

# TESOL INTERNATIONAL JOURNAL

Volume 15 Issue 3 2020

**Chief Editor** 

Ramon Medriano, Jr.

Published by the TESOL International Journal

www.tesol-international-journal.com

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Chief Editor: Ramon Medriano, Jr.

ISSN. 2094-3938

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#### **Foreword to Edition Volume**

We are pleased to present 6 articles in this Volume that examine the research findings of Second language acquisition in Saudi Arabia and Indonesia. The first article in the volume is by Dr. Paiker Fatima Mazhar Hameed entitled "Saudi EFL Students' Beliefs on Communicative Language Teaching". The paper explores Saudi EFL students' beliefs in a traditional methodology, Communicative Language Teaching (CLT). Dr. Paiker's recommendations include professional development should be initiated for Language teachers focused on the merits and advantages of the CLT and very importantly the use of techniques that balance the personality, styles and inclinations of men and women in language learning be regarded. In the second article of this volume penned by Dr. Fahad Saleh Suleiman Alfallaj entitled "E-Learning Challenges in Saudi Arabia: Exploration of Factors with special reference to EFL" the author concludes, that "...it is important that colleges continuously update the security systems, and ensure that, the software is completely secured from all kinds of malware; and that, all research activities are lawfully performed on the grounds of the regulations and privacy rules." It is found that a degree of suspicion exists in student's minds as their world of learning moves from traditional to IT based learning.

The third paper is presented by Dr. Nasser Mohammed Saleh Al-Sa'egh, entitled "Role of COVID-19-related social media videos and messages in English in triggering panic among people in Saudi Arabia: A study in Pragmatics". This study concludes that certain key words in English were instrumental in the inciting of panic and fear amongst the people even as the pandemic had not yet made any considerable inroads in KSA. The findings of this research are critical to English language teaching not only in Saudi Arabia but across the ESL/EFL world. Despite the best efforts of professional educators, the finer nuances of English are left out for the reason that they are simply challenging to teach. Simply but forcefully stated, EFL learner needs to be trained in English pragmatics if they are to avoid inaccuracies and misunderstandings in communication which clearly arose during the outset and ongoing pandemic.

The next paper, "Lexical aspect and the L2 acquisition of English past tense morphology by Saudi EFL learners", is authored by Dr. Ahmed Yahya Almakrob and Dr. Nayef Shaie Alotaibi. Their

study examines the effect of the lexical aspect on the use of the English simple past temporal morphology by Saudi learners of English as a foreign language with a particular reference to the Aspect Hypothesis. Their findings suggest that English SLA instructors should not be limited to explicit instruction when teaching English forms but should use different teaching techniques and strategies that meet the different needs of students.

The fifth paper in this volume "Advancing Grammatical Accuracy of EFL Students in Web-based Writing" is presented by Dr. Abdurrazzag Alghammas. The research examines the impact of web-based group writing among linguistic scholars on intermediate-level sophomore students majoring in English in colleges in Saudi Arabia. It investigates the relationship between L2 group creative writing and modern technology and how online group writing helps students produce grammatically accurate essays and promotes the self-correction of errors inter alia.

The final paper in this volume is by Dr. Derlina, Dr. Aisyah, Dr. Nurdin Bukit, Dr. Sahyar and Dr. Ahdi Hassan, entitled "Blended Learning in English and English-medium Physics Classes Using Augmented Reality, Edmodo, and Tinkercard Media". The authors' unique research aims to determine the effectiveness of blended learning in improving student learning outcomes in English and physics, using AR, Edmodo, and Tinkercad Media. Their study suggests that a blended learning model can be a powerful and efficient way to promote quality instruction for ESP teachers. It also foreshadows a greater need in professional development for the English language teaching profession as AR etc occupies more of the second language learning advances

# Saudi EFL Students' Beliefs on Communicative Language Teaching

#### Paiker Fatima Mazhar Hameed

Department of English Language, College of Arts and Sciences, Methnab

Qassim University, Saudi Arabia
f.paiker@qu.edu.sa

# **Bio-profile:**

**Dr. Paiker Fatima Mazhar Hameed**, born in India (Aligarh) 1981, is currently working as an Assistant Professor of English and Linguistics (Applied Linguistics and Language Teaching) in the College of Sciences and Arts, Methnab, Qassim University, KSA. She was awarded MA Degree (Linguistics) from Aligarh Muslim University, India, in 2005; she earned her PhD in 2012 from the same prestigious and famous Institution (AMU). She has taught Linguistics to graduate and undergraduate students in Women's College & Department of Linguistics, Aligarh Muslim University, India and Saudi Arabia. She was awarded prestigious Doctoral scholarship offered by NTS, Mysore and apex body of the Government of India for language study and AMU Doctoral fellowship. She is bilingual and has widely published research in leading journals. Her interests include ESP, Second Language Acquisition, Foreign Language Teaching, Phonetics and Phonology, Psycholinguistics, apart from Vocabulary learning strategies and assessment. One book by her "A Linguistics study of Spelling Mistakes" has been published by Lap Lambert, Germany. She has also presented many papers in Seminars and Conferences.

#### **Abstract**

This paper explores Saudi EFL students' beliefs on Communicative Language Teaching (CLT) at the University of Qassim. The study used a descriptive quantitative approach. Eighty-nine students have responded to the researcher-made questionnaire addressing six areas of the CLT (students' belief, the grammar function; the function of students' native language; work in pairs and classes and errors and correction). The findings show that students have a positive belief in the CLT, particularly in terms of teachers' and students' roles. In the teachers' position, mother tongue and pair and class functions, teachers and schoolchildren held different CLT opinions. This study

indicates that CLT in the Saudi context is favorably accepted in the Language teaching process. Implications of the study are presented and discussed.

**Key Words:** Communicative Language Teaching, Saudi EFL, Language Learning

#### Introduction

English is a foreign language dominating manufacturing, finance, education, humanities, and all occupations and lifestyles. The willingness to use English in multiple contexts is a crucial skill for learners to gain global competence. English language skills help a person to understand the different people of the world. World school institutions are implementing action to train students for international communication skills.

The English Language Teaching (ELT) discipline has widely acknowledged communicative language teaching (CLT) since its inception in Second Language Teaching in the 1970s (Rahman & Pandian, 2018; Rahman et al, 2018; Thornbury, 2016). This is reinforced and reinforced by several academic articles, conference papers and books (Wei, et al, 2018; Mulyanah, et al, 2018; Savignon, 2018) is focused on the assumption that language expertise means not only understanding of language structures or rules but the application of language (communicative expertise). Therefore, studying a language in a foreign language involves knowing not just grammatical rules but also how and when to apply them (suitability). In other terms, students in L2 can develop their communication skills by engaging actively in exercises to discover the expression's definition. Adil (2020) developed another interpretation of CLT, providing practical and systemic perspectives on language instruction that demonstrate that language structures are essential and can be used as springboards for experimental practice. Kohnke and Moorhouse (2020) subsequently restated the CLT as a set of guidelines that include learning the language, how language learners prepare, and the styles of training practice, which make learning more viable and teacher and student positions in classrooms.

In the last years, teachers and students have believed in CLT in multiple educational contexts as an essential way to learn the CLT process. The various study has examined teachers' perspectives of CLT of numerous forms or the students ' perceptions of the use of CLT (Albahri, Yang, &

Moustakim, 2018; Bao, et al., 2016; Kustati, et al, 2018; Mohammed Al-Amri, 2020; Nuby et al., 2020). However, teachers and students are persuaded to use CLT in the ELT classroom as scarce, although a ton has been separately written in terms of teacher's or learners' opinions. Research by Islam (2020) claimed that classroom tasks or incidents significantly impacted students' involvement in understanding. It must also be noted if teachers' and students' views lead to the classroom level's academic activities.

This research follows the principle of communicative competence, consisting of four similarly essential aspects, grammar skills, discourse skills, sociolinguistic skills, and strategic competence. Grammatical competence is the underlying concept of this report. Grammar competence is a speaker's ability to grasp arbitrary grammar laws, and each learner must be grammatically competent to participate successfully in communication circumstances. Today's language education includes grammar teaching. Teachers don't know how to perform classroom tasks. Language teachers need to determine the usefulness of Communicative Language Instruction (CLT) to boost EFL students' proficiency and interim behavior in the English language.

#### **Literature Review**

#### Students and Teachers Role

Teachers are recognized as leaders of educating schoolchildren. Teachers and students, however, play a crucial role in information processing in the CLT classroom. Al Mamari, Al-Mekhlaf, & Al-Barwani (2018) regard the trainer as a coach who co-ordinates and conducts community learning. Nunan (1989) addresses teachers' and students' positions as workers who consider social and interpersonal problems. Communication between the two students is also part of the learning experience. Kustati, Yusuf, & Maarof (2018) describe the teacher as a co-learner in the CLT School. Students were situated to select their teaching materials, method, and assessment (Sato & Oyanedel, 2019). This form of choice offers students a sense of influence regarding the performance of their education. In this regard, though, not all outcomes are compatible. Teachers believe themselves to be an instructor, a learning resource, and a co-communicator in Asia (Shao & Gao, 2016). Fungchomchoei and Kardkarnklai (2016) have also stated that teachers consider themselves facilitators, whereas students think their teachers' information providers. They often saw the instructor as a motivator and a mate. Sato and McDonough (2020) claim that even as

students are pursuing teachers to build an immersive learning atmosphere, they also consider the instructor fundamental to the classroom and the students' information provider.

Regarding their position as students, students thought they wanted their learning processes to be shared and monitored (Mangaleswaran & Aziz, 2019; Al-Ahdal & Shariq, 2019; Al-Ahdal, 2020; Magulod, 2019). Ho (2020) revealed a difference between the opinions of teachers and the findings of classes. The teachers perceived themselves as facilitators, but they refused to encourage several students' behavior over the six months. These instructors invest a large part of the day without students getting the ability to communicate. The functions of teachers and learners are not transparent, or concrete in the situations addressed here.

## **Grammar Teaching Role**

The CLT method is based not on form but meaning. Fichman et al. (2017) suggested a methodological system consisting of pre-contact and communication activities and that grammar acts as a whole communication mechanism. In the pre-communication stages, students learn a variety of language skills or knowledge to connect. Students are expected to develop their talents. The purpose of language skills is to allow students to build partial communication abilities and to strengthen their language skills. A quasi-communicative vocabulary (context and structure) or a systemic one (totally systemic) with modern skills can be used. Students may use the expertise or information acquired by pre-communications workouts to negotiate the relevance of situations through a way of communication.

In comparison, Parkinson and Dinsmore (2019) believed that, while second-language teaching can entail learners gaining information subconsciously, grammar is still a major part of linguistic learning. This means that students can explore the meaning of their language skills. In his perspective, implicit learning would emerge first. Learners should be prepared to render production mistakes when studying is a mistake editor. Different studies have recorded grammar problems (Aziz & Dewi, 2019; Harun, et al, 2020; Akramova & Burkhonova, 2019). Due to the importance of evaluations, Ghannam (2019) reported that students prefer teachers' grammar, memorization, and examination. The studies indicate a myth about the role of grammar in the CLT method. Teachers agree that CLT does not involve grammar that could lead to CLT grammar-translation, as grammar is considered appropriate. In general, Blseke-Rechek et al. (2019)) find

that teachers don't want to use CLT, so they don't rely on grammar. At the same time, CLT takes the position mentioned above of grammar and communication as a whole.

#### The Role of Learners' Mother Tongue

The role of the mother tongue of learning in the ELT classroom was addressed at length by scholars (Dorji, 2017; Farsia, 2016; Ull & Agost, 2020). Rahman et al. (2018)) propose that students use their natural language to encourage student thoughts, check comprehension, teach lessons, or facilitate the learning process. Besides, Rahmatuzzan (2018) suggests that if the literacy of students L1 is limited, the available linguistic repertoire should be used. Changing the code would allow teachers to explain the meaning of the ESL classroom. Research into Iranian students ' attitudes towards CLT showed that the mother tongue's wise use in the school was favored, particularly when teaching tasks or homework was needed. On the contrary, Poul (2019) found that teachers felt translation reduced the student's enthusiasm for learning. The CLT approach's goal is to maximize the opportunity for students to use their English through communicative activities such as pairing or working together (Reddad, 2018).

#### **Corrective Feedback**

CLT aims to increase learners' potential to meet communication targets. In this context, fluency and accuracy became the focus of discussion. The measures of fluency or accuracy should lead to the goal of unique learning interactions. It advises that non-communication activities such as finalization of workbooks be prepared for rehearsal so that students can produce their language goals consistently. Therefore, accuracy evaluation is essential. Communication activities such as role-play make it easier for students to talk fluently. This focus on fluency will correctly tolerate mistakes. The latest findings are available on the error correction and evaluation feature.

#### **Research Purposes**

Therefore, the present study contributes to the fulfillment of filling out the research gap, which aims to answer the following research purposes. What are the students' beliefs on the use of Communicative Language Teaching (CLT) mainly on the following: teacher and students; The use of grammar; The use of mother tongue; Language teaching strategies; Corrective feedback.

#### Methodology

This study investigates the views of teachers and students about CLT by means of a theoretical approach to broad research. Using the sampling ease strategy. This study was performed at Qassim University. Data were gathered via an online survey sent to participants via social media to reach them quickly. The MA TESOL members, who learned English in their school and trained for their MA, addressed the inquiry as students. The questionnaire used illustrates six dimensions of CLT: the status of teachers, the intent of students, the grammatical status, the role of students ' native language, the work of peers/groups and error and correction. In a previous study, its efficiency and pertinence have been demonstrated. There is a selection of objects covering each of the six CLT lengths. Twenty-four items used in the questionnaire. The data where analyzed with version 23 of IBM SPSS. The data have evaluated using the 5-point scale Likert. Any negative remarks have reversed to preserve consistency. Therefore, if the average mean values of a sub-category are lower, the interviewees are more optimistic regarding CLT. Furthermore, a t-test experiment explored the difference between teachers and students' perspectives on CLT.

#### **Results and Discussion**

Overall, the results suggest that teachers and students in the study accept CLT. Participants, the participants' role, the teachers' role, and the function of pairs/groups were primarily involved in three factors studied. The overall outcomes for the part of the learners are significantly low in both classes of participants. Note that lower grades reflect more robust affirmative views. Teachers and students recognized the importance of the students' role in the management of the learning method, negotiation with their colleagues and their teacher, sharing of ideas or impressions, and suggest resources and learning exercises. This requires a significant degree of autonomy for students. Participants also treated the teacher as a lecturer. This may mean that the students treat the teacher as promoting learning activities and motivating the students to learn the language.

Table 1. Beliefs of Students on CLT

Dimension of CLT	Mean	SD
Roles of Teachers and Students	2.33	.31
Use of Grammar	2.87	.43
Use of Mother Tongue	3.04	.49
Language Teaching Strategies	2.45	.36
Corrective Feedback	2.50	.56

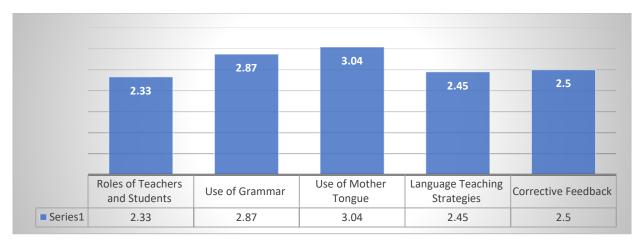


Figure 1. Beliefs of Students on CLT

Other dimensions of CLT, including remedial input, the role of grammar, and the students' natural language role, were also deemed fairly positive concerning CLT. This can suggest a preference for measuring contact-based learning performance. Language learning mistakes can presume inevitable learning implications and therefore they should be accepted. Importantly, since the mean error corrections are extraordinarily small, the participants should have taken both accuracy and fluency into account. The basic definition of grammatical concepts or modes cannot be highly preferred for participants. Instead, they can opt for teaching/learning grammar by communicative contexts and practices that are less common in grammar. Finally, this may mean that the local language usage is always unnecessary to facilitate language training and learning for teachers and students.

This study looked at the views of Saudi students in CLT regions. The results suggest that students favored complete CLT. The results contribute to the results of other studies. Results on instructor role and student role are consistent with previous research disclosing that teachers saw their position as school facilitators (Lawrence, 2018; Kubanyiova, 2020). This can also be due to the use of pairs/groups, allowing students to participate actively in learning activities, cooperate in definition negotiation, and recommend learning content and activities. The instructor's role in this scenario is to create an engaging learning environment, supporting student interest and encouragement in learning. As Nguyen (2017) states, students want to be comfortable listening to their classmates in pairs/groups and not dependent on their coach. The participants have found the variables addressed in this study (error and correction, grammar feature, and native language feature) to be fairly positive in CLT. However, these findings questioned earlier studies in the area of syntaxes and errors and correction (Yildiz & Senel, 2017; Harun, et al, 2019; Valls-Vargas, Zhu, & Ontañón, 2017; Al-Harbi & Alshumaimeri, 2016). These previous studies have demonstrated that grammar is overly emphasized in the classroom, where error-correcting is utilized in a close manner. While individual differences occur compared with previous research, which should be predicted since there are inevitably various backgrounds in both of the participants of the current sample, but teachers were more optimistic than students about the position of teachers, the work of students, the role of students and the role of the students.

## Conclusion

The research analyzed CLT views of learners in Saudi Arabia and concluded that the function and role of teachers and the job of pairs/groups considered significant CLT aspects. Peer/group work's critical feature has enabled learners to play an essential part in the learning process, while their role supports the learning process. The research shows some gaps between teachers' opinions and students' attitudes on three factors (the teachers' position, the position of the native language, and work with the pair/group), indicating that teachers were more optimistic about CLT on these values than students were. What were gaps not enough to threaten CLT adoption in the classroom? It is necessary to note that all respondents who were centered in Saudi Arabia in this report. Therefore, teachers and students from outside the city did not reflect the outcome. More details should be gathered from a broader range of contexts in the Cambodian education system, especially in remote regions, to analyze the extent to which CLT can be promoted in Saudi Arabia.

#### Recommendations

Based on the conclusion of the study, the following are the recommendations offered: (1) Language teachers must be willing to properly combine the usage of the CLT to EFL students both in language and in the subject fields to assist students in learning grammar skills and attitudes; (2) Professional development should be initiated for Language teachers focused on the merits and advantages of the CLT; (3) the use of techniques that balance the personality, styles and inclinations of men and women in language learning may be regarded.

