The Use of WhatsApp in Teaching and Learning English During COVID 19: Students Perception and Acceptance

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Researchers across the world are examining the educational value and effectiveness of integrating mobile technology into the teaching-learning activities. As an attempt to help improve the mastery of writing skills, WhatsApp as an alternative tool to help the students master in their writing as they face a lot of difficulties in executing a good write up. However, the university level syllabus does not provide ample time for the students to exercise this ability in the classroom due to time constraints. The low-level students will find it hard to master the skill within the time given in a semester. A total of 66 students in Penang who have smartphones with WhatsApp were assigned into experimental and control groups. Besides the traditional classroom learning for both groups, the experimental group was also supported by the teacher-student interaction via WhatsApp. The intervention of WhatsApp improved the learning achievement of the participants. The strength of the intervention between the two groups was medium to large. A questionnaire designed by the author was administered and the participants showed positive perception and acceptance of the use of WhatsApp for teaching and learning. The typical usability issues on mobile learning were found to be valid.

Key words: *WhatsApp, Second Language, Mobile Technology, Perception, Acceptance.*

1. Introduction

In February 2020, the outbreak caused all universities around the world to close, and teachers forced to initiate online teaching. It applies to what is happening to the world today when everyone is locked up in their own house due to Coronavirus disease (Covid-19). Due to this new phenomenon, teachers all around the world are now experiencing an unprecedented massive 'migration' from the traditional in-class face-to-face education to online education. Sixty-one countries in Africa, Asia, Europe, the Middle East, North America, and South America have announced university and school closure (UNESCO, 2020). The outbreak of Covid-19 is unexpected, and most of the teachers are facing challenges of lacking online teaching experience, early preparation, and the support from educational technology. Hence, it is necessary to have a contingency plan prepared to support the students during this time.

The Malaysian government made an effort to incorporate the use of technology into education since the implementation of the computer system. Hence, echoed Malaysia's National Philosophy of Education which aims for developing the potential of individuals in a holistic and integrated manner to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious. To achieve the aim, the incorporation of technology needs to revamp and transform as one of the ways to attract the students' interests to learn through technology. The exposure of students to technological devices and this is not something new to them. It is accessible, easy, and hassle-free. The rapid advancement and developments in technology in this era is so prominent that it influences not only our daily life but also our education system (Altun, 2015). Therefore, technology has changed the traditional language learning by making way for the newer, creative, innovative, and modernized form of learning. The change is evident as "technology lies at the heart of the globalization process, affecting education, work, and culture" (Graddol, 2000, p.16 as cited in a book by Natalia A. Gunina 2015). Although the use of technology is helpful and beneficial in assisting the language learning process among learners, challenges still exist. Researches carried out by experts found several problems in using technology. Among the challenge is in finding the right type of technology that can attract and engage learners. In a study done by Martin and Ertzberger (2013), found that students show more enthusiasm towards mobile devices. Boticki, Baksa, Seow, & Looi (2015) added that mobile technology provides new ways to learn, such as promoting authentic learning environments and also allowing students to make connections to their classroom lessons on learning (Murphy, 2011).

Malaysian students are incapable of grasping the importance of learning English, as most of them are still weak in the English proficiency level. Lian, Hoon, & Abdullah (2011) discovered that many Malaysian students are unable to produce comprehensible statements in speaking or written text in English has increased. The learning of English has changed to a merely conventional static performance to a more innovative and authentic process (Abidin, M.J.Z., Mohammadi, M.P & Abdul Hamid, F. 2011). The integration of mobile technology offers

possibilities for change. WhatsApp is used to support teaching and to sustain the students' interests. However, considerable prior research has proposed that writing in a language learning context is a demanding and challenging task (Alsamadani, 2010). This complexity originates from the fact that writing involves several processes like stating a thesis, organization, revision, and finally editing to guarantee error-free writing (Alsamadani, 2010). Likewise, university students, especially first-year undergraduates, tend to view writing with a certain amount of nervousness. Writing entails skills that they might not be able to master, and what makes it more worrying is that the writing skills are the main components in the students' university life. Thus, this indeed places extra stress on students to do well in each submitted written assignment. Besides, De et al. (2017) added that the writing anxiety that university students express is likely to increase due to the high expectations for writing in university curricular. Educational mobile tools have emerged and shown great potential to help students and the teacher's role from a provider to a resource person in this paradigm shift are essential in improving the students' writing (Alowayr, 2018). This study would like to explore the possibilities of WhatsApp in enhancing English language writing. The objectives of this study are:

1. To examine students perceptions towards WhatsApp in English language writing.
2. To identify student's acceptance of WhatsApp as an English language writing platform.

