was drawn from the University of Mohammed Lamine Debaghine. Utilizing a convenience sampling technique, the research focused on teachers specializing in written expression. Consequently, 22 teachers who taught written expression participated in the study by responding to the questionnaire. Regarding the demographic characteristics of the sample, the study comprised 27.3% male teachers and 72.7% female teachers. The distribution of teaching experience among the participants was as follows: 40.9% had less than 5 years of experience, 36.4% had 6-10 years of experience, 18.2% had 11-20 years of experience, and only 4.5% had more than 20 years of experience. Concerning the academic levels they taught, the breakdown was as follows: 50.0% taught 1st-year courses, 59.1% taught 2nd-year courses, 45.5% taught 3rd-year courses, 31.8% taught Master 1 courses, and finally, 13.6% taught Master 2 courses. In terms of the nature of the classes for written expression modules, 54.5% of the teachers taught lectures, while 95.5% were engaged in teaching tutorials (TD). None of the participants reported teaching in lab sessions.

3.5. Procedures:

The questionnaire administration predominantly followed a self-administered approach, with the participants responding to the survey on their own. However, in consideration of the time constraints faced by certain teachers, an online version of the questionnaire was also distributed to them through email and Facebook channels. However, despite these efforts, the response rate was not as high as anticipated. Out of the total 33 teachers who taught written expression, only 22 teachers accepted and agreed to participate in the study by cooperating with the survey.

4. Results and Discussion:

The results were structured into four subsections addressing the four research questions: teachers' practice with ICT tools, obstacles to their incorporation, teachers' perceptions on automated writing assessment tools, and their intentions towards integrating them.

4.1. Teaches Practices with Information and Communication Technology (ICT) in the classroom setting:

Table2. Teachers' Intention to Integrate ICT Tools

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	6	27.3	27.3	27.3
	yes	16	72.7	72.7	100.0
	Total	22	100.0	100.0	

Table3. Teachers' Use of ICT Tools

	Frequency	Percent	Valid Percent	Cumulative Percent
No	10	45.5	45.5	45.5
yes	12	54.5	54.5	100.0
Total	22	100.0	100.0	

The survey results regarding teachers' practices and utilization of Information and Communication Technology (ICT) tools to enhance students' writing skills reveal distinct patterns. When participants were asked of their intention to include them, 27.3% have not considered integrating ICT tools, while a significant 72.7% expressed an interest in their use. However, In terms of their actual usage, a decrease in engagement is viewed as 54.5% of educators reported to actively employ ICT tools for writing improvement whereas 45.5% do not utilize them for this goal.

When asked about the tools used in their classroom, teachers highlighted a range of choices:

- Collaborative platforms like Wikis
- Interactive tools such as Google Forms and Moodle
- Custom applications ("My App")
- Learning management systems like Google Classroom and Microsoft Teams
- Multimedia resources including videos and podcasts
- Conventional tools like Microsoft Word
- Personal devices such as laptops and mobile phones
- The internet for research and learning.

The findings are consistent with previous studies, which demonstrated that the utilization of ICT in teaching ESL writing was quite limited (Yunus, 2013; Mubireek, 2020; Rodliyah, 2018). Ahmed (2020) indicated that teachers' actual incorporation of such technologies in their classroom instruction doesn't meet the required level. Additionally, Alonso-García et al (2019) revealed that there are variations in the usage of the specific technologies commonly employed in the field of Arts and Humanities, including forums, blogs, and wikis,VLE, web, radio, podcasting, and mobile devices.

The results indicate that despite the positive intention to include ICT tools to teach written expression skills, a notably low rate of actual integration is observed. This suggests the presence of potential barriers that impede the practical utilization of these tools.

4.2. Barriers Impeding the Successful Classroom ICT Integration:

Table 4. Barriers Impeding the Successful Classroom ICT Integration

Theme	Example	Number	Percentage
Time constraints	- Due to the short length of time and number of classes per week.	5	50%
Overwhelming task	- Because I feel the task is overwhelming just by thinking about how to bring the data up and waste some time setting it up..	3	30%
Lack of proper equipment	- Due to the shortness of time and lack of proper equipment.	3	30%
Lack of technology literacy	- No idea about any tool or the way it is used	2	20%
Favoring traditional teaching	- I favor traditional, face- to- face teaching	2	20%
Inability to access apps	- I haven't got access to software apps, an the apps I want to involve are not for free	1	10%
Total		10	