# **Implications**

The analysis results on the usage of Communicative Language Instruction include practical teaching and language training considerations to allow students to learn their communicative skills more effectively. This study argues that it is challenging for students to improve communication skills while their grammatical skills are low; hence, literature must demonstrate the CLT process's efficiency. It means that language teachers should be reasonably willing to follow an eclectic approach to teaching in the English language and involve students in mastering and exposing language laws to the actual usage of language.

After reaching the goals stated in this study, this study has several inconveniences, which will affect future courses. First, the course is confined to a minimal, intermediate sample size of Chinese EFL students, limiting discrepancy examination. Secondly, using the simplified pre-test design, as the weakest version of a quasi-experimental test design did not include the requisite factors and variables to integrate ALM and CLT. The use of a mixed process method is proposed for further analysis. These hybrid research designs may be more detailed in the triangulation of the data collected using two or more approaches. Third, future studies are encouraged to duplicate or modify study backgrounds at different educational levels in Saudi, taking into account and correlating other variables, including cultural history, parenting, income levels, and linguistic performance. Finally, the cognitive and attitudinal influence of different methods of language teaching which are not included in the study must be identified, including the grammatical form, direct approach, oral approach, situational language teaching, physical response (TPR), community language learning (CLL) approach as well as other Saudi language teaching approaches.

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# Questionnaire

# Saudi EFL Students' Beliefs on Communicative Language Teaching

Roles of Teachers and Students		4	3	2	1
1. Teachers and students play a crucial role in information processing in the CLT classroom.	5	4	3	2	1
2. Communication between the two students is also part of the	5	4	3	2	1
learning experience.					
3. Teacher as a co-learner in the CLT classroom	5	4	3	2	1
4. Teachers believe themselves to be an instructor, a learning	5	4	3	2	1
resource, and a co-communicator in CLT					
5. CLT is a participatory role of teacher and student.	5	4	3	2	1
Use of Grammar		4	3	2	1
6. Grammar is still a major part of linguistic learning in CLT.	5	4	3	2	1
7. Grammar is difficulty to learn in CLT.	5	4	3	2	1
8. Teachers agree that CLT does not involve grammar that	5	4	3	2	1
could lead to CLT grammar-translation					
9. CLT takes the position mentioned above of grammar and	5	4	3	2	1
communication as a whole.					
Use of Mother Tongue		4	3	2	1
10. The use of mother tongue in CLT is effective.	5	4	3	2	1
11. CLT improves the use of mother tongue.	5	4	3	2	1
12. The L1 have an important and positive role to play in L2	5	4	3	2	1
learning					
13. The use of the L1 enabled students to continue with the task	5	4	3	2	1
and in the process to move forward in achieving their					
linguistic goals					
14. Communicative Language Teaching insists that the less the	5	4	3	2	1
L1 is used in the classroom, the better the teaching.					
Language Teaching Strategies	5	4	3	2	1
15. CLT promotes interesting language learning strategies	5	4	3	2	1
16. CLT helps to facilitate effective language interaction	5	4	3	2	1
17. CLT makes the language classroom interactive	5	4	3	2	1
18. CLT improves my linguistic skill	5	4	3	2	1
19. CLT learning strategies develop my confidence.	5	4	3	2	1
Corrective Feedback	5	4	3	2	1
	5	4	3	2	1
20. CLT corrective feedback improves my fluency and accuracy	)	4	)		1
in language.					

21. Communication activities such as role-play make it easier for	5	4	3	2	1
students to talk fluently.					
22. CLT has error correction and evaluation feature.	5	4	3	2	1
23. Language assessment is important in CLT	5	4	3	2	1
24. Accuracy evaluation is essential	5	4	3	2	1

# **Interview Questions**

- 1. How do you see your role in the CLT classroom?
- 2. What are the difficulties faced in learning grammar, using CLT?
- 3. How does CLT improve a learner's communicative competence?
- 4. What are the problems you encountered in using the CLT in your classroom?

# E-Learning Challenges in Saudi Arabia: Exploration of Factors with special reference to EFL

# Fahad Saleh Suleiman Alfallaj

Department of English Language, College of Arts and Sciences

Methnab, Qassim University, Saudi Arabia
f.alfallaj@qu.edu.sa

# **Bio-profile:**

**Dr. Fahad Alfallaj** is a Professor of Linguistics at the Department English Language, College of Arts and Sciences, Methnab, Qassim University, Saudi Arabia. He has published many research papers in journals of international fame and name and examined many MA dissertations and PhD theses. His interests include ESP Course Design, SLA, and pronunciation problems among EFL learners, not to forget Islamic Translation.

#### **Abstract**

The development and use of online and e-learning system in many colleges are now the greatest obstacles in the field of EFL, but ones that are necessitated given the onslaught of the COVID-19 pandemic. Like Blackboard, e-learning has other useful avenues to use in EFL till the time that the pandemic is over. However, the success of e-learning platforms in EFL relies on an understanding of the dynamics of the application and the main problems affecting current e-learning programs. Teachers and learners of EFL in KSA are only now recognizing the problems and variables, whose resolution alone can ensure success of e-learning during the COVID-19 pandemic, and later as an expanding horizon in foreign language learning. The aim of this paper is, therefore, to examine the major challenges posed by current e-learning systems and the key explanations for the usage of e-learning in EFL in the current circumstances. The paper used the thematic research interview approach using the NVivo development model. This was an interview with 30 EFL students and 31 e-learning specialists at Qassim University in Saudi Arabia. The study results offer valuable advice for policymakers, programmers, content creators, academicans and EFL learners in identifying the key aspects of e-learning use during the COVID-19 pandemic in KSA.

Keywords: COVID 19, EFL, E-learning, Saudi, Education, Delivery Mode

#### Introduction

As we see in the world now, the COVID-19 pandemic forces educational institutions such as colleges to quickly move into distance learning and online learning. The EFL departments and schools were no different. COVID-19 compelled emergency electronic training throughout the world. Mankind has been caught in an emergency and there is a need to react with unique and usable learning resources like e-learning programs and mobile apps. The EFL learners in the region have had some exposure to online and distance learning, especially since the beginning of the last decade as universities welcomed MOOCs as a viable learning option to accommodate the growing numbers of EFL learners. However, COVID-19 was an immediate motivation to explore online training and learning resources in foreign language education. UNESCO (2020) states that, the closing of schools has many negative effects on education. Digital online learning systems, now, have easy internet connectivity, and the requisite quality in terms of speed and access which are needed for them to be used as learning tools. E-learning programs play a crucial role in mitigating the dire consequences of the pandemic, bringing about some sense of 'normalcy' for the learner community. E-learning programs must schedule, run, and monitor the educator's learning cycle. It also aims to encourage student education through university, and school suspension through helping schools, colleges, and universities to deliver teaching online. The development of these structures is currently healthy for effective learning during the COVID-19 pandemic.

However, the quality and use of online course material in the world of e-learning remains an important issue during the COVID-19 pandemic for various colleges. E-learning is an essential source of education, because it is universal (available everywhere), affordable, user friendly, and enjoyable. E-learning platforms, like blackboards, which have been popular with the EFL environments for some time now. It may be more realistic to use these and other tools more fully in this period given the fact that except for the physical presence of the teacher, students have an almostreal classroom experience with the features of cameras and microphones for real time interaction, an essential for a foreign language classroom. For example, students can be taught a lecture, or take part in an e-learning system training with their home teachers on a laptop, or mobile computers, communicating with the teacher or peers, and participating in real time activities.

Students may also use the handheld device to access instructional content, as they can be wired to telephone, or local wireless networks. Ülker and Yılmaz (2016) announced that, Learning Management System (LMS) is an e-learning alternative. E-learning involves e-learning events, including student enrollment, training, mission, class-related knowledge, planning of courses, material, curricula, and applicable classes (Haghshenas 2019). With the shift from mainstream schooling, students can become increasingly open to e-learning platforms, such as the Blackboard around-the-counter, providing a number of benefits, including increasing the consistency and productivity of schools by improved interactions with their teachers; and exposure to learning resources (Idris and Osman 2015).

Although students are willing to adopt the software (Almaiah & Alismaiel, 2019; Almaiah & Jalil, 2014; Shawai & Almaiah, 2018), the scarcity of e-learning services keeps students hard up from recognizing its benefits (AlmaiahAl-Khasawneh, 2020). This enhances the depletion and lack of academic funds (Naveed et al. 2017). However, research are pending and the opinions of students are not extended (Tarhini, Al-Busaidi, Mohammed and Maqableh, 2017; Almaiah and Alamri 2018). E-learning helps colleges to take into consideration the expectations of their students and effectively establish a functional e-learning environment (El-Masri and Tarhini, 2017; Alksasbeh, Abuhelaleh & Almaiah, 2019). Apart from these few studies rooted in e-learning under 'normal' circumstances, the effectiveness of the same or the obstacles encountered under special conditions such as those imposed by Covid19 pandemic, have not been researched in KSA. What makes the case of KSA a special one are three factors: i. Limited e-learning exposure of learners in the region; ii. Recent adoption of MOOCs by universities in the region; iii. Limited availability of EFL courses under the MOOCs or any other e-learning platform. It may be noted that e-learning systems were implemented around three years ago in a series of traditional models. The main problems and consequences of e-learning during the COVID-19 pandemic are explored in this report.

#### **Literature Review**

#### **E-Learning Usage**

Any system's performance is based on the user's device usage (Almaiah, 2018). It follows that, the student e-learning assistance is one of the key factors in the performance of the e-learning system.

Many reports also addressed issues about the introduction of e-learning in several countries worldwide. For instance, Al-Rahmi et al. (Almaiah& Man, 2016) used the Technology Acceptance Model (TAM) to analyze important factors, which influence the usage in Malaysia of the Malaysian e-learning program. Relative advantages, observability, schooling, accessibility, difficulty, and a sense of fun are the variables crucial to selecting students to use the e-learning program of Malaysia. In a detailed analysis, Salloum, Al-Emran, Shaalan, and Tarhini (2019) using a case study from the United Arab Emirates. Four factors (innovation, training, trust, and common knowledge) were found to increase students' acceptance of the e-learning framework. Al-Gahtani (2016) examined the effects of e-learning for TAM graduates. He considered playfulness, selfperformance, and flexibility as the most important considerations for e-learning through the usage of machines, social power expectations, community principles, and future benefits. The social influence, protesters, and assumed good fortune in Saudi Arabia, however, did not render elearning programs more appropriate. According to Almaiah and Almulhem (2018), and Almaiah, Jalil, and Man (2016a), the Delphi approach may be used to assess growth drivers for the online learning programs launched by Saudi Arabia. The findings highlight 11 key factors in four areas: website functionality, layout decisions, encouragement for top management, and academics and learning and e-learning.

In almost the same context, Bellaaj, Zekri, and Albugami (2015) used a standard functional application and usage concept description in order to review the factors that have an effect on the extent of the usage of e-learning services by students at Tabuk University in Saudi Arabia. They noticed that, creativity and achievement have a powerful influence on e-learning adoption. While operating in Azerbaijan, Chang, Hajiyev, and Su (2017) utilize e-learning as a tool of societal norms, knowledge, and satisfaction. The facets of TAM e-learning adoption have, nevertheless, been discussed by Abdullah and Ward (2016). In this study, autonomy, societal aspirations, enjoyment, discomfort, and experience with machine usage play a key role in e-learning for students. Similarly, Alhabeeb and Rowley (2017) indicated that, telecommunication, IT, and education personnel competences are essential to improving e-learning performance at Saudi Arabian universities. While numerous e-learning studies are being conducted, the present study, nevertheless, attempts to refer to the literature analyzing the major obstacles and influences in Saudi Arabia, which can be inspired by the positive development of e-learning.

# **Challenges of E-learning**

There is no doubt that e-learning in both developing and developed countries is a challenge for both learners and teachers. Perhaps more daunting is the willingness to take e-learning and to use it as an effective and constructive literary tool in developed countries (Almaiah, Jalil & Man, 2016b). Our latest literature review deals with several questions which are relevant to the application of the system for e-learning. It was debated if these issues could be grouped into four study groups: technological, individual, cultural and educational. We found that the problems from one country to another were very different, mainly due to variations of cultures, backgrounds and stages of growth. E-learning difficulties related primarily to the lack of ICT awareness, low development of networks and a small output of material in developed countries (Aung and Khaing 2015). A recent study has shown that access, internet literacy and computer productivity in Pakistan are significant problems as the e-learning system is being implemented successfully (Kanwal and Rehman 2017). A similar study in Kenya has established three major issues in elearning: a shortage in technical know-how, financial resources and ICT potential (Tarus, Gichoya and Muumbo, 2015). Some other studies (Kisanga and Ireson, 2015; Mulhanga and Lima, 2017) highlighted insufficient equipment facilities as a primary challenge for the effective execution of current e-learning initiatives owing to a shortage of technological resources and IT expertise. In addition, Mulhanga and Lima (2017) stated that social, political and economic constraints are the key factors in Libya's e-learning framework. Chen and Tseng (2012) categorize learning problems into four different groups, namely interpersonal constraints, the complexities of technology and cultural concerns.

Despite these initiatives, none of these studies addressed the concrete challenges confronting elearning users of EFL. Consequently, Araibi, Naz'ri Bin Mahrin, and Yusoff (2019) studied the key criteria for the e-learning system performance, attributing to technical challenges 45% of overall failures, 40% of partial failures, and just 15% successful. Based on this and other research works, many IS / IT students have investigated the mechanisms of effective e-learning integration (Al-Araibi *et al.*, 2019; Esterhuyse and Scholtz, (2015); Islam, Beer, and Slack, (2015). There are many examples, which demonstrate the reasons why the students do not choose to use new technologies (Almaiah & Al Mulhem, (2019); Al-Khasawneh and Obeidallah, 2019). There is yet another issue, which needs addressing; namely, restricted usage and recognition. Longitudinal research are also crucial to finding significant hurdles to e-learning in a context fraught with the

COVID-19 pandemic, in order to assist decision makers in solving the question of the inadequate utilization of e-learning in this field. The present research was carried out in Saudi universities. Such colleges are introducing the e-learning framework for supplying their EFL students with online learning courses. The questions in the interview are structured to gather data from students and professionals, who already use e-learning in such universities. These universities may, then, help us achieve the study target.

#### **Research Questions**

This study, generally, investigates the challenges of e-learning in EFL in Saudi Arabia. It, specifically, aims to answer the following research questions: (1) What are the core challenges of e-learning in EFL, especially in a context beset with the COVID-19 pandemic?; and (2) What are the key factors impacting the successful usage of the e-learning for learning a foreign language? In the first section of this investigation, we concentrate on related studies on the application of the e-learning system on learning of English, and on the nuances of the e-learning method. This will include a reference to the techniques for research, data analysis, and data assessment. We, then, examine the experiments, and, ultimately, the inconveniences and conclusions.

# Methodology

#### **Research Design**

The research method of this study involves three main steps. In phase 1, we reviewed the available literature for the variables and challenges in the implementation of e-learning in EFL. In phase 2, a thematic analysis was employed to identify and explain, e-learning variables and difficulties as seen in EFL. The qualitative knowledge obtained during the interview was analyzed with the thematic analysis of the NVivo testing methods. For the thematic research process of this typ of study, Braun and Clarke (2006) have identified five-stage projects, including the aggregation of results, the creation of initial codes, thematic analysis, identification and naming of topics, and the final report production. In the third phase, the main challenges and factors are to be identified for e-learning adoption in EFL. The following sections address in depth the data-collection process, the sample analysis, and the data processing strategies used in this study.

#### **Research Subjects**

A total of 61 participants were asked with their technical background as technology specialists, to make the study more representative. These comprised of 30 EFL learners, 25 language and ICT workers, and 6 online content developers. In qualitative research, sample size according to Quick and Hall (2015) is usually between 4 and 50 due to the huge volume of data collected. The research focuses on adequacy (participants) and suitability (data collected). Strauss and Corbin (1990) suggested the interviews would be fully prolonged for 5 to 6 hours. Nevertheless, researchers are used to help lobby, and to comment on the topic. The findings ought to be appropriate and specifically described in facts (Howell 2003). Consequently, 30 students and 31 e-learning specialists were requested for the interview, and this number sufficiently fulfilled the criteria of the sample size of the analysis (Quick and Hall 2015; Howell 2003).

#### **Procedure**

This was a qualitative study based on data collection and evaluation via semi-structured interview method. For this analysis, the qualitative approach was used to analyze participant data in order to produce a case study, rather than simply list numerical results.

#### **Interviews**

The participants did not take a specific question list during the semi-structured interview, but were offered a set of general topics called an interview guide. This approach helped us engage the interviewees more, and collect more details using the Skype program given the social distancing norms prevalent in KSA. The online interviews with 30 EFL students were conducted over a period of five days and the questions centred around the Blackboard program with which the Saudi EFL learners are somewhat familiar. The interview was based on many issues resulting from the core research goals of the group and the problems discussed included different concerns relating to the usage of the e-learning method for EFL during COVID-19 pandemic, and the key difficulties they faced through the implementation of the COVID-19 e-learning system. The interviews with the 31 professionals were telephonic as these were fitted in between the free slots they availed as these people were all working from home at the time of the study.

#### **Results and Discussion**

Qualitative data is analyzed utilizing the thematic analysis software of NVivo during the interview. The main goal of this method was to obtain valid data from the study topic. It can be used to render more comprehensive findings and predictions (Denscombe 2010). In this review, five steps according to Braun and Clarke (2006) were established for the phase of detailed analysis: awareness of data, development of initial codes, the quest for themes, the recognition, naming and preparation of the final report. The description of the subject was an integral element derived from research-related evidence. During the thematic analysis, the researcher split the data from the interviewees into three components with NVivo 10 subjectively. The NVivo coding approach started with descriptive coding as described by Morse and Richard (Watts 2008), followed by words, terms and phrases from a data transcript that established the related words surrounding elearning difficulties and problems. NVivo calls the 'Letter text references nodes' codes (Almaiah 2018) and adds to the collection of references for a particular subject, genre or area of interest (Almaiah 2018). (Almaiah 2018) Several sub-themes can be mentioned for each specific issue, based on the study topic.