2. ESL learners in Malaysia

English is an international language, widely used and spoken by people worldwide. English is spoken and used as a second language (L2) in the countries that were typically ex-colonies of the United Kingdom or the United States, including Malaysia, India, Philippines, and Nigeria (Thirusanku & Yunus, 2012). Malaysia is one of the Asian countries that is adopting a bilingual system of education. The aim is to establish a balance between national and international needs and challenges manifested through linguistic, educational policies (Gill & Kirkpatrick, 2012). Regarding the Malaysia education system, English as L2 (Gill, 2002) and in line with the education policy, the English language is made a compulsory subject at all levels of education implying its existence "side by side with strong indigenous languages, wide use in speaking, official functions, the language of politics, media, jurisdiction, higher education and other such domains" (Thirusanku & Yunus, 2012, p.2). Hence, mastering and being able to use the language effectively is very important, especially in places where English is a second language (Gill, 2002).

According to the Malaysian Government Official Portal (2012), English is a compulsory subject taught and learned in schools in Malaysia. The changes in the Malaysian scene have created literacy problems among Malaysian universities' learners, and "competence in English among learners has been on the decline since a change in language policy was changed from English to Bahasa Malaysia in 1970" (Chan & Wong, 2004, p.1). The decline has led to a rise

in the number of unemployed graduates for failing to secure jobs because of their lack of competence in the English language, evident during interviews (Heng & Tan, 2006, p.309). Hence, systems of support, which include internal and external factors, will be assigned to aid the students' language skills, especially in writing.

Besides, the language council eventually put forward the idea of adopting the Common European Framework of Reference (CEFR) for Malaysia. The proposed adoption of CEFR in the development of the English education system in Malaysia is to meet the international standard (Ministry of Education Malaysia Blueprint, 2015(b): 62). Recent documents and plans released by the government, such as the English Language Roadmap 2015-2025, which are part of the Malaysian Education plan, have indicated that the Malaysian government is expediting the implementation of the framework into the current education system. One of the ultimate aspirations of the education system is the development of bilingual proficiency, mainly the dual language policy that is to uphold "Bahasa Malaysia and to strengthen the English language."

This policy aims to ensure that every student in Malaysia has at least an operational proficiency with two other languages (which includes English) by the time they have completed their 11 years of education. The CEFR was introduced in 2001 by the Council of Europe to provide "a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations and textbooks across Europe" (Council of Europe, 2001 p.1.) The Common European Framework of References or CEFR was primarily developed by the Council of Europe more than two decades ago. Then, there was a greater need for language education to promote free movement of people, information, and ideas within Europe after the Second World War and the birth of the Council of Europe and the EU (Byram & Parmentar, 2012). Since then, the framework has grown in status not only in Europe but also across the world (Asian correspondent, 2015). The first country in South East Asian to officially adopt CEFR is Vietnam. The state decided to implement the international standard framework because a large number of Vietnamese students failed to meet the global standard compared to its competitors (Nguyen & Hamid, 2015).

In the university context, English language learners are segregated according to the Malaysian University English Test (MUET) results upon their enrolment in the undergraduate programs. Undergraduate students who enrolled in English courses focusing on their beliefs, 96.9 percent of the sample agreed that English is an important subject, and 74.6 percent of them agreed that the usage of English as the medium of instruction should is at the tertiary level. The importance of learning English at the tertiary level because English language courses are compulsory courses for the university's graduation requirement (Kaur & Singh, 2014).

3. Mobile Technology

We are living in a digital world where the use of technologies such as instant messaging, video sharing, social network tools, podcasting, and blogging is synonymous with the students' lifestyle. Mobile phones are not only used for making calls but also for taking pictures, uploading into shared space, creating mobile blogs, and accessing the web on the move. The portability and versatility of mobile technology have significant potential to be exploited. Mobile technology has shown the mobility and connectivity of technological tools have shown that. The pedagogical shift from didactic teacher-centered to participatory student-centered learning (Brozek and Duckworth, 2011).

Recent developments in mobile technology have shown that aiding technology is not limited to computers anymore. Martin and Ertzberger (2013) studied the differences between the use of computers and mobile phones in a classroom setting and found that students show more enthusiasm towards mobile devices. As a result of this change, learning institutions try to adapt their systems to involve these technologies in their programs. English language learning is one of the leading subjects that appeared this change due to the universality of the English language (Abdul Fattah, 2015). Mobile technology relates to the rapid evolution and incredible development in the information and telecommunications technologies that have affected every part of society, both teachers and students.

