The Impact of Ez-Article Software on Post Graduate Students Academic Writing: A Tracking Study

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Abstract
Student achievement and professional success depend on students' abilities in academic writing. In the higher education institutions, students are tested on their writing abilities by completing academic writing written in a variety of writing styles. This EzArticle software was created to help students and researchres get better at writing, better arrange facts, and better organise data used in academic writing. It was designed to be a quick, simple, and user-friendly method for organising the data collected in the academic literature, which may then be used in writing. The programme also facilitates the tabular presentation of data and concepts, which may be easily sorted and reorganised to meet the needs of a variety of situations and projects. In this study, 280 software end-users were polled using Google survey, and a few software end-users were interviewed. The numeric data was examined using SPSS, while the qualitative interview data was studied using a content analysis approach. Overall, the survey found that the majority of respondents give very positive feedback. The study also showed that the majority of responses exceeded 80% agreements. The qualitative results demonstrate, however, that everyone who has used the programme agrees that it has significantly improved their writing and made it more organised.
Keyword: EzArticle, Writing Ability, Academic Writing, Software

Introduction
Academic writing is not a new thing among higher education students, especially post graduate students. Academic writing becomes a trademark of scholarship and a mandatory requirement that needs to be implemented by them. In most cases in universities around the

world, the publication of academic writing is a mandatory condition for students to graduate and obtain recognition for their graduation. So academic writing is seen as something that is highly emphasized and becomes the mainstay of students' academics. Based on the importance of academic writing, students need to master academic writing well in the process of publishing their writing.

Students need to develop their own unique voice while writing and be able to do it without any external resources or technology aids since effective writing is essential for their academic and professional success. Abilities related to writing, such as the capacity to produce and organise ideas, construct sound arguments, and clearly convey one's thoughts on paper. This set of abilities is vital and finds widespread use. If a student can't convey their thoughts clearly and elegantly in writing, they may have trouble getting accepted to prestigious schools and finding work in numerous fields (Mustapha et al., 2021).

Writing abilities are essential for students to succeed in higher education and the modern global economy. As a result, it is crucial to provide students experience with formal writing by giving them the chance to create academic papers. Professional writing calls for careful attention to grammar, in-depth research, and the ability to deliver an argument backed up by facts in a clear and convincing manner (Alhusban, 2016; Mustapha et al., 2021)

Problem Statement
Academic writing requires high skills and knowledge. Several aspects of education and the writing process have been altered by the lightning pace of technological development. In many ways, it has revolutionised education, communication, and the written word. It has effectively reshaped our culture by enhancing our collective capacity for communication, technology, and education. Access to vast volumes of information is made possible by computers, which may undoubtedly facilitate the educational process (Ghahri et al., 2015). As a result of this technology's widespread availability, students shouldn't have any trouble learning how to write effectively for academic purposes. However, many modern students, especially those studying languages other than their native tongue, struggle to write well. Arab students in Malaysia, where a study by (Karim, 2013) was done, were shown to have difficulty with academic writing. Their ability to write effectively in English and their familiarity with various writing techniques affect their grades in school.

Literacy viewpoints, knowledge, technical elements of writing, language characteristics, and linguistic and cultural background disparities are only a few of the many factors that have been taken into account in studies of writing difficulties in higher education (Lea, 2014). Students have a significant challenge when first starting to write for academic reasons because they lack the skills necessary to properly incorporate source information into their writings (Cumming et al., 2016). It was found that students had difficulty with the multi-step procedures involved in writing from sources but had learned strategies to overcome these obstacles; students' prior knowledge and experience impacted how well they performed when writing from sources (Supriyadi et al., 2020). The results presented above suggest that not all pupils have a firm grasp on the art of writing. When it comes to technical support for writers, there are limitations and necessities that must be met to help remedy the problems plaguing academic writing. Consequently, the researcher believes that this writing issue may be resolved by utilising existing technology to teach students how to effectively process

writing with the use of writing technology. Based on this fact and the researcher's observation of the problems that exist among students at the highest level in academic writing, we built a software (EzArticle) to help students in academic writing. Therefore, this study will try to get the effect of using this software that we have built and see the impact on their academic writing.

What is EzArtcle Software?

EzArtcle is an academic writing software that was built to help higher education students in creating their academic writing. This software is a form of software that functions as mapping, literature extract, organizing ideas and organizing the structure of writing in a simple form. At the end of writing, this system can organize all ideas and information automatically and the researcher will be able to make corrections easily based on the concept of seeing the data they wrote. This software is only marketed in Malaysia at the moment, and only a few users from Indonesia and China are using it.

Literature Review

Several academics worked on creating software for evaluating and providing comments on students' writing abilities. According to Parra & Calero (2019), the best way to enhance one's writing skills is to write regularly and to receive timely and helpful feedback on one's work. The use of automated writing tools as an auxiliary aid that improves both feedback and output quality is also on the rise (Wilson & Czik, 2016). Writing for an academic audience differs drastically from that of a high school student. Learning to express oneself clearly and concisely in written form is essential for success in the realm of formal education. Writing for academic purposes (such as reports, articles, diploma papers, dissertations, presentations, essays, and so on) is meant to hone and improve the writing abilities of students and recent graduates across a wide range of disciplines and fields of study (Todorova & Koleva, 2019; Mustapha et al., 2021).

