

Pp. 88-105

# **Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation to Assess their Writing**

#### **Tamer Gamal Ahmed Abd El Rasoul**

Tamer.gamal.msg@gmail.com

#### **Abeer Refky**

abeerrefky@gmail.com.

#### Maerwa Adel Aboelwafa

Marwa\_adelmoh@gmail.com

College of Language and Communication (CLC), Arab Academy for Science, Technology and Maritime Transport (AASTMT), Alexandria, Egypt.

Abstract: The aim of the current study is to explore the attitudes of ESP learners towards using automated writing evaluation (AWE) to assess their writing. The mixed-method qualitative and quantitative approach is employed in this study. The sample of the study consisted of 201 second-year students from the college of engineering at the Arab Academy for Science, Technology and Maritime Transport, Egypt. A post-experiment questionnaire was utilized to investigate the students' attitudes towards using AWE to assess their writing. The results of the study revealed that the students hold positive attitudes towards using the AWE software Grammarly since it encouraged them to self-correct their errors and revise their writings before submitting them to their teachers. Based on the findings of this study, it is recommended to conduct research on the pedagogical usage of AWE tools in writing classes, and the attitudes of the writing instructors towards using AWE tools in their writing classes.

**Keywords:** Automated Writing Evaluation (AWE); Assessing ESP Writing Performance; English for Specific Purposes (ESP).

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

Abd El Rasoul, Refky & Adel Aboelwafa

#### 1. Introduction

Writing holds a special place in language teaching because it necessitates proficiency in and familiarity with the other three language skills—listening, reading, and speaking. Additionally, it necessitates the mastery of additional cognitive and metacognitive skills. Students must decide on a purpose for their writing, carefully plan it, think about its organization and logical flow, rewrite it, revise it, and so on. When writing, individuals must use cognitive skills; they must evaluate their sources before fusing them into a precise piece of writing. The importance of writing, according to Walsh (2010), arises from its extensive use in both higher education and the workplace. Students that struggle with writing will never be able to interact with teachers, employers, peers, or anybody else effectively. Writing has always been a challenging task for both teachers and students due to its sophisticated teaching and learning processes. However, the time and skill required to analyze multiple drafts of student writing impedes the teaching of second language writing and adds to the workload of the writing instructor. As a result, online Automated Writing Evaluation (AWE) applications have been created to relieve the instructor's workload and allow students to self-check their work before final submission.

This study, however, intends to investigate the attitudes of ESP students at the Arab Academy for Science, Technology, and Maritime Transport's College of Engineering in Alexandria towards using the AWE programme Grammarly to evaluate and academic writing performance.

#### 2. Literature Review

In the opinion of many teachers, writing is one of the most challenging productive skills to acquire and, thus, to teach. Writing requires meticulous accuracy due to the complex communication process involved (Hyland & Hyland, 2006). Because human error can occur when providing feedback to students, it can be challenging to identify the same written issue, leaving students perplexed about the feedback they receive from their teachers (Lavolette, 2015; Zhang, 2016; Ranalli, 2017). For language teachers, to be able to give proper instructional feedback that includes details on degrees of accuracy as well as strategies for progress, the learners' results are crucial (Shim, 2013). However, instructional feedback may result in a procedure that places an enormous burden on teachers (Warschauer & Grimes, 2008; Chapelle, Cotos, & Lee, 2015; Wilson & Czik, 2016).

Therefore, numerous studies on students' attitudes toward using Automated Writing Evaluation (AWE) programmes as a tool to help students improve their writing skills have been carried out over the last ten years in an effort to lessen the enormous workload that teachers must do to provide instructional and individual feedback.

## 2.1 Approaches to Teaching Writing

An approach is a way of thinking about how teaching and learning are related to one another. Any strategy for teaching a language is underpinned by a theoretical understanding of what language is and how it may be learned. An approach is the starting point for procedures, or the

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

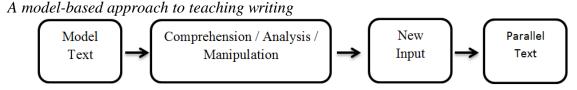
#### Abd El Rasoul, Refky & Adel Aboelwafa

manner in which something is taught, using techniques or classroom activities to aid in student learning. The product approach and the process approach are the two basic approaches that are consistently distinguished when teaching writing.