The implementation of mobile technology serves not as a new way to learn and teach, but rather a compliment to specific learning skills in the educative content (Martin & Ertzberger, 2013) as it supports the students' need in language learning. Mcconatha, Praul, & Lynch (2008) believes that a distinguishable feature of mobile learning or M-learning is the potential to study when travelling on transport. The learning process is more meaningful due to the construction of knowledge that comes from the tool that the students are familiar with it. The use of mobile technology in learning is an innovative educational technology in higher education (Aicha, 2014).

The use of mobile technology is "how English language teachers, teacher educators, and administrators can and should use technology in and outside the classroom" (Healey et al., 2008, p.2). The term mobile implies it stands for mobility or the ability to move freely and easily from one place to another. It plays a significant role in the enhancement of English language learning (El-hussein & Cronje, 2010). One of the mobile technology learning impacts is to provide new ways of learning. (Furió, Juan, Seguí, & Vivó,2015) argued that the students were able to explore new ways of learning from a different perspective after using mobile technology. Besides, (Boticki, Baksa, Seow, & Looi, 2015) added that mobile technology provides new ways to learn, such as promoting authentic learning environments and also allowing students to make connections to their classroom lessons on learning (Murphy, 2011). The students were able to be more engaged when learning through mobile technology (Lu et al., 2014). The level of engagement of the students' interests to accomplish educational tasks

had increased in classes that used mobile technology and able to generate autonomous learning (Gerger, 2014). The incorporation of mobile technology encourages students to take control of their knowledge as it allows the students to establish their own learning goals (Boticki et al., 2015). Mobile technology also helps students to manage their self-directed learning (Lu et al., 2014). Furthermore, mobile technology encourages students to be more active and supportive of their classmates (Gerger, 2014).

In improving writing skills, mobile technology is an alternative to traditional teaching. Mobile learning corresponds to a new learning environment by using mobile devices that use wireless communication in a higher degree of mobility (Rodrigues, 2007). Mobile technology impacted the students' interests to accomplish educational tasks increases, raise students' satisfaction in learning, and generate the students' collaboration. According to Falloon (2013), mobile technology itself cannot be as a single and homogenous technology and crucial to not only pay attention to it in general.

Technology is ineffective in the classroom without teachers who are knowledgeable about both technology and educational goals (Aicha, 2014). Improving learning through mobile technology applications should remain the goal. In Korea, teachers' mobile learning attitudes were low in general (Baek, Zhang, & Yun, 2017). The female teachers were more positive than the male. Although having a few concerns regarding the adapting of technology in the classroom such as classroom management issues and lack of skills hindered the students from using mobile technology in the classroom, teachers should always be skilful to tackle the problem and utilizing technology in teaching (Baek et al., 2017).

Mobile devices have also gradually introduced into the educational context over the past two decades (Chen, Carger, & Smith, 2017). Many students are now familiar with using personally owned, portable digital devices that can connect wirelessly and are "always-on" (Selwyn & Bulfin, 2016). The word mobility refers not only to people but also to human interactions. By providing ongoing communication with technology enhances learning in young people (Sharples, Taylor, & Vavoula, 2005).

A study conducted by Dahlstrom et al. (2015) surveys approximately 112,000 university students from the USA and 13 other countries, whereby the use of smartphones for academic activities has shown significant growth from 2011 to 2013. A similar study performed by Angela (2012) on university students in Utah finds more than half of the students using their mobile devices as a tool for academic purposes. Due to its mobility, physical, technology, conceptual, social, and learning dispersal mentioned below, as adapted by a study done by Ishak & Ismail (2016).

Table 1: Mobility Concepts in Mobile Learning

Dimension	Description
Physical	Learning can take place anywhere
Technology	Use portable devices to access and store resources
Conceptual	Learning contents are managed and administered using specific applications so that users can easily zone into the needed information.
Social	Users can perform social groups and connect.
Learning dispersal	Allow learning to expand across various contexts in a short time.

Adapted from (Ishak & Ismail, 2016)

Cheung (2014) and Santos et al. (2011) show that students who use mobile phones to learn to tend to be more engaged with their learning environment as they communicate and interact with other students to exchange ideas. The use of mobile phones is becoming widespread among ESL students, and this allows the students to have access to relevant information as communication is no longer a problem. In Australia, 90 percent of the students between the ages of 15 to 17 years old use the mobile in 2009, and that was ten years ago. Since then, the importance of Mobile learning is significant to the students' life (Justina, 2016).