In order to improve pedagogy and learning outcomes in composition classrooms, students must first develop their writing skills. The use of digital tools has been proved to improve the writing process. They broaden the scope for multimodal composition input and interaction with real audiences (Albertoni et al., 2015). Students' writing improved over pencil and paper with the use of word processing and other technologies, and continued to do so with each succeeding grade (Noble et al., 2015). Using digital devices in the composition classroom has been found to increase cooperation between student authors and real audiences, according to a study conducted jointly by the Pew Research Centre and the National Writing Project. Researchers polled 2,462 educators about how digital resources have impacted their classrooms and pupils (Purcell et al., 2013).

Research on student writing in multimodel web-based technologies, such as Wiki platforms like Google Sites and blogs, is still in its infancy despite the widespread availability and use of such programmes. Both Takayoshi and Selfe (2007) discuss the evolution of literature from alphabetic texts to works that include several media. Students' writing can improve with the introduction of digital technologies into the classroom, which can also help them learn more. Goldberg et al (2003) provided evidence of this for word processing, and the Wiki references Dymock, Hughes, and Wheeler et al (2008) as mentioning possible benefits. In particular, resources that promote teamwork and provide real viewers can enhance peer review,

instructor feedback, and critical thinking (Purcell et al., 2013). It has been suggested that specific programmes might help with writing in the literature. Additionally, in today's environment, technology is required not just for academic writing but also for completing tasks. So, to save time, we developed an app that serves as a manual, a set of tools, and a set of procedures for producing high-quality academic writing.

Methodology
This study uses a survey method by using a survey as a way to collect data. A set of questions (google form) is distributed to the respondents which is distributed via whatapp. considering how far the user is in all corners of Malaysia, then this method is the best method to use. The data collection process takes 2 weeks to obtain. The data obtained was analyzed using IBM SPSS software. At the same time, the end of the study, the researcher did a little triangulation of the data with some interview questions (open ended) to see the user's personal opinion on this software.

Respondents
The respondents involved in this tracking study are those who use this software. All those who use this software will answer some questions asked to evaluate the effectiveness of the software in their writing. In total, 280 respondents were involved.

Instrumentation
This study uses a survey form that uses a satisfaction scale that is 1 strongly disagree to 5 scale which is strongly agree**.**

Findings
The conclusions of the study will be detailed in this section. Quantitative results and qualitative results gleaned from interviews will be presented. Based on the scale provided, the respondents will respond to their experience in using this software.

Descriptive data
Table 1
Demographic

Gender	Total	Percentage
Male	180	72
Female	100	28
Institution		
Public university	205	57
Private university	75	22

This study involved 280 respondents consisting of 180 (72%) men and 100 (28%) women. the majority of respondents consisted of 205 people (57%) public university students and 75 people (22%) were students from private universities in Malaysia.

Table 2
Users Satisfaction data

Item	Feedback
The software is easy to use	78%
The format / data is very easy to understand	84%

User friendly	88%
This software meets my writing needs	92%
I am satisfied using this software	95%
This software is very useful in my writing	91%

Based on table 2, the data shows the results of user perception and response to the EzArticle software. The majority of respondents gave a very good response to the use of this software. For the item the software is easy to use, 78% of respondents agree with this statement. for the item the format is very easy to understand and user friendly more than 80% agreement (84% and 88%) responses agree with the statement. Three items received a very good response (over 90%) namely This software meets my writing needs, I am satisfied using this software and This software is very useful in my writing.

Table 3
Summary of qualitative findings

Statement	Feedback
"This software honestly helped me a lot. I have produced 2 studies using this software. Ok, for me, because it makes it easier for me"	*Participants 8, 23, 73, 87, 108. 201*
I think that this software is very good, interesting. so far I don't think there is anything specially built for writing articles like this.	*Participants 19, 56, 82, 239*
Alhamdulillah,, I use this software to write. This software is very helpful for me. Easy to use, I will continue to use it.	*Participants 5, 89, 127, 276,*
I like this software, it's easy for me to organize my research and writing data.. I think other people should use it too	*Participants 3, 78, 80, 107, 207, 218, 267*

Based on the qualitative findings, the researcher selected only a few participants due to the difficulty of accessing them. The results (see table 3) show that the majority of users strongly agree and comment that this software is very helpful in their writing.

Conclusion
This piece of software is an example of an organised, inventive, and methodical technical innovation effort that was designed to make the process of academic writing, scientific journaling, and other forms of writing easier. Writing that is systematic requires careful planning and the use of a solid strategy in order to ensure that the writing is structured effectively. Because of this, the programme is able to improve academic writing by making it more organised, clear, and methodical while also teaching the writer about the requirements of writing for a variety of reasons. According to the data, it is also apparent that the application of technology to support academic writing is becoming an increasingly crucial factor. The outcomes of this study, both quantitative and qualitative, demonstrated that users had a favourable reaction, and they agreed that the use of technology is able to assist in developing writing abilities and the overall quality of academic writing. Students who are engaged in academic writing may benefit from improved software in the future, particularly

in the areas of citation creation and literature search, which will be developed by future scholars. Researchers will basically improve this software to make it better and more useful in the future. More importantly it can help researchers, students in completing their academic writing in particular.

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