#### 2.1.1. The Product-Oriented Approach to Writing

The term is most frequently used to refer to focusing on the requirements of the final text that the writer must produce. In this method, a model text is presented, examined, and used as the basis for a task that results in the creation of a text that is comparable to that task. Writing is seen as an output of "combinations of lexical and syntactic forms, and good writing as the evidence of knowledge of these forms and of the rules employed to generate texts," according to the classic oriented-product perspective (Hyland: 2003a, p. 4). Writing instructors that advocate this method place a lot of emphasis on formal correctness and precision at the sentence or paragraph level (Silva, 1990). They concentrate on imparting formal writing skills including vocabulary, grammar, cohesiveness, coherence, etc. They view writing as "an extension of grammar—a way to measure learners' capacity to construct coherent sentences and reinforce language patterns through habit development" (Hyland, 2003a, p. 3). Students must follow precise models in order to produce parallel writings, as illustrated in figure 1 by Robinson (1991).

Figure 1

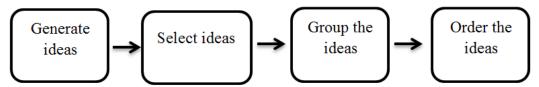


# 2.1.2 The Process-oriented Approach to Writing

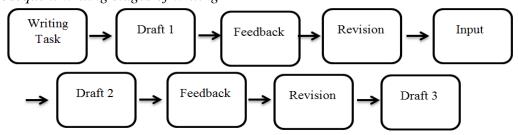
The model-based, overly-simplistic product approach, which only focuses on the final result, gave rise to the process approach. The process approach views writing as a task that involves both thinking and writing in order to solve an issue. This method is related to Flower's (1985) work, who taught pupils how to recognize a rhetorical problem—or simply the school assignment—find a solution to, and then reach the proper conclusion. The process stage, on the other hand, necessitates breaking the plan down into sentences and paragraphs, editing the initial draft, and then creating a number of subsequent revisions. However, in practical instruction, peer review is used to teach the skills of editing and evaluating. Figures 3 and 4 show how Robinson (1991:104) characterizes the thinking stage and the subsequent writing stages.

Abd El Rasoul, Refky & Adel Aboelwafa

Figure 2
The subsequent thinking stage of writing



**Figure 3** *The subsequent writing stages of writing* 



It is also crucial to note that the cognitive writing model, created by Flower and Hayes in 1981, is the most well-known and significant process model in the fields of psychology and education Graham (2006). As depicted in figure 4 by Flower and Hayes (1981), writing requires the interaction of three essential elements, including the work environment, the writer's long-term memory, and the writing processes (1981).

The expanding text and the rhetorical difficulty, two elements that are "beyond the writer's skin," are part of the task environment (Flower & Hayes, 1981, p. 369). The topic, the rhetorical situation, and the audience are referred to as the rhetorical problem or the school assignment, which acts as a writing constraint that aids authors in efficiently solving the problem and responding to the writing assignment. The second element of the task environment emerges when authors move forward with solving the rhetorical problem through writing and begins to have a considerable influence on writers' decisions. It is the expanding written text itself since "each word in the growing text determines and limits the choices of what can come next" (Flower & Hayes, 1981, p. 371). Writers use their long-term memory, where they have knowledge of the topic, the audience, and numerous writing plans, to deal with the rhetorical problem of the expanding text (Flower & Hayes, 1981, p. 369).

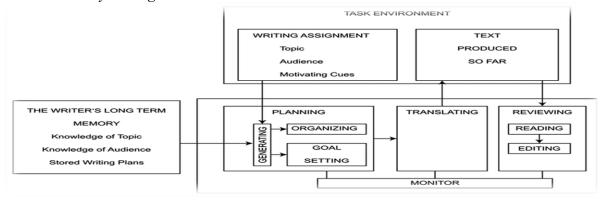
The writing processes, which are governed by a monitor, the master process that enables authors to track their present process and progress, are the third element in Flower and Hayes' (1981) model. These processes include planning, translating, and reviewing (Hayes, 2012). Writers go on to the second procedure, translation, where they start working on the first draft after developing a straightforward plan. They focus on putting ideas down on paper during this process rather than worrying about the intelligibility of their words. After the reviewing process is finished, writers rewrite their first drafts in order to make any necessary modifications and

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

#### Abd El Rasoul, Refky & Adel Aboelwafa

ultimately better their writing. However, revision cannot be viewed as a distinct writing step but rather as a thinking process (Flower & Hayes, 1981, p. 376).