For the chosen coding analysis, researchers clustered the findings of interviews on the key global classifications, i.e. unique subjects, e-learning variables and problems created by usage of e-learning in EFL during COVID-19. The interviews were recorded in video using the Samsung, S8 + study. After the interview, the debriefing was done so that participants could ask concerns, answer or provide information that was not addressed during the interview. All interviews were then transcribed. The materials analyzed included the interview transcripts and the interview notes. The auditor reviewed the documents for the information on the mobile computer more than once and that, where appropriate, the same words used by the person challenged were ensured and updated. This process was critical before the coding, after reading the whole text section. The categories were coded according to the transcript of the interviewee obtained during this point.

## Observations of the key problems confronting e-learning in EFL during COVID-19

This part includes thematic results that contribute to the discovery of the key problems that EFL learners encountered in the use of electronic education systems.

#### **Management Problems**

As the interviewees have noticed, changing governments is one of the hurdles, as it has an impact on governance guidelines and policies, students and instructors. As the interviewees said, "We think that, this is a challenge, because the University is experiencing substantial resistance to the adaptation of current circumstances; and will, thus, be approached with caution about any changes." Students, or teachers, prefer the traditional learning and teaching cycle in EFL as it offers them greater scope for real time language exposure, including the surasegmental and paralanguage aspects of it. The interviewees affirmed that, "Some students and teachers are still reluctant to utilize the e-learning platform, because many students distrust the learning tools of the system, such as applications, tests, and so on, also because they have their pre-conceived notions about the difficulty of learning a foreign language using the purely online method. This issue affects teachers who think the move would threaten their work, because of the shift from traditional methods to modern methods." The finding of the management problems on e-learning implementation has been acknowledged by previous studies (Abdalmenem, Abu-Naser, Al Shobaki& Abu Amuna, 2019a; Lee, Song, & Hong, 2019; Poór, et al, 2019; Vershitskaya, Mikhaylova, Gilmanshina, Dorozhkin & Epaneshnikov 2020).

#### **Technical Problems**

All respondents acknowledged that, the technological aspect for the EFL e-learning program is one of the key problems, which needs to be tackled, as it might hinder the implementation of the framework by many students. The experts outlined that, "The present e-learning program in EFL has certain possible challenges in terms of openness, affordability, reliability, and the consistency of the e-learning service." The interviewees made it clear that, "It is clear that, if the student believes that the e-learning program is simple to use, pleasant to operate on, and leads to the expected proficiency level in English, then he thinks the program is beneficial, and would boost his or her efficiency and prospects." The researchers recommended that, the e-learning program in English as a Foreign Language courses be implemented more effectively in order to ensure the performance of the user in terms of his or her willingness to utilize it. We, therefore, conclude that, "There is a challenge, because students' schooling is special, their exposure to English as a language is limited and has been in a teacher-centred direction, the e-learning program is not convenient for certain students to use, so that is why the university is searching for a way to make

it easier to use as that aspect plays the main role in enhancing proficiency in English, thus making students feel that using e-learning in EFL courses is useful."

#### **Financial Constraint**

All respondents indicated that, financing is an obstacle for e-learning enterprises, because Saudi universities have a limited resource, and a high budget deficit. As interviewees pointed out, "Economic issues, such as the current budget gap will deter certain projects, as the Saudi Budget is the key source of funding for universities.

# Detection of important variables impacting the usage of e-learning in EFL courses during the pandemic COVID-19

This segment contains contextual observations that describe the main factors impacting the effective usage of e-learning systems. The findings indicate that, (1) technical factors, (2) success factors of e-learning programs, (3) confidence factors, (4) self-effective factors, and (5) cultural factors are essential problems, which should be addressed, and overcome in potential planning.

# **Technological Reasons**

According to respondents, "technology considerations are one of the considerations required to make an e-learning program in foreign language efficient." "Throughout the implementation process, every technical consideration should be weighed," as one expert said. For example, even though universities do have the equipment and software to support the e-learning of foreign languages, they may not have the technical expertise to utilize the software, or the technology, that may lead to a mistake. One such example is of the Language Labs available in some places. Though all the paraphernalia and technology exist in these, the requisite espertise is missing as teachers are not sufficienty trained to use these labs. Experts have also highlighted the fact that, "e-learning is available through physical resources, such as computers, servers, and networks;" in addition, "computer programs and operating systems are completely required for usage."

# **E-learning system quality Indicators**

For opinions on important factors in the implementation of the e-learning system in Saudi universities, the main focus of the expert opinion is on the feasibility and efficiency of the e-learning system in ensuring and measuring the achievement of espected language proficiency in

English. Respondents unanimously agreed that, "The current EFL e-learning systems have some possible barriers to accessibility, usability, and affordability, particularly for people with minimal internet experience." This view is being shared by many experts and universities, and is highly advised to be taken seriously; for it may pose an impediment to their acceptance of technology in the first place. Yet, another analyst said that, 'The success of the e-learning system will be focused on happiness and individuality of the student.'

Students, without great programming abilities, have been invited to clarify their thoughts on the current e-learning software in EFL courses. "The new tech is not easy to use for anyone lacking programming know-how, and can not contribute to machine failure," interviewees said. "Essentially, the current e-learning framework is not flexible," as Expert 3 said. Consequently, more than the language (English), the students end up spending time on learning the useof the software.

Participants (Expert 1 and Expert 2), too, said: "The correlation between user-friendly usage and program adoption is important, as if it becomes challenging for students to use and they tend to lose their faith in the process." Expert 1 continued by saying that, the software is about how easy it is for a person to use the system. "The capability cannot be separated from the functionality of the device owing to my familiarity with numerous Information systems. Additionally, the consumer may believe that, there is no effort for utilizing the app.

#### **Cultural Factors**

The respondents state that, community is a crucial element in growing the students' usage of the e-learning curriculum: "Social concerns are one of the key issues to enable the full use of the e-learning curriculaby more students." ICT literacy is one of the main topics considered by the Higher Education board, as experts contend: "The increase in ICT literacy, and online learning, is one of the factors to improve the use of the e-learning system." In fact, experts have described education as a very significant goal for the 2025 dream of Education. Further, proficiency of the Saudi populace in English is one of the stated goals of the Saudi Vision 2020 and 2030. According to the experts,

"E-society should bring all schools together to create a common e-learning agency." Another significant aspect is the participation in Saudi core technologies and forum with students in various

social media. Social networking applications are the perfect place to reach people. Social networking would allow universities to react differently to students, increase student engagement and thereby boost the e-learning climate.

# **Self-efficacy Domains**

As the respondents pointed out, self-efficacy is one of the main determinants in adopting the elearning curriculum. The experts have said: "To increase the implementation of an e-learning scheme, it is important that, students in Saudi universities have a high degree of self-efficiency or, in other words, a high degree of motivation to carry out the appropriate tasks even without teacher or peer support. Instead, if students have a low degree of self-efficiency, it is difficult to accomplish learning activities in an e-learning framework." Learning a foreign language is in itself an onerous task, added to this the stress of unfamiliar technology can create some serious obstacles in learning. The respondents indicated that, "Training programs in self-directed EFL study would play a significant role for students, as well as, for teachers to reach a high degree of auto-performance; and universities should also develop these training programs so as to boost their IT capacities; and, hence, continue to adopt the electronic learning process."

#### **Factors of Confidence**

"Trust is a significant consideration for raising Saudi universities' rate of adoption of the e-learning program in EFL courses," the respondents said. "Universities are still seeking to ensure that, the e-learning system is trustworthy," they asserted. The dimension of trust involves computer protection, information honesty, and machine reliability in ensuring measurable language success for the students. "To allow students more likely to embrace e-learning, it is important that, colleges continuously update the security systems, and ensure that, the software is completely secured from all kinds of malware; and that, all research activities are lawfully performed on the grounds of the regulations and privacy rules."

#### **Conclusion**

The development and use of the online and e-learning system in EFL courses in many colleges are, now, the greatest obstacles in the times of the COVID-19 pandemic. Like Blackboard, e-learning has other useful resources to use in this period of crisis. However, the design of the e-

learning platform in EFL relies on an understanding of the dynamics of the application and the main problems affecting current e-learning programs and learner needs. The crucial problems and variables, which enable successful use of e-learning during the COVID-19 pandemic, have not been accepted. This study sought to examine the key challenges of current e-learning systems in EFL and to investigate the immense possibilities that exist unused in this direction. The interview approach was used to perform thematic analyzes using the NVivo development model. The outcomes of the study offer a valuable guide for policymakers, programmers, engineers and academics in properly recognizing the key implications of the usage of e-learning in EFL during the COVID-19 pandemic. As is quite apparent, this paper discusses significant issues concerning the effects on the usage of the e-learning method in EFL during the COVID-19 pandemic. This technique encompasses not all areas typically addressed within the e-learning system; and, hence, the findings include a fresh research methodology to promoting successful utilization of the elearning curriculum not only in the current but also times to come. The findings of this study are likely to be useful to university decision-makers, planners, and academicians in these institutions. They give a good view of the current e-learning landscape, which can be seen as a reference for successful usage by students in e-learning programs. The findings show that there are three major obstacles preventing the use of the e-learning system: (1) issues linked to transition of management; (2) technical problems related to the e-learning system in EFL courses.

# **Implications**

An additional advantage for current literature in this study may be viewed as the primary barriers to the effective usage of the e-learning method in the COVID 19 pandemic. Such research gives valuable realistic perspectives on how e-learning in EFL is utilized, and implemented in countries such as Saudi Arabia. In addition to the technical problems found during previous studies, several subjects, such as e-learning, progress monitoring, course design, self-efficiency, and financial assistance, are discussed (Almaiah and Almulhem, 2018; Almaiah and Alyoussef, 2019; Eltahir, 2019; Chen and Tseng, 2012). The research results will provide decision-makers, researchers, creators, and observers with valuable recommendations to better grasp the main facets of the e-learning system's implementation. Second, university management and technical support will include the institutional tools needed to continue e-learning services in EFL in the implementation phase, as significant changes in the operation of the e-learning framework need tremendous and

consistent access to e-learning material. University administration must also include the required software, apps, and internet connectivity to ensure best outcomes for the student community. Universities may effectively provide online learning in foreign languages, because they are continuously updating their technology resources, teachers and students. Third, the developers of e-learning systems for EFL studies can build a user-friendly, easy-to-use e-learning platform, because it will quickly be implemented if students and teachers find the e-learning system convenient to use. Fourth, educational institutions in Saudi Arabia will follow the applicable policies, and regulations so as to enable students and teachers to incorporate the e-learning program in EFL courses. Therefore, a range of reforms in education policies will be introduced to prepare for a seamless transition from mainstream to e-learning. Via the usage of the teaching structure, the top management guidelines, the curriculum programs, and the university rules, such changes may be made. Fifth, the findings will enable university administrations to concentrate on instruction on increased comprehension, and expertise for teachers; because teachers play asignificant role in motivating students to use the e-learning program, which impacts efficiently the consistency of their teaching, as well as their profitability. Sixth, school systems should focus on the importance of e-learning services in EFL by preparing, and improving their capabilities in both language and technology and the synthesis of the two. Students, with adequate programming ability and constructive attitudes towards the application of the e-learning program in learning of a foreign language, should be motivated to effectively incorporate the e-learning system. The results of this report will provide officials with fresh ideas and advice to ensure that, e-learning programs are effectively utilized in a COVID-19 pandemic.

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# Role of COVID-19-related Social Media Videos and Messages in English in Triggering Panic Among People in Saudi Arabia: A study in Pragmatics

## Nasser Mohammed Saleh Al-Sa'egh,

Department of Islamic Studies, College of Science and Arts, Rass

Qassim University, Saudi Arabia

nsaaeg@qu.edu.sa

## **Bio-profile:**

Dr. Nasser Al-Sa'egh, born in 1969, is a Professor of Islamic Studies at the College of Science and Arts, Rass, Qassim University, Saudi Arabia. He has examined many dissertations and theses and published widely on Islamic Studies, and is a popular figure in the field. With over three decades of teaching at tertiary-level Institutions, he is currently the Dean, College of Arts and Sciences, Methnab, Qassim University and a member of umpteen academic and administrative Committees at both the University and Province levels. He has lots of research work both published and in press. Prof. Al-Sa'egh is also an Editorial Board member in many well-reputed journals. Apart from all these academic activities, he is into volunteering work and has participated actively in many voluntary and community service projects.

#### **Abstract**

This study offers a pragmatic analysis of English discourse for assessing the impact of coronavirus (COVID-19) related media messages and videos in English in creating fears and panic among people in Saudi Arabia. Any media, including social media, is both a source of awareness and education of individuals and it fulfilled this purpose during the current pandemic by spreading videos and messages about precautionary measures. However, it simultaneously fuelled rumours, conspiracy theories, and false information, thereby creating unnecessary panic among the public. Using qualitative data gathered through semi structured personal interviews of thirty professionals; this study concluded that certain key words in English were instrumental in the inciting of panic and fear amongst the people even as the pandemic had not yet made any considerable inroads in KSA. It also compared these with key words that went viral during an earlier pandemic to

generalise the findings. It is felt that this and similar studies carry much significance for regulatory authorities in the KSA in times of national emergencies of the dimensions of the Corona pandemic, in spreading useful and constructive information and containing dangerous, false and useless propaganda.

## Keywords: EFL learners, Covid-19, Social Media, Pragmatics

#### Introduction

Pragmatics is an inquiry into "the state of our language usage in the social contact sense and the effect on others of our concern" (Bardovi-Harlig, 2017). Pragmatics discuss, in other words, how people interact and comprehend what others do. Pragmatics uses completely grammatical sentences rather than words or the sentence form as a tool of analysis. As Martinez-Flor and Uso-Juan (2010) put it, rhetoric and pragmatism are not merely about utterance but about the components of the statement. As Platridge (1995) introduced the 'speech act theory,' she argued that all words were constructed first to fulfill a purpose and offer a word. This requires an appreciation of words both speakers and listeners use. Austin believed that there had been three civil acts. Firstly, the act of locution that corresponds, in its basic meaning, to the act of speaking; the physical features of speech sounds (phonetic), atmospheric or mood (phatic), real or semitone and existing meanings (rhetic). Secondly, it defines the item expected by the legislation (i.e. promises, warnings, advice or threats). The speaker's aim is to create a culture-dependent vocabulary that helps the listener to recognize cultural meaning. The non-discussive effect of a conversation. Thirdly, the perlocutionary act demonstrates the true effect on the listener. The speaker then sounds and adheres generally to syntax and other semanthropic elements. The word, 'Can you open the door?', although a grammatically correct statement can still not cause anyone to open a door but has an unwelcome desire to suggest that it be opened. Nevertheless, a listener may specifically interpret the query and presume that it would just open a door, suggesting that maybe the 'you' are more conventional.

In this way, pragmatics examining the use of languages and language users should consider the non-language dimensions in order to interpret properly language in the context of social media posts regarding COVID 19 Pandemic. Inferences in expressions cannot be interpreted purely by

the interpretation of the words. Pragmatics involves inference, argues Glaser (2009), encouraging audiences to use non-linguistic information in order to comprehend the language.

What began in early January as underreported news of a mystery illness took on the form of a disastrous calamity facing the world in the weeks that followed, with 'fear' and its synonyms and symbols spreading like wild fire on social media. Popular social media platforms such as Facebook, Twitter, and Instagram facilitated important conversations surrounding the virus, while simultaneously allowing the spread of misinformation and creating sensationalism (Ali and Kurasawa, 2020). On the other hand, it was recognised that social media helped individuals remain aware of the latest developments and take prescribed precautions (Vasterman and Ruigrok, 2013). However, issues of fear, anxiety and panic buying were commonly observed among the public with the rapid transfer of information about COVID-19 (Depoux et al., 2020), necessitating an evaluation of the impact of social media messages and information in English on triggering pain among the public and determining the extent to which social media positively or negatively contributes during a pandemic outbreak. It was the uncertainty and initial lack of information that effectively gave birth to a fear psychosis of the unknown and the unpredictable. This was immediately followed by unchecked media coverage of the happenings, and extensive social media exchange of both true and false bits of information. In modern times, media coverage is a key regulator of people's emotions, especially fear. It may be noted that collective participation in a happening has unlimited potential for sharing of emotions, which was fear in the case of the Coronavirus pandemic. As soon as an event enters the public domain, it becomes open to debate, giving the masses something to debate about but not necessarily guiding the direction of the debate. Wanta, Golan and Lee (2004) point out how that public perception were a factor of media coverage which acts like an agenda-setting agent for the people. Wahl-Korgensen (2020) notes that in the period of one month starting January, 12, 9387 Coronavirus related stories were collectively published in leading English print media around the world. Of these, 1066 articles contained the word 'fear' or associated meanings, all of which were fear inducing. What was notable was that this circle of 'fear' was ever widening, starting with fear for life and becoming more and more inclusive with the passage of time by adding other 'fears', such as fear of economic backlashes, food shortages and even of nations collapsing. Soon it was apparent that more than the 'fear' of the disease it was an undefined 'fear of fear' that characterised public reaction. Equally notable

was the pattern of reporting being followed by the news media who underreported statistics on the mortality rates induced by other highly contagious diseases like Ebola or H1N1, or the comparable number of deaths caused by common influenza, with prime coverage being reserved for dramatic videos of people collapsing on the streets, cities piled up with bodies, ransacked food and provision stores, and medical professionals in forbidding special suits struggling to manage the sick people. In hindsight, these behaviours do not appear to be random; rather they bear the semblance of well thought out strategies to up the TRPs and sales of the channels and the print.

## **Research Problem and Significance**

As per Depoux et al. (2020), in the era of digitalisation, social media technologies and advanced information technology, misleading rumours, false information and conspiracy theories rapidly spread across the globe within few weeks of the outbreak of coronavirus (COVID-19) in China. Issues concerning bulk buying of face-masks, and fear-mongering behaviour of public occurred due to circulation of important information as well as falsified information about the pandemic. In this regard, it is described that media reporting is strongly linked to public behaviour and sentiments on the private and public sectors in taking decisions regarding discontinuing airline services and imposing travel restrictions (Depoux et al., 2020). Linguistic analysis is an applied linguistics technique used by many scholars, pedagogues and educationalists as an evaluation of language problems and in the search for a suitable approach. Crisis approaches to public health are constantly overlapping and interconnected on the ground and online. Social networking gives the ability to share all kinds of knowledge directly with the public. In the new world dispensation, it is imperative that health services can use social media tracking to develop national and international networks of disease prevention and surveillance. In order to address the dissemination of misleading news, the need of the hour is a more constructive and responsive public health voice on social media.