According to Sharpless (2002), mobile learning is also able to promote collaborative learning among learners. Mobile learning provides the opportunity for learners to work independently or to work in groups with peers as a learning process. Besides, mobile learning is said to be able to provide opportunities for learners to think creatively and critically. Hence, learners can tackle and solve problems better after being exposed to mobile learning (Vesisenaho, Virnes, Eronen, & Sutinen, 2002). Education is not solely depending on educators with the implementation of mobile learning. Learners are encouraged to be in charge of their studies.

In a study done in Korea, to investigate the effects of mobile learning on Korean learners' competency for English speaking skills (Kang, Sung, Park & Ahn, 2009). The findings revealed that mobile learning brings positive effects on learners' English-speaking competency as the learners involved in mobile learning scored higher than the learners who are engaged in E-learning as it is portable. Meanwhile, the teaching of English has changed to a merely conventional static performance to a more innovative and authentic process (Abidin, Mohammadi, & Abdul Hamid, 2011).

A well-structured learning environment must facilitate the user in connecting different tools to build, share, and improve one's level of knowledge with a variety of learning models (Rossi, 2006). Miyazoea and Anderson (2010), in their study, found that students had a positive perception of the use of technology, and they progressed in identifying writing styles through forums, blogs, and wikis. Andrews & Thoms (2008) believed that writing is an activity that

can be acquired by practice, and the uses of tools in literature have proven to have many benefits to create a stress-free learning environment and, therefore, improve writing skills. By having a tool to help the students ease the process, hopefully, improve their English writing skills (Alsaleem, 2013).

4. Connectivism Theory (Siemans & Downes, 2009)

Connectivism is related to network learning. The more reliable the connection between modes, the faster information will travel. Siemens (2015) explains that nodes can be related to thoughts, feelings, interactions with others, new data, and news. Connections between nodes in an individual's learning network can vary in strength and depends on several factors that include motivation, exposure, emotions, and experience.

A personal learning environment (PLE) is similar to connectivist model where shared facilities and social networking components of PLE will follow the connectivist nodes (Archee, 2012). The concept of PLE is new in the educational research field as it can be related to the conceptual connections between other studies about learning styles, self-regulated learning, social learning, personalized education, or individual differences (Prendes et al., 2017). The key is that learners are in control of his/her knowledge, lifelong learning, and various tools (Ruengkul & Sukavatee, 2015).

In a connective learning environment, the teacher is the facilitator guiding the students to improve their learning skills. Students are encouraged to support, share, and express their opinions as this theory relates to a connected group that eventually share the same results (Siemen, 2010). In the world of connectivism, the process of learning involves thinking critically, evaluating information, and having an opinion as the learning process is focused more on networking and knowledge as a group (Mackey and Jacobson, 2011). Therefore, this theory, as it is related to learning networks and group work as an epitome of connectivism, is suitable to be used as a guide in this study as it is needed to be explored.

5. Methodology

Procedure

This study primarily examines students' perceptions of WhatsApp in English language writing, as well as their acceptance of WhatsApp group to improve language writing. First, thirty-three students divided into two groups and the experimental group answered a questionnaire that gauged their perceptions and to rate their scale from five scales (i.e. strongly disagree, disagree, neutral, agree and strongly agree).

Second, they participated in WhatsApp group that was created to assist their writing skills and promote interaction with their peers. The group was conducted for eight weeks with 33 students. The researchers shared a variety of social posts in ESL content in order for the students to interact. The content included ESL articles, online articles, grammar quizzes, videos and music.

The students' in the experimental group shared their thoughts and ideas in WhatsApp after the online class which support and facilitate the online learning. During the covid-19 pandemic, all students accessed learning online. The interactive interface enabling two-way communication between teachers and students as well as between the students. In this new era of new normal learning, students help each other and receive help from their teachers via feedback. Furthermore, the built-in affordances that enables synchronous and asynchronous communication as well as revision by various writers from various locations on one or more documents. The experimental group, had extra hours with the researchers as teachers which allows for the exchange of text, pictures, audio and video among students and between students and teachers that supported student-student and student-teacher interaction, communication, and collaboration. This concurs with Vygotsky's (1978) Socio- cultural Theory of learning where interaction between novice-master, peer-peer, and student-student leads to master scaffolding with the result that the student learns the language skill better. Not only that, WhatsApp as an added mobile learning tool helps to motivate students, lower their anxiety, and allow them to work together on various language skills such as listening, speaking, reading, and writing while being in a low- threatening atmosphere. This is in line with Krashen's (1981) affective filter hypothesis where low anxiety and high motivation allow the language input to pass through the learners' affective filter and reach the Language Acquisition Device (LAD). Therefore, students learn the language skill at hand.