Despite possessing the intention and recognizing the benefits of utilizing ICT tools, teachers continue to confront obstacles that impede their successful integration. When asked about their reasons for not using these tools, the responses highlighted various factors:

- Time Constraints*:* A substantial 50% of respondents cited time limitations as a hindrance to employing ICT tools. One teacher stated that the brevity of class sessions and the frequency of classes per week contributed to this challenge.
- Perceived Overwhelming Task: Around 30% of participants expressed that integrating ICT tools into the classroom environment felt overwhelming. One teacher elaborated that the mere thought of setting up tools like projectors or data displays was daunting and time-consuming.
- Lack of Proper Equipment: An additional 30% of teachers mentioned inadequate availability of equipment as a challenge. Teachers pointed out that universities lacked sufficient equipment, making it difficult to access tools and maintain a consistent internet connection. A teacher stated that: "*It would take time and energy bringing data show and pcs especially they are not available at 8 am*». Therefore, the effort required to locate and set up equipment is deemed time-consuming.
- Lack of Technology Literacy and Training: Moreover, 20% acknowledged their lack of technology literacy and training as a constraint. This shortfall in proficiency prevented them from effectively utilizing ICT tools. Another teacher said: " *I am not interested in using technology because I don't have the time to learn how they are used. I don't feel comfortable using something I have little knowledge about.*"
- Preference for Traditional Teaching: Another 20% of teachers indicated a preference for traditional, face-to-face teaching methods. They highlighted a preference for the conventional approach over incorporating technology in their classrooms.
- Access to Apps and Tools: For 10% of teachers, the inability to access certain applications and tools due to payment methods posed a barrier to using ICT in the classroom.

These findings are consistent with those of Lawrence and Tar (2018) and Spangenberg and De Freitas (2019), who identified two primary categories: teacher-level and institutional-level barriers. Teacher-level barriers encompass challenges such as inadequate ICT knowledge, time constraints, resistance to change, and the complexity of using ICT tools. Meanwhile, institutional-level barriers involve limitations in infrastructure, inadequate training opportunities, restricted resource access, and a lack of technical support. However, these findings deviate from those mentioned in the study by Nath (2019), where the primary impediments to ICT integration were reported as limited access to computers, inadequate

funding, intermittent electricity supply, and a deficiency of ICT-related policies and training. Additionally, in the work of Bingimlas (2009) and Khaerunnisa et al. (2023), the principal obstacles identified encompassed a lack of confidence, insufficient competence, and restricted access to resources. Moreover, Vongkulluksn et al. (2018) identified teachers' values and beliefs as a primary hurdle in technology integration. Indeed, these results confirm the existence of barriers to technology integration and explain the low rate of utilization of ICT tools regardless of the positive vim.

4.3. Teachers' Perceptions of Automated Feedback Tools as Supplementary Tool for Teacher's Feedback:

Table5. Teachers' Awareness and Usage of AWE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	4	18.2	18.2	18.2
	Yes	16	72.7	72.7	90.9
	Not Sure	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

Table6. Utilization of AWE Tools in Classroom Settings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	16	72.7	72.7	72.7
	yes	6	27.3	27.3	100.0
	Total	22	100.0	100.0	

Table7. Perceived Benefits of AWE Tools

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1	4.5	4.5	4.5
	yes	21	95.5	95.5	100.0
	Total	22	100.0	100.0	

Inquiring into teachers' familiarity with Automated Writing Evaluation (AWE) tools, the study found that among the respondents, 72.7% were acquainted with these tools, whereas 18.2% were unaware, and 9.1% remained uncertain. This demonstrates a noteworthy level of awareness among educators about AWE tools.

Regarding the incorporation of AWE tools within the classroom environment, results showed that only 27.3% of teachers had integrated these tools into their teaching practices. In contrast, the majority, accounting for 72.7%, had not utilized them. For those who affirmed usage, a range of websites and software were mentioned, reflecting diversity in tool selection. Some of the mentioned tools included Grammarly, Quillbot, Wordtune, Hemingway Editor, Microsoft Word, and voice/text tools. Additionally, some included platforms like Jotform, Ginger, and Language Tool, while others engaged with Helen Sword's "The Writer's Diet".