**Figure 4** *Flower and Hayes' Cognitive Process Model* 



*Note*: From (Hayes, 2012, p. 371)

This process-oriented approach's exclusive concentration on writing processes has also come under fire. Some claim that this inductive method of teaching writing should not be used with all kids (Horowitz, 1986). Since teachers do not explicitly instruct students on the structure of the various target texts, students are left to discover appropriate forms on their own while writing, drawing on their "growing experience of repetition" and on "suggestions in the margins of their draughts" (Hyland, 2003b, p. 19).

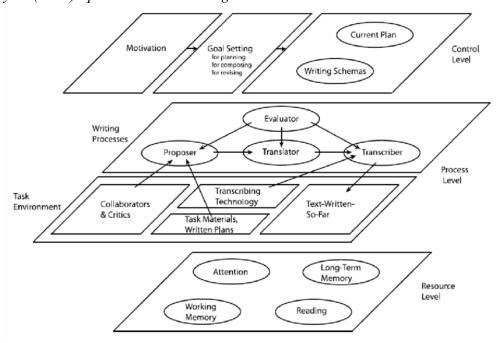
The process writing method put forward by Flower and Hayes (1981) was revised to solve these issues. Hayes (2012) modified the 1980s-writing model and addressed both criticisms of the original model after several years of empirical study and borrowing from the work and theories of other writing scholars. In truth, Hayes and his collaborators have presented a number of writing models over the course of more than 30 years, with this being the most recent (Hayes & Olinghouse, 2015, p. 481).

This most recent model has three levels (Figure 5). The writing act is shaped and guided by factors at the control level. The process level is composed of both internal and external factors. It discusses the mental operations required for writing as well as how the social and physical environment affects those operations. Features that are essential for writing as well as other human jobs are included in the resource level (Hayes & Olinghouse, 2015).

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

#### Abd El Rasoul, Refky & Adel Aboelwafa

Figure 5
Hayes' (2012) updated 1980s- writing model



*Note*: From (Hayes, 2012, p. 371)

# 2.2 Assessing Writing

Writing is one of the language abilities that can be most improved by frequent writing and appropriate and immediate feedback, according to Burstein, Chodorow, and Leacock (2004). In order to build computer programmes that can evaluate and offer feedback on writing skills, several studies have been done. Due to recent technological advancements like the AWE computer programme, which supports teachers and provides students more freedom and planning time to boost motivation, these verification processes are now automated (Shim, 2013). Therefore, there has been an upsurge in the usage of Automated Writing Evaluation as a teaching tool that can deliver high-level feedback and writing quality (Wang, Shang & Briody, 2013 Therefore, a deep and rigorous look at what AWE programs are, their functions as well as their benefits and drawbacks is required.

## 2.3 Automated Writing Evaluation

Since 1960, automated evaluation tools have been developed to speed up the marking of written assignments and to help instructors provide feedback on their students' essays (Wilson & Czik, 2016). The adoption of the Common Core Standards in the USA and its emphasis on standardized testing have resulted in a thriving market for computer-based testing solutions. For instance, the Intelligent Essay Assessor from Pearson graded about 34 million student essays for state and federal exams in the United States in 2017 (Smith 2018). Since the mid-1990s, there has been a significant advancement in the tutoring of intelligent language systems

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

Abd El Rasoul, Refky & Adel Aboelwafa

and the development of early software that has the potential to evaluate writing aspects due to the involvement of artificial intelligence technology in the process of natural language (Chen & Cheng, 1997).

Numerous studies that support the usage of AWE have shown how these programmes can improve three-dimensional writing ability. First, word processing makes it easier to edit and revise grammar and spelling, pointing out students' mistakes and offering correction recommendations, increasing learners' writing awareness (Wang & Wang, 2015). Second, software for correcting errors enables students to recognize their errors right away and professors to have direct conversations with their students about errors and feedback (Shim, 2013). Additionally, automatic feedback directs students' attention to sentence-level issues, motivating them to correct incorrect usage and increase their capacity to spot and reformulate errors when no human assistance, such as a teacher, is available, fostering autonomous learning (Wang, 2013). Third, artificial technology systems promise to be more objective and accurate when grading standardized essay tests, as human markers in a normal test score may differ by a few points, necessitating the need for a third marker to reach a final grade agreement (Warschauer & Grimes, 2008). Depending on the student's demands and background, human input is also adaptable and constrained. Modern AWE systems use Latent Sematic Analysis (LSA), a technique that evaluates the semantic meaning of terms used in essays. As a result, the AWE can check large groups of essays and correctly score them (Khoii & Doroudian, 2013).

