A Case Study on the Use of Dynamic E-IAW Program Module for Learning ESL Writing

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Abstract
This study is important as it contributes to the area of ESL academic writing. The methodologu applied is qualitative case study. It explores the use of a supplementary analytical online writing program module known as Dynamic E-IAW (DE-IAW) among ESL tertiary students in learning academic writing. DE-IAW module was developed based on the previous need analysis study conducted on ESL tertiary students from University Teknologi Mara Cawangan Johor as well as the pertinent learning theories and research on writing. Specifically, the study aims to investigate the use of the elements of DE-IAW which are perceived useful by the students in enhancing their writing ability as well as how the program affects the students' attitude towards writing academic essays in English. The subjects in this study comprised 40 diploma students taking a Part Three ESL language proficiency course at UiTM Johor. They were chosen based on a purposive sampling method whereby they were selected from one intact class or the same group. The subjects were treated with DE-IAW as a supplementary module in learning to write academic essays for six weeks. The data were obtained from the

research instruments which include students' short online reflective journals and a set of questionnaires and were analysed qualitatively using triangulation method. The overall findings indicate a positive result in the use of DE-IAW in enhancing the students' writing ability. In addition, the subjects also perceived it was able to train them to be critical of their writing and helped to change their negative attitudes towards learning to write to positive ones which saw an increase in their interest towards academic writing. Further research could explore on the use of similar supplementary online writing program for other literary skills such as reading.

Keywords: ESL Writing, Online Learning, Learner's Attitude, Autonomous Learning, Learners' Interest

Introduction
The main challenge for higher learning institutions and language teachers during the Covid-19 pandemic is to provide viable and meaningful learning experience Albakri, et al (2021) especially through the right e-learning courses or program which can enhance tertiary students' self-development and academic achievements. As universities are increasingly turning to e-learning techniques and tools to deliver instruction, the challenge for the web developers, higher learning administrators and educators is to develop the right e-learning programs for students (Chung et al., 2020). Ideally, an effective e-learning program should provide students with a range of online tools and resources that can help to enhance their learning ability, guide them to be autonomous learners. Furthermore, an e-learning program should also provide meaningful activities and materials that can stimulate learning interest and alter the negative attitude of some students towards ESL online learning particularly in learning writing skill. If such aims can be achieved then the program can be said to be successful (Ismail et al., 2015).

In learning to write, success is more likely if the students are given the opportunity to express themselves in various ways and are allowed to access the latest educational tools such as the online learning programs which allow more independent learning and increase the learning time for writing Chung et al (2020), received feedback, get the latest information they need for their writing content and the chance to publish their work. It is reported by various scholars that ESL learners need a lot of time to master writing as it is seen as a formidable task and therefore careful planning, structuring, revising and other important writing processes need to be carried out by the students (Ismail et al., 2015). Such is also true among ESL tertiary students who need to spend a lot of time planning, thinking and processing their written product in order to produce a good piece of writing.

The regular class hours are often insufficient for ESL learners especially at the tertiary level to write soundly and critically as such essays require a lot of planning and processing time (Yang, 2010). Thus, these students should be encouraged to participate in an online writing program which does not limit the students' learning hours and also provides a favourable medium for students to think critically, explore ideas, gain feedback and share their work with peers (Ismail & Soo, 2021).

A number of studies conducted within ESL contexts have indicated positive impacts of online learning for learners in comparison to the traditional face to face instruction. For instance, Al-Jarf (2004) experimental study of two groups of freshman students enrolled in ESL writing course showed that the experimental group who learnt writing through web-based instruction via Blackboard online course showed more progress in writing and communication

skills as well as produced fewer errors compared to the control group who received face-to-face writing instructions. Other studies indicated that ESL learners benefited from the interactive, self-directed potential of the technology and they were able to receive better corrective feedbacks for their writing tasks, gain more opportunity to access varied and interesting writing resources online as well as enjoyed their writing lessons more (Ismail et al., 2019; Chung, et al., 2020).