However, when it came to ascertaining the perceived benefits of AWE tools, a substantial 95.5% of teachers expressed a positive view. A mere 4.5% held reservations. Subsequently, the participants were asked to explain their answers; thus, these themes were derived.

- Immediate Error Detection and Efficiency in Feedback: a teacher stated that: " *Due to the very limited time of the sessions along with the numerous numbers of students it is very hard to provide sufficient feedback for everyone. Moreover, peer feedback is usually not effective nor do students trust it. Therefore, these tools would provide nonjudgmental and instant feedback more than what a teacher could provide. Since students really need feedback for their progress*", and another stated: "*They highlight the problem and offer the remedy*". That

is to say, Automated Writing Evaluation (AWE) programs can promptly identify errors. The provision of immediate feedback allows students to become aware of their individual areas of difficulty in writing; therefore, facilitating their fast remediation of these deficiencies.

- Fostering Self-Revision and Autonomy: A teacher stated that, "*Simply because the writing experience has developed. We can no longer write efficiently using a paper and a pen. We have to use our PCs. Moreover, the number of students in our universities does not allow teachers to provide feedback. Most importantly, teachers can skip useful and meaningful feedback due to being tired or not being well-concentrated. The application does not have such issues. It can deal with long paragraphs and essays. Finally, in the educational system, students need to be autonomous. Teachers providing individual feedback fuel students' laziness and dependency; they even prevent students from development*" and another teacher stated: "*These tools foster students' self-revision and increase their autonomy*". Henceforth, AWE tools highlight writing errors and specify their types. Over time, this feature fosters self-revision as students pay attention to recurring errors and actively work to avoid them in subsequent writing. This promotes autonomy as students take more responsibility for their writing improvement.
- Drawing Attention to Unnoticed Errors: AWE tools serve the purpose of directing students' attention towards errors that may have gone unnoticed, hence facilitating their identification and correction via repeated revision attempts. This awareness is crucial for effective self-improvement. A teacher expressed that: "*Research shows that AWE can help learner to improve their grammar; besides, I believe that enabling students to notice their mistakes is already beneficial" and another demonstrated that:" It would draw the students' attention towards the mistakes that they would not even realize them through the various revision*". Additionally, another said: " *It helps learners face/see their own errors and thus they will try to avoid them when writing*".
- Promoting Lexical Variation: AWE tools may promote greater lexical variation in students' writing. By providing suggestions for synonyms and alternative word choices, they encourage students to diversify their vocabulary, enhancing the overall quality of their writing. This suggests that any lack of usage of these tools might not stem from negative perceptions of AWE itself but rather from broader challenges associated with integrating Information and Communication Technologies (ICTs) in education.

Table8. Teachers' perceptions of Automated Writing Evaluation (AWE) tools

		N	Minimum	Maximum	Mean	Std. Deviation
Assistance	AWE tools increase the amount and immediacy of feedback.	22	3.00	5.00	4.5000	.59761
	AWE is an additive to my instructions.	22	3.00	5.00	4.3182	.71623
	AWE can cover many more aspects and give feedback quicker than I could do for all my students.	22	2.00	5.00	4.2273	.92231
	AWE helps me know students' lacks in writing and prioritizing feedback on specific skills.	22	3.00	5.00	3.9545	.72225
	AWE decreases my grading time.	22	1.00	5.00	4.0455	1.04550
Motivation	AWE increases students' writing motivation.	22	2.00	5.00	3.5909	.95912
	The ability to receive an immediate score and to see progress increases students' motivation	22	3.00	5.00	4.0000	.69007
Independence	AWE helps students complete more of the writing process independently	22	2.00	5.00	4.0909	.75018
	AWE helps students to be able to write, revise, and edit with greater independence.	22	2.00	5.00	4.0455	.78542
Error reduction	AWE can help reduce students' errors of writing content.	22	1.00	5.00	3.5000	1.01183
	AWE can help reduce students' errors of organization of ideas.	22	1.00	5.00	3.1364	1.03719
	AWE can help reduce students' errors of mechanics, such as spelling, punctuation, and capitalization	22	3.00	5.00	4.3182	.64633
	AWE can help reduce students' errors in written language expression, such as lexical errors.	22	1.00	5.00	3.8182	.90692
	AWE can help reduce students' grammatical errors, such as morphological and syntactic errors.	22	2.00	5.00	4.1364	.77432
	Valid N (listwise)	22				

Pimentel (2010) explains that the interval scale serves as a representation of the Likert scale. Mean values falling within specific ranges indicate different levels of agreement or disagreement. Mean scores from 1 to 1.8 represent strong disagreement, 1.81 to 2.60 indicate disagreement, 2.61 to 3.40 signify neutrality, 3.41 to 4.20 correspond to agreement, and 4.21 to 5 signify strong agreement.