## 2.4 Benefits and Limitations of Grammarly

The AWE programme used in this investigation is Grammarly. When using its service, it offers two sorts of checking options: free checking and premium checking. Free-Grammarly checks for 150 different types of problems, including grammatical, wordiness, conjunction, spelling, punctuation, word choice, style, and even tone. The version used in this study, Free-Grammarly, includes all the key elements that students can use to check their writing without adding to their financial burden or that of the Arab Academy, where the study was done, by having to pay for the premium version.

Using the Technology Acceptance Model (TAM), Cavaleri and Dianati (2016) analyse how Grammarly, the AWE software employed in this study, is perceived by students Students generally reported that Grammarly's explanations made it easier for them to understand grammar rules. Although portable, grammar books and exercises on photocopied handouts lack the one-on-one interaction with pupils that online grammar checkers might offer. Additionally, Grammarly's comments prompt contemplation on grammar that might not have otherwise happened (Calvarleri, p. 233). According to O'Neil and Russell's (2019) mixed method exploratory study, which compared responses from students receiving feedback from Grammarly and students receiving feedback from the teacher, students using Grammarly responded more favorably and enjoyed AWE significantly more than students receiving feedback from the teacher. The researchers also stated that both groups were satisfied with the feedback they received, but the Grammarly group was substantially happier. O'Neil and Russell (2019) discovered a flaw in AWE connected to the inaccuracy of some input, and they

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

Abd El Rasoul, Refky & Adel Aboelwafa

recommend that more research be done to determine the most common errors that Grammarly misses or misidentifies.

#### 3. Methodology

## 3.1. Research Design

This study uses a mixed-methods qualitative and quantitative approach. This method was specifically chosen because it is appropriate for the objectives of the study, which are to examine students' attitudes toward using the automated evaluation tool Grammarly during the third term of writing technical reports at the College of Engineering at the Arab Academy for Science, Technology, and Maritime Transport in Alexandria. The use of a mixed-method approach is justified because the quantitative analysis of the students' writing samples from the Grammarly reports will provide answers to the first and second research questions, which are whether or not using AWE software affects students' writing performance and the advantages of doing so. On the other hand, the qualitative data drawn from the students' post- experiment questionnaires will help to reveal the students' attitude towards using the AWE tool Grammarly (i.e., the third research question). This means that the numerical data obtained are analyzed qualitatively.

The research also takes an exploratory approach and uses an inductive methodology. It contrasts the writing of the students before they used Grammarly to self-correct their writing with their writing after using it and after implementing all of the program's correction recommendations. So, at the end of the study, a conclusion is made on whether or not the students' writing performance has improved as a result of utilizing Grammarly. The results of the questionnaires given to the students at the end of the experiment show that they have a positive attitude toward using Grammarly to improve their writing.

## 3.2. Sample and Tools of the Study

The non-probability sampling technique was chosen for this study. In contrast to probability sampling, the non-probability sampling methodology uses nonrandomized ways to get the sample. The non-probability sampling approach requires judgement. Participants are chosen because they are convenient to reach rather than at random. The Arab Academy for Science, Technology, and Maritime Transport in Alexandria is where the researcher collected the convenience sample from the engineering students, from all departments. The fact that the study's essential subjects were easily accessible was a major factor in the researcher's decision to employ this approach. This sample technique is thought to be less expensive, simpler, and easier to use than its counterpart.

The population of the study consists of second-year engineering students in their third term who registered in the Technical Report Writing (TRW) course at the Arab Academy for Science, Technology, and Maritime Transport in Alexandria during the first semester of the academic year 2021–2022. A total of 201 students from all engineering majors, including computer

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

#### Abd El Rasoul, Refky & Adel Aboelwafa

engineering, mechanical engineering, construction and building, civil engineering, industrial management, oil and gas, electric engineering, and communications and electronics, participated in the experiment.

In order to collect the necessary data for this study, the students' writing samples, both before and after using Grammarly, coupled with their automatic reports and feedback collected from the software Grammarly, as well as the end-of-experiment questionnaires, are the two key instruments employed in this study.

# 3.3. Study Procedures

The data for this study are cross-sectional, meaning they were gathered at a single point in time. It falls under the category of observational studies because the researcher doesn't alter the study setting or interfere with the subjects while gathering data. The advantage of this type of study—the cross-sectional study—is that it allows the researcher to compare multiple factors at once, including gender, age, major, level of English, etc.