6. Data Analysis

There were two stages in the data analysis. First, the questionnaire was analysed. Second, the threads from the questionnaire were gathered to examine the students' acceptance in using WhatsApp. The results are used to substantiate and triangulate the quantitative data findings from the questionnaire.

7. Findings and Discussions

The findings are presented in three main sections; a) Participants demography, b) Quantitative findings and c) WhatsApp discussion

a) Participants' Demography

The 66 respondents consisted of 70 percent female and 30 percent male. All of them reported that they have a smartphone and uses WhatsApp on a daily basis. The participants were between the ages 19 to 26 with a majority of 21-22 years old. They were divided into two groups. Experimental and control. Before conducting the independent samples t-test, the assumptions were tested. As such, skewness and kurtosis tests were carried out with the pre-test scores from both groups and the results showed that the skewness and kurtosis were both positive indicating normal distribution. The respondents were normally distributed with the skewness of .136 (SE=.409) and the kurtosis of -.643 (SE=.798) for the experimental group. Skewness of -1.173 (SE=.409) and kurtosis 1.973 (SE=.798) were for the control group.

The results showed that the skewness and kurtosis are both positive indicating normal distribution as all values for kurtosis between -2 and +2 are considered normal distribution.Therefore, the data for both groups were normally distributed and the assumption was made. There were 33 students in both groups and in order to find out if there was a difference in students' scores between the students who used WhatsApp and that of those who did not, the data were analyzed using descriptive statistics. The means and standard deviation of the scores before and after the intervention were calculated. Descriptive statistics of the students' scores are shown in Table 1:

Table 1. *Performance of Control and Experimental Groups for the Post-test*

Groups	N	Mean	SD
Experimental	33	39.42	4.535
Control	33	33.48	5.478

The statistics reveal that the experimental group's essay writing performance show a higher mean score at 39.42 compared to the mean score of the control group at 33.48 with the difference of 5.94. The intervention of WhatsApp in improving language writing seems to influence the students' performance for the students in the experimental group. In the pre-test scores, both control and experimental groups perform very similarly with only 0.97 differences in mean. The experimental group show 23.70 compared to the mean score of the control group 24.67, having a slightly higher mean in the pre-test. The results of the descriptive statistics in pre-test are shown in Table 2.

Table 2. *Performance of Control and Experimental Groups for the Pre-test*

Groups	N	Mean	SD
Experimental	33	23.70	2.756
Control	33	24.67	3.854

The independent t-test assumes that the measured variances of the two groups are equal.

b)   Quantitative Findings from the Closed-Ended Items

The quantitative findings present the data from the close-ended items of the questionnaire in relation to the students' perceptions and acceptance towards the use of WhatsApp in language writing. In answering the research questions, the items for each section of Perceptions of English Language Learning and their acceptance of Writing Activities on WhatsApp are grouped together, and statistically analysed using mean scores, levels of mean scores analysis (Table 2). The students' perceptions, and acceptance views will be considered as low, mediocre, or high if they have the following values.

Table 3. *The Level of Mean Score Analysis*

Mean Score	Level
0 – 1.33	Low
1.34 – 2.66	Mediocre
2.67 – 4.00	High

Table 4. *The Levels of Students' Perceptions towards Using WhatsApp for English learning*

Research Question	Mean	SD	Level
RQ1 (Perceptions)	2.65	.51	High
RQ2 (Acceptance)	3.05	.44	High
Overall			High

Table 4 shows that the students demonstrated high positive perceptions and acceptance towards using WhatsApp for English language writing. The findings for each research question are further elaborated below.