#### **Research Objectives and Questions**

The central objective of the current study is to test the hypothesis that social media, apart from disseminating a large amount of relevant and timely information to the public in the wake of the Coronavirus pandemic, also triggered panic through the massive circulation of unchecked videos, images and messages amongst the Saudi people. Concurrent to this,

## The proposed work aims:

- To examine the impact of social media tools on the psychology of individuals during the outbreak of a pandemic.
- To assess the benefits and drawbacks of social media messages and videos in English in the context of the coronavirus outbreak.
- To analyse the impact of the social media messages, videos and pictures on COVID-19 that were basically in English on Saudi Arabian individuals.
- To recommend strategies for minimising the negative aspects of social media use in a foreign language in a pandemic outbreak.

#### **Review of the Literature**

Feng and Zhou (2020) who watched the shifts in transient tweet patterns to learn all about COVID-19 across working hours while the pandemic grew analyzed the United States State and County Tweets. They also performed a dynamic analysis over time using an event-related task that reported negative emotions when the 1000th death was announced and positive when the lock-up measures in the countries were simpler. Lyu et al. (2020) looked at US tweets containing the expressions "Chinese virus" or "Wuhan virus" for a COVID-19 pandemic to achieve market classification. They compared the results with people who did not use this divided vocabulary. The findings show that there are major shifts in era, geolocation and follow-up policies. Moreover, Chen et al. (2020) reflects on researching feelings and computer problems through using tweets COVID-19, like (controvertibly) the term "Chinese Virus." "Chinese Virus" tweeting addresses other China-related concerns. The mood analysis revealed a gloomy feel for both groups, but uncontested tweets had a slightly stronger and more important sound. They further highlight the ability of the nation to combat the crisis. The divided group also focuses more about their background and what they should do.

In the viewpoint of De La Garza (2020), conversations between the active users on different social media platforms like Twitter and Facebook in the case of a pandemic outbreak, are facilitating a window to gather information and shaping the reactions of people. Social networking sites

including Facebook, Twitter and alike which did not exist at the time of significant outbreaks in the past, are providing important conversations regarding COVID-19 spreads in today's time, while also permitting sensationalism and inaccurate information to spread. Moreover, the unparalleled level of real-time details available to people through such social media platforms are providing tools they need to make a rational decision, but also trigger anxiety about what will happen next. The optimistic opinion suggests that social media can be useful at the time when many people are otherwise not connected with one another. Communications related to coronavirus, particularly ones at the society level can assist people in navigating such crisis (De La Garza, 2020).

In a similar context, Cellan-Jones (2020) argued that 24\*7 news culture and the growing use of social media spread the fear rapidly than the virus itself, particularly as the coronavirus was being detected very speedily then Sars was before twenty years. Furthermore, social media is providing partial or incomplete information to people instead of covering all facts, which is actually magnifying concerns. Therefore, it is assessed that inadequate and moulded information circulated by social media platforms during pandemic outbreaks threatens people about the upcoming consequences (Cellan-Jones, 2020).

The Cinelli Social Network Infodemic Study (2020) COVID-19 sponsored the COVID-19 Information Improved Social Networking Site. They also concluded that knowing the social forces that influence the usage of information and social networking could be a big challenge as it allows us to build more efficient behavior trends that explain social behaviour and develop improved strategies for experiences during emergencies.

Dupoux et al. (2020) studied the COVID-19 global hysteria epidemic and stated that in view of the current COVID-19 crisis, we are calling for a program to share data on a real-time basis and evaluation of the different social networks in many languages and in the environment of the diaspora. This would improve public health and stakeholder skills to spot and understand social trends that propagate fear and anxiety about the coronavirus and increasingly shifting infection and prevention approaches, mitigating group tension and needless ineffective behaviors.

Thelwall and Thelwall (2020) then evaluated 3,038,026 COVID-19 tweets between 10 and 23 March 2020. It reflects on a common reaction component: class inequalities. The findings show

that people in households, socio-economic inequalities and cultural networks tweet the infection more. In contrast, more media think of the death of sport, the propagation of the disease worldwide and global reactions. Therefore, women tend to have an unequal part of the duty to effectively defend the country. Detailed reports will help raise public awareness and identify viral transmission.

In Vietnam, La et al. (2020) studied financial, social media and science journalism responses within the context of the Vietnam epidemic of COVID-19. It offers useful lessons for other countries by true cooperation between governments, civil society and private people in the fight against the COVID-19 pandemic. The original declaration of gains made in government and media turmoil and recent work into Vietnam's current virus helped credible news outlets. The case study gives important advice not only to certain countries in the parallel struggle with the COVID-19 pandemic but also to the general approach to public health problems, underlining the reality that governments, civil society and private individuals collaborate effectively and frankly.

During the epidemic of COVID-19, Gao et al. (2020) studied Chinese mental wellbeing and social networking issues in China. The results show that SMEs had a significant influence on mental health during the OVID-19 epidemic. The government will concentrate more on mental health concerns, particularly depression and anxiety in the general community, and on addressing "infodemics" during crises in public health.

## **Research Methodology**

For the purpose of assessing the role of social media in igniting fears among people during any pandemic outbreak, with specific reference to the impact of corona virus-related messages and videos circulated over social networking sites, on people of Saudi Arabia, this study used qualitative data because the researcher was convinced that this area required subjective evaluation to obtain deep knowledge instead of relying only on objective philosophy supported by quantitative methods. We understand that qualitative methods are commonly used for answering questions related to meaning, experience and perspective, mostly from the viewpoint of participants, and this is another reason justifying the selection of qualitative methods in the proposed research project (Lune and Berg, 2016). As a part of qualitative methodology, semi-structured interviews were conducted with thirty individuals of Saudi Arabia who are active on

social media platforms. This was a non-probability typical case sample, which logically represented a cross section of the population, based on the belief that being educated and professional individuals, these were least likely to be taken in by illogical and unsubstantiated social media propaganda. In this sense, it was felt that the sample would help creating a benchmark for the reactions of the entire population. It was ensured that the convenience sample chosen from academic and non-academic staffers at Qassim University fulfilled the following conditions:

- i. They are above 25 years of age.
- ii. They have been active social media users at least for the past three years.
- iii. They have a minimum of one social media account, which they have consistently used in these past three years.
- iv. They welcome participation in the study and are willing to share their views honestly and to the best of their knowledge.

Interview data was evaluated with the aid of a thematic analysis whereby themes were generated centering around the emergent concerns voiced by the interviewees and which variedly highlighted the constructs of panic and fear as well their manifestations. Given the social distancing norms still prevalent in the KSA at the time of data collection, all interviews were conducted using the Zoom video app. A schedule was drafted and informants intimated in advance for the Zoom meet. Each interview was recorded with prior permission of the interviewee and was later manually transcribed and saved electronically. An equal representation was sought from male and female volunteers. All the informants were primed for the interview via email, clearly enumerating upon the aims and objectives of the study and their consent for participation was duly obtained by the same route.

All the interviews were conducted by the researcher in the English-Arabic language pair and the medium of communication and the task of transcribing these was assigned to his research team. The average duration of the interviews came to 42 minutes and recommended research ethic guidelines were followed. Table 1 below presents the demographic and social media status of the sample respondents.

Table 1: Demographic data

Respondent	Gender	Highest	Current	Number
		qualification	employment status	of social
				media in
				use
1	F	Bachelor's	Non-academic	2
		degree	staff	
2	F	PhD	Academic staff	1
3	F	Diploma	Non-academic	1
			staff	
4	F	Master's	Non-academic	2
		degree	staff	
5	F	PhD	Academic staff	1
6	F	Bachelor's	Non-academic	3
		degree	staff	
7	F	Bachelor's	Non-academic	2
		degree	staff	
8	F	Master's	Non-academic	2
		degree	staff	
9	F	PhD	Academic staff	1
10	F	Master's	Non-academic	1
		degree	staff	
11	F	Bachelor's	Non-academic	2
		degree	staff	
12	F	Master's	Academic staff	2
		degree		
13	F	Bachelor's	Non-academic	2
		degree	staff	

14	F	Diploma	Non-academic	1
			staff	
15	F	Bachelor's	Non-academic	3
		degree	staff	
16	M	Master's	Non-academic	2
		degree	staff	
17	M	Master's	Academic staff	1
		degree		
18	M	Bachelor's	Non-academic	1
		degree	staff	
19	M	Bachelor's	Non-academic	2
		degree	staff	
20	M	Master's	Academic staff	2
		degree		
21	M	PhD	Academic staff	2
22	M	Bachelor's	Non-academic	1
		degree	staff	
23	M	Bachelor's	Non-academic	1
		degree	staff	
24	M	Bachelor's	Non-academic	2
		degree	staff	
25	M	Diploma	Non-academic	1
			staff	
26	M	Master's	Academic staff	3
		degree		
27	M	PhD	Academic staff	1
28	M	Master's	Non-academic	2
		degree	staff	
29	M	Master's	Academic staff	2
		degree		
 1	•	•	•	

30	M	Bachelor's	Non-academic	2	
		degree	staff		

## Interview Data and Results obtained via Thematic Analysis of Social Media exposure

Main theme: Recurrence of the term 'fear' and its associated synonyms and reflection of panic reaction in participants' behaviours.

- **❖** Discussion:
- Sub theme 1: Frightening video messages.

Discussion: Twenty-one of the participants were in agreement on the most distressing social media videos being the following:

- i. Supposedly infected people spitting in and around public places to spread purposely the virus.
- ii. Apparently healthy people falling dead on the roads presumably being infected with the Coronavirus.
- iii. Complete apathy and inability of authorities to attend to the dead lying unattended.
- iv. Mass graves being used to bury the dead for lack of space and work force to do otherwise.

Participants 14 and 26 shared that they found these videos so distressing that they had to seek psychiatric assistance to manage their fears. On being asked if they had verified the veracity of the videos, they admitted to the contrary but expressed immense 'faith' in stories doing the rounds on social media platforms because they attach a certain amount of 'sanctity' of life.

• Sub theme 2: Text messages with hyped up safety recommendations.

Discussion: Eighteen participants in all shared the view that the hyped up safety precautions doing the rounds on social media with fear, death, highly contagious, sanitation, uncontrolled, dead bodies, life support and contagion, caused them extreme anguish, so much so, that they stocked up on sanitizers and masks much beyond what they could possibly have needed. Three participants whose close family members are healthcare professionals further shared that the latter reported how these very things had to be rationed in health facilities, as manufacturers were unable to keep up with the crazy hike in demand. In short, the people who most needed the precautionary materials and gear were the ones most suffering for their shortage.

#### • Sub theme 3: Racial slur.

Discussion: Participants reported feeling drawn to social media messages and videos that targeted a particular race as being the source of the virus. The term 'Chinese Virus' was reported as being extremely popular on the social media leading to feelings of anguish and hatred towards the entire Chinese people. At least nine of the participants interviewed reported change in buying behaviours since they encountered the term, rejecting products that were made in China out of fear that they may be infected by buying them. Similar reactions were reported by another three participants who reported they preferred to go without certain essentials (though they equally worried about their short supply in the coming weeks) rather than buy Chinese products as they believed social media messages that warned of virus transmission by means of objects.

• Sub theme 4: Videos and messages of likely food shortages leading to certain behaviours.

Discussion: The most remarkable responses were obtained on the theme of food shortages; a paranoia that the participants reported was totally uncalled for had it not been for social media messages. Participant 8 specifically reported the panic-buying spree that she went on prompted solely by social media messages and one particular video that showed that even toilet papers were no longer to be found on store shelves. She reported that so well circulated was this video that when she went out to stock on essentials, the store refused to sell her beyond the 'rationed' quantity of certain items even though there seemed to be no dearth of the commodity at the time.

Participant 23 reported that a certain nation or its supporters filtered messages onto the social media, which claimed that if people boycotted products made there, they would eventually have nothing to buy as the entire world's supply chain started from this country! The effect of such messages was panic buying, and this participant shared that a friendly store assistant even warned that things were likely to be in short supply and it was best to stockpile whatever one could find in the markets.

On the other hand, participants 11, 15, 24 and 19 reiterated that social media posts though created anxiety and fear helped them get educated about the precautions that protected from catching the infection. Even so, the fear and panic quotient far outweighed the potential benefits of these posts as a warning system.

• Sub theme 5: Most frequent words/ word strings in social media messages.

Discussion: A large section of the participants (N=24) unanimously recounted the following words and expressions as being most frequently found in social media posts and videos: Death, toll, bodies, fear, virus, untreatable, pneumonia, morbidity, ventilator support, tension, shortage, risks, safety, isolation, upward graph.

On the other hand, the hard facts, such as the annual number of deaths by influenza, the ratio of cured to succumbing patients, the age bracket of those likely to succumb to the illness, etc. were highly underreported in these posts, thus starting a vicious circle of hopelessness and fear.

• Sub theme 6: 'Expert opinion' videos.

Discussion: False and unverified videos by people and agencies claiming to know all there was to know about the virus became a cause of much concern in the early days of the outbreak when information on the facts was not readily available. These posts, however, were taken largely at their face value, as there was no way for even governments to verify the truth of these claims since the global outbreak was quite sudden and unprecedented in the experience of mankind in the recent decades. One big negative contribution of these was the birth of the conspiracy theories, which asserted that there was nothing accidental about the happening, and that it was all part of a bigger game plan. Some of these claims were out rightly atrocious such as the theory that mass scale of vaccines and medicines to rake up huge profits was actually the 'secret' behind it. What is notable is that no matter how incredible these conspiracy angles appeared to the logical mind, noted seven participants, the fear psychosis was so overwhelming that these theories were attributed some credit at the end of the day. The reason for this as stated by participant 19 is that man needs an answer or an explanation to a problem, not necessarily a solution, and a concrete and tangible object or people to blame for it, even this appeared to offer some respite in the midst of the panic. Again, the 'expert' speak led to irrational behaviours early during the outbreak, with people being

extra cautious not to contract the infection. That was a time when it was anyhow not widespread, and as weeks ran into months, they began to feel weary and lax, at a time when the dangers were far more than earlier on, ignored genuine governmental advisories to practice sanitation and distance from others, and hence, ended up actually falling prey to the infection.

#### Conclusion

The current study being qualitative in nature, the number of participants was relatively small at thirty, yet the role of social media in spreading misinformation and its concomitant fear and panic amongst the people of Saudi Arabia cannot be ruled out. In fact, so palpable was this wave in some countries that administrations were forced to send out warnings of severe prosecution of people and agencies, which engaged in this anti-social act. This brings up a question that is quashed by freedom rights activists, the question of governmental control over the social media. The influence of social media is formidable today, much like other media like television and radio. Users attach legitimacy to it and posts on these media are taken as 'truth', a fact that caused much fear and panic amongst the Saudi Arabians, throwing into oblivion, the assurances of the administration that all was under control in KSA and there was no cause for irrational behaviors. The participants in the current study were in a way, the intelligentsia of the country, an educated and aware lot, well-adjusted to technology and its use. Even so, they admitted to the negative effects of social media posts that pertained to the global pandemic. Compared to the only other pandemic in the last one hundred years, the Spanish Flu, it is notable that the press was sensitive to its commitment as an instrument of public welfare, refrained as it did, from reporting the frightening statistics of people who were daily succumbing to the virus. This, when in 1918 itself the Spanish flu has taken a toll of 50 million people. Clearly, then the media played the game more responsibly.

#### Recommendations

Recommendations from this study are partly a contribution of the participants of whom at least twenty-one pointed out that the quality of their lives and those of their near and dear ones was severely jeopardised by the lack of true information and the actual deluge of unchecked information on social media. Official media, of course, were far more constrained, conscious of the legitimacy attached to every media utterance, especially in such testing times. Some participants averred that some form of governmental control of social media might not be totally

out of place. The researcher agrees with this view but also recommends that the administration can keep the floodgates of misinformation tightly shut by being the first to constructively educate its citizens in the wake of similar threats to humanity. In other words, any threat to the lives of the masses should be treated as a veritable war and the people should be prepared to face the enemy as an anticipatory measure rather than when standing close to its nose.

## Implications of the study for Teaching of English (EFL) in KSA

Pragmatics, a core aspect of a foreign language is largely an ignored area of study for the EFL learner of KSA. While it is true that the EFL teaching community untiringly profess the importance of the target culture, they finer nuances of English are left out for the reason that they are challenging to teach. The present study is a step in the direction of demonstrating the significance of pragmatics in the EFL teaching-Learning scenario of KSA. The EFL learner needs to be trained in English pragmatics if he/ she has to avoid inaccuracies and misunderstandings in communication. We cite the example of the word 'fear', which has been at the centre of the current study. For a student of EFL who is ignorant of the pragmatics of the language, University 'fear' may be seen as an equivalent of any of its synonyms, such as, dread and terror. However, with some depth of the understanding of pragmatics, a discerning EFL learner will immediately define 'fear' for what it is, i.e. a possibility and not a certainty. This study will certainly shine the torch in the direction of pragmatic competence for the average Saudi EFL learner so that he/ she may comprehend and produce utterances, which are suitable to the social and cultural circumstances in the target language. Ensuring pragmatic competence for EFL learners may be a difficult goal for the teachers, but it certainly is one that can be achieved.

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# Lexical aspect and the L2 acquisition of English past tense morphology by Saudi EFL learners

## Ahmed Yahya Almakrob

Department of English, College of Sciences and Humanities in Al-Kharj, Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi Arabia.

a.almakrob@psau.edu.sa

## Nayef Shaie Alotaibi

Department of English, College of Languages and Translation

Al-Imam Mohammed Ibn Saud Islamic University, Riyadh, Saudi Arabia

nsotaibi@imamu.edu.sa

Correspondence: Ahmed Yahya Almakrob, Department of English, College of Sciences and Humanities, Prince Sattam Bin Abdulaziz University, Saudi Arabia. Email: a.almakrob@psau.edu.sa

#### **Bio-profile:**

**Dr. Ahmed Yahya Almakrob** is an Assistant Professor of Applied Linguistics at the Department of English, College of Sciences and Humanities in Al-Kharj, Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi Arabia. He received the IMSIU Award for Excellence in Research for his PhD dissertation, entitled "Acquisition of Arabic and English tense-aspect systems by L2 learners: a comparative study". Dr. Almakrob worked for five years at King Saud University as a Language Instructor of English at the Department of English Language and Literature and the Center for Excellence in Learning and Teaching. His research interests fall into L1/L2 acquisition of tense-aspect system, L1/L2 discourse and pragmatics and language testing.