Many previous research claim that students' interest towards learning essay writing may enhance students' writing skills and performance (Sundgren, 2017; Chung, et al., 2020). Therefore, it is important to discover the general level of writing interest as well as identify ESL students' perception on the best way or technique for them to learn to write academic essays especially those at the tertiary level. Few previous research has focused specifically on writing ability and interest Maznun et al (2017); Ismail et al (2020) as well as on the use of analytical writing technique for ESL tertiary students. Thus, the findings of this study would contribute to this field of knowledge.

Literature Review

Traditionally, many ESL teachers tend to generalize that ESL students only needed to be drilled with a lot of grammar exercises or getting their written products error free (Raimes, 1991). Their primary focus was on the surface structure. This over concern on the form resulted in the lack of attention given to the strategies on how to write better or on the use of the right techniques and activities that can facilitate better writing so that the students are able to produce essays which are profound and interesting to read (Rankin-Brown, 2006; Maznun et al., 2017). Due to this, many ESL students were not able to produce a good piece of work and only obtain a poor grade despite being able to turn in an error free essay (Sadiq, 2010; Ismail & Albakri, 2012; Sundgren, 2017; Chung, et al., 2020).

This emphasis on critical thinking and learner inquiry are also in line with the Constructivist Learning Theory. Constructivist learning strategies capitalize on learning through inquiry and problem solving via critical and creative thinking (Brown et al., 2009). Moreover, according to Exline (2004), student inquirers are encouraged to explore new ideas and understandings through personal discoveries and explorations as well as interactions with objects and with other people. Writing is enhanced through the inquirers' opportunity to engage in real life activities, situations and with real audience.

ESL students need to be taught more on how to develop their ideas and critical thinking especially in writing. Otherwise, they can only produce an accurate but dull or even irrelevant piece of work (Ismail et al., 2012; Ismail et al., 2014). For instance, many ESL tertiary students were not able to think critically or deeply when describing a particular issue in their writing, even when such problems have been noted by the lecturer in their revised drafts (Sundgren, 2017; Chung, et al., 2020). This lack of critical thinking skill has resulted in the lack of in-depth content and dull essay presentation by many ESL tertiary students. Such a problem does not only occur among ESL tertiary students from MARA University of Technology but also has been reported in other institutions as well such as among Universiti Malaysia Serawak (UMS) students (Osman & Abu Bakar, 2009). Therefore, students need to be allowed to be inquisitive when writing and given ample time to practice writing even outside class time such as by using an effective writing guide and resources which is designed to cater to their lacks and needs.

In addition, another factor that needs to be emphasized on is students' interest and motivation towards learning which will help to enhance their learning performance (Ismail et al., 2015; Motevalli et al., 2020). Chung et al (2020) contend that one of the most prominent

factors affecting students' success in college composition is their interest and attitude towards their writing task. Therefore, how the students feel and react towards their writing tasks greatly determines the quality of their composition.

From a needs analysis study conducted on ESL tertiary students at MARA University of Technology, it was discovered that the students face weaknesses in terms of the language use but most significantly, they were not critical during their writing process which leads to carelessness when writing as well due to their inability to produce in-depth and interesting essays (Ismail, et al., 2016; Maznun et al., 2017). In addition, they need more time to practice writing online and autonomously to enhance their writing ability (Motevalli et al., 2020). Furthermore, many ESL tertiary students face problems in learning to write which occur mostly due to ineffective writing modules or activities Ismail, et al (2016) lack of writing practice in class Ismail & Soo (2021) proper guidance and scaffolding learner discussions as well. Therefore, to enhance ESL students' writing ability as well as interest towards writing many researchers regarding ESL writing suggest that the students be given suitable online writing module and scaffolding (Hussin, 2008) in order to write successfully.

To that end, the dynamic, inquisitive and analytical online writing program (DE-IAW) uses inquiry-based learning techniques and composing guide which emphasizes analytical and critical thinking as well as Autonomous Learning Model Betts & Kercher (1999) and related ESL communicative learning theories Krashen (1985); Kroonenberg (1995); Kung & Chuo (2002) as its basis. Moreover, E-IAW module is also based on the needs analysis for supplementary writing module conducted in the previous study by (Ismail et al., 2015). In this study, its role will be extended to reducing writing apprehension and enhancing writing skill among students. The study will be conducted among a group of 40 ESL Tertiary Level students at UiTM Cawangan Johor studying ELC231 English for Academic Writing.