The AWE tool Grammarly is used in all Technical Report Writing (TRW) classes at the Arab Academy for Science, Technology, and Maritime Transport in Alexandria in the third term, which begins in October 2021 and lasts for 16 weeks, during which students have to submit their writing assignments. The tool is used for an entire semester. The major goal of the AWE implementation is to assist students improve their writing skills by allowing them to autocorrect their work and reducing the workload of writing instructors, giving them more time to deal with more complex writing issues that the program cannot detect.

Before the writing lessons start, the researcher sends the writing instructors a video that explains the functions of the programme Grammarly as well as how to use it and submit work. The writing instructors then show the video to their pupils. The video demonstrates how to operate every feature of the software as well as how students can submit and edit their own writing. It is also advised that both the professors and the students spend more time getting acquainted with the features of the programme.

Then, in the first class, the instructors gave a brief tutorial on how to use the tool, let the students know they had to use the AWE tool Grammarly for the duration of the semester on every written assignment, and got their permission to use their writing samples for this study. The initial draught, written without the aid of the software, and the final document, written after using the software to self-edit their papers, were to be submitted via email to the researcher and students' lecturers, respectively. While utilizing the AWE tools, teachers instructed students to edit their writing as many times as they wished before turning it in to their professors and the researcher.

This means that AWE applications will be used for formative evaluation, which is giving students feedback on their writing that isn't assessed so they may fix their mistakes and gain more autonomy. The summative evaluation will be based on the input from the teachers. The teachers' workload will be reduced as a result, freeing them up to concentrate on other, more

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

# Abd El Rasoul, Refky & Adel Aboelwafa

difficult writing assignments that the programme cannot handle. The instructor provides the students with final feedback on their writing, highlighting the issues that the AWE software cannot resolve. Students were told to use the automated feedback to help them develop their organisational, grammatical, and language abilities. Thus, the teachers' workload for corrections will be reduced, allowing them to devote more time to instruction.

# 4. Findings and Discussion

The majority of the students who participated found using AWE Grammarly in writing sessions to be appealing, according to the descriptive statistics of their responses to the post-experiment surveys (section 4, questions 32–38; and section 5, questions 52). The majority of individuals have positive sentiments about using the AWE software Grammarly. The majority of participants said that AWE Grammarly's features were helpful. These characteristics supported them in identifying and correcting mistakes in spelling, punctuation, grammar, etc., which helped them write more effectively overall. Additionally, the findings of this study about the views of the participants toward using the AWE programme Grammarly are consistent with those of Warschauer and Grimes' (2008) study, which revealed that utilising the AWE tools increases students' motivation for writing.

Table 1 shows that the majority of students revise essays using Grammarly before submission (mean=1.78). Only very few of students, 22.4%, did not do that.

**Table 1**Students` attitudes towards revising essays using Grammarly

Q39		Frequency	Percent	Mean	Std. Deviation	Т	df	Sig. (2-tailed)
	Yes	156	77.6					
Valid	No	45	22.4	1.78	0.418	60.258	200	.001
	Total	201	100.0					

Table 2 shows that on average the majority of participants revised their essays once or twice using Grammarly before submitting them to their teacher (mean=2.10). Very few of them revised their essays more than five times, and only (10.9) of the participants did not revise their essays using Grammarly before submitting them to their teacher.

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

Abd El Rasoul, Refky & Adel Aboelwafa

**Table 2** *Number of times students revise their essays using Grammarly* 

Q40		Frequency	Percent	Mean	Std. Deviation	Т	Df	Sig. (2-tailed)
	More than five times	11	5.5					
77 11 1	Three to four	21	10.4	2.10	0.651	45.010	200	001
Valid	Once or twice	147	73.1	2.10	0.651	45.819	200	.001
	Never	22	10.9					
	Total	201	100.0					

Table 3 indicates that 52.2% of the participants think that grammar is the most useful area in Grammarly, 18.9% think punctuation is the most useful area,17.9% of them think that wording is the most useful area, and 10.9% of the students think that transitions is the most useful area.

**Table 3**Students` most useful area in Grammarly

Q41		Frequency	Percent	Mean	Std. Deviation	Т	df	Sig. (2-tailed)
	Grammar	105	52.2					
	Transitions	22	10.9					
Valid	wording	36	17.9	2.97	1.210	34.746	200	.001
	punctuation	38	18.9					
	Total	201	100.0					

Table 4 indicates that most of the participants frequently used or half the time used Grammarly to correct punctuations and format errors (mean=2.80), whereas only few of the students, 13.9%, never used the program to correct punctuations and format errors.