Question 1: *To examine students perceptions towards WhatsApp in English language writing.*

	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I believe I have improved myself in essay writing through the WhatsApp discussion group.	0.0%	0.0%	0.0%	42.4%	57.6%
2.	I believe I can enhance my essay writing knowledge through WhatsApp.	0.0%	0.0%	0.0%	36.4%	63.6%
3.	I enjoy my essay writing lessons in the WhatsApp group.	0.0%	0.0%	3.0%	54.5%	42.4%
4.	I get more ideas when writing after the WhatsApp discussion.	0.0%	3.0%	0.0%	42.4%	54.5%
5.	I am more motivated to write because of the topic discussed in WhatsApp.	0.0%	0.0%	0.0%	60.6%	39.4%
6.	WhatsApp has made me become a better writer.	0.0%	3.0%	0.0%	66.7%	30.3%

Thirty-three students responded to the questionnaire on perception, and all the questions were answered. The responses are more inclined towards the positive aspects as there are more 'agree' and 'strongly agree' responses compared to 'disagree' and 'strongly disagree.' The statements can be categorized into positively worded statements that advocate the utilization of WhatsApp and all of the respondents expressed positive feedback about the use of WhatsApp in improving English language writing

Objective Question 2

To identify a student's acceptance of WhatsApp as an English language writing

	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I find that my essay writing improved after the discussion on WhatsApp.	0.0%	3.0%	0.0%	54.5%	42.4%
2.	WhatsApp makes essay writing easier.	0.0%	0.0%	0.0%	60.6%	39.4%
3.	WhatsApp makes learning essay writing more interesting.	0.0%	0.0%	0.0%	66.7%	33.3%
4.	WhatsApp has made me become a better writer.	0.0%	3.0%	0.0%	66.7%	30.3%
5.	I am satisfied with the WhatsApp group done by my teacher in improving my essay writing.	0.0%	0.0%	0.0%	39.4%	60.6%

Generally, the questionnaire indicated a reasonably positive attitude towards the students' acceptance regarding the use of WhatsApp in improving English Language writing. Students who were engaged in the WhatsApp group felt connected, and they benefited from the WhatsApp's discussions. As such, it was concluded that on the whole, the experimental group's participants had a positive effect of WhatsApp in improving essay writing performance.

c) WhatsApp discussion

One could argue that the students' discussions in the WhatsApp mirrored the connectivism methods of learning. The students became active learners who made efforts to work as a team to that they can later use in their essays. It allowed them to link wide-ranging concepts and offer detailed information to reinforce their main ideas. This was demonstrated in their post-test. They instinctively altered their approach to suit the process of content construction through lively exchange of views, sharing of ideas, and they became more aware of turn-taking. Consequently, it substantiated the argument that despite the significant benefits, WhatsApp requires minimal technical assistance from the students and teachers. In addition, their ability to share authentic sources through links and express their opinions in a spontaneous manner are some of the evidence that progress had occurred.
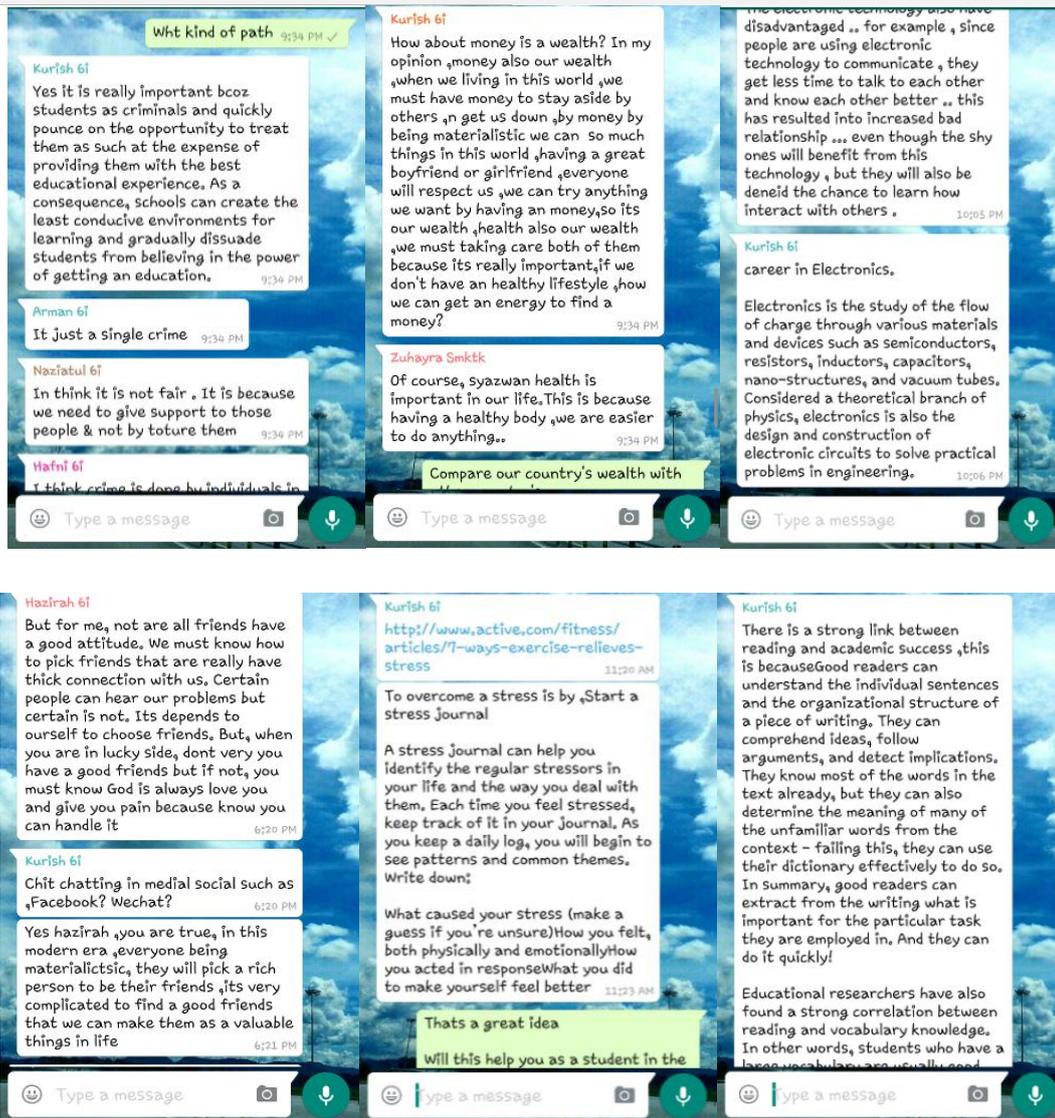
Figure 1: Samples of the students' WhatsApp screenshots