Research Design
This research embarks on a case study which is mainly descriptive and qualitative in nature. The main purpose of the study is to investigate the use of a dynamic, inquisitive, and analytical online writing program module known as DE-IAW among ESL tertiary students in learning academic writing. DE-IAW program was developed based on the needs' analysis conducted of ESL tertiary students from University Teknologi Mara Cawangan Johor as well as the pertinent learning theories and research on writing. Specifically, the study aims to investigate the use of the elements of DE-IAW program which are perceived useful by the students in enhancing their writing ability as well as how the program affects the students' attitude towards writing academic essays in English.

The following are the two research questions pertaining to this study:
1. What are the elements of DE-IAW program module which are perceived useful by the students in enhancing their writing ability?
2. In what way does DE-IAW program module affect the students' attitude towards writing academic essays in English?

Under this research design the research site, the population sample, the instruments, data collections as well as the process and details regarding the data analysis and evaluation are described.

The Population Sample

For a qualitative study, it is important to gain access to the right individuals and sites thus, purposive sampling was used. Merriam (2009) notes that purposeful sampling assumes that one wants to discover, understand, gain insights; therefore, one needs to select a sample from which one can learn the most. In this study, the respondents were forty Diploma students from UiTM Cawangan Johor. There are 2 reasons why they were selected as sample for this study. Firstly, accessibility factor as the students were available to participate in the study. Secondly, they were taking an ESL proficiency course known as The Integrated English Language Course which was held for four hours per week via a hybrid classroom setting. The course focuses mainly on the writing skill even though the other three language skills which are reading, listening, and speaking are also taught.

The Instructor

The instructor, a senior lecturer, has been teaching English as a second language for over fifteen years in the Academy of Language Studies at the university. She obtained a master's degree and a PHD in English Language Studies. However, she had not utilized the E-IAW for teaching writing prior to this research project. Her role in this research was providing traditional writing instruction to participants in the control group and E-IAW Instruction to participants in the experimental group.

The Instruments
The Main Features of E-IAW

The instruments used in this study were DE-IAW program module which include the IAW Composing Guide which was modified from the previous version (IQ-AWG), IAW Forum and the IQ-Dynamic Resources. In addition, the Perception Questionnaires, and the participants' reflective journal entries (e-Journaling) were used to collect the data.

IAW Composing Guide for ESL Students

IAW Composing Guide is one of the main features of DE-IAW Writing Module. It is a modified version of the earlier composing guide in IQ-Write Program which was a supplementary online learning module for ELC200 students (The earlier version of ELC231).

IAW Composing Guide consists of 7 writing steps which the students need to follow (in a recursive manner as it employs the process writing approach) which include:

1. Analyse – At this stage students will analyse their writing tasks or assigned essay questions and how they are going to answer or tackle them.
2. Think – During this stage students need to think of the important questions pertaining to their topic and scope.
3. Inquire – This is the phase where the students seek for the relevant information regarding their topic and must think about using right materials and resources.
4. Drafting – When writing out their draft students are encouraged to be analytical and think about producing the right ideas and content for their essays.
5. Proofing –At this stage students have to proofread and revise their work and to help them do this carefully they have to answer some important questions and checklists.
6. Evaluate – At this stage students are to evaluate one another's work and they are given a set of questions and checklist to help them go through with this step.

7.Reflect & re-evaluate – Once the students have completed their essays they are encouraged to reflect on and re-evaluate their writing process through self-inquiry in order to ascertain their own writing strengths and weaknesses for improvement.

To help the students during each of these writing steps, DE-IAW provides some very useful Guide Sheets and Tip Sheets which consist of important guides and tips as well as some interesting writing tasks and exercises related to each step.

IAW Forum

The students also discussed their writing tasks in the IAW Forum using the university's LMS known U-Future. It provides a good platform for the students to discuss their writing process and provide peer feedbacks. The forum topics and activities are structured and specified based on their assigned writing topics and the steps they have to go through when they used the IAW composing guide. The students were able to make full use of this forum to brainstorm on their writing topics and contents as well as to exchange their constructive comments online. In this way the students were able to interact and provide each other with feedbacks and evaluate one another's written tasks and exercises.