The findings reveal that teachers strongly agree that AWE tools enhance the quantity and immediacy of feedback, serve as an additive to their instruction, and provide quicker feedback across various aspects compared to their own efforts. The mean scores for these aspects are 4.5000, 4.3182, and 4.2273, respectively. Furthermore, teachers agree that AWE aids them in identifying students' writing deficiencies and focusing feedback on specific skills (mean: 3.9545) and also reduces the time needed for grading (mean: 4.0455).

In terms of motivation, teachers agree that AWE increases students' motivation to write (mean: 3.5909), and the ability to receive immediate scores and monitor progress further boosts student motivation (mean: 4.0000). Regarding independence, teachers concur that AWE supports students in independently completing more of the writing process (mean: 4.0909) and in writing, revising, and editing with greater autonomy (mean: 4.0455).

In the context of error reduction, teachers strongly agree that AWE is effective in reducing mechanical errors such as spelling, punctuation, and capitalization (mean: 4.3182). They also agree that AWE helps reduce errors in writing content (mean: 3.5000), in language expression such as lexical errors (mean: 3.8182), and in grammatical aspects like morphological and syntactic errors (mean: 4.1364). However, teachers remain neutral regarding AWE's ability to reduce errors related to organizing ideas (mean: 3.1364).

According to the results presented, teachers are generally aware of the benefits offered by Automated Writing Evaluation (AWE) tools and hold positive perceptions of them. These tools are viewed as aids to teaching, primarily due to their ability to reduce grading time through the immediacy of feedback. Furthermore, teachers believe that AWE tools can enhance students' understanding of mechanics and language structure, helping them identify errors and learn from their mistakes. This, in turn, is expected to motivate students to study

independently and improve their writing skills. However, it is important to note that while AWE tools offer advantages, their effectiveness is limited. Teachers are still considered essential for providing comprehensive improvement in writing skills (Hunt et al., 2021). These findings align with prior research in the field, such as Li (2021) and Koltovskaia (2022), which also observed positive perceptions towards AWE tools.

The study results also echo the findings of Palermo and Wilson (2020), where the NC Write program was found to be advantageous for instructors by increasing efficiency and time-saving in writing instruction. This allowed teachers to allocate their attention to other instructional elements and monitor student development. Additionally, Wilson et al. (2021) reported positive attitudes from both teachers and students towards automated writing evaluation systems, even though they may not be utilized to their full potential.

However, it's worth noting that these findings differ from those of Koltovskaia (2022), who suggested that AWE tools do not significantly alleviate teachers' workloads as teachers continue to provide feedback to all students. Furthermore, studies like Li et al. (2014) and Klobucar et al. (2013) have raised concerns about the reliability of AWE tools in providing accurate feedback and scoring, potentially not reflecting the true level of students. This limitation could hinder the effectiveness of such tools in improving students' writing skills. Consequently, some teachers may prefer conventional methods, as working with AWE tools may prove insufficient.

4.4. Teachers' Intention to Utilize Automated Feedback Tools in the Classroom:

Table9. Teachers' willingness to teach writing with automated writing evaluation software aid**.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	9.1	9.1	9.1
	yes	20	90.9	90.9	100.0
	Total	22	100.0	100.0	

An overwhelming majority, 90.9% of respondents, expressed a strong interest in using these technology tools in their teaching. They are enthusiastic about integrating technology into their classrooms. Conversely, a smaller group, comprising around 9.1% of respondents, exhibited their lack of intention to use these technologies in their instructional practices. Consequently, the participants were requested to provide a rationale for their response.