**Table 4** *Number of times students use Grammarly to correct punctuation and format errors* 

	Q42	Frequency	Percent	Mean	Std. Deviation	Т	Df	Sig. (2-tailed)
	frequently used	62	30.8					
	half the time	64	31.8					
Valid	seldom used	47	23.4	2.80	1.031	38.444	200	.001
	never used	28	13.9					
	Total	201	100.0					

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

## Abd El Rasoul, Refky & Adel Aboelwafa

Table 5 shows that a high percentage of students frequently or half the time used Grammarly to correct spelling errors (mean= 2.61), while only 22.4% of them never used the program to correct spelling errors (mean2.61).

**Table 5** *Number of times students use Grammarly to correct spelling errors.* 

Q43		Frequency	Percent	Mean	Std. Deviation	Т	df	Sig. (2-tailed)
	frequently used	60	29.9					
	half the time	48	23.9					
Valid	seldom used	48	23.9	2.61	1.131	32.621	200	.001
	never used	45	22.4					
	Total	201	100.0					

Table 6 shows that a high percentage of students frequently used, or half the time used Grammarly to correct grammar errors (mean= 3.08), while only 8% of them never used the program to correct grammar errors.

**Table 6** *Number of times students use Grammarly to correct grammar errors.* 

Q44		Frequency	Percent	Mean	Std. Deviation	Т	df	Sig. (2-tailed)
	frequently used	87	43.3					
	half the time	59	29.4					
Valid	seldom used	39	19.4	3.08	0.971	44.946	200	.001
	never used	16	8.0					
	Total	201	100.0					

Table 7 shows that a high percentage of students frequently used or half the time used Grammarly to correct wording (mean= 2.73), while only 19.4% of them never used the program to correct their wording errors.

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

## Abd El Rasoul, Refky & Adel Aboelwafa

**Table 7**Frequency of using Grammarly to improve wording.

Q45		Frequency	Percent	Mean	Std. Deviation	T	df	Sig. (2-tailed)
	frequently used	66	32.8					
	half the time	53	26.4					
Valid	seldom used	43	21.4	2.73	1.118	34.576	200	.001
	never used	39	19.4					
	Total	201	100.0					

Table 8 indicates that more than half of the participants frequently used or half the time used AWE software to improve their essay content and structure (mean=2.56), while 23.4 % seldom used or never used the AWE software to improve their essay content and structure.

**Table 8** *Frequency of using Grammarly to improve my essay content and structure.* 

Q46		Frequency	Percent	Mean	Std. Deviation	Т	df	Sig. (2-tailed)
	frequently used	52	25.9					
	half the time	55	27.4					
Valid	seldom used	47	23.4	2.56	1.113	32.585	200	.001
	never used	47	23.4					
	Total	201	100.0					

Table 9 indicates that the majority of students feel that they have made some progress in their writing skills this term due to using Grammarly (mean=1.95), whereas only 17.4% of the students feel that they have not made progress.

**Table 9** *Students` attitudes towards making progress in writing due to using Grammarly.* 

Q47		Frequency	Percent	Mean	Std. Deviation	T	Df	Sig. (2-tailed)
	Great	24	11.9					
<b>V</b> al: d	Some	142	70.6	1.05	0.540	£1 020	200	001
Valid	No	35	17.4	1.95	0.540	51.038	200	.001
	Total	201	100.0					

Table 10 shows that after using Grammarly, 38.8% of participants have made the greatest progress in grammar, 21.4% of them have made the greatest progress in word choice, 16.9% of

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

#### Abd El Rasoul, Refky & Adel Aboelwafa

them have made the greatest progress in use of punctuation, 9% of the students have made the greatest progress in structure, 8% in spelling and 6% in ideas and content (mean=2.71).

**Table 10**Students` greatest progress after using Grammarly.

Q48		Frequency	Percent	Mean	Std. Deviation	T of the	df	Sig. (2-tailed)
	A. choice of words	43	21.4					
	B. grammar	78	38.8					
	C. spelling	16	8.0					
Valid	D. use of punctuation	34	16.9	2.71	1.495	25.706	200	.001
	E. structure	18	9.0					
	F. ideas and content	12	6.0					
	Total	201	100.0					

Table 11 indicates that most of the participants, 56.7%, think that the teacher helps them most in writing through a term's study, 27.9% think that feedback from Grammarly helps them most in writing through a term's study, 10.9% think that classroom helps them most in writing through a term's study, and only 4.5% think that peer feedback helps them most in writing through a term's study (mean=3.08).