IQ-Dynamic Resources

IQ-Dynamic Resources consists of the various online writing links and materials in DE-IAW module. These resources are selected by the writing instructor based on the students' level of proficiency as well as their needs' analysis data. In addition, suggestions from the students are also taken into consideration and they were allowed to autonomously search for the materials and had them uploaded in the U-Future platform after they were approved by their writing instructor. The online links and resources are constantly added and upgraded based on the current needs of the students and the course content.

Pre-Instruction and Post-Instruction Perception Questionnaires

The Pre-Instruction and Post-Instruction Perception Questionnaires are used in this study to answer the second research questions. The questionnaires were first distributed to a sample of 15 students during the pilot study before they were deployed to the target subjects during the actual treatment of E-IAW program. Foddy (2004) maintains that to ensure the questionnaires are valid and works as intended it should be administered to a sample in a pilot study. The questionnaire consists of three parts. The first part of the questionnaire is used to gather the students' background information as well as their interest and attitude towards writing in English especially academic writing. The second part of the questionnaire contains 11 open-ended questions inquiring further about participants' perception and comments regarding the DE-IAW program module. They are meant to discover the participants' views of how of the features of DE-IAW program module is useful in enhancing their academic writing skills. In addition, in the Post Instruction questionnaire the students were asked to rank their most preferred De-IAW features and to provide short explanations or reasons for their answers. The third part is meant to elicit the students' attitude regarding writing and learning to write academic essays after they had gone through DE-IAW program treatment. This section requires the respondents to tick the appropriate response as well as to provide short explanations or reasons for their answers.

e-Journaling

e-Journaling consists of the students' personal writing experience which the students post online once a week via U-Future. It was also used as a reflective journal to reflect on their writing process and activities, share their writing experiences as well as their writing samples and activities with the other participants.

Research Procedures

During this initial stage which occurred in week 1, the instructor conducted an introduction session for the course and briefed the students via Google Meet on how to use the DE-IAW program module which include the IAW Composing Guide, IAW Forum, e-Dynamic Resources and e-Journaling. The students mostly already know how to use the university's Learning Management System (LMS) known as U-Future since they have been introduced to its feature the previous two semesters. The students were required to write three essays with the help of IAW Composing Guide and IQ-Dynamic Resources. In addition, they also discussed their writing task via IAW Forum. Moreover, each week the students need to do their reflective journal to reflect on their writing process and activities, share their writing experiences as well as their writing samples and provide peer editing and evaluation. The students were required to submit their essays via the LMS. The essays were evaluated by their writing instructor using ELC231 essay rubrics and returned to them. In addition, the Post-Instruction Questionnaire was administered at the end of the six weeks in which the participants were asked to describe how useful and interesting the E-IAW features are for learning essay writing.

Data Analysis

The frequency distributions of positive responses to the item in the questionnaires were tabulated by collapsing the "Strongly Agree" and "Agree" responses on the Likert scale in the Questionnaires. Singleton and Straits (2005) proposed that for Likert Scale questionnaires, the analysis of the data can be simplified by collapsing or combining the responses particularly for a relatively small sample size (of less than a hundred) as by doing so, not only the responses can be analysed and answered quickly but they are also more clearly distinguishable and significant. Data collected were analysed by using descriptive statistics. In this study, scores ranging from 3.00 to 4.00 in a 5-point scale questionnaire indicated a moderate satisfactory level, whilst scores from 4.00 to 5.00 indicated a high satisfactory level. The range indicated is based on the general rule provided by Nugent et al (2001) that scores can be interpreted as a magnitude continuum whereby higher scores are indicative of the greater magnitude and lower scores are indicative of lower magnitude. Moreover, triangulation of the data was carried out using the two research instruments namely the second and third part of the questionnaires as well as the reflective journal entries. Triangulation allows researchers to validate or cross-check the data from different sources and perspectives (Patton, 2002). The data gathered from the questionnaires and reflective journal entries were analysed descriptively and categorized according to the research questions. All four types of data were cross-checked with one another to address specific research questions.

Findings and Discussion

The following sections present the findings for the research questions. The findings for the research questions were elicited from the post instruction questionnaires as well as the students' reflective journal. The data for the study were analysed qualitatively and quantitatively using narrative description and descriptive statistical technique.