With reference to Figure 1, the screenshots illustrate that due to their online discussions in WhatsApp, improvements can be seen in their content, particularly in terms of their formation of ideas. Notably, despite the treatment coming to an end, the students remained in the WhatsApp to continue to use it as a discussion platform. This suggests that the students find online interactions on WhatsApp appealing for educational purposes. Hence, the continuous usage of WhatsApp for academic learning can provide the necessary framework that students need to increase their writing content. It should be noted that the students' expertise and familiarity with the functions of their mobile devices had expedited their learning process. Given the fact that these can be conducted using mobile devices, it allows for increased flexibility in terms of time and space, it grants personalisation and the continuation of learning beyond formal classroom hours. Flexibility and personalisation are appealing to students especially when it concerns educational matters. Below is another data collected after the intervention in WhatsApp group.

Introduction sample (S1) in the pre-test:

Topic: Women make better leaders than men. Do you agree? Discuss.

> **'***Nowadays, numerous women have been a leader in many places than men. Many question mark exist, why women be a better leaders? They are many reasons that women make a better leaders than man. Generally, women have a many good critirea to make a better leaders than men.* **'**

Introduction sample (S1) in the post-test:

Topic: There is a strong link between reading and academic success. Discuss. You should write at least 350 words.

> *'Academic success is crucial in a student's life. As human beings, it is normal to dream of being a success not only to yourself but also to your parents. It is a dream of mine to be able to gain success and due to this, I strongly believe that academic success have a significant effect with reading. A student's ultimate goal in life is to achieve academic success and hence reading does have a strong link with the whole phenomenon thus in this essay I will discuss on 3 main points which are in terms of education, reading for pleasure and future prospects.'*

In the above samples of introductions written by S1 the introduction produced was more in-depth and displayed a clearer elaboration of the main ideas in the full-length essay. This was gained through considerable practice in the intervention for 8 weeks including pre and post-test at the end of the treatment. Hence, making this result an evidence that WhatsApp is an effective tool in helping students improve their language writing performance.

S1 improved in the thesis statement which helped them in elaborating the main ideas and having a purpose in their essay. This was lacking in the pre-test for all students. The thesis statement was fully developed, well explained and supported by in-depth examples. The number of cohesive devices in the essays were significantly increased which subsequently increase the students' overall scores.