**Dr. Nayef Alotaibi** is an Assistant Professor of Applied Linguistics at the Department of English, College of Languages and Translation, Al-Imam Mohammed in Saud Islamic University, Saudi Arabia. Dr. Nayef's research expertise is language assessment and teaching methods.

#### **Abstract**

This study examines the effect of the lexical aspect on the use of the English simple past temporal morphology by Saudi learners of English as a foreign language (EFL), with a particular reference to the Aspect Hypothesis (AH). Data were gathered from 54 Saudi undergraduate EFL learners from five levels (L3- L7), using a production task and a comprehension task. The results of the study suggest that the lexical aspect may not have a primary influence on the use of the English past morphology. Findings of the production task showed that learners are sensitive to the lexical aspect in that they first associated the past markers with achievements and accomplishments and then with activities and statives. Findings of the comprehension task, by contrast, did not support the AH whereby learners' comprehension of the simple past marker spread from accomplishment to achievement verbs. Similarly, among atelics, the learners' association of the simple past marker spread from stative to activity verbs, which is not in line with the AH, too. Remarkably, learners' first language (L1) and task variation may have an impact on the learners' use of the English past marking because their realizations of the English past marker in the production and comprehension tasks were inconsistent.

Keywords: L2 acquisition, the Aspect Hypothesis, EFL, past tense, lexical aspect

#### 1. Introduction

Acquiring a new language requires a learner to adopt the temporality system of the target language (Smith 1997). Temporality can be expressed through different means, such as temporal and locative adverbs, tense, chronological order and tense (Klein, 1994). Aspect is another means of expressing temporality which, in turn, can be realized overtly or covertly. That is, it can be expressed through morphological inflectional markers (grammatical aspect) or lexically through the semantic properties of verbs (lexical aspect) (Smith, 1991). Encoding tense-aspect markers is a crucial element for L2 learners' language acquisition because it is an integral part of both syntactic and semantic competence (Ayoun and Salaberry, 2008). Thus, there is a considerable body of literature on the acquisition of the tense- aspect system, with a particular focus on the influence of the lexical aspect on the use of tense and aspect markers.

One approach that best accounts for the L2 acquisition of tense and aspect is known as the AH (Bardovi-Harlig, 2012; Bardovi-Harlig & Comajoan-Colomé, 2020). According to the AH, L1 and L2 learners tend to use aspect marking before tense markings (Andersen and Shirai, 1994).

The AH is based on the assumption that " first and second language learners will initially be influenced by the inherent semantic aspect of verbs or predicates in the acquisition of tense and aspect markers associated with or affixed to these verbs" (Andersen and Shirai, 1994, p. 133). Based on Vendler's (1967) four-way classification of verbs, the AH states that learners' acquisition of the past marking spreads from achievements (ACHs) to accomplishments (ACCs) to activities (ACTs) and finally to statives (STAs) (Bardovi-Harlig (2000).

The validity of the AH has been examined by many researchers across different languages in L1 and L2 settings. In L1 acquisition of tense-aspect system, it seems a large number of the studies in the literature are in line the AH claims whereby children are sensitive to the lexical aspect rather than tense when acquiring tense and aspect morphology. That is, children in the early stages tend to use perfective past marking with telic predicates (accomplishment and achievement), and imperfective marking on atelic (activities) (e.g., Chen & Shirai, 2010; Johnson & Fey 2006; Le, 1998; Shirai & Anderson, 1995;, 2004; Shu, 2004; Weist et al and so on). On the other hand, some studies did not confirm the AH predictions due to some factors, namely language-specificity (e.g., Bertinetto's et al. 2015), task variation and individual differences (e.g., Bar-Shalom, 2004; Filiouchkina, 2004; Wanger, 2001; Olbishevska, 2004; Stoll, 2005).

Likewise, in L2 settings, the acquisition of tense and aspect as a second language has been investigated by many researchers across several languages. The findings of previous studies are of two fold. Most of the studies revealed that there is a universality of the AH with regard to the spread of past marking across the aspectual classes, including English (Al-Surmi, 2013; Bardovi-Harlig 1998, 2000; Lee & Kim, 2007; Rocca, 2002, 2005; Mazyad, 1999; Zhao & Shirai, 2018, among others), Japanese (Shirai & Kurono, 1998), French (Ayoun & Salaberry, 2008), Spanish (Salaberry, 2002), Italian (Rocca, 2002, 2005), Francophone (Collins, 2002) and Mongolian (Qian, 2006).

Some studies, on the other hand, rejected the AH predictions in which the aspect marking distribution is not restricted to the lexical aspect (Housen, 2000; Ishida, 2005; Salaberry, 2000). Some other researchers found that there are some factors besides the lexical aspect affecting the acquisition of tense and aspect morphology, such as learner variation, language transfer, task variation and discourse narration, in languages like Catalan (Comajoan, 2006), Spanish (Salaberry, 2011), Japanese (Sugaya & Shirai, 2007), English (Housen, 2002; Rodhe, 1996, 2002,), Chinese (Ming, 2008), Italian(Rocca, 2005).

Concerning the studies of Arabic-speaking learners acquiring English tense-aspect systems, the reviewed related literature showed that a few studies have been conducted to test the acquisition of the English simple past tense, with a particular reference to the AH. For example, Mazyad's (1999) study investigated the acquisition of English tense and aspect on learners of English for specific purposes by using grammaticality judgment task, gap filling task and retelling task. Another study that investigated the L2 acquisition of English aspectual system by Arabic-speaking learners is Alruwaili's (2014) study. It paid more emphasis on the L1 influence on the acquisition of English tense and aspect marking rather than the lexical aspect. Thus, it's worth addressing the strength of the AH on Arabic-speaking learners of EFL for academic purposes in an instructional setting by using different elicitation tasks, production and comprehension tasks.

Accordingly, the main objective of this cross-sectional study examines the relative influence of the lexical aspect on the acquisition of English past marker by EFL Saudi undergraduate learners, with a particular focus on the AH. To achieve this objective, it attempts to answer the following research questions:

- 1. Will Saudi undergraduate learners' use of the simple past be predominantly on telics or atelics?
- 2. Among the telics, will the learners' association of the simple past marker spread from ACH to ACC verbs?
- 3. Among the atelic verbs, will the learners' association of the simple past marker spread from ACT and STA verbs?

#### 2. Theoretical background

# 2.1. The Definitions of Aspect and Tense

Aspect is one of the verbal categories that is used for expressing temporality. Aspect, according to Comrie (1976, p. 3) refers to the "different ways of viewing the internal temporal constituency of a situation". By contrast, tense locates the time of a situation in which it is a deictic category (Aksu-Koq, 1988; Binnick, 1991; Comrie, 1985). The sentences, *he read the story*, and *he was reading the story*, are similar with regards to time reference, but they are not similar in terms of aspect. That is, both of the previous sentences describe an action that tool place in the past, but in terms of aspect, the first one indicates perfectivity while the other one indicates imperfectivity. So the

difference between the above sentences is not one of tense, rather it's a difference of aspect. In short, we can say that aspect has to do with the semantic or meaning of the verbs (predicates). In other words, it can be expressed lexically via the inherent meaning of the verbs or morphologically through affixation or auxiliaries (Dowty, 1979; Klein, 1994). Consequently, aspect falls into two types: lexical aspect and grammatical aspect (Smith, 1991). The following sections will deal with these two kinds of aspect in detail.

## 2.2. Types of Aspect

## 2.2.1 Grammatical Aspect

As indicated earlier, aspect is mainly classified into two categories: grammatical and lexical aspect. Grammatical aspect expresses whether an event is viewed as completed, or ongoing (Smith, 1991). As a result, grammatical aspect is concerned with how the situation is presented. Grammatical or viewpoint aspect can be realized morphologically or grammatically (Klein, 1994). In other words, grammatical aspect is indicated by inflectional markers, such as (*ed*) and (*ing*) in English or by auxiliaries such as *was* or *is* (Salaberry & Shirai, 2002; Smith, 1991).

Grammatical aspect, in turn, is divided into two classes: perfective and imperfective aspect (Smith, 1991, 1997). The former indicates the completion of an action; the latter indicates the incompletion of an action (Comrie, 1976). Perfective aspect describes a situation that has a beginning and a concluding point. For instance, the sentence, *Alex wrote a letter* indicates that the act of writing is complete (i.e. it has a beginning, a continuation and an end). Imperfective grammatical aspect, on the other hand, is characterized by the continuation of a situation with no terminal point and it describes the internal time reference of a situation (Comrie, 1976). Hence, the sentence, *Alex was writing a letter* is imperfective, indicating the continuing of the event without denoting its endpoint.

#### 2.2.2. Lexical Aspect

Lexical aspect (sometimes also called aktionsart or inherent or situation aspect) refers to the inherent meanings of the verbs or verb phrases (Smith, 1997). In this study the concept "lexical aspect" is used. Vendler (1967) classified lexical aspect into four classes based on their temporal prosperities; STA, ACT, ACH and ACC.

ACTs are verbs that express an event that "consists of successive phases following each other in time" (Vendler, 1967, p.18). In other words, activities express an action in progressive, in sentence like (Sam is running). Vendler (1967) differentiates ACT (e.g., walk, run, work, etc.) from STA (e.g., know, understand, recognize, etc.), in terms of continuation. STA lack the continuous tense (e.g., \*I am knowing, loving, and so forth) while activities possess progressive tense (e.g., I am walking, writing, etc.). STAs, by contrast, lack the feature of continuous tense. STA are expressed by verbs like *know, understand, love, realize and so on.* Some linguistic features can help recognize the statives. ACCs, according to Vendler (1967, p.100), should (have a "climax," which has to be reached if the action is to be what it is claimed to be). Finally, ACH verbs (e.g. reach the top, win a race, and so on), unlike STA, take place at a short and specific time. In other words, they occur instantaneously (Smith, 1991). Furthermore, one can distinguish ACH from ACC and ACT in that ACH lack the feature of progressive tense (Vendlre, 1976). A further explanation about the characteristics of these aspectual categories is given below.

From a semantic point of view, the lexical classes can be grouped according to their inherent semantic features into telic/atelic, static/dynamic and durative/punctual situations or predicates (Comrie, 1976). ACH and ACC verbs, as shown in table 1 below, can be grouped as telic verbs and ACT and STA can be grouped as atelic verbs (Dahl, 1985; Klien, 1994).

Table1.

Semantic features of aspectual classes (Based on Smith, 1991)

Situation	Telic	Dynamic	Durative	Example
Stative	_	_	+	know, realize
Activity	_	+	+	run, walk
Accomplishment	+	+	+	run a mile, draw a circle
Achievement	+	+	_	win a race, die

## 3. Methodology

## 3.1. Participants

Fifty-four Saudi EFL undergraduate learners took part this cross-sectional study. They were all male students enrolled in the B.A. program of the Department of English Language and Literature, Prince Sattam bin Abdulaziz University in Riyadh. A biographic questionnaire, in the target language, was administered to them to gather information on each person's background: their age, their level, the time spent studying English and being abroad in a place where English is spoken. Their ages range from 19-22 years. All of them had had at least seven years of studying English. They belonged to five levels. The five groups were chosen from L3, L4, L5, L6 and L7 in order to account their proficiency, given the fact that L3 and L4 learners are beginners, L5 and L6 learners are intermediate and L7 learners are advanced.

The tasks of this study were administered to 65 students in the selected different five levels: L3, 13; L4, 13; L5, 12; L6, 13 and L7, 14. However, eleven students were excluded: 9 students did not complete the task, and 2 students had been to a foreign country (the US for 1-3 years) and they answered the task 100 % correct. As a result, the findings of 54 students from different five levels (L3; n=10, L4; n= 10, L5; n=10, L6; n= 11, L7; n=13) were reported and analyzed for the study's instruments.

## 3.2. Elicitation Tasks and Procedures

Bardovi-Harlig (2000) reviewed different ways of eliciting information on the use of tense and aspect systems; "by observation of talk on a daily basis, conversational interviews, a film retell task, a story retell task, cloze passages, short contextualized passages, judgment tasks and personal and impersonal narratives" (p.15). Information elicitation in this cross-sectional study included two tasks: (1) a production task, a series of cloze passages task and (2) a comprehension task, a grammaticality judgment task (GJT).

#### 3.2.1. Production Task

The production task employed in the study was a cloze task because it is useful to examine learners' use of simple past in an obligatory context (Bardovi-Harlig, 1992). In addition, it facilitates the comparison among the participants based on the same criteria, which otherwise might be less clear. The purpose of the cloze task in this study was to compare the appropriate and inappropriate production of the simple past markers of English with both telic and atelic verbs.

The written series of cloze passages task were adopted from Collins' (1999) study. This task is a revised version of Bardrovi-Harlig and Reynod's (1995) cross sectional study. In this task, 56 of the 82 items focused on the simple past and were distributed across the four lexical aspectual categories of verbs: 14 STA, 14 ACT, 14 ACC and 14 ACH (see Appendix A).

Students were administered this task during one of their sessions of the first semester of the academic year (2019). Each level of the students was administered the task separately during their classes. To perform the cloze task, participants, after reading every single passage of the cloze task, had to provide the correct tense of the given base form according to the context.

## 3.2.2. Comprehension Task

One of the comprehension tasks that SLA researchers use to assess learners' comprehension of the grammaticality of a certain aspect of structure is Grammaticality judgment task (GJT). Kang (2002) states that a major merit of the use of the GJT tests in SLA studies is "to avoid processing difficulties, such as slips of the tongue, memory, etc., often found in production tasks, grammaticality judgments may be appropriate to tap into the learners' implicit knowledge of the new features." (p.55)

This task targeted some of the past simple verbs of the cloze passages task. Thirty two (32) sentences were given to investigate the comprehension of using the past simple tense with the aspectual classes of verbs (A revised version of the GJT, adopted from Gabiriele, 2005). All the items of this task were derived from the cloze task and targeted the simple past tense. They were also distributed by the lexical aspect: 8 ACH, 8 ACC, 8 STA, and 8 ACT (see Appendix B). Unlike the production task, this task was designed to examine the receptive knowledge rather than the production of the distribution of the simple past marker with the aspectual classes of verbs.

Students were administered this task during another session of the second semester of the academic year (2019). They were given the instructions of how to perform this task. That is,

students were asked first to read each sentence and then decide whether it is grammatical (G) or ungrammatical (U) by circling the letter (G) or (U). The context of the sentence determines whether it is grammatical or ungrammatical. That is, in order for a sentence to be grammatical, the verb + morphology must be well-formed in terms of inflection and also must be appropriate in terms of tense and aspect in conjunction with the context.

## 3.3. Data Coding and Statistical Analysis

Since the main objective of this study is to examine the influence of the semantic properties of the verbs in the simple past context through the appropriate or inappropriate association of the simple past marking, the ability of the learners to produce the correct or incorrect forms of simple past tense was the dependent variable. When the correct verb forms in past tense were produced correctly, they were coded with number (1). When the forms in past tense were produced incorrectly, they were coded with (0). The independent variable was the learners' level. Thus, when correcting the students' responses, each correct answer receive the form 1 and the incorrect one the form 0.

The next step was to enter the data obtained from the learners into excel sheets for each level. In the excel sheet, the four aspectual classes (STA, ACT, ACC and ACH) were labeled separately in isolated columns. Under each one of these category, the 14 verbs were labeled horizontally. Students' names were coded with numbers form 1 – 13 according to the total number in each level. The total of the correct responses was calculated in a separate column. In the GJT, the aspectual categories were attached with the number 1 (SAT1, ACC1 AND ACH1) to differentiate between them and the other categories of the cloze task. Then the same procedures of the cloze task were followed.

To carry out the distributional analysis of the appropriate and inappropriate use of the simple past markings, SPSS 22 for Windows was used. Quantitatively, means, standard deviation, frequency, and percentages were used to analyze the elicited data in order to examine the overall use of the simple past responses, non-simple past responses and the distribution of the simple past across the four aspectual classes by all level learners. A one way ANOVA tests were used to investigate the significant differences among the aspectual classes and the learners' level as well. A post hoc Tukey HSD test was also used to decide where the differences lied either between the four aspectual classes or the learners' levels.

## 4. Findings

# 4.1. Findings of the production task

The analysis of the findings of the cloze task consists of two parts: (a) the overall use of simple past in general; (b) the distribution of the past marker by the four aspectual classes and the use of the simple past across the levels of the students.

## 4.1.1. The Overall Use of the Simple Past in the production

This section discusses the use of the simple past tense in general across the students' levels (L3 - L7). The purpose of this analysis is to gauge the learners' general production ability of the simple past. As Bardovi-Harlig and Reynolds (1995) and Collins (2002) did, appropriate responses to the past included target-like (knew, belonged, finished, told), non-target like attempts, including overgeneralized forms of irregulars (telled, knewed, writted) and phonetic misspellings (studyed, singed).

Table 2 illustrates the overall use of the simple past tense by learners across the five levels. It is shown that the simple past tense was used highly by level 7 learners with a percentage of 30.9 %. Level 6 learners used the simple past tense about 6% more than level 5 learners (22.9 % and 17.3 %, respectively). The percentages of the use of the simple paste by Level4 and level3 were close with approximately 1 % difference for level 4 learners. All in all, among the five levels of the learners, it is seen that there is a relative development in the use of the perfective as learners proceed to higher levels.

Table 2.

Distribution of percentage use of simple past by learners in the production task.

Level	N	Mean	Std. Deviation	% of Total Sum
Level 3	10	6. 50	1.57	14.1%
Level 4	10	6.85	1.50	14.9%
Level 5	10	7.98	2.09	17.3%
Level 6	11	9.60	2.31	22.9%

Level 7	13	10.94	2.33	30.9%
Total	54	8.54	2.60	100.0%

To examine whether the differences between the performances of the learners with regard with their level of proficiency were significant or not, a one way ANOVA test was run. The results obtained from this test indicated that the differences were significant (F = 9.82) and p = .000. Post hock Tukey HSD results revealed that there were significant differences in the use of the simple past between L6 and L7 learners and the other level learners. The use of the simple past tense by L3, L4 and L5 learners were not significant.

## 4.1.2. Distribution of Simple Past by Lexical Aspect

This section presents the findings of the appropriate use of the simple past marking across the four aspectual categories (STA, ACT, ACC and ACH). First, the means and standard deviations of the use of the simple past by all level learners across STA, ACT, ACC and ACH are presented in Table 3.

Table 3.