The findings for the Research Question 1

The findings for the Research Question 1 revealed that the students DE-IAW program to be useful in enhancing their writing ability. Below are the data for the findings related to Research Question 1.

Table 4.1

Respondents' perception on the role of DE-IAW program in helping the students to be critical and produce better essays

Statements	Agree %	Disagree %
1. Does DE-IAW program help you to be critical of your writing process?	90	0
2. Do you find that being critical of your writing process helps you to write better?	85	0

The results showed a 90% support from the students who claimed that the program helped them to be critical of their writing process and that 85% said it had indeed improved their writing ability and performance. Moreover, the students were also asked to explain the reasons for their answers in the second part of the questionnaire. From the descriptive analysis of the students' responses, it is clear that the students found the program to be effective in training them to be critical in their writing process and that it helped them to improve their writing quality. Below are some of the unedited excerpts from the questionnaire:

Student # 4

DE-IAW module is effective in making me be critical when writing because I can be more focused when I write. For instance, this program helps me to be focused and not be out of topic or scope I am supposed to write etc. I am more trained to question whether they relevant or not and then select the best ones. So, this program helps me to write better and get better grades!!

Student # 9

To me this program helps me to be critical during my writing process because it makes me question about my writing steps and think for myself. It is different from our textbook which only direct us with the instruction or and spoon feed us with the information but rather this program allow us to think critically and be more careful with our drafts and writing. Now my writing quality has improved a lot.

Student # 16

With these critical questions available in IAW Composing Guide, I'm able to avoid myself from wasting my time and get 'lost' in the search. 'what are the primary sources to use for my topic?', "Are the examples I use sufficient and updated?", etc, these are very good questions for me to think about when searching for my sources and I find this have guided me when in the process of finding my materials and thus made me produce much better essays.

Furthermore, the respondents were also encouraged to indicate the specific elements or features in the program which helped them to be critical when writing and to number it according to importance. The result indicates that 90% of the students were convinced that all the main elements or features in DE-IAW program helped them to be critical when they write. This finding is similar to the study by Chan and Han (2005) which focuses on strategy use in learning to write in an online environment. A group of tertiary level students were put through an online writing course which consisted of a staged exposure to a variety of theme focused topics related to writing. The study saw that all of the respondents (100%) claimed that the online writing encounter was a positive experience with the report of a marginal increase in the use of the metacognitive strategies.

In addition to the data presented above following the excerpts depict the students' descriptive responses from the open-ended questionnaire regarding the role of all the elements in this program in helping them became inquisitive and critical during their writing process and how it contributed to their better writing ability:

Student # 28
Indeed, by using all the elements in this program such as IAW-Composing Guide, IAW Forum, e-Journaling and the IQ-Dynamic Resources, I become very analytical and critical when writing. This is important in order to produce better essays because I get to be more aware about my topic and who I am writing it for and so on. It makes me think whether I am writing this for my lecturer (like in exam) or for peers also (like for assignment which need to present to class) so it's important to be critical when I write because it helps me to write better.

Student # 33
Because the program has many useful elements that help me to be more critical of my writing and question all my writing steps and process such as the IAW Composing Guide and e-Journaling.

Student # 25
DE-IAW module provide step by step way to be critical in our writing process. I like using the IAW Composing Guide because it is complete with writing Guides Sheets and Tip Sheets along with the sample answers and IAW Forum also allow us to discuss our writing and assignments through a well-organized forum topic so that we can discuss online critically about our essays.

However, when asked to rank each element in terms of their usefulness in helping them to be critical in their writing process, the students were divided in their responses as shown in table 4.2

Table 4.2
Features of DE-IAW program that help students to be critical according to rank

IQ-DEW Program Features	N0.1 %	N0.2 %	N0.3 %	N0.4 %
IAW Composing Guide	100	0.0	0.0	0.0
IAW Forum	0.0	55.6	44.4	0.0
e-Journaling	0.0	44.4	55.6	0.0
IQ-Dynamic Resources	0.0	0.0	0.0	100

*Note: No.1 is the most important and No.4 is the least

From table 4.2 it can be seen that all of the students (100%) ranked IAW Composing Guide as the most important (number 1) in helping them to be critical in their writing. IAW Forum stands at number 2 with 55 % of the students' votes followed by e-Journaling at number 3 with similar number of students (55%) putting it in the third place. IQ-Dynamic Resources was anonymously ranked as the fourth most important element by all of the students (100%).