The students were not able to have a proper thesis statement as well as not having any ideas for supporting details. The students lacked the use of cohesive devices in the pre-test, and this is proven that they were not able to perform well at first. The intervention of WhatsApp helped the students to have a better flow in writing and making their essays easier to understand. A few examples of cohesive devices used by S1 are *First and foremost, Moreover, Thus, Secondly, Due to the fact that, Furthermore, Last but not least, This is true because and Hence.*

S1 managed to develop a widespread vocabulary and was able to display them with confidence. As stated in the assessment guide *'very appropriate and varied vocabulary'* merits a higher band score. All of the students were able to produce varied vocabulary in the post-test compared to the pre-test and some of the examples are *crucial, modernization, future prospects, phenomenon, materialistic, luxurious, ultimate, harsh, instill and individualistic.*

The most significant improvement in the students' ability to perform in writing would be their style in supporting ideas. The students were able to give more concrete examples in order to support their main ideas.Another evidence shows that by using WhatsApp, the students were able to write better, making WhatsApp as an effective tool in essay writing. WhatsApp as an alternative tool also helped students to write well-planned introductions, able to write an in-depth elaboration of arguments and organize their essays well, proving that WhatsApp is an effective tool in to improve essay writing performance. Another sample from the post-test can be seen below.

Sample of paragraph from the post-test by S1:

> *'First and foremost, it is true as the saying goes "Money can't buy happiness." Happiness is more than just being wealthy and being materialistic. People are becoming more materialistic and individualistic making the world harsh and ruined. It is our responsibility as the new generation to instill love and kindness in order to spread positivity into every living creatures on Earth. As the great Mahatma Gandhi once said, it is health that is real wealth and not pieces of gold and silver.'*

The sample writing by S1 indicated that as S1 was able to relate ideas from the topic to everyday life situations. S1 managed to add in a quote that relates to the topic at hand. The paragraph was elegantly concluded with a quote. S1was able to improve her essay writing performance after the 8 weeks intervention of using WhatsApp.

8. Implications and Conclusion

Writing skills require the students to draw on many skills that are combined; thus, the difficulties and fears students face are likely in the case of students with lower language proficiency. WhatsApp as a social group holds great potential as an alternative tool to help students improve not only in writing but also in learning the English Language. WhatsApp is a versatile platform for teaching speaking and even reading or even other subjects taught at schools. The contribution of M-learning in the educational world should be fully utilized by teachers to engage in collaborative learning. Students will be able to not only develop communication skills but also exchange ideas and gain other benefits from their interactions in WhatsApp.

WhatsApp acts as a tool for improving students' English language writing. The students used mobile devices and a variety of other devices resulting in the new transmission of general information through the use of mobile technology. Mobile learning has been introduced in the educational technology and gaining significant interest from educators (Prensky, 2001). This study on WhatsApp is a part of a new generation of distance learning, focusing on the use of mobile devices. Mobile learning as a learning technology that uses a variety of learning approaches and methods across multiple contexts and social interactions operating on personal electronic devices.

WhatsApp provides students with the opportunity to learn anywhere and at any time. The findings prove that WhatsApp to be suitable for situated, authentic, and personalized mobile learning. The use of WhatsApp in learning is widely utilized in this study to enhance group interactions through discussions in the WhatsApp group and to share knowledge among students in synchronous or asynchronous mobile communication modes. Hence, it helps to improve the students' ability in English language writing. University students are very active on social media, and these mediums are a source of attraction to increase students' motivation and to retain their attention.

WhatsApp is a social networking tool for education and learning, including language learning. Facebook, for instance, is a medium well explored by researchers, and student-friendly, student-centered, and student-controlled as it invites the students to learn. WhatsApp platform that integrated the elements of socialization and can be an excellent platform for learning if positively exploited in this study. The new technology in education will improve students' classroom engagement, increase their academic achievement, and enriches writing. WhatsApp, as social networking in teaching writing, is still new to the formal education system. Nevertheless, past researchers claimed that it improves the students' skills with the assistance of information and technology. It is undeniable that students learned more effectively being part of a social network as it encourages feedback, critical analysis, and articulation of opinions by offering collaborative learning and student-centered learning environment.

The Covid-19 pandemic changes the teaching environment under normal conditions allowing teaching activities to move from offline to online, from teaching face to face to online and from student's learning from classroom to autonomous learning where students can take control of their learning by learning independently. The use of WhatsApp will help generate excitement and enthusiasm towards learning, mainly when it caters to difficult learning situations in writing lessons with the lower proficiency students. WhatsApp has a valuable opportunity and excellent potential to be used for educational purposes for researchers to gain insights and explore the teaching of other language skills especially during the new normal of education.

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