**Table 11**What helps students most in writing.

Q49		Frequency	Percent	Mean	Std. Deviation	Т	Df	Sig. (2-tailed)
	A. feedback from Grammarly	56	27.9					,
	B. teacher	114	56.7			-01	• • • •	004
Valid	C. classroom	22	10.9	3.08	0.751	58.156	200	.001
	D. peer feedback	9	4.5					
	Total	201	100.0					

Table 12 the features that the students like most when using the software Grammarly. 17.91% of students liked the ease of usage and ability of correct mistakes, 9.95% liked the feedback they received on their writing skills, 8.46% liked correcting their grammar errors, 7.96 liked the way it improved their grammar, 6.97% liked the instant recognition and correction of mistakes, 5.47% liked how it helped improve skills and the essays they have written, 4.48 liked the way it helped their punctuations without the need to revise, 5.47% liked how it pointed out their mistakes, 3.48% liked how it corrected all aspects of report, 3.48 liked how it gave suggestions of the more accurate writing, 2.99% liked the correction of punctuation, 2.49%

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

## Abd El Rasoul, Refky & Adel Aboelwafa

liked how it was quick in evaluation, 1.49% liked how it helped them pay more attention to punctuation, 1.49% liked how it made their job easier and saved a lot of time, and 1% liked the way it helped at revision before submission.

Table 13 shows that the majority of the participants did not have any suggestions or experiences to share after using the software Grammar.

**Table 13**Students`experiences and suggestions after using Grammarly

Q51	Count	
Statements	Frequency	Percent
we can add voice correct	2	1.00
learning some writing skills in short time	6	2.99
it just needs to be more accurate	9	4.48
other websites can olso help	8	3.98
it should focus more on writing skills	7	3.48
we should search for better information from more		
than one place	5	2.49
English should be simple	3	1.49
didn't answer	161	80.10
Total (n = 201)	201	100.00

Table 14 shows that the majority of students did not answer the question.

**Table 14**Students` attitudes towards replacing writing instructor with Grammarly

Q52-YES	Count	
Statements	Frequency	Percent
using AWE is pleasant	1	0.50
can revise the structure and words within seconds	3	1.49
it gives a feedback more than enough	2	1.00
didn't answer	195	97.01
Total (n = 201)	201	100.00

Table 15 that 14.87% of participants think that AWE software Grammarly cannot replace the teacher in providing feedback as the teacher can explain why the mistake is made, 15.38% think that human interaction is needed in learning, 13.85% think that face to face teaching is better and cannot be replaced, 12.31% think that the teacher's feedback is more important, 10.77% think

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

#### Abd El Rasoul, Refky & Adel Aboelwafa

that teachers might have advice to improve content and ideas, 5.64% think that teachers can understand the topic better, 5.13% think that they trust their teacher more than a website, 4.62% think that AWE tool isn't 100% accurate, 4.10% think that both are helpful, 4.10% think that discussion of mistakes make the information stick to their brain, 3.59% think that teachers could correct speaking and spelling, 2.05% think that they can communicate with their teacher verbally and discuss issues, and 0.51% think that teacher is more flexible. 2.99% of the participants didn't answer the question.

**Table 15**Students` attitudes towards replacing writing instructor with Grammarly

Q52- NO	Count	
Statements	Frequency	Percent
teacher explains why a mistake is made	29	14.87
face to face teaching is better and can't be replaced	27	13.85
because it isn't 100% accurate	9	4.62
I can communicate with my teacher verbaly and discuss issues	4	2.05
both are helpful	8	4.10
teachers might have advices to improve content and ideas	21	10.77
discussion of mistakes make the information stick to my brain	8	4.10
teachers could correct speaking and spilling	7	3.59
human enteraction is needed in learning	30	15.38
teachers can understand the topic better	11	5.64
I trust my teacher more than a website	10	5.13
the teacher's feedback is more important	24	12.31
teacher is more flexible	1	0.51
didn't answer	6	2.99
Total (n = 195)	195	99.91

# 5. Conclusion

The aim of the study is to find out how learners feel about utilising mind AWE. All Technical Report Writing (TRW) classes at the AASTMT in the third term, which starts in October 2021 and lasts for 16 weeks, during which time students must turn in their writing projects, use the AWE tool Grammarly. The programme is utilized for the whole semester. The primary objective of the AWE implementation is to help students develop their writing abilities by enabling them to auto-correct their work and lowering the workload of writing instructors, giving them more time to deal with more complicated writing problems that the computer

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

## Abd El Rasoul, Refky & Adel Aboelwafa

cannot detect. 201 pupils made up the study's sample. AWE appeals to the pupils, and they responded favorably to it.