Thus, from all the data obtained for Research Question 1, the students perceived that DE-IAW helped them to be critical and inquisitive of their writing process which they felt important to improve their writing performance. The students were guided and trained to be critical of their writing process mainly through self-questioning and self-reflection and introspection. Hence, it was apparent that the students viewed the role of IAW Composing guide as one of the important elements in guiding them to be critical before, during and after their writing process. This was because it comes together with online writing Guide Sheets and Tip Sheets, provided good guidance on how the students should question themselves and be critical of their writing steps through self-questioning techniques. The aim of DE-IAW module is not to spoon-feed the students with direct instructions but train them to think for themselves. This skill is important especially during exams whereby, tertiary students are required to write an essay on their own. Thus, students who are not properly trained or equipped with the important skill of self-questioning or critical inquiry will not be able to think for themselves and may fail to produce well-written and thought-provoking essays (Chung, et al., 2020). This finding further supports the study conducted on 60 ESL students on the use of IQ-WCG to enhance the students' academic writing performance. The experimental study which was conducted within a period of eight weeks at UiTM Johor revealed a significant difference in the target students' writing performance and one of the main reasons was due to the fact that by making use of an analytical guide the students were able to be critical during their writing process and that has helped them to produce better quality essays (Ismail et al. 2021).

Besides IAW Composing guide, the participants also viewed that their use of IAW Forum provided them with the opportunity to question each other and comment critically on one another's essay or assignments and thus, helped them to be critical in their writing process. This finding further supports another study by Ismail et. al (2016) which found that the use of online forum provides an avenue to share new knowledge, to ask questions, to clear and clarify thoughts and ideas as well as to exchange views and opinions.

In addition, De-IAW program participants also felt reflective e-Journaling to be effective in helping them become critical in their writing process. This was because they were able to critically reflect on their writing process. Similar findings can be found in Hussin et. al (2016)

which reported that blogs can be used as a platform to solicit ideas and receive comments from others that may improve interaction and reflective and critical thinking.

Furthermore, the data also indicated that DE-IAW Program module enabled the participants to access the online materials and resources regarding critical thinking, learner inquiry and the like from IQ-Dynamic Resources which they used to help them write in a critical way. These findings were in line with the study by Sundgren (2017) on the significance of critical and independent thinking in an online learning environment and also another one by Chan and Han (2005) which focuses on strategy use in learning to master research writing in an online environment. On the whole, the study reported that the participants viewed their online writing encounter as a positive experience and the use of questions as a strategy helps to increase their critical thinking skills.

To further strengthen the data regarding the participants' positive views regarding the program's effectiveness, they were asked to provide their perception of DE-IAW program as a whole as illustrated in Table 4.3. This table indicates the participants' view of the DE-IAW program after going through the course for 6 weeks. From the data provided, it can be seen that the students were satisfied with the program as they viewed it to be suitable with their level and needs, helpful and effective (90%), as well as interesting (95%) in a sense that the features and interface were not only attractive but were also reliable and easy to use. These findings seem to concur with the another study in which the researchers (Ismail et al., 2013) found that students' favourable views and conviction of an online writing program's effectiveness help to reinforce their positive attitude towards it and in turn motivate them to be actively engaged in the program which subsequently enhances their writing attitude and quality as well.

Table 4.3
Respondents' perception of DE-IAW after 6 weeks treatment

Statements	Responses
1. After 8 weeks of going through DE-IAW treatment our perception of the module is that it is:	
a) Suitable to your level and needs	90%
b) Not appropriate with your level and needs	0.0%
c) Helpful and effective	85%
d) Not beneficial and ineffective	0.0%
e) Interesting: attractive, easy to use	95%
f) Boring	5.0%
g) Difficult and too challenging	10.0%

The findings for the Research Question 2
Under this section, the data obtained from reflective journals are discussed to further support the findings from the questionnaires in order to answer research question 2 regarding the impacts of DE-IAW program module on the students' attitude towards writing in English. Table 4.3 illustrates the respondents' perception in terms of their attitudes towards writing in English before and after they were introduced to DE-IAW program. In table 4.4, the negative worded statements are reversed to positive ones as according to Singleton and Straits (2005) this should be done for data presentation in order to conform to the same direction.