Table10. Teachers' Rational Behind Their Willingness to Use AWE for Teaching Writing Skills

Theme	Example	N	Percentage
Innovation	- I'm for innovation, digitization, and interactivity student software programs.	5	38%
Dgilization	- Simply because we're in a digital age in which we should open to the new ICT's tools and developed ideas to ameliorate the quality of teaching practices and to be good learning facilitators.	4	31%
Time saving	- It can be very useful as it may save time and efforts to improve the students' writing skill	4	31%
Energy Saving	-It can save teachers' efforts and energy as they don't have to correct all students' papers.	4	31%
Effectiveness	- I think it will be helpful if well planned using ICTs	3	23%
Error Minimization	- Because it would be very beneficial for minimizing errors grammatical, vocabulary, and spelling.	3	23%
Facilitation	- To facilitate the correction lesion.	2	15%
Speed	- Feedback is the most corrective tool in writing and these tools are faster	1	8%
Total		13	

The educators who expressed a desire to use these tools presented a number of justifications for their choice. Firstly, one of these reasons is embracing innovation. A significant number, roughly 38%, highlighted that these tools represent innovation. They believe that in the contemporary era of digitization, the adoption and utilization of emerging technologies are of paramount importance in enhancing pedagogical practices. One teacher explained, "*Simply because we're in a digital age in which we should open to the new ICT's tools and developed ideas to ameliorate the quality of teaching practices and to be good learning facilitators*". Also, another teacher stated, "*I'm for innovation, digitization and interactivity student software programs"*. Moreover, approximately 31% of participants saw these technologies as a mean to time and efforts saving. It was perceived by proponents that the use of these tools has the potential to enhance students' writing proficiency, while concurrently reducing the task of manual grading. One teacher stated that."*It can be very useful as it may save time and efforts to improve the students' writing skill. Teachers find it difficult to improve the students' writings due to the large number of classes and restricted time allotted to this process*." Additionally, the effectiveness of these aids in minimizing mistakes in grammar, vocabulary, and spelling was perceived by around 23% of the respondents. These AWE tools were assessed as having significant value in enhancing the quality of student work. A respondent said, "*Because it would be very beneficial for minimizing errors, grammatical, vocabulary, and spelling ones.*" Finally, a smaller percentage of teachers, including 15% and 8% respectively, expressed the belief that these technologies will enhance the efficiency of assignment correction and accelerate the delivery of feedback. This was seen as an attempt to expedite the learning and assessment process.

Conversely, teachers who do not have the intention of using these technologies have different reasons for their decision. Certain educators hold the belief that while assessing students' writing, grammatical errors are not their first concern. They believe that there are more important aspects to consider, and thus, automated tools might not align with their feedback priorities. Furthermore, a subset of educators holds the belief that certain automated resources are easily accessible for independent student use. Given the ease of accessibility and use of these instruments, there seems to be a lack of need in offering direct tutoring for them.

The findings of this study are consistent with those of Wilson and Roscoe (2020), where all three teachers not only recommended the use of AWE tool but also expressed their intention to continue using it in the future due to its ease of use, effectiveness, and desirability

as an instructional tool. However, these findings contrast sharply with the results of the study conducted by Klobucar et al. (2013). In their study, teachers had limited interest in using the AWE system in composition classes, and they did not plan to use the essays generated by the tool as graded assignments. Moreover, these teachers expressed skepticism about the AWE tool's ability to enable students to work independently to develop their writing skills.

5 Conclusion:

It could be inferred from the result of the current study that the written expression is not given its proper attention in terms of technology. One compelling piece of evidence is the absence of dedicated laboratory instruction equipped with the necessary tools and resources. This deficiency hampers teachers' ability to seamlessly integrate ICT (Information and Communication Technology) tools into the learning process, despite the potential benefits they offer.

Furthermore, despite teachers' positive perceptions of these tools, some encounter significant obstacles within the University of Mohammed Lamine Debaghine. These barriers include time constraints, inadequate equipment and facilities, limited technology literacy and training, and difficulties accessing apps and tools. Nevertheless, teachers unanimously acknowledge the advantages of these tools, notably their capacity to save time and energy, foster student autonomy, and effectively detect and rectify grammar, spelling, and word choice errors.

Moreover, educators express a strong desire to incorporate these technological resources into their teaching practices, recognizing the current era's emphasis on digitization and innovation in education. Therefore, policymakers should prioritize the provision of enhanced facilities to support the integration of these tools, especially in light of the contemporary emphasis on innovation and globalization. These innovative tools can significantly facilitate teaching tasks, particularly in the face of time constraints and large class sizes.

Future research endeavors should consider expanding the scope of this study, encompassing a more extensive sample of teachers from various universities across Algeria. Additionally, exploring students' perspectives on these tools and empirically evaluating their effectiveness could be valuable avenues for future research.

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