Based on the results of the current study, it is recommended to conduct research on the pedagogical usage of AWE tools in writing classes, and the attitudes of the writing instructors towards using AWE tools in their writing classes.

## References

- Burstein, J., Chodorow, M., & Leacock, C. (2004). Automated essay evaluation: The criterion online writing service. *AI Magazine*, 25(3), 27. https://doi.org/10.1002/rcm.5057.
- Cavaleri, M., & Dianati, S. (2016). You want me to check your grammar again? The usefulness of an online grammar checker as perceived by students. Journal of Academic Language and Learning, 10(1), 223-236. Retrieved from https://journal.aall.org.au/index.php/jall/issue/view/22
- Chapelle, C. A., Cotos, E., & Lee, J. (2015). Validity arguments for diagnostic assessment using automated writing evaluation. *Language Testing*, 32(3). https://doi.org/10.1177/0265532214565386.
- Chen, C.-F., & Cheng, W.-Y. (2008). Beyond the design of automated writing evaluation: Pedagogical practices and perceived learningeffectiveness in EFL writing classes. Language Learning and Technology, 12(2), 94-112. Retrieved from https://www.lltjournal.org/item/2631
- Flower, L. (1994). *The construction of negotiated meaning: A social cognitive theory*Carbondale, IL: Southern Illinois University Press.
- Graham, S. (2006). Writing. In P. Alexander, & P. Winne, (eds.), Handbook of Educational Psychology (pp. 457–478). Mahwah, NJ: Erlbaum.
- Hayes, J. R. (2012). *Modeling and Remodeling Writing*. Written Communication, 29(3), 369–388.
- Hayes, J. R., & Olinghouse, N. G. (2015). Can Cognitive Writing Models inform the Design of the Common Core State Standards? The Elementary School Journal, 115(4), 480-497. Retrieved from https://www.learntechlib.org/p/161731/.
- Horowitz, D. (1986). Process, Not Product: Less Than Meets the Eye. TESOL Quarterly, 20(1), 141-144. DOI:10.2307/3586397
- Hyland, K. (2003) Second language writing. New York: Cambridge University Press.
- Hyland, K., & Hyland, F. (2006). Feedback in second language writing: Contexts and issues. Cambridge University.
- Khoii, R., & Doroudian, A. (2013). Automated Scoring of EFL Learners' Written Performance: a Torture or a Blessing? In *Conference proceedings. ICT for language learning* (p. 367).

Exploring the Attitude of ESP Learners towards Using Automated Writing Evaluation

#### Abd El Rasoul, Refky & Adel Aboelwafa

- Lavolette, E. (2015). The accuracy of computer- assisted feedback and students. Retrieved from https://www.mendeley.com/catalogue/accuracy-computer-assisted-feedback-students-responses-it/.
- O'Neill, R., & Russell, A. M. T. (2019). Stop! Grammar time: University students' perceptions of the automated feedback program Grammarly. Australasian Journal of Educational Technology,
- Shim, Y. (2013). The effects of online writing evaluation program. *Teaching English with Technology*, 13(3), 18–34.
- Silva, T. 1990. Second language composition instruction: developments, issues, and directions. In Kroll (ed.), *Second language writing: research insights for the classroom* (pp11-23).Cambridge: Cambridge University Press.
- Smith, T. 2018. 'More states opting to "robo-grade" student essays by computer'. National Public Radio website. Available at https://www.npr.org/2018/06/30/624373367/more-states-opting-torobo-
- Walsh, K. (2010). The importance of writing skills: Online tools to encourage success. Retrieved December 27, 2012, from http://www.emergingedtech.com/2010/11/the-importance-of-writing-skills-online-tools-to-encourage-success/
- 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.
- Wang, Y.-J., Shang, H.-F., & Briody, P. (2013). Exploring the impact of using automated writing evaluation in English as a foreign language university students' writing. 

  \*Computer Assisted Language Learning, 26(3), 234–257. 

  https://doi.org/10.1080/09588221.2012.655300.
- 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.
- 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.
- Wilson, J., & Czik, A. (2016). Automated essay evaluation software in English Language Arts classrooms: Effects on teacher feedback, student motivation, and writing quality. *Computers and Education*, 100, 94–109. https://doi.org/10.1016/j.compedu.2016.05.004.