Table 4.4

Respondents' perception on their attitude regarding writing and learning to write in English before and after DE-IAW program treatment

Statements Treatment	Before Treatment		After	
	Agree	**Disagree**	**Agree**	**Disagree**
1. I think my writing is good	28%	72%	67%	33%
2. *Writing in English is a pleasant experience for me	11%	89%	78%	22%
3. I love to write in English	11%	89%	61%	39%
4. *Writing in English is not difficult	33%	67%	72%	28%
5. I like having the opportunity to write down and express my ideas in English	44%	56%	90%	0%
6. *Learning to write academic English is interesting	44%	56%	90%	0%
7. My lecturer reacts positively at my writing	39%	61%	89%	11%
8. *I often do not procrastinate when I have to write English essays because I do not get stuck while trying to write the paper.	33%	67%	83%	17%
Mean	26%	74%	81%	19%

* Statement was reversed

As shown from the data in table 4.4, there was a positive change in the students' attitudes towards writing. This can be seen from the significant increase of the overall score of 55% towards positive writing attitude. After DE-IAW program treatment, the students who perceived that their writing was good increased sharply from 28% to 67%. This suggests that the students had positive attitude towards learning to write via DE-IAW program and that they were confident with their writing quality and ability after going through the course for 6 weeks. Furthermore, the students who viewed writing as a pleasant experience also increased by 67% and that the percentage of those who loved to write rose to 50% from 39% to 89% after going through the program for 6 weeks. The findings further support the study carried out by Yuen & Mussa (2015) which shows that attitude towards the language may be linked to writing behaviour.

Moreover, from the frequency distribution shown in Table 4.5, the number of students who regarded writing in English as not a difficult task with the help of DE-IAW program increased substantially from 33% to 72%. Thus, it was apparent that DE-IAW program reinforced the students' positive attitude towards writing. This was evident from the significant increase of 56% in the percentage of the participants who felt that learning to write

academic English as interesting and that they liked having the opportunity to write down or express their ideas in English after having experienced learning to write via DE-IAW module. In addition, there was a great change in the students' responses regarding the reactions of their lecturer towards their writing with an increase of 50% reported to receive positive comments for their essays with the help of DE-IAW program.

Another aspect that promoted positive change in the students' writing attitude was that more students no longer procrastinated when it comes to writing their English essays; the number of students who admitted that they did not procrastinate to write their essays because they no longer get stuck or have writers' block increased from 33% to 83%. Furthermore, there was a positive change in the students' attitudes and perceptions. This is evident from the differences in the percentages; after the treatment 95% 0f the students claimed that learning and writing academic essays were more interesting and fun, 88% of them stated that it was not difficult, and 90% agreed that it was more effective and important.

Table 4.5
Respondents' perception on their attitude regarding learning and writing academic essays before and after De-IAW Program treatment.

Statements Treatment	Before Treatment	After
1. How do you perceive learning and writing English essays?		
a) Interesting and fun	33%	95%
b) Dull and uninteresting	67%	0.0%
c) Difficult	56%	11%
d) Not Difficult	44%	88%
e) Effective	39%	90%
f) Not Effective	61%	10%
g) Important	67%	90.0%
h) Unimportant	33%	10.0%

The findings from the students' reflective journals (e-Journaling) further support the data gathered from the interviews as shown in some of the unedited excerpts taken from the participants' reflective journals below:

Student #3
I think my attitude on writing has change from negative to positive because I am now not only able to write much better, but I am interested to write and enjoy writing more, thanks to this program!! So, I think this program should be used by all students learning to write in English especially academic essays which we have to write in a more academic and critical way. Thank You!

Student #14

About my attitude in writing, when I reflect back on my attitude regarding writing before joining this program, I was often lazy and not so interested to write my essays. Now I become more interested and a little diligent! I think this program also make me realize my carelessness is mostly because I was not critical. Now I am critical and analytical about all aspects of my writing, and I am more motivated. So now I will continue using the resources I find from this program, and I very much enjoyed writing in this blog which helped me to reflect and express myself. I think I would love if the program continued longer and I also want to continue participate in the IAW Forum and e-Journaling if possible.