The distribution of the simple past across the lexical aspect in the production task

Level		N	STA	ACT	ACC	ACH
Level 3	Mean	10	4.70	5.80	7.40	9.50
	Std. Deviation		1.34	1.81	2.88	2.07
Level 4	Mean	10	4.20	5.50	7.10	9.20
Level 4	Std. Deviation		1.03	1.72	1.91	2.44
I aval 5	Mean	10	6.40	6.60	9.40	9.50
Level 5	Std. Deviation		2.95	2.91	2.413	2.12
Level 6	Mean	11	7.82	8.09	10.55	11.91
Level 0	Std. Deviation		3.34	3.42	2.02	1.76
I assal 7	Mean	13	10.46	9.31	11.69	12.31
Level 7	Std. Deviation		3.09	3.12	2.56	2.08
TD 4.1	Mean	54	6.94	7.20	9.39	10.61
Total	Std. Deviation		3.45	3.02	2.93	2.44

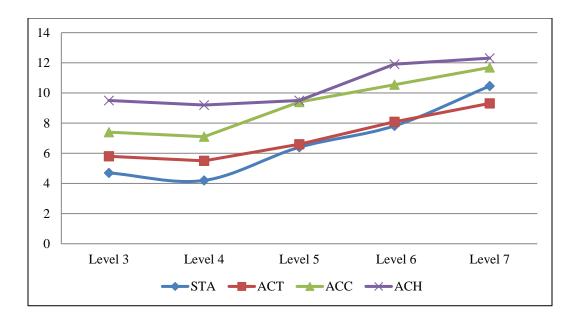


Figure 1. The distribution of the simple past across the lexical aspect in the production task

It can be clearly seen from Table 3 and figure 1 that all learners in the different five levels attached the past marker most with ACH verbs followed by ACC (with a total mean 10.61 and 9.39, respectively). The use of the simple past with STA and ACT was approximately close (with a total mean 6.94 and 7.20 respectively).

L3 learners used the past marker more with achievements than with accomplishments (9.5 and 7.4 respectively) and they associated the simple past marker more with activity verbs (with a mean of 5.8) than statives (4.7). Similarly, among telics, L4, L5 and L6 learners attached the past marker more with ACH than with ACC, and they also preferred using simple past more with activities than with statives. L7 learners', with regard with telics, performance is similar to the other levels (their use of the simple past with ACH is better than with ACC), but they used the simple past more appropriately with statives than with activities.

In general, it can be clearly seen from the table and graph above that all learners in the different five levels used the simple past more appropriately with telic verbs (ACH and ACC) than with atelic verbs (STA and ACT). More specifically, among telics, the distribution of the simple past marker spread from ACH to ACC in all the learners' levels; among atelics, it spread from ACT to STA.

To examine whether the difference of past marker distribution with telic and atelic verbs is significant or not, a one way ANOVA tests were used. The results of ANOVA indicated that there

was a significant difference in the use of the simple past across the aspectual classes of the verb (STA, ACT, ACC, and ACH verbs) where F (18, 929), p=0.000 where P < 0.05. To compare the significant difference among STA, ACT, ACC and ACH verbs, a post hoc Tukey HSD test was performed. Tukey test revealed that there was a significant difference in terms of use of the simple past between ACH (P = 0.000), and STA and ACT. Like ACH, there was a significant difference between ACC (P= 0.001) and STA and ACT. However, there was no significant difference between ACH and ACC (P= 0.147) or between STA and ACT (P= 0.969 where P > 0.05.

# 4.2. Findings of The Comprehension task

## 4.2.1. The General comprehension of the Simple Past

To examine the overall receptive knowledge of the past marker, the general understanding of the simple past by all learners is analyzed first. As table 4 shows, the simple past was highly preferred by level7, 6 and 5 learners (with a percentage of 23.0%, 22.3 % and 21.3 % respectively). On the other hand, L 4 and L3 learners showed a less preference than the higher levels (with a percentage of 18.3% and 15.1% respectively). Generally speaking, it can be said that high-level learners' receptive knowledge is better than the lower levels.

Table4.

The distribution of the simple past marking across levels in the comprehension task

level	N	Mean	Std. Deviation	% of Total Sum
level3	10	4.35	.38	15.1%
level4	10	5.28	.32	18.3%
level5	10	6.13	.76	21.3%
level6	11	6.43	.69	22.3%
level7	13	6.02	1.22	23.0%
Total	54	5.65	1.04	100.0%

When a one way ANOVA test was run, it indicated that there was a significant difference in the choice of the simple past tense by learners' levels, F (12.227), p = 0.000. To discover where these differences lied, post hoc Tukey HSD was performed. The results of this test illustrated that

the simple past tense was used more significantly by level, 5, 6 and level 7 learners in comparison with level3 learners(p=0.000 for each). The results of Tukey did not reveal a significant difference in the use of the simple past between level 3 and level4 learners (p=0.065). Similarly, the choice of the simple past marker was not significant among level 5, 6 and 7 learners.

## 4.2.2. The Distribution of Simple Past by Lexical Aspect

As table 5 indicates, unlike the production task, the simple past was highly preferred with ACC followed by ACH (with a mean of 6.61 and 6.12, respectively). Regarding the atelic verbs, it seems that the association of the past marking with STA is more than with ACT (5.08 and 4.78). More precisely, all Level learners attached the simple past marker more with ACC than with ACH except L5 learners: they used the simple past tense more with ACH than with ACC. The distribution of the past marker with atelic verbs varies. L3, L5 and L7 learners attached simple past marker with STA more than with ACT verbs whereas L4 and L6 learners associated it in a similar percentage with both STA and ACT. In short, the distribution of the simple past with telic verbs (ACH and ACC) was more appropriately than with the atelic verbs (ACT and STA). In this task, figure 2 shows that the use of the past marker among telic verbs, unlike the cloze task, spread from ACC to ACH, and among atelic verbs, it spread from STA to ACT.

Table5.

The distribution of the simple past across the lexical aspect in the comprehension task

level		N	STA	ACT	ACC	ACH
Level 3	Mean	10	4.10	3.40	5.00	4.90
	Std. Deviation		.99	.843	1.05	.74
Level 4	Mean	10	4.40	4.40	6.50	5.80
	Std. Deviation		1.58	1.35	.97	.919
Level 5	Mean	10	5.70	5.10	6.80	6.90
	Std. Deviation		1.34	1.66	.79	.876
Level 6	Mean	11	5.27	5.27	7.18	6.36
	Std. Deviation		2.05	1.68	1.25	1.43
Level 7	Mean	13	5.90	5.70	7.50	6.60

	Std. Deviation		.74	1.49	.85	1.35
Total	Mean	54	5.08	4.78	6.61	6.12
	Std. Deviation		1.55	1.60	1.30	1.28

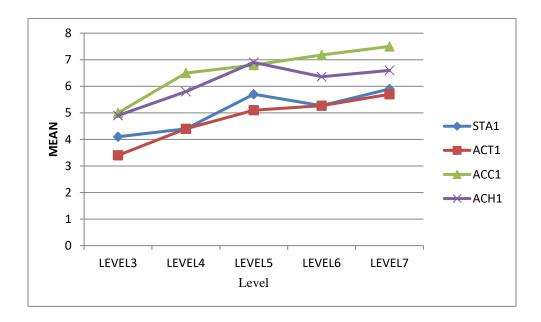


Figure 2. The distribution of the simple past across the lexical aspect in the comprehension task

To examine whether the difference of past marker distribution with telic and atelic verbs was significant or not, a one way ANOVA tests were used. The results of one way ANOVA indicated that there was a significant difference in the use of the simple past across the aspectual classes of the verb (STA, ACT, ACC, and ACH) where F(18, 178), P = 0.000 where P < 0.05.

To compare the significant difference among statives, activities, accomplishments and achievement verbs, a post hoc Tukey HSD test was performed. Tukey test revealed that there was a significant difference in terms of use of the simple past between achievement (P = 0.002 and P = 0.000), and statives and activities. Like achievement, there was a significant difference between accomplishment (P = 0.000) and statives and activities. However, there was no significant difference between achievement and accomplishment (P = 0.315) or between statives and activities (P = 0.731 where P > 0.05).

In sum, according to the results obtained from the comprehension task, it can be said that higher level learners' (L6 and L7) performance in using the simple past was better than the lower

levels. Regarding the association of the simple past marker with the four aspectual classes (ACH, ACC, STA and ACT), findings, in general, revealed that all level learners matched the past marker more appropriately with telics than with atelics. More specifically, the use of the simple past, among telics, spread from ACC to ACH, and it spread from STA to ACT among atelics.

#### 5. Discussion

The first research question asked whether Saudi undergraduate learners of English use the simple past marking more telic or atelic verb. In both tasks (the production and comprehension tasks), Saudi learners marked the simple past morphology significantly more successfully with telics (ACH and ACC) than with atelic verbs (STA and ACT). These findings are consistent with other studies (Andersen and Shiria, 1994, 1996, Bardovi- Harlig and Reynolds, 1995 and Rodh, 1996) which confirm the validity of the AH predictions whereby learners of L2 language tend to associate simple past marking initially with telic verbs and they extend it to atelic verbs. These findings suggest that Saudi learners are influenced by the lexical aspect when acquiring the simple past marking.

The Second research question guided the investigation of the distribution of the past morphology across achievements and accomplishments. The evidence obtained from the this study investigation, including the production task (the cloze task) and the comprehension task (GJT), were of twofold; findings of the cloze task showed that Saudi learners' association of the simple past morphology spread from achievements to accomplishments in which they used the simple past more appropriately with achievements than with accomplishments; on the other hand, results of the GJT revealed that Saudi learners preferred the use of simple past morphology more appropriately with accomplishments than with achievements.

The results of the production task are consistent with the findings of learners from other studies whereby the association of the past marker was more strongly with ACH (Bardovi- Harlig and Bergestron, 1996; Bardovi- Harlig, 1998; Rohde, 1996). Accordingly, the findings of the cloze task are completely in line with the AH predictions in that the use of simple past marking spread from achievements to accomplishments.

Findings obtained from the comprehension task do not follow the principles of the AH in that learners preferred using the simple past with durative telic events (ACC) more successfully than with punctual telic events (ACH). These findings support the evidence of other studies (Slabakova,

2001, 2003; Mun, 2008). Nevertheless, according to the findings of the post hock Tukey in the two tasks, it was found that there were no significant differences between ACH and ACC and in the use of the simple past. These findings suggest that learners in general are more influenced by the semantic telicity of the verbs (the inherent end point) regardless of the punctuality property (ACH) of the verbs.

The third research question was set to test the spread of English past marking among atelics, from ACT to STA verbs as predicted by the AH. The results obtained from the cloze task followed the AH prediction in which Saudi learners' use of simple past marking extended from ACT to STA (although, post-hoc Tucky test found no significant difference between STA and ACT means for the whole sample). A better explanation for these results could be attributed to the overuse of the base and present forms with STA verbs, which is a possible effect of the learners L1 where simple past is not marked overtly. Moreover, the perfective (past) is considered the base form in Arabic so that learners, in particular lower level learners struggled to attach the English past marker.

Findings of the comprehension tasks are not in line with the AH because learners perceived the past stative more appropriately than the past activity. These findings are congruent with other previous cross-sectional studies of English that had found that learners struggle more with ACT verbs rather than STA (Bardovi-Harlig, 1998). In general, findings of this study do not completely support the AH principles in which the sequence of the distribution of the past marking spread from STA to ACT in the comprehension task.

In short, the findings indicated that the lexical aspect had a partial influence on the acquisition of English temporal morphology of the simple past marking by Saudi EFL learners. More specifically, results showed that learners' first choice of using the past marker was with telic verbs then extended to atelic verbs. Among telics, findings are partially in line with the validity of the AH, in which learners' association of the past marker in the comprehension task distributed from ACC to ACH rather than from ACH to ACC. Similarly, learners' use of the simple past marker in the same taks did not follow the predictions of the AH, in which it spread from STA to ACT rather from ACT to STA.

Beside the effect of the lexical aspect, learners' L1 language influence might emerge through the overuse of base and present forms by all learners across the five levels in which they did not mark tense with the past markers because it is marked covertly in Arabic. In the analysis, according to the data obtained from the learners in all the levels, it is clear that there was a higher percentage of accurate use of simple past associated with learners of higher levels (L6 and L7). However, both lower and higher level students associated the English past marker in the same sequence.

#### 6. Conclusion

The AH states that there is an acquisitional sequence for simple past marker because of the effect of the inherent meanings of the verbs. However, findings of this study revealed that the lexical aspect may not have a primary influence on the L2 acquisition of English past marking. The analysis of the two tasks, the production and comprehension tasks, revealed that the lexical aspect has a partial influence on the English past marking. Learners in the production task marked simple past more with ACH than with ACC, which is consistent with the AH; however, in the comprehension task, learners' comprehension of the past marking spread from ACC to ACH, which is inconsistent with the AH. Among atelic verbs, findings obtained from Saudi learners in both tasks partially agree with the AH principles. In the production task, learners' association of the past marking was more appropriate with ACT verbs than with STA verbs. However, in the comprehension task, it was the other way around, which is not in line with the AH prediction. Thus, according to the analysis of the data of the comprehension and production tasks, it seems that elicitation tasks may play a role in the L2 acquisition of English past morphology. Learners' L1 may be a factor that affect the distribution of the English past markers across the lexical aspect.

### 7. Pedagogical implications

The findings of this study found that Saudi learners performed differently in the two tasks- the production and comprehension tasks. It was also found that even high level learners kept using incorrect forms in the simple past contexts which suggests that even proficient Saudi learners of English have a difficulty in marking tense in English. These findings suggest that instructors should not be limited to explicit instruction when teaching English forms. Moreover, instructors should be eclectic whereby they ought to use different teaching techniques and strategies that meet the different needs of students. For example, task-based language teaching and communicative approaches are thought to be useful for teaching students how to use the language structures

accurately and appropriately because EFL learners of English need more exposure to the target language (Fontiveros-Malana, 2018).

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**Appendix A**Target verbs for simple past context in the cloze passages task

States	Activities	Accomplishments	Achievements
(14)	(14)	(14)	(14)
belong	cook	buy	break
enjoy	eat bread	change the story	die
feel	eat in the cafeteria	change apartments	discover
know	go (attend)	give	drop
like	live	go to Paris	drop
look	panic	grow up	explode
look	ride	marry	fall out
need	run	move	find
own	sing	rent a video	finish
seem	stay	ride 10 km	happen
smell	study	run 5 km	kill
taste	swim	swim a km	lose
think	tell stories	tell a story	start
want	work	write	turn of

**Appendix B**Target verbs for simple past context in the comprehension task

Statives	Activities	Accomplishments	Achievements
(8)	(8)	(8)	(8)
enjoy	cook	change the story	break
feel	go (attend)	give	die
look	live	grow up	discover
need	sing	marry	fall out
own	stay	rent a video	find
seem	study	run 5 km	finish
taste	swim	swim a km	lose
want	work	write	rn off

# Advancing Grammatical Accuracy of EFL Students in Web-based Writing

## **Abdurrazzag Alghammas**

Department of English Language and Translation, College of Arabic Language and Social Studies, Qassim University, Saudi Arabia alghammas@qu.edu.sa

## **Bio-profile:**

Abdurrazzag Alghammas is an assistant professor of applied linguistics at Qassim university, Saudi Arabia. He has been teaching English courses for secondary-level and university-level students since 2002. He obtained a Master's degree in Applied Linguistics from The University of Edinburgh, UK, and a PhD in Applied Linguistics from The University of Memphis, USA. His research interests include computer assisted language teaching and learning, second language acquisition and assessment, and teaching L2 grammar and writing.

#### **Abstract**

In group writing, a group works together to compose a well-written text. Web 2.0 has bolstered web-based group writing among linguistic scholars and language teachers. This research examined the impact of web-based group writing on intermediate-level sophomore students majoring in English in colleges in Saudi Arabia. It considered the students' work process during web-based group writing, unveiling students' opinions and attitudes toward web-based tools. Employing a questionnaire survey after a writing task, data were gathered after respondents experienced the benefits of web-based writing. The theoretical framework for the research was based on Vygotsky's social constructivist theory and Li and colleagues' wiki-based collaborative process writing pedagogy (WCPWP). The results indicated that using web-based tools in the group writing of essays helped learners make fewer grammatical errors and also fostered group interactions. Many learners positively reacted to the web-based group writing. This research provides a better understanding of the modern technology and pedagogy used by educators, thereby contributing to the existing literature. Based on the study results, the research presents recommendations of appropriate web-based applications for second language writing.

**Keywords:** web-based tools, group writing, grammatical accuracy, social constructivist theory, wiki-based collaborative process writing pedagogy (WCPWP) model

### 1. Introduction

For more than two decades, teachers have employed group writing in second language learner (L2) classrooms. In this writing activity, students negotiate ideas, interact to make joint decisions, and engage in a composition process yielding a single outcome resulting from co-ownership and shared responsibility (Storch, 2013). By enabling learners to construct knowledge through cooperative efforts, the writing practice also helps them collect language resources. Experts in the L2 field have demonstrated that group writing motivates students to use recurrent editing to promote L2 development (Williams, 2012). Scholars have explored how writing collectively has impacted language learning (Wigglesworth & Storch, 2012). As L2 students complete a mutual writing project, they subconsciously cultivate the skills needed for group, interactive writing (Storch, 2005). Moreover, the collective efforts enhance L2 learning, as they generate a joint scaffolding that helps students identify linguistic gaps, form hypotheses, and talk about other languages while they cohesively develop a co-constructed text (Hanjani & Li, 2014).

Many experts have illustrated the benefits of group writing, including the increased discussion of language forms and heightened audience awareness (Storch, 2012). Students can apply these newly acquired skills and knowledge as they produce a composition together (Hirvela, 1999). Recent innovations in most Web 2.0 tools, such as Google Docs or wikis, have facilitated collaboration and participation. This technology has increased attention on computer-mediated group writing, especially for L2 students. Because of the technology's space—time independence, students can engage in virtual reflection and writing interactivity, thereby taking a highly beneficial research path (DiCamilla & Anton, 1997). Because group writing offers numerous advantages for L2 students, researchers should assess how it can also advance cultural learning and educational learning.

The present study examines the relationship between L2 group creative writing and modern technology. Specifically, it investigates how online group writing helps students produce grammatically accurate essays and promotes the self-correction of errors; it also measures students' perceptions of the adoption of wikis for writing assignments. The primary research purpose is to explore the use of online group writing in enhancing student writing and unmask

student views of the experience. Furthermore, the research aims to expand the way modern technology can enhance pedagogy, specifically language learning.

#### 2. Literature Review

## 2.1 Teaching Grammar Through Technology

The methodological assumptions and underlying learning of instructors and students have led to the teaching of grammar through computer-assisted language learning (CALL). In the past, computers have offered structured or drilled response activities (multiple-choice questions or fill-in-the-blank exercises) to help learners review grammar. Grammatical exercises continue to be prevalent, especially among behaviouristic teachers who view language learning as involving audiolingual instruction (Bikowski, 2018). However, educators wishing to transcend rote behaviourism can leverage technology to teach grammar in new ways. Technology can benefit teaching when educators integrate it into the curriculum and their teaching practices after careful planning. Although some educators have focused on task-based instruction, the aspects of this instruction related to identifying problems, assessing practical tasks, and evaluating real-world events have not been assimilated in bottom-up grammar learning (Blake, 2013). Moreover, by basing instruction on tasks, both teachers and learners have a better opportunity to get involved in student work and immerse themselves in their grammatical structures.

Doughty and Long (2003) developed 10 methodological principles that can be applied to task-based language teaching with technological aids; they used inputs, learning tasks, learning styles, and student preferences. CALL implementation relies on structured tutorials, technology-based simulations, problem-based learning tasks, computer-mediated communication discussions, and autonomous learning tasks (Swain & Lapkin, 1998). A well-focused task for learning grammar can take any of these forms. Therefore, instruction using this perspective appears to be better suited here than traditional rule-based grammar teaching. Teachers today have three methodological choices: technology-based, language-based, and conventional context-based learning. Although traditionally, educators around the world have employed English as a foreign language (EFL) teaching strategies to teach grammar, new result-oriented tactics have emerged and are being put into practice. Most professional development programs present various techniques and approaches (Almuhammadi, 2020). However, more studies are needed to create a body of evidence about the

efficacy and effectiveness of modern techniques over traditional ones, so that more educators will incorporate them.

## 2.2 Group Writing

In group writing, two or more participants co-author a written text and, as they do so, combine a product and a process (Kale, 2013). The procedure encourages all members of the group to participate actively during the composition, proposal of ideas, negotiation of structures, and editing of the text. These activities constitute and result in a collective achievement. It is important to note that collaboration does not distribute projects independently among group members and then encourage them to assemble a final product (Cole, 2009). In collective writing, at some point—if not at all points—the participants share the task. Interaction problems emerging during web-based group writing can include reluctance to edit the work of others or comment on it, feelings of isolation, preference to work independently, and the discounting of group members (Boling et al., 2012). Researchers have asserted that writers can relate with each other in meaningful ways in group writing. The aim of this research is to focus on goals, contexts, and other similar aspects influencing interactions (Cho & Lim, 2017). The outcome of this research can improve the practice of collectivity and boost the perception of group writing, increasing its usage and reducing its negative connotations (Volet et al., 2009).

Vygotsky (1978) reported that collaboration helped students learn. He developed the zone of proximal development (ZPD) to measure what a student can learn and accomplish alone compared with the learning that student gains when working cooperatively. Group writing requires that a group work as a team to create documents; scholars have found that this mutuality encourages linguistic proficiency and better academic performance (Elola & Oskoz, 2010). Web-based writing is one effective means by which students can compose a text together to achieve a mutual goal. Learning through technology requires that all actors actively participate in a conducive learning environment.

Both groups and individuals must remain regulated for group writing to succeed. In De Wever et al.'s (2015) study, students confirmed that activity supervision improved learner participation and confidence and reduced anxiety about group writing. Few researchers have examined student influences and interactions during group writing sessions (Wigglesworth & Storch, 2012). The current study examines student interaction and its effects during group writing to address this gap.

It is hoped that future researchers can explore the impact of teacher supervision during group writing.

## 2.3 Wiki Usage in Writing Courses

Wikis constitute a useful and easily accessible tool for foreign language learning and L2. Few researchers have explored wiki efficiency and technological efficacy for language acquisition or its impact on grammar learning because it is a relatively new field. Because of their flexible web settings, wikis are a unique web tool (Aydin, 2014) that offers an editable online space in which a group text can be created to facilitate knowledge and information sharing. The wiki allows users to send and post messages, draft and modify the text, and manage materials within a prescribed space (Wang, 2015). Many researchers have used wikis to modify, delete, or add content while collaborating with others. The group writing tool tracks source information and stores edits, recording how they influence student writing and collaboration (Alghammas, 2016). Li and Zhu (2017) discussed the four dimensions of wiki-based group writing: (1) factors mediating group interactions, (2) text negotiation and co-construction, (3) final wiki product generation, and (4) the student perception of wiki-based writing assignments (Figure 1).

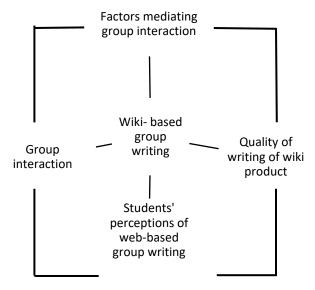


Figure 1. Li and Zhu's (2017) four dimensions of wiki-based group writing

Accessing wiki effectiveness as a web-based learning tool is easy because the web browser stores the composition and its editing changes. Therefore, wiki collaboration enhances group writing

completed outside the classroom. It also incorporates editing structures and open reviews to help students co-construct L2 knowledge through proper negotiations, revisions, and discussion points. This asynchronous, online, common platform fosters additional reflection on the L2, thereby promoting language acquisition. A wiki also gives writing trainers another means of integrating group writing into the classroom (Jung & Suzuki, 2015).

Many researchers have examined wiki-mediated L2 group writing, and others have focused on the steps students use to revise their text when engaging in group writing. For example, Lee (2010) observed that, while using wiki tools to write, students have linguistically supported one another to make corrections regarding word and sentence formation. Other experts have contended that students generate form, content-related information, and other changes in joint wiki projects (Arnold et al., 2009). Arnold et al. (2009) discovered that students focus better on content presented in a more formal style of writing. Li (2013) and Mak and Coniam (2008) also found that learners rephrased, formed, reorganized, and established ideas while correcting others' errors in joint projects. Some language learners have explored L2 interactions as they have co-constructed wiki projects. Li and Kim (2016) investigated student interactions and found that changes in language writing and grammar resulted from the projects on which L2 students were working; in addition, student interactions while working on wiki projects had significant effects on the students' writing proficiency and sociocultural factors (dynamic goals, socially constructed emotions, and flexible agency) also affected their performance.

Scholars have examined the effects of group wiki writing on L2 students from Taiwan (Hsu & Lo, 2018). The researchers divided 52 learners into two groups: an individual writing group and a wiki group writing group. The wiki students shared ideas about the project to produce a joint essay, and the students in the other group wrote papers individually. The researchers assessed the students' individual written assignments before the exercise and the group and individual assignments after the exercise for content organization and value and language accuracy and complexity. The outcomes indicated that the wiki group made remarkable improvements in organization and content quality along with language accuracy. The comparison also demonstrated that the wiki group had become superior to the individual writers in terms of language accuracy and content quality after their group wiki-writing experience. Hsu and Lo (2018) focused on problem solving and found that group writing effectively improved the quality of essays written by L2 students; this advantage might be attributable to the collective wiki-facilitated conversations among the L2

students who were co-constructing the text. Although many experts define a wiki as a technological development allowing L2 students to recreate skills from a sociocultural constructive learning perspective, most wiki-based studies primarily concentrate on student interactions and revisions in group writing (Castañeda & Cho, 2013).

Few researchers have explored student collaboration beyond interactions and revisions; most researchers have concentrated on the joint student dialogue and how students can develop better L2 skills. Kuteeva (2011) reported that wiki writing increased the structural coherence and grammatical accuracy of student efforts. Both Kuteeva (2011) and Kessler (2009) asserted that, while teaching non-native speakers, EFL teacher candidates gave more time and attention to the nature of the content when they were editing via a wiki. Teachers encouraged students to use language and maintain accuracy while revising and writing texts. Although they could have made the necessary changes, the learners in Kessler's (2009) study did not engage in correcting grammatical errors that did not change the meaning. Meanwhile, Wheeler and Wheeler (2009) and Kuteeva (2011) revealed that students significantly advanced their academic writing abilities when they engaged in group wiki writing.

On the other hand, Wheeler and Wheeler (2009) and Lee (2010) discovered that reluctance limited group writing for most participants because they ignored the errors in other students' texts on the wiki. Wheeler and Wheeler (2009) reported that participant unwillingness stemmed from the fact that a significant number of participants were instructors with several years of experience, which may have increased their fears about questioning the competence of their peers. Conversely, Lee (2010) found that 40% of her participants lacked confidence in their writing skills, making them unwilling to correct peer texts. However, students in Kessler's (2009) study developed increased confidence and easily analysed and corrected other students' work. Therefore, wiki writing did enhance grammatical accuracy, and shared learning enhanced the benefits accrued by participants.

### 3. Theoretical Framework for Group Writing

The theoretical framework for this study, based on Long's (1981) second language acquisition interactionist theory focusing on input, notice, and interaction, plays a vital role when creating CALL materials integrating grammar within group language learning in computer-mediated communication (Kessler & Bikowski, 2010). This paradigm resides in the notion that group writing facilitates L2 student interactions and, thereby, contributes to the development of language.

Vygotsky's (1978) sociocultural theory also pointed out that collaboration among professionals and beginners (students) facilitates learning.

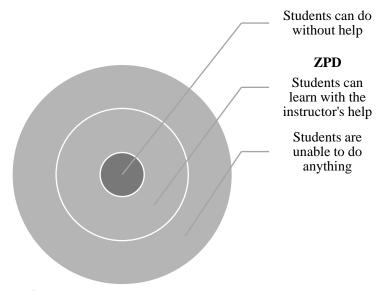


Figure 2. Vygotsky's (1978) model of the zone of proximal development (ZPD)

Figure 2 depicts the underlying premise of the sociocultural theory. It explains the difference between what learners can learn self-sufficiently and what they learn with the help of instructors or peers. When in the zone of proximal development, L2s engaged in group tasks pool their expertise to create a final product through a mechanism called collective scaffolding (Donato, 1994). The theoretical framework guiding this study posits that, although students can learn independently, they also garner additional benefits from others' assistance.

### 3.1 Conceptual Model for Web-Based Group Writing

The conceptual framework for wiki-based group writing resides in the wiki-based collaborative process writing pedagogy (WCPWP) created by Li et al. (2012). This model, also based on the sociocultural theory, uses the sociocultural perspective of writing. According to this paradigm, social theory supports the use of wikis in writing where composition activities occur grouply. A wiki allows learners to observe the ideas of other people and then build on their knowledge while interacting with their fellow peers (Witts, 2008). According to Figure 3, learners can build their knowledge and understanding through cultural interactions with other group members (Kessler et al., 2012). This model displays groups G1 to G3 in the group writing process being monitored,

which showed that their interactions with teachers and among themselves improved communication and accuracy.

## 3.2 Teaching Grammar in Saudi Arabia

Instructional strategies play a significant role in teaching grammar. Throughout the 1970s, Saudi Arabia—like other countries in which English is not a native language—utilized antiquated methods in teaching grammar (Raja et al., 2016). According to Jin and Cortazzi (2011), traditional grammar instruction in EFL uses an approach in which vocabulary and grammar reinforce words and grammar rules translated from one language to another. In Saudi Arabia, this grammar translation places the teacher at the centre. This prevailing style needs to be shifted to a more dynamic type of student-centred training, allowing more interaction among students to strengthen classroom grammar teaching. According to Yuan et al. (2016), the lag in updating teaching methods may result from the fact that many instructors have long engaged in language coaching and are resistant to engaging in a new pedagogy.

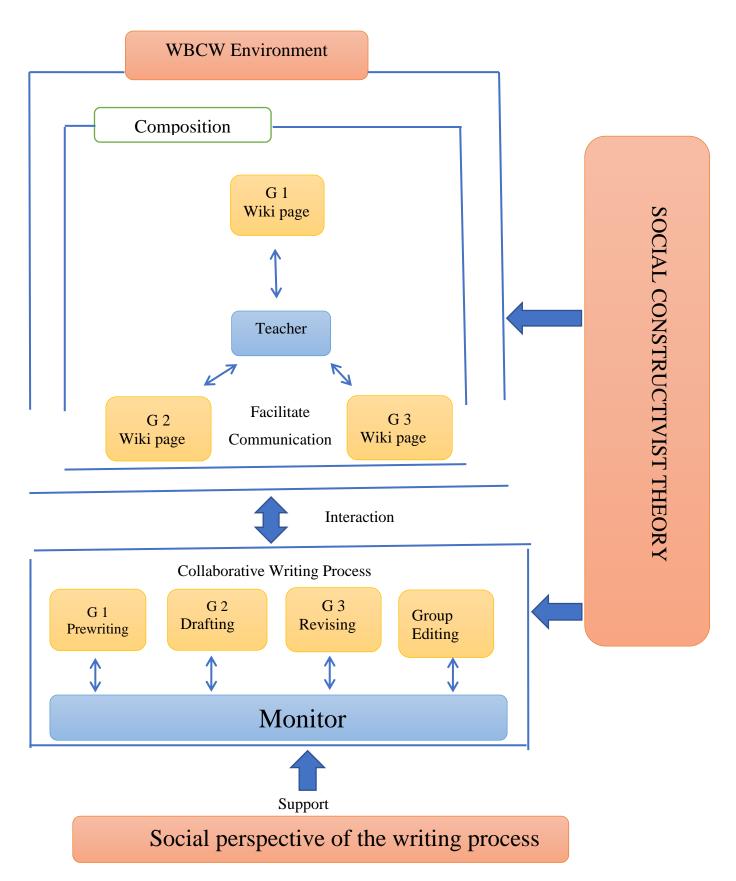


Figure 3. Li et al.'s (2012) conceptual model of web-based collaborative process writing pedagogy

Experts have found that wikis have influenced student grammar. Kessler (2009) investigated the effect of wikis among 40 non-English speaking instructors who aimed to advance their language skills in 16 weeks. The teachers were encouraged to pay attention to language accuracy while interacting with their peers. The research outcomes indicated that students who focused more on meaning than language form, spelling errors, or word choices when editing peer posts had better language development. Castañeda (2011) studied 57 undergraduates learning imperfect Spanish tenses at a public university. No significant differences were seen in the photo/video blog and wiki production between participants who used video and photographic blogs with wiki technology and those who used more traditional forms of technology. However, some recognition variations existed. The results showed that wikis and photo/video blogs enhanced the learning and teaching of more challenging structures (Godwin-Jones, 2018).

Kuteeva (2011) explored how wikis in courses contributed to effective communication in English, building writing skills for professional and academic purposes. The ESL texts produced in an English communication course were examined for interactional meta-discourse resources and reader-oriented elements. Kuteeva (2011) contended that exposing learners to writing activities enhanced their ability to identify proper grammar use, text organization, and structural cohesiveness. In the study, 60% of students declared that using wikis while writing made them focus on their audience and engage their readers more than when writing in an argumentative style. Lund (2008), on the other hand, explained wikis in sociocultural terms as developed social and psychological phenomena. This exploratory study centred on student interactions among EFL learners while using wikis. The researchers discovered that wikis' cooperative practices semantically expanded lexicogrammatical expression. Therefore, a wiki was the epitome of a viable technological tool for enhancing language learning (Yim & Warschauer, 2017).

### 4. Research Methodology

The researcher employed mixed methods to explore the impact of wiki-based group writing. Vygotsky's (1978) theoretical zone of proximal development framework and Li et al.'s (2012) conceptual framework of the WCPWP suited the mixed-method design. The questionnaire (see Appendix) was adapted and modified from (Alghammas, 2016). The first item asked respondents to provide their identification numbers, which the researcher had assigned as a random sequence of numbers to protect respondents' identities. The second item was a yes/no question asking about

respondents' previous experience with wikis. The next 11 items employed a 3-point Likert scale to score the answers, with 1 showing disagreement, 2 neutrality, and 3 agreement. The last three items were open-ended questions that collected qualitative data detailing participants' feelings and opinions about wikis. A statistician and an applied linguistics professor assessed the final questionnaire to bolster its reliability and validity. The sample was made up of 28 Arabic students majoring in English at a Saudi university who completed the online questionnaire using SurveyMonkey.

The questionnaire survey was administered after a group writing task in which seven groups of students, with four learners in each group, used wikis to write about the impact of COVID-19 on education. After brainstorming ideas in an online activity, where all students shared their wiki knowledge, the group jointly composed an essay using built-in wikis on the Blackboard learning management system. These assignments were collected electronically and copied into Microsoft Word; the researcher used the grammar check tool to analyse the document's grammatical accuracy and then manually reviewed the document.

The researcher coded the responses to the subsequent Likert scale items according to common themes, calculated the percentages of students who had agreed with, been neutral about, or disagreed with each item, and reported the results. The open-ended question responses were coded into common themes and analysed using a thematic analysis.

## **Research Questions**

This study focused on addressing three research questions:

- 1. Does wiki-based group writing enhance the grammatical accuracy of students' essays?
- 2. Does wiki-based group writing help students identify grammatical errors?
- 3. What perceptions do students have about incorporating wikis into writing assignments?

## 5. Results

Participants' responses provided the main findings of the study, which are presented in this section. Among the respondents, 89.29% (n = 25) had not used wikis before and 10.71% (n = 3) had previous experience with wikis (Item 1). Table 1 presents the percentages of answers to six of the Likert scale items on the questionnaire as well as their means and standard deviations.

Table 1
Respondents' Views on the Value of Wikis in Identifying Grammatical Errors

Statement	Disagree	Neutral	Agree	Mean	Standard
					Deviation
Item 5. Wiki writing helped me	7.14%	32.14%	60.71%	3.61	0.86
focus on meaning					
development					
Item 6. Wiki writing helped me	7.14%	39.29%	53.57%	3.61	1.05
focus on grammar use					
Item 7. Wiki writing helped me	32.14%	21.43%	46.42%	3.21	1.08
write with no grammatical					
errors					
Item 8. Wiki writing helped me	7.14%	32.14%	60.72%	3.71	0.96
notice grammatical errors					
Item 9. My wiki group focused	57.14%	35.71%	7.14%	2.43	0.73
on grammar more than					
meaning					
Item 10. Wiki writing helped me	3.57%	39.29%	57.15%	3.68	0.89
correct my grammatical errors					

Two items related to identifying grammatical mistakes generated the greatest agreement: "wiki writing helped me notice grammatical errors" (60.72% agreement) and "wiki writing helped me focus on meaning development" (60.71% agreement). The items "wiki writing helped me correct grammatical errors" (57.15% agreement) and "wiki writing helped me focus on grammar use" (53.57% agreement) generated agreements among more than half of the respondents. The statements that generated the most disagreement among the respondents were "my wiki group focused on grammar more than meaning" (57.14% disagreement) and "wiki writing helped me write with no grammatical errors" (32.14% disagreement).

## 5.1 Value of Wikis in Improving Grammatical Accuracy

When asked whether wiki writing had helped students focus on their grammar, 53.57% of the respondents agreed that it had while 39.29% were neutral and two respondents (7.14%) felt that it had not helped them. The mean value for this item was 3.61, and the standard deviation was 1.05. An open-ended question in item 14 provided more clarity about how wikis helped students write an essay with no grammatical mistakes. The thematic analysis revealed commonalities in the responses (see Table 2). Each entry in Table 2 shows a common theme identified through an analysis of respondents' opinions.

Table 2
Students' Views of the Value of Wikis in Improving Grammatical Accuracy

Theme	Number of Respondents
Helped remove mistakes and weaknesses through collaboration	8
Corrected grammatical errors	7
Shared information	4
Took less time	3
Generated more ideas and better details	3
Was more enjoyable	2
Resulted in lack of coherence in wiki writing	1

Respondent 3 summarized wiki writing well by stating, "In individual writing, it's only you, so there is no one to correct your mistakes and help you, but in a wiki, you have people in the same group to work with." Respondent 10's views added to this:

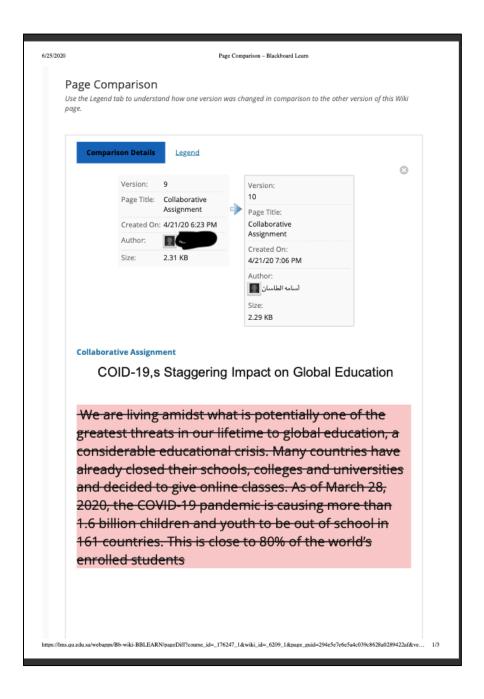
In a wiki, some of the members might have good thoughts, and [one can] write them down but can't arrange them, so [another member] might be excellent [at] writing [and] can arrange them in a good writing style, and [a third member] may be good with grammar [and] can correct the grammatical errors if (they) exist, and so on.

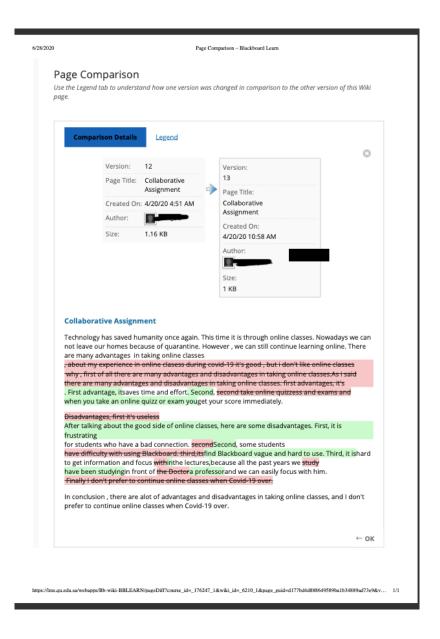
### Respondent 17 corroborated this by asserting,

the difference between individual learning and group learning is that group learning can modify mistakes, [lead to the] shar[ing of] ideas, and [allow the] exchange [of] opinions. From my point of view, group learning gives a better product than individual learning.

However, Respondent 5 pointed out a weakness in wiki writing, citing differences in writing styles and the ability to organize ideas in paragraphs.

Figure 4 presents screenshots of some of the students' work to illustrate how learners achieved grammatical accuracy while working grouply. The words in red and the comments show group members' efforts at editing.





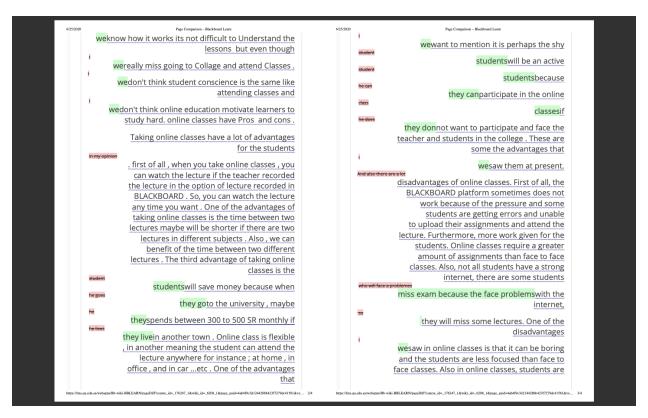


Figure 4. Group writing screenshots

### 5.2 Value of Wikis in Avoiding Grammatical Errors

Regarding the item "wiki writing helped me write with no grammatical errors," the percentages of agreement were lower (see Table 1): 32.14% of respondents disagreed, 21.43% remained neutral, and 46.42% agreed with the statement. The mean value (3.21) was also lower than for the other items, and the standard deviation was 1.08.

The item "wiki writing helped me notice grammatical errors" received more agreement: 60.72% of respondents agreed, 32.14% remained neutral, and 7.14% disagreed. The mean value was 3.71, and the standard deviation was 0.96—the highest among the writing benefit statements. Quite a high percentage of the respondents agreed with the item "wiki writing helped me to correct grammatical errors": 57.15% agreed with the statement, 39.29% remained neutral about it, and only one respondent (3.57%) disagreed with it. As a result, a high mean value of 3.68 was observed, and the standard deviation was 0.89.

Open-ended questions in item 14 further explored a wiki's contribution to removing grammatical mistakes. Some respondents felt that they were self-reliant in correcting their mistakes. According to Respondent 19, "[The wiki] highlights errors with red lines so I can correct them." Respondent

18, on the other hand, self-corrected his work, claiming "[The wiki] has no corrector like Microsoft Office Word." The researcher identified the respondents' common themes and their frequency, which are shown in Table 3.

Table 3

Common Themes Identified in Respondents' Views on the Value of Wikis in Helping Them Write Without Grammatical Mistakes

Theme	Number	of
	Respondents	
Respondent relied on self-correction	8	
Wikis allowed group members to help correct spelling for others	8	
Wikis were helpful and easy and fun to use	3	
Wikis offered students more time to choose the right words	3	
Wikis were not helpful	3	
Wikis helped students to write continuous sentences	1	
No response	1	
Wikis motivated students by giving them the chance to compare	1	
themselves with others		

### 5.3 Students' Perceptions of Wikis

The last research question inquired about students' perceptions of wiki writing, eliciting several more benefits of the medium. The results indicated that 71.4% of respondents agreed that they had enjoyed using wikis while 25% remained neutral when answering Item 3. Only 3.57% strongly disagreed, which reflected a single person's response. The mean value was 3.89, with a standard deviation of 0.90. Regarding the item "wiki writing helped me focus on meaning development," 60.71% agreed with the statement, 32.14% remained neutral about it, and 7.14% felt that it did not help. The mean value was slightly higher at 3.61 while the standard deviation was 0.86, demonstrating little variation between the responses. When students were asked if they preferred wiki writing to individual writing in item 4, the responses were more varied, with 42.85% agreeing that they preferred wiki writing, 25% being neutral about it, and 32.14% stating that they did not

prefer wiki writing to individual writing. The mean value was 3.14, and the standard deviation was 1.12.

To the item "my wiki group focused on grammar more than meaning," most of the respondents (57.14%) stated that they disagreed with the item, 35.71% remained neutral about it, and only 7.14% agrees with it. As a result, the mean value of this negatively worded statement was low (2.43), and the standard deviation was 0.73. Another benefit entailed the role of wikis in helping the group reach agreement faster as "wiki group agreed on the final product easily" (item 11). Only one respondent (3.57%) disagreed with the statement (i.e., felt that wikis did not help in this regard), and 64.28% of the respondents agreed with it; 32.14% were neutral. Hence, a relatively high mean value was observed at 3.68, and the standard deviation was 0.66. When asked about the agreement with item 12, which states that "wiki helped me make important contributions," only one participant (3.57%) disagreed, whereas 71.43% agreed and 25% were neutral. The mean value (3.82) was the highest observed, and the standard deviation was 0.71. Item 13 asked if students had found editing in the wiki enjoyable: 10.71% felt it had not been enjoyable, 14.29% were neutral, and 75% felt it had been enjoyable. A mean value of 3.82 and a standard deviation of 1.17 were observed.

The two principal themes that emerged from this open-ended question were that (1) students preferred to remain self-reliant and correct their own work and (2) the wiki enabled students to correct the work of peers and vice versa. Therefore, in cases where the students did use a wiki, they appreciated its ability to allow them to review their peers' work over other elements. In their answers to this question, respondents mentioned some conditions that affected wiki use. For instance, Respondent 2 stated that the wiki was easy and fun to use and helped his writing, but that its benefits depended on the group with whom he was working.

Table 4

Common Themes Found Regarding the Advantages of Wikis in Group Writing Efforts

Theme	Number of
	Respondents
Wikis facilitate teamwork and collaboration	10
Wikis help in the sharing of information and points of view	5
Wikis make writing more enjoyable and productive	5
Wikis facilitate caring and support among team members	3
Wikis are of no help	2
Wikis allow members to focus on their roles in the group	2
Wikis help in creating more ideas and alternatives	2
Wikis generate competition among students and negative challenges	1
for them	

The next open-ended question (item 15) inquired about the advantages of the wiki for group writing. Several respondents mentioned more than one theme about the advantages of wiki writing, including cooperation and teamwork. Respondent 17 asserted that the benefits included "cooperating, helping each other, correcting mistakes for each other, giving opinions without bias, but for the benefit of all." Some respondents reported that wikis did not help group writing, but they ascribed the failure to low levels of member commitment rather than a problem with the wiki. Respondent 8 said that his group copied answers from Google, rendering the experience useless.

#### 6. Discussion

The results of this study indicate that wikis helped many respondents notice grammatical errors and produce more accurate essays. However, some participants felt differently and stated that they continued to feel the onus for producing work with fewer or even no errors. Some respondents echoed Kessler (2009), asserting that wiki writing focused more on developing meaning than form. Most students had positive perceptions of wiki writing because they believed it led to better productivity, a higher quality of work through collaboration, more skills that could make up for each other's weaknesses, more diversity in ideas, and enhanced sharing of knowledge. Wikis helped the respondents collaborate, buttressing the view of Storch (2011) and Williams (2012) that

group writing helped develop L2 skills. As Hanjani and Li (2014) found, collaboration helped students spot each other's mistakes and correct them. Furthermore, respondents reported hypothesizing about language and improving the text through discussions, as Wigglesworth and Storch (2012) found.

Respondents also mentioned a few weaknesses of wikis. If the group was unproductive or had a few social loafers (Respondent 8 mentioned a team member who copied text from Google), the group writing became uneven because it reflected the minimal efforts and negative aspects of the group. This substantiated the researcher's claims that using web collaboration does not automatically guarantee a better performance. The makeup of the wiki groups also affected participants' perceptions. The participants who felt that wikis played little, if any, role in improving their writing also mentioned that their group members did not participate fully in the exercises or were overly critical of others. For instance, Respondent 24 said he had to remain neutral in his opinions, and Respondent 8 claimed that he worked alone for the most part. Boling et al. (2012) highlighted similar issues.

### 7. Conclusion and Recommendations

This research explored the impact of wiki-based group writing on the ability of students to produce grammatically accurate essays. The study also investigated students' attitudes toward wiki-based group writing. Wiki-based group writing engenders a student-centred learning approach underpinned by the sociocultural theory. After the successful implementation of the WCPWP, the learners not only responded positively to the wiki tools, but also produced more grammatically accurate essays. The overall findings suggest that a well-developed model of the WCPWP applied successfully and constructively can improve the writing skills of Saudi students.

The findings of the current research generated several recommendations for future researchers. Because the present research was limited to online wiki-based group writing assignments, future researchers should compare wikis with other tools, such as Google Docs, to check the differences between the two writing approaches. Contextual factors, such as group composition and the lack of proper group formation, can affect participants' opinions; therefore, a further understanding of situations impacting wikis' effectiveness is required. A longitudinal assessment of certain parameters that indicate lasting changes in second language acquisition, as Kuteeva (2011) implied, is also needed. In this study, time limitations prevented the researcher from observing

students' subsequent use of wikis. Complicated sociocultural contexts, motivational analyses, organizational parameters, emotional aspects, and analyses of students' prelearning experiences remained outside the scope of this research. Future research may, therefore, examine additional variables, such as the roles of social context, class ideologies, gender, and student proficiency (Davidson, 2015).

The current research has significant pedagogical implications for learning grammar during wikibased group writing. The wiki is an excellent group tool in L2 learning. The researcher put forth some suggestions for implementing wiki-based group writing in the L2 curriculum. Teachers and language instructors should design a syllabus comprehensively and explain the goals of wiki-based group writing. The curriculum should clearly outline participation criteria, time schedules, and expectations for the final paper. In addition to choosing interesting topics to motivate students, language instructors should provide additional resources that would help students learn more about the topic. Wiki-based group writing can be a new experience for L2s. Thus, professors must conduct training sessions to explain the primary aims of wiki writing. Wiki-based group writing shifts the focus from teacher-centred learning to student-centred learning. Teachers should foster student confidence so learners can navigate learning. Language instructors should assist students and help them solve technical or written problems. To motivate students to participate in wikibased group writing, instructors should implement creative tasks. The more effort the teacher makes in offering innovative assignments, the more engaged the students will remain. Moreover, language instructors should consider how to form groups to enhance learner performance. Language instructors should restrict the group size because groups comprised of three to four members operate most efficiently (Dobao, 2012).

The teaching of grammar does not occur in software programs designed specifically for language learning; instead, the programs employ technologies for communicative learning. Thus, intensive teacher training remains vital, because it empowers instructors to choose the proper technological tools to build a curriculum to meet student needs. Moreover, teacher self-learning remains essential for teaching grammar because teachers must expand their knowledge and capacity to juggle more responsibilities. The learners, too, should be trained in how to learn when using tools or resources for noneducational purposes (Bikowski, 2018). Thus, preparing teachers and students will significantly affect the success of wiki-based writing and technological teaching for helping with L2 instruction.

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## Appendix

## Questionnaire

1. I used wikis before taking the CALT course.

Statement	Disagree	Neutral	Agree
2. I enjoyed the wiki for group writing.			
3. I preferred wiki writing to individual writing.			
4. Wiki writing helped me focus on meaning development.			
5. Wiki writing helped me focus on grammatical use.			
6. Wiki writing helped me write with no grammatical errors.			
7. Wiki writing helped me notice grammatical mistakes.			
8. My wiki group focused on grammar more than meaning.			
9. Wiki writing helped me correct my grammatical mistakes.			
10. My wiki group agreed on the final product easily.			
11. Wiki helped me make important contributions.			
12. The editing process in wiki writing was enjoyable.			

- 13. How did wiki help you write an essay with no grammatical mistakes?
- 14. What were the advantages of group writing on the wiki?
- 15. How did wiki writing differ from individual writing?

## Blended Learning in English and English-medium Physics Classes Using Augmented Reality, Edmodo, and Tinkercad Media

Derlina<sup>1\*</sup>, Aisyah<sup>2</sup>, Nurdin Bukit<sup>1</sup>, Sahyar<sup>1</sup>, Ahdi Hassan<sup>3</sup>

<sup>1</sup>Universitas Negeri Medan, Indonesia

<sup>2</sup>SMK Nusa Penida, Indonesia

<sup>3</sup>Plcorpora, Islamabad, Pakistan

\*e-mail: derlina@unimed.ac.id

#### **Abstract**

Globalization and the emergence of IT also rendered English more relevant for second language learners. This study aims to determine the effectiveness of blended learning in improving student learning outcomes in English and physics, using augmented reality, Edmodo, and tinkercad media. This is a quasi-experimental study with data randomly obtained from 70 students of Public Senior High School (SMA) 2 on Lubuk Pakam, Indonesia. The samples were divided into two groups, each totaling 35 students. One of the classes is an experiment with blended learning, while the other is a control class comprising the conventional method. Furthermore, the research instrument consisted of a learning outcome test, in the form of an objective test administered during the pretest and post-test in the form of an observation sheet. The effectiveness of blended learning in improving learning outcomes was analyzed using the independent sample t-test with SPSS 17. The results showed that the blended learning model effectively improves student learning outcomes through the independent and paired t-test samples of 0.148 and 0.000, significance differences, respectively. This study concludes that blended learning using augmented reality, Edmodo, and tinkercad media effectively improves student learning outcomes and can make them active.

**Keywords:** Blended learning, augmented reality, Edmodo, tinkercad, learning, outcomes

### Introduction

English has been one of the useful ways to link people. Approaches to support and enhance the efficiency of English teaching and learning have been particularly important for scientists and

educators in the area of English language education particularly in the development of industrial revolution 4.0 in the field of innovation has led to changes in new knowledge and technology, which tend to affect the education sector. Furthermore, teachers have continued to make innovative efforts in learning technological developments due to globalization. According to Kiryakova et al. (2018), innovation creates an environment that enriches and encourages students to learn effectively. The emergence of information communication technology has led to a change in orientation from teacher-centered to student-centered learning. Furthermore, the orientation that was originally a presentation of knowledge from one party became a guidance activity for knowledge exploration.

In this study, the problems posed stem from the need to diversify the learning model according to high school millennial students' needs. Hussin (2018) stated that the birth of the millennial generation is one of the reasons for changing the vision of education, thereby leading to the creation of new learning processes. According to Sirakaya & Cakmak (2018), millennial students expect modern technology because they are accustomed to a computerized environment.

However, the current means of learning