Exploring the Impacts of Peer Interaction in ESL University Students' Argumentative Writing Activities via WhatsApp

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ABSTRACT

This study explores whether peer interaction in WhatsApp discussion affect participants' writing achievement. The initial phase of this study is to improve the participants' ability to share ideas and discussions on the eight argumentative topics in the WhatsApp group through peer interaction. Eight undergraduate students from University Sains Malaysia were chosen purposely based on their low proficiency in MUET results of Band 2. In this qualitative study, twenty open-ended interview questions were added to understand the participants' views and experiences on peer interaction in WhatsApp. The open-ended interview questions were validated by three language experts from three local universities in Malaysia. The participants' writing scores were also recorded to measure their writing essays that the participants sent every week for eight weeks after three days of peer interaction in WhatsApp. The study showed significant improvement that the participants' perceived a strong peer interaction in their discussion via WhatsApp. The participants were able to interact with their peers and used the ideas shared in supporting their arguments in the essay writing. Relatedly, these promising improvements in the students' participation and the findings found that the participants' peer interaction had created a positive community environment and increased their writing achievement.

Keywords: Peer Interaction, Mobile learning, Writing, WhatsApp, University Students.

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INTRODUCTION

Research has long proven that English students urgently need help in higher education settings to improve their academic writing skills and excel in their career goals (Ankeny, 2019). Writing skills are an important aspect of academic performance, but to Malaysian students, it has always been a problematic area (Haron H. & NH Rahmat, 2020). This, in return, causes it to become a widely discussed topic for second language researchers (Mohammad et al., 2018). Writing can be improved by encouragement and building up confidence in the language (Ahmed et al., 2013) as studies on ESL writing also look at factors that influence writing skills in promoting their interest, motivation and pleasure in writing (Graham & Perin, 2007). The modern understanding of writing differs from the past as teachers have tried to integrate technology into the curriculum in practical ways, as cell phones have become standard in classrooms (Bensalem, 2018). For this purpose, due to their accessibility and power to connect students past the classroom walls, mobile messaging applications have attracted attention as a tool to facilitate academic teaching. The range includes electronic tools such as email (Mpungose, 2020) from the application on mobile phones to tablets, and WhatsApp and Telegram (Hamad, 2017) for mobile learning. Social media applications such as Instagram (Akhiar et al., 2017) and Facebook (Adi Kasuma, 2017), are also used in English language teaching. In addition, recent researchers (Andujar, 2016; Avci & Adiguzel, 2017; Dehghan et al., 2018; Thabit & Ahmed, 2019; & Mpungose, 2020) have facilitated language learning by employing several applications and discovered that the use of WhatsApp can potentially increase learning as it helps students have a positive attitude and active involvement in their studies (Andujar & Hussein, 2019).

The incorporation of technology in writing allows students to engage in a supportive environment as it fosters interaction between students and teachers (Siragusa et al., 2007). The findings from these studies showed that the involvement of a suitable platform, the competency of teachers, and the support of peers aid in the interests of learning English (Wilhelm & Pei, 2008), and they recommended for further research to be conducted in meeting the students' challenges in academic writing. Writing is challenging, not only for low proficiency but also sometimes for advanced students. Nevertheless, it is a required skill to learn as it will improve the students' skill in expressing thoughts and ideas. Hence, the following research questions are observed:

- 1. What are the impacts of peer interaction via WhatsApp on students' argumentative writing achievement?
- 2. How does peer interaction on WhatsApp support the students' argumentative writing achievement?

LITERATURE REVIEW

RELATED STUDIES ON MOBILE LEARNING AND PEER INTERACTION

According to Ozdamli and Cavus (2011), mobile learning can be defined as a model of learning that allows learners to acquire learning resources from any source and at any time by utilising the Internet or mobile technologies. Peeters (2018) examined peer communication and interaction in an out-of-class setting, using Facebook to interact with EFL language learners from Belgium. The study demonstrated how learners' online engagement reflects the way they organised their learning

in a Web 2.0 context and, consequently, how they interact effectively with one another via Facebook while engaging in language learning activities. To investigate the role of peers in a second language or L2 development, Akbari et al. (2016) found that promoting and prompting peer interaction through social media platforms such as wikis and social networking sites in foreign language learning classrooms has gained increasing attention over the years.

Peer interaction, on the other hand, has long been an integral part of language education, both in foreign and second language learning practices (Greenhow & Askari, 2017). As a result, language learning should not be conducted in isolation but within appropriate, sustainable environments where learners can share materials, resources, and personal interpretations (Akbari et al., 2016; Duff & Talmy, 2011; Ma, 2017; Peeters, 2018). Perhaps the most prevalent interaction in a classroom setting is peer interaction. Although peer interactions can accelerate students' second language (L2) development in order to meet learning needs, various constraints such as class size, time, and environment frequently limit such opportunities (Philp, Walter & Basturkmen, 2010). As a result, peers may serve as the primary source of L2 interaction in settings where opportunities to interact with the language are limited outside of the classroom. As a result, peer interaction is incorporated into L2 classrooms to supplement student interaction by providing a context for practice and meaningful use of the target language, as well as increased opportunities for individual production (Philp, Walter & Basturkmen, 2010, p.261). It's remarkable how peer interaction has become an increasingly integral part of language learning activities that provide learners with a context for experimenting with a foreign language and observing the language in use (Philp, Adams, & Iwashita, 2014). Due to time constraints and space availability in the classroom to introduce learners to peer interaction, tutors and educators are more receptive to solutions outside the classroom walls (Lamy & Zourou, 2013; Yang, 2016).

However, the way the learners perceive peer interaction from their classmates has been underinvestigated. One of the few studies investigating peer interaction is done by Okyar & Ekşi (2019) involving university-level EFL learners in Turkey, which found that the learners were more motivated during peer interaction activities than during teacher-fronted lessons. The learners felt that they benefited from practising with their peers and were not afraid of making mistakes. Further work on peer interaction within the specific context of the foreign language classroom is necessary to have any real idea of the usefulness of peer interaction in these contexts (Okyar & Eksi, 2019). Specifically due to this, this study therefore investigates the interaction that might promote language development as the normal classroom is in the WhatsApp. The students will interact by answering and discussing on the topics selected by the teacher. They can use all the functions in WhatsApp to share their ideas on the topics during the discussion. The teacher will prompt questions and the students will answer accordingly with the help from their peers. Since the selected students were of low proficiency, the goal is to look at how peer interaction would impact the students' argumentative writing achievement without putting too much pressure on the students. At the end of each week, students will write their essay in Microsoft Word and later send them in the WhatsApp group in PDF format with hopes they will improve in their writing skills.

This research is classroom-based research as it has the potential to bring to light the relations between those multiple factors that impinge upon or promote the potential of interaction for learning (Mackey & Gass, 2005, p. 219). The findings would provide educators with the input of online peer interaction that would be accessible to the students as they can observe the conversations and be responsible for guiding their friends who need it via WhatsApp and aid low proficiency students in learning writing without the added pressure.

LANGUAGE LEARNING VIA MOBILE TECHNOLOGY

Without teachers who are knowledgeable in both technology and educational objectives, technology in the classroom would be ineffective (Aicha, 2014). The ultimate goal should remain to improve learning through mobile technology applications. Teachers' attitudes toward mobile learning were generally negative in Korea (Baek et al., 2017). Female teachers were more optimistic than male teachers. While some concerns about integrating technology into the classroom such as classroom management issues and lack of skills, prevented students from using mobile technology in the classroom, teachers should always be adept at resolving the issues and incorporating technology into teaching (Baek et al., 2017).

Globally, the greater use of wireless technologies in the classroom has implications on schools by transforming traditional classroom-based learning and teaching into a more flexible model of education. It helps students to become more autonomous and aids the teachers in changing the delivery of teaching and learning in higher education. Students will be able to extend their classroom activities to homework and, in the end, change the way they learn (Liak, 2011). One could argue that mobile learning has started a different learning environment by promoting a greater degree of mobility through the use of mobile gadgets and wireless connectivity (Rodrigues, 2012).

Transformations in learning from using a personal computer to a laptop and currently from laptop to handheld devices such as tablets and mobile phones are driven by advancement in technology, which initiated learning through mobile platforms (Cook, 2014). Over the last couple of decades, mobile devices have also gradually been added to the educational setting (Chen et al., 2017). Countless students are now accustomed to using privately owned, smart handheld devices that are capable of wireless connectivity and are "always-on" (Selwyn & Bulfin, 2016). Not only does the term "mobility" refer to people, but also to social interactions. By facilitating constant communication using technology, it aids in the development of learning among youths (O'Malley et al., 2005).

Cheung (2014) and Santos et al. (2011) demonstrated that students who are more actively involved within their education are more likely to use their mobile phones to learn because they enable them to share ideas and thoughts and interact with other students. Mobile phone use is becoming more prevalent among ESL students, allowing them to obtain access to numerous information because data transmission is no longer an issue. In 2009, 90 percent of students aged 15 to 17 in Australia used mobile phones, which has been more than a decade ago. Since then, the significance of mobile learning has grown in students' lives (Justina, 2016). Meanwhile, English language learning has changed from traditional static presentations to authentic and creative activities. In a study by Khalitova and Gimaletdinova(2016), researchers found that Facebook is extensively used because it is student-centred, student-controlled and student-friendly because it encourages participants instead of instructing them, allowing them to give more attention to the learning process. This study revealed that mobile learning helps in improving learners' learning styles.

Sato (2016) reported in another related study, concentrating on higher education EFL learners in Japan that learners felt more at ease when interacting with peers than with native speakers, and that learners would have more time to construct sentences. According to Foley and Thompson (2003, p.58-61), what a child can accomplish today through collaboration will help the child survive tomorrow. Thus, regardless of the learning context, L2 learners may perceive peer interaction positively, but this claim is far from conclusive (Sato, 2016). A study focusing on the

acquisition of L2 vocabulary found similar evidence for peer interaction. In comparison to the study conducted, there was a high rate of lexical occurrence and resolution in individuals. The collaborative tasks, as well as the learners' vocabulary retention on the post-test and delayed post-test that followed the tasks, were poorly defined. Over the course of three weeks, thirty-two Korean as a second language (KSL) learners were evaluated on their vocabulary acquisition. They were assigned randomly to either a teamwork or a specific group to complete a task (Sato, 2013).

According to Peeters (2018), one of several methods that has gained attention over the years is the incorporation of social media, or Web 2.0 tools, into the curriculum (Greenhow & Askari, 2017; Manca & Ranieri, 2016; Toetenel, 2014). Peeters (2018) examined the peer interaction process in an out-of-class context, where peer interaction was conducted on Facebook by EFL language learners from Belgium. The research showed how learners' online engagement takes into account how they organise their learning in a Web 2.0 environment and, consequently, how they interact effectively with one another via Facebook while attempting to engage in language learning activities. To explore the effect of peers in second language or L2 development, Akbari et al. (2016) found that encouraging and urging peer interaction through social media platforms such as wikis and social networking sites in foreign language learning classrooms has gained increasing attention over the years. Peer interaction, on the other hand, has long been an integral part of language education, both in foreign and second language learning practises (Greenhow & Askari, 2017). As a result, language learning should not be conducted in isolation but rather within appropriate, sustainable environments in which learners can share materials, resources, and personal interpretations (Akbari et al., 2016; Peeters, 2015).

The wide use of the Internet has exposed students to various communication tools, such as smartphone applications and social network sites (Fogg, 2010). In other words, knowledge can be anytime and anywhere in various formats, easily shared within communities, and there is the possibility of having to create a learning environment in any place. Therefore, using WhatsApp as a method to enhance their ability to write essays encourages peer collaboration. The fact that WhatsApp has many advantages for students makes it possible to improve student learning output by encouraging active participation in WhatsApp discussions (Mistar & Embi, 2016). The use of WhatsApp positively helps students develop their thinking skills, allows students to exchange and explain academic knowledge on the platform by communicating and exchanging ideas. The effects of WhatsApp are recorded to generate a very significant level of satisfaction among students as they initiate students' willingness to learn. This has a positive impact on students' interest in learning (Mar et al., 2013).

The introduction of WhatsApp can increase the quality of education as well as the development of communication and information (Hartoyo, 2009). WhatsApp has a growing recognition as a possible tool for collaborative language learning, but there was limited proof to improve students' writing skills (Salem, 2013). A study done on primary school pupils by Suhaimi (2018) suggests that the findings could fill in the literature gap on pedagogical aspects of implementing WhatsApp to improve writing teaching strategies. To this effect, Khan (2016) remarked that technology, especially online platforms, has created an exciting platform for aiding writing skills as it is considered as the most productive skill. The learners need to explore the learning needs of writing skills with the help of technology integration. 91 English language learners from Jeddah College participated in the research, and 98 percent used WhatsApp, 89 percent of the learners joined a WhatsApp group to learn English, 89 percent confirmed that some teachers created WhatsApp group for learning English and 95 percent of the learners used WhatsApp to communicate. The study also revealed that the use of technology such as mobiles, Facebook and WhatsApp are

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beneficial for English learning as it helps the students to collaborate their ideas and motivate selfconfidence in language learning. Chatting via WhatsApp enhances the students' typing skills and self-confidence (Hashemifardnia, Namaziandost & Esfahani, 2018). Since the learners initially faced many problems while trying to learn English as a second language, the tremendous growth in technology helps to provide space and location in language learning (Lee et al., 2017). In line with the above studies and findings, the study conducted by Allagui (2015) found that WhatsApp increases the students' motivation to write. A group of 50 students were given a written assignment and were required to text one another. It was reported that the study was not conclusive as more samples are needed. However, the students were better at using appropriate vocabulary. Likewise, another study by Justina (2016) also confirmed that WhatsApp could increase writing and reading skills among undergraduate college students. Based on the results, it was discovered that WhatsApp helps the students enjoy learning writing. WhatsApp is able to motivate the students and further improve the students' attitude towards learning.

In addition, another research by Cetinkaya (2017) found that students who utilised the WhatsApp group as a support mechanism to the traditional environment to improve their English vocabulary learning. Similarly, a related study done by Bataineh, Al-Hamad, & Al-Jamal (2018) revealed that there was a difference in the participants' paraphrasing and summarising skills of 45 Jordanian EFL tenth-grade students. According to Suhaimi (2018), primary school students in Malaysia discovered that using WhatsApp in narrative writing increases their confidence to communicate and write in English. Fifty percent of the participants were able to score one to two marks higher content-wise. All of the studies mentioned above strongly favoured the usage of WhatsApp in facilitating ESL instructing and acquiring English writing skills. Another study concerning the Malaysian context was conducted by Zarina, Zakaria, & Abdullah (2018). They favoured the use of WhatsApp as it is helpful to the learners to improve their acquisition of the language and enhance their skill in using the English language. The research also confirmed that WhatsApp is a valuable means of learning a language and beneficial to be implemented at the university level and adapted in this research.

METHODOLOGY

This section describes the instrument of data collection and data procedure, participants and data analysis.

MATERIALS AND METHODS

A case study paradigm was used in this qualitative research. The data were collected through semistructured interviews and WhatsApp discussions. The WhatsApp discussion was based on topics related to the students' argumentative writing activity which were on smoking, mobile phones, English language learning in university, fast food, sports, living in cities vs. villages, online writing and hobby. The students discussed on the topic for three days and submitted an argumentative essay to the WhatsApp group on Day 4 after the discussion. After the 8th week, the students and teachers were interviewed by the researcher. The interview questions were validated by three experts in the language field. The interview questions were asked to the students in relation to the research questions. The student's argumentative writing achievement is based on their writing activity scores for 8 weeks and the teachers' interview. The argumentative essays were marked by an experience examiner using the writing band scale from the school. As suggested by Creswell and Poth (2018), data were collected until saturation point, or data redundancy was achieved. Transcriptions of the interview and WhatsApp discussions were examined several times to capture the themes and further analysed through coding and categorising of themes using QDA Miner software. Trustworthiness is the premise used to determine the validity and reliability of a study, as well as whether the study accomplished what it set out to do. As Merriam and Tisdell (2016) suggested, validity can be established by comparing the descriptions and explanations. As a result, it is fundamental to examine if these explanations perfectly fit the descriptions. Validity is the defining feature of qualitative research, ensuring that the data are reliable from the researcher's, participants, or reader's perspectives (Creswell & Poth, 2018).

PARTICIPANTS

The participants of this study were undergraduate students at a public university in Malaysia, who are enrolled in various levels of English proficiency classes. The participants were selected conveniently via their class teachers and consented to taking part in the study. Eight low proficiency students were gathered for eight weeks of WhatsApp discussion. They were six females and two males, within the age range of 21-22, in Year 1, six Malay descent and two Indians, from the Science programme, and low English users (Band 2 in MUET). Two teachers were in the WhatsApp group to monitor and prompt questions for four weeks each.

FINDINGS AND DISCUSSIONS

Research question 1: What are the impacts of peer interaction via WhatsApp on students' argumentative writing achievement?

Peer interaction among students seemed to have an impact on the WhatsApp discussion, particularly in the aspects of knowledge sharing, communication and interaction, as well as learning satisfaction specifically in their motivation by strong number of cases and counts for all of the students. These findings are supported by the students in terms of convenience, mobility, content, sharing platform, paperless, conduciveness, accessibility, familiarity in technology and interactivity. The most notable aspect of peer interaction in the writing was related to peers giving of ideas and opinions about particular topics. Peer interaction was also found to be useful in enhancing the students' writing motivation through the use of verbal supports and sharing of work and resources.

In terms of mobile technology, peer interaction impacted the argumentative writing through WhatsApp on the students' discussion. WhatsApp has a potential role to assist the delivery of English language education. Students seemed to have positive attitudes towards WhatsApp discussion and the writing activity which was exemplified by the themes and the frequency of codes. In support to this, students expressed their views in the WhatsApp discussion based on language teaching in learning. However, peer interaction could also lead to negative impacts to the students' ESL writing activities due to individual's negative feeling such as stress and demotivation due to the students' social attitude such as their lack of learning ethics and relevant points of discussion. However, students did express that WhatsApp is sufficient in writing as it

enables them to focus and sharpens their communication skills. Hence, the peer interaction in the WhatsApp group will also help to increase their other skills besides writing which is a bonus point.

S1: I believe that WhatsApp can be used as a platform itself to help people to actually sharpen their communication skills. So, there is no need for Google Classroom or Zoom, actually. WhatsApp should be sufficient enough for people like us to learn.

S2: I came to agree that it is a good platform – in teaching writing especially.

S4: Yes, I think, it's a very good platform because when you are focusing more on writing, then it's good because you can see how they write. Um, when you use something like Google Meet, I think it's not like really... um, good... as good as... um... WhatsApp because Google Meet it's more on you seeing on other people's face. It's not on writing. I think it's a very good platform.

These findings resonate that many students agreed that WhatsApp aided their discussion by having peer interaction in the discussions. It also is a platform to interact with peers in language teaching and learning. Therefore, peer interaction could also play a key role in impacting the argumentative writing activity for low-proficiency students.

Table 1 illustrates the six major themes generated from the interview questions regarding the students' argumentative writing achievement

Research question 2: How does peer interaction on WhatsApp support the students' argumentative writing achievement?

Six major themes are generated from the interview questions regarding the students' performance in their argumentative writing activity. The theme English skills in terms of writing recorded the highest count which was at 22 counts. The students were able to interact and share knowledge which recorded 11 counts. Hence, peer interaction did give an impact on the students' argumentative writing after they discussed on the topic they had to write on.

WhatsApp was mostly commented as having an impact on students' argumentative writing. Another frequently mentioned theme about WhatsApp was the interaction aspect, specifically related to idea and knowledge sharing. WhatsApp was also identified as a tool that aided the students in their learning, learning satisfaction, study skills, and teaching and learning. Knowledge sharing appears to be the most highlighted in student's peer interaction, followed by learning satisfaction, motivation, as well as knowledge creation or enhancement of understanding. Students were able to share ideas by giving examples and relate to the topic. They were also able to interact with other students in the group by agreeing or disagreeing with confidence. Other impacts of peer interaction include the interaction in terms of enhancing the students' support in their study, improving their argumentative writing and being able to have an increase in time management skills. Hence, the ability to enhance their study skills as an overall. Table 1 illustrates the students' comments in WhatsApp on the impact of peer interaction that supports argumentative writing.

Table 1

The relationship of WhatsApp in the students' argumentative writing

	Themes	Categories	Count	Number of cases
1	English skills	Speaking	7	3

		Writing	22	8	
2	Interaction	Communication	6	5	
		Idea/ Knowledge Sharing	11	5	
3	Learning	English Language	2	2	
		New Knowledge	5	3	
4	Learning satisfaction	Motivation	4	2	
5	Study skills	Referencing	4	4	
6	Teaching and Learning	Flexibility	1	1	
		Online Benefits	2	2	
		Pedagogy/ Teachers' Skills	5	2	

The students also strongly agreed that their learning satisfaction improves their motivation. In fact, they were able to enhance their understanding in the specific task after having the peer interaction session in the WhatsApp group. However, the students did have learning issues such as feeling negative although the number of cases were only two. This, therefore grounds the importance of social learning in peer interaction (Wu & Nian, 2021) to enhance learning experience. The qualitative data that substantiated these arguments are as following:

Themes	Count	Number of cases	Categories	Interview answers
Interaction	7	4	Enhance relationship	<i>S1</i> : I got many benefits from the discussion just because through the four weeks discussion, I got many knowledge, friends.
				S3 : The second discussion I feel like um, I'm comfortable with you know being there, part of the students, I'm no longer like shy to throw my ideas whenever you asked me to. And, I feel that, um, yeah. I think that you know, you don't see them like in person.
	6	4	Study support	 S4: So, overall, everyone was open-minded, everyone was friendly, everyone was open to suggestions and information as well. So, I feel that the WhatsApp group was very, un, interesting. S3: They saythe thing that I'm most touched was whenif I speak broken English they will still support me.
Learning satisfaction	10	5	Motivation	 S5: Mmm. They're like a life saver no um, you know like I said before, I have something on my mind but it's all in Malay. So, hmm sometimes whatever I wanted to share and they share it first, you know yeah, so we're like thinksame. S1: Basically theythey motivate me by making me moreinterested to read more.
				S6 : So after week 2, I was like "Okay, I shouldum. err really improve my writing and elaborate more because I saw everyone like Syakirah and everyone start to like elaborate more on their opinion, on what they read. So, I feel that it's I feel it's as a challenge for me to like improve to really go to internet, articles and really um, see how they write and elaborate.

Knowledge	19	9	Sharing	<i>S4</i> : Then when we talk about some topic, we can share. Okay 'what is the advantage', 'what is the disadvantage'.
				S7 : Yeah, not just that but other stuff as well that they share and I was like, 'Oh this is something very new!' because they were from a science background. And English is more towards humanities background so two different things.
	8	4	New/enhance understanding	 S3: It helped throughout their discussion because they can share their ideas. S8: Yeah absolutely. I feel the discussion through WhatsApp, I feel that my knowledge more increase because I can show my weakness through the discussion.
				S3 : Someone actually brought up the question where, 'Why the Japan and France actually not wanting to in cultivate the English culture?' That's That's actually um, intrigued me, and wanted me to read more about the history English, which then brought us to our knowledge.
Study skills	1	1	Time management	<i>S8:</i> and <i>I</i> also know how to manage my time. Because you give homework to me and <i>I</i> just want to <i>I</i> just want to done my homework.
English skills	3	3	writing	S4 : So, as the discussion keep on going on, you can actually see that they have somehow um, gained their confidence in which they started to actually um, write more in English.
Learning issues	4	2	Feeling negative	 S3: From that, their sentences actually help me to add my points as well. S6: Mmm, like I said, I was pretty much intimidated because there were friends as well as teachers in the group for me to write the essay, so I felt that as if that I had a certain benchmark that I had to go by for my essay.
				S2 : SY: Week 1 I feelI not very confident, until week 2 I very struggle. For example, my friends canwhy can't I? For example when teacher gave us homework

Relatedly, the students were able to have positive outcome from the discussion with their peers in the WhatsApp group. The students agreed that WhatsApp is an effective platform to increase their English language ability, especially having improved their argumentative writing. Most of them also expressed their satisfaction, particularly in terms of how the discussion contributed to boost their self-confidence in learning the language. The students also felt satisfied because the peer interaction in the WhatsApp discussion helped them to feel motivated in English language learning. Table 2 below shows the students' achievement in their argumentative writing activity from Week 1 to Week 8.

Table 2

Argumentative Writing Activity scores from Week 1 to Week 8

Students	Week1	Week2	Week3	Week4	Week5	Week6	Week7	Week8
S1	10	15	17	18	23	24	24	25
S2	10	21	22	23	23	23	23	26
S3	10	11	13	14	16	17	17	22
S4	12	12	13	14	16	15	17	23
S5	9	9	17	18	17	19	23	23
S6	10	10	12	13	15	17	17	24
S7	20	20	20	18	16	23	24	24
S8	22	22	23	23	24	23	24	24

From the students' argumentative writing activity, it can be concluded that peer interaction and the WhatsApp discussion aided their writing achievement as there was a vast difference in their scores from Week 1 and Week 8. In order to make comparison on the achievement in Week 1 and Week 8, below is an example of an introduction made by S2.

Week 1 Smoking is no stranger to the present era. It can be said that many people in all walks of life have started smoking. The cause of the health problems that many people face now is one of them due to smoking. In my opinion, smoking will have a negative impact on people.

Week 8 Hobby is usually defined as any enjoyable and relax activity that we engage in when we are free from works. Everyone have their hobby and rarely people do not have hobby because hobby is something we love to do. Thus, hobby is important for everyone and I believe that hobby can be transformed into career. It is because hobby can reduce stress, improve our creativity skills and help us to socialize with others.

In Week 1, S2 was not able to define and construct thesis statement and topic sentence but in Week 8, S2 was able to have a concise introduction that made this students scored an overall of 26 marks in this argumentative essay. Although students showed improvement in their argumentative writing, there were several issues and challenges identified from the students' interviews. This includes the issues of internet connection and conflicts due to personal commitment it did not hamper the students' ability to improve in their writing. Nevertheless, from the teachers interview, three themes were analyse which were improved performance, enhanced writing skills and increased understanding. In the interview, Teacher 1 mentioned;

Teacher 1: "mean, to say that, they're Band 2 and their essays with me, it changes a lot, yeah. With the essays that I gave them in the classroom. I can see improvement, a lot of improvement."

Teacher 1: "Even at first, it is a little bit a struggle with the students, but towards the end, they understand how and what we really want them to do."

The students were able to increase their understanding and improved in their argumentative writing and this is supported by Teacher 2.

Teacher 2: "And they know, when we ask in the discussion, they know how to come up with proper thesis statement and topic sentences."

There were also issues in using WhatsApp as a platform in terms of originality

Teacher 1: "They read over there, sometimes, they copy paste, sometimes, they changed their own words, but then, at least, whatever that they do, even at first, we found out that some of them plagiarized, but at least, they learn new words."

Peer interaction has led to various aspects of students' knowledge creation and enhancement, particularly in terms of understanding thesis statements and topic sentences, and constructing sentences. Furthermore, the distribution of the number of counts suggested that there was an increase from Week 1 to Week 8 in students' knowledge creation and enhancement resulting from peer interaction through the Whatsapp discussion. New understanding of information was mostly highlighted by students and teachers when describing the impact of peer interaction through WhatsApp on students' argumentative writing. This is followed by increased understanding and improved argumentative writing skills. In increased understanding that reflects in positive experience, a student mentioned,

LHW: "Yes especially after I joined this group, I learned many knowledge about arguments writing"

Meanwhile in improved argumentative writing skills, students were able to explain and elaborate answers, provide definition, provide facts and points, summarises and interpret, restate main points in each WhatsApp discussion, write thesis statement and topic sentence, construct sentences, and share their work as stated below.

Explain & Elaborate answer	LHW: "I like this idea because we don't know what will happen for today and the next day. In case I have an emergency, my parents can take action quickly by looking at cctv. So, for me cctv gives me more safety."
Provide definition	FS: "Mobile technology is a form of technology that is mostly used in cellular communication and other related aspects."
Provide facts & points	<i>TSY: "Yes. Some people even open more than 1 account. It called as "spam account" which they use to share more picture there."</i>
Summary/ interpretation	NI: "from the article, says that young people need a balance between education and sports. sports are able to help a person to persevere and practice to not easy in give up"
Restate main points	<i>IH: "Points discussed today 1.can lead to death 2.waste money 3.have a positive side in smoke 4.social smokers 5.dangerous for the surrounding community 6. Fertility problems"</i>
Make thesis statement & topic sentence	NI: "*Thesis statement:* It is important for everyone to have a hobby, this is because hobbies can provide various advantages in our lives such as helping us in improving our memory, prevent is from wasting time and creating bad habits, and being able to reduce our stress."

Construct sentences	<i>KR</i> : "Even if cell phone use could be limited in a school, say during lunch and study hall time, there is still an environment of expectation that someone will call or text. Students are focusing on their phones and messages during times when prior to cell phones, students would talk about their lessons or homework for the day."
Share work	IH: "https://drive.google.com/drive/folders/1- nsMQVRLrk9WHDxmMthgUPsz9TvhDB0U I put my video in this link"

The WhatsApp discussion data have shown that the students were able to support each other in their argumentative writing. The students increasingly shared with others about their views based on the topics discussed each week. From week to week, the students managed to share with others citation of resources related to the discussion topics. In addition, peer interaction contributed to the students' improvement of their argumentative writing. As agreed by one student during the interview,

RN: "For example, when we talked about the topics related to sports and others, they will send articles and so on. Therefore, I feel like I get ideas from the sources that they shared"

It was undeniable that these students were able to improve and learn. The teachers also agreed that there were a lot of improvement among most students, particularly in terms of their ability in constructing essays and active participation in discussing the writing tasks. Therefore, peer interaction in WhatsApp aided students as shown in Table 2.

IMPLICATIONS AND CONCLUSION

The findings from this study suggested that WhatsApp can be used in peer interaction and proven to be suitable for situated, authentic, and personalised mobile learning. The use of WhatsApp in learning is utilised in this study to enhance peer interaction through discussions in the WhatsApp group and to share knowledge among students. This, in the end, 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.

Peer interaction was identified from the group as an indicator of students' motivation and enthusiasm to participate in mobile online discussions. The collaborative efforts to achieve shared educational goals will in the long term encourage and promote independent, life-long learning. This was shown with the students' ability to increase in their writing achievement. Without discriminating, peer interaction in WhatsApp eased the process to share and explore unlimited authentic materials, and enhanced spontaneous interactions in the target language, i.e. the two fundamentals of constructivism. Thus, besides playing the function as a platform for social interaction, peer interaction in WhatsApp is effective as an English writing tool for content development, when it complements face-to-face classroom learning (Tavares, 2016). This supports the paradigm shifts towards quality education and relates to the new normal of education where students will in hopes be able to blend in and flourish with the help of WhatsApp as a tool in improving their argumentative writing.

Peer interaction creates positive impacts on the students' writing performance as the use of this technological application holds a great potential as an alternative tool to help students improve not

only in their writing but the competency and mastery in English language learning, in general. The success of improving students' writing calls for more mobile activities on popular applications to motivate and sustain learning interest. This is no easy feat for teachers who must think of strategies, design materials, explore new applications, implement activities, facilitate learning, motivate participation, and assess performance (Shih, 2011). Recent literature, however, has shown that students were dissatisfied with their teachers' poor digital understanding and online pedagogical capabilities, which hampered a seamless learning experience (Octaberlina & Muslimin, 2020; Vandeyar, 2020). Placing such demands on teachers without sufficient preparation may be a step back rather than a step forward (Kellerman, 2021) as careful selection of meaningful content, and well-structured tasks on social media will involve students in real collaboration and communication practice, hence valuable. Therefore, however burdensome, the nature of effective learning in the era of technology reliance is as such. Perhaps, teachers will have to collaborate in their efforts and resources too in realising these apps-based, mobile educational activities.

In conclusion, the combination of WhatsApp with peer interaction enables students to interact in this growing trend in education. The present study demonstrated a potential approach for creating online communities in learning. The result of this study indicated that learning could be enhanced using WhatsApp in engaging peer interaction in the students' argumentative writing achievement. To further test the findings of this study and to consolidate the improvements made, another phase of research should be developed to measure the students' role in the discussion, their learning style and participation quantitatively.

REFERENCES

- Adi Kasuma, S. A. (2017). Four Characteristics of Facebook Activities for English Language Learning: A Study of Malaysian University Students' Needs and Preferences. Advances in Language and Literary Studies, 8(3), 155. https://doi.org/10.7575/aiac.alls.v.8n.3p.155
- Aicha, A. B. (2014). The impact of WhatsApp mobile social learning on the achievement and attitudes of female students compared with face to face learning in the classroom. European Scientific Journal.
- Akhiar, A., Mydin, A. A., & Kasuma, S. A. A. (2017). Students' perceptions and attitudes towards the use of Instagram in English language writing. *Malaysian Journal of Learning and Instruction, Special issue*, 47–72. https://doi.org/10.32890/mjli.2017.7796
- Allagui, B. (2015). Writing through WhatsApp: an evaluation of students writing performance. International Journal of Mobile Learning and Organisation, 8(3/4). https://doi.org/10.1504/ijmlo.2014.067022
- Andujar, A. (2016). Benefits of mobile instant messaging to develop ESL writing. *System*, 62, 63–76. https://doi.org/10.1016/j.system.2016.07.004
- Akbari, E., Naderi, A., Simons, R.-J., & Pilot, A. (2016). Student engagement and foreign language learning through online social networks. *Asian-Pacific Journal of Second and Foreign Language Education*, 1(1), 1–22. https://doi.org/10.1186/s40862-016-0006-7
- Ankeny, R. (2019). Interweaving technology and language goals to promote academic vocabulary: The role of WhatsApp in an intensive English classroom. *TESOL Journal*, *10*(3), 8–10. https://doi.org/10.1002/tesj.457

- Andujar, A., & Hussein, S. A. (2019). Mobile-mediated communication and students' listening skills: A case study. *International Journal of Mobile Learning and Organisation*, 13(3), 309–332. https://doi.org/10.1504/IJMLO.2019.100432
- Avci, H., & Adiguzel, T. (2017). A case study on mobile-blended collaborative learning in English as a foreign language (EFL) context. *International Review of Research in Open and Distance Learning*, 18(7). https://doi.org/10.19173/irrodl.v18i7.3261
- Baek, Y., Zhang, H., & Yun, S. (2017). Teachers' attitudes toward mobile learning in Korea. *Turkish Online Journal of Educational Technology*, 16(1), 154–163.
- Bataineh, R. F., Al-Hamad, R. F., & Al-Jamal, D. A. (2018). Gender and EFL writing: Does WhatsApp make a difference?[1]. *Teaching English with Technology*, *18*(2), 21–33.
- Bensalem, E. (2018). The Impact of WhatsApp on EFL students' Vocabulary Learning. Arab World English Journal, 9(1), 23–38. https://doi.org/10.24093/awej/vol9no1.2
- Cetinkaya, L. (2017). The Impact of Whatsapp Use on Success in Education Process. *International Review of Research in Open and Distributed Learning*, 18(7), 1–8. https://doi.org/10.19173/irrodl.v18i7.3279
- Chen, Y., Carger, C. L., & Smith, T. J. (2017). Mobile-assisted narrative writing practice for young English language learners from a fund of knowledge approach. *Language Learning and Technology*, 21(1), 28–41.
- Cheung, M. W. L. (2014). Modelling dependent effect sizes with three-level meta-analyses: A structural equation modelling approach. *Psychological Methods*, *19*(2), 211–229. https://doi.org/10.1037/a0032968
- Cook, J. (2014). Mobile learning : structures, agency, practices Mobile Learning. January 2010.
- Creswell, J. W., & Poth, C. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th Ed.). Sage Publications.
- Dehghan, F., Rezvani, R., & Fazeli, S. A. (2018). Social networks and their effectiveness in learning foreign language vocabulary: A comparative study using WhatsApp. Computer Assisted Language Learning-Electronic Journal, 18(2), 1–13.
- Fogg, P. (2010). The 24-7 professor- what to do when home is just another word for the office. *Chronicle of Higher Education* 54(21), B12.
- Foley, J., & Thompson, L., (2003). *Language learning: A lifelong process* (pp. 58-61). New York: Oxford University. Press
- Graham, S., & Perin, D. (2007). Writing next-effective strategies to improve writing of adolescents in middle and high schools. *The Elementary School Journal*, 94(2), 169–181.
- Greenhow, C., & Askari, E. (2017). Learning and teaching with social network sites: A decade of research in K-12 related education. *Education and Information Technologies*, 22(2), 623–645. https://doi.org/10.1007/s10639-015-9446-9
- Hamad, M. M. (2017). Using WhatsApp to Enhance Students' Learning of English Language "Experience to Share." *Higher Education Studies*, 7(4), 74. https://doi.org/10.5539/hes.v7n4p74.
- Haron, H., & Rahmat, N. H. (2020). Exploring The Theory Of Activity In English Language Writing : The Case For Whatsapp. *International Journal of Asian Social Science Keywords*, 10(11),671–684. https://doi.org/10.18488/journal.1.2020.1011.671.684
- Hartoyo (2009). ICT in the learning of EFL. Retrieved on December 7, 2019, from https://hartoyo.wordpress.com/2009/07/07/ict-in-the-learning-of-efl/.

- Hashemifardnia, A., Namaziandost, E., & Esfahani, F. R. (2018). The Effect of Using WhatsApp on Iranian EFL Learners' Vocabulary Learning. *Journal of Applied Linguistics and Language Research*, 5(3), 256–267. https://doi.org/10.21462/jeltl.v3i3.151
- Khan, I. A. (2016). Utilization Of Different Technologies And Media In Learning Writing Skill In English : A Case Study. *European Journal of Education Studies*. 143–156.
- Kellerman, D. (2021, March 8). https://www.timeshighereducation.com/opinion/academics-arentcontent-creators-and-its-regressive-make-them-so
- Lamy, M. N. & Zourou, K. (2013). Social networking for language education. Croydon: Pal- grave Macmillan. https://doi.org/10.1057/9781137023384
- Lee, C., Yeung, A. S., & Ip, T. (2017). University English language learners' readiness to use computer technology for self-directed learning. System, 67, 99–110. https://doi.org/10.1016/j.system.2017.05.001
- Liak, A. J. (2011). *Exploring the affordances of the iPad in learning physics*. Redesigning Pedagogy Conference, 2011, Singapore. http://johnlittle.pbworks. com/f/SYM044 c.pdf
- Mackey, A., & Gass, S. M. (2005). Second language research: Methodology and design.Mahwah, NJ: Lawrence Erlbaum Associates.
- Manca, S., & Ranieri, M. (2016). Yes, for sharing, no for teaching! social media in academic practices. *The Internet and Higher Education*, 29, https://doi.org/10.1016/j.iheduc.2015.12.004
- Mar, A., & Christine. (2013). Improving Learners' Reading Skills Through Instant Short Messages: A Sample Study Using WhatsApp, *WorldCALL: Sustainability and computerassisted language learning*.
- Merriam, S. B., & Tisdell. (2016). *Qualitative research: A guide to design and implementation* (4th Ed.). Jossey-Bass.
- Mistar, I., & Embi, M. A. (2016). Students' Perception in on the Use of WhatsApp as a Tool Learning in an ESL Classroom. *Journal of Education and Sciences Social*, 4.
- Mpungose, C. B. (2020). Is Moodle or WhatsApp the preferred e-learning platform at a South African university? First-year students' experiences. *Education and Information Technologies*, 25(2), 927–941. https://doi.org/10.1007/s10639-019-10005-5
- Al Dafaei, I. M., Ismail, Z., Samsudin, M. A., & Shakir, F. J. (2013). The Mediating Effect Of Self-Efficacy Towards The Relationship Between Attitudes And Level Of Use Towards Instructional Computer Technology In Oman. In *International Journal of Asian Social Science*, 3(12).
- Octaberlina, L. R., & Muslimin, A. I. (2020). EFL students perspective towards online learning barriers and alternatives using moodle/google classroom during Covid-19 pandemic. *International Journal of Higher Education*, 9(6), 1–9. https://doi.org/10.5430/ijhe.v9n6p1
- O'Malley, C., Vavoula, G., Glew, J., Taylor, J., Sharples, M., Lefrere, P., Lonsdale, P., Naismith, L. and Waycott, J. (2005). *Guidelines for Learning/Teaching/Tutoring in a Mobile Environment*. Retrieved from https://hal.archives-ouvertes.fr/hal-00696244/document.
- Okyar, H., & Ekşi, G. (2019). Training students in peer interaction and peer feedback to develop competence in L2 forms. *PASAA: Journal of Language Teaching and Learning in Thailand*, 58, 62–94.
- Ozdamli, Fezile & Cavus, Nadire. (2011). Basic elements and characteristics of mobile learning. *Procedia - Social and Behavioral Sciences*. 28. 937-942. 10.1016/j.sbspro.2011.11.173.

- Peeters, W. (2018). Applying the networking power of Web 2.0 to the foreign language classroom: a taxonomy of the online peer interaction process. *Computer Assisted Language Learning*, 31(8), 905-931. https://doi.org/10.1080/09588221.2018.1465982
- Philp, J., Adams, R., & Iwashita, N. (2014). *Peer interaction and second language learning*. Routledge. https://doi.org/10.4324/9780203551349
- Philp, J., Walter, S., & Basturkmen, H. (2010). Peer interaction in the foreign language classroom: what factors foster a focus on form? *Language Awareness*, 19(4), 261–279. https://doi.org/10.1080/09658416.2010.516831
- Rodriguez, P., Nussbaum, M. & Dombrvskaia, L. (2012). ICT for Education: A Conceptual Framework for the Sustainable Adoption of Technology-Enhanced Learning Environments in Schools. *Technology, Pedagogy and Education* 21(3), 291 – 315. https://doi.org/10.1080/1475939X.2012.720415
- Salem, A. A. M. S. (2013). The impact of technology (BBM and WhatsApp applications) on English linguistics in Kuwait. *International Journal of Applied Linguistics and English Literature*, 2(4), 64–69. https://doi.org/10.7575/aiac.ijalel.v.2n.4p.64
- Santos, I. M., & Ali, N. (2011). The Uses of Mobile Phones to Support Curriculum Related Activities Outside the Classroom. In T. Bastiaens & M. Ebner (Eds.), *Proceedings of EdMedia: World Conference on Educational Media and Technology*, (pp. 850-859). Retrieved April 27, 2020, from https://www.learntechlib.org/p/37968.
- Sato, M., & Ballinger, S. (2016). Mayo, M. D. P. G., & Azkarai, A. (2016). 9. EFL task-based interaction: Does task modality impact on language-related episodes? *Peer interaction and second language learning: Pedagogical potential and research agenda*. Amsterdam: John Benjamins. https://doi.org/10.1075/lllt.45
- Selwyn, N., & Bulfin, S. (2016). Exploring school regulation of students' technology use rules that are made to be broken? *Educational Review*, 68(3), 274–290. https://doi.org/10.1080/00131911.2015.1090401
- Siragusa, L., Dixon, K. C., & Dixon, R. (2007). Designing quality e-learning environments in higher education. *Proceedings ascilite Singapore*, 923-935.
- Suhaimi, N. D. (2018). Writing the WhatsApp Way!. International Journal of Innovative Research and Creative Technology, 4(3), 51–56.
- Thabit, S., & Ahmed, S. (2019). *ELS Journal on Interdisciplinary Studies on Humanities*. 2(2), 148–156. https://doi.org/10.34050/els-jish.v2i2.6419
- Toetenel, L. (2014). Social networking: A collaborative open educational resource. *Computer Assisted Language Learning*, 27(2), 149–162. https://doi.org/10.1080/09588221.2013.818561
- Vandeyar, T. (2020). The academic turn: social media in higher education. *Education and Information Technologies*, 25(6), 5617–5635. https://doi.org/10.1007/s10639-020-10240-1
- WhatsApp Official Page (2020). https://www.whatsapp.com/. Accessed February 13, 2021.
- Yang, Y. (2016). Transforming and constructing academic knowledge through online peer feedback in summary writing. *Computer Assisted Language Learning*, 29(4), 683–702. https://doi.org/10.1080/09588221.2015.1016440
- Zarina, Zakaria, A., & Abdullah, N. (2018). Learners' Perceptions On The Use Of Whatsapp In Esl Classroom (Vol. 693).