Student #16

My Attitude Before and After this program:
Before, I like to procrastinate and did last minute and as the result, I produced bad essays. I know because I've gotten some bad comments from lecturers and friends. But after joining this program, my writing improved and I got better comments from them especially for my paragraphs and ideas and my overall essay contents. I think because I was able to write more critically and carefully too and with more interest. Procrastinating is bad but I often do it before…because I often get writer's block. Now when I reflect on my previous work that I've done, I think it's bad for me. Now I think I have changed my attitude after participating in this program and as result I do not procrastinate and managed to do better for my short essays and my project paper too. I also got good comments from friends and lecturer which make me happy. Now I am motivated to write and like to write using the DE-IAW to guide me and also the resources it has which I think really has helped me improve.

Student #21

Lastly, in terms of writing weakness, for me my main weakness is on grammar and vocabulary. Before joined this program, I was careless and also lazy to edit or do exercises on grammar and so on. But now my attitude changed to be better because of this program I now prefer having my friends correct my errors using the IAW Composing Guide and discuss in IAW Forum. I also able to do many exercises on these from the IQ-Dynamic Resources which have many good ones on grammar and vocabulary as well as read many online books and magazines and newspapers to improve my vocabulary.

Student # 38

Most importantly, this program makes me enjoy learning to write especially online and I am more motivated and able to improve by going through all the resources and materials from this program by myself or independently. I read my friends' e-Journals about this and many write the same in their entries! Lastly, I definitely think it is important for all of us to reflect and be analytical on our writing process because we can discover our mistakes and try to improve in the next attempts.

Finally, the result in the questionnaires show that many of the participants agree to promote the program to their other friends who did not participate in the program as shown in Table 4.6.

Table 4.6

Respondents who would recommend DE-IAW to their friends.

Statements	Responses
1. Would you recommend DE-IAW to your friends?	
a) Yes	88.8%
b) No	11.2%

From the result in Table 4.6, 88.8% of the respondents claimed that were willing to recommend the program to their friends as they were confident with the usefulness of DE-IAW module in improving their learning and writing in English.

Conclusion

Generally, the findings indicated that DE-IAW Program's participants favour the use of the program as all of them were convinced that it is suitable to their writing level and needs, is effective and interesting to use. In fact, they felt that they were fortunate to gain the opportunity to participate in the program were willing to recommend it to their friends who have not gotten a chance to be involved in this program so that they too can benefit from it. This is in line with the finding the other previous studies on e-learning particularly on the use of online learning tools and programs which indicate increased learners' interests and positive attitude towards learning (Maznun, et.al 2017; Yuen & Mussa, 2015; Ismail et al., 2021).

The participants' positive views regarding the use of DE-IAW program has essentially changed the students' negative feelings and attitudes towards learning to write academic writing. The importance of learners' attitude and interest towards online learning is also highlighted in Chung, et al (2020) who mention that motivation, attitude, and training should play important roles in shaping writing behaviour. Understanding the workings of affect within a writing discourse model would enable the writer to interact with the task environment more efficiently and holistically. In addition, Motevalli et. al (2020) also reported that English language learners who love their learning experiences and have positive attitudes and motivation towards their learning including learning to write were able to significantly improved their performance.

The significant findings in the writing performance and favourable perception of the use of De-IAW program in ESL Writing class in this study are in line with previous studies on the use of ESL/EFL language learning instruction in which effective writing tools, guides and resources were utilized (Yuen & Mussa, 2015; Ismail et al 2021). It also strengthened the results of prior studies on the importance of being self-explorative, inquisitive and to be critical when writing in order to enhance one's writing performance (Ismail, et.al., 2014; Sundgren, 2017; Chung, et al., 2020) and thus, such learning opportunity and initiatives should be provided to all ESL tertiary students. Thus, from the findings of this research, it is hoped that, curriculum development and administrators, ESL course book developers as well as writing instructors are more aware of the current problems faced by the students regarding academic writing especially regarding writing problems and needs. Insofar, they would then strive to find viable ways to tackle the problems such as through the implementation of interesting and effective writing techniques and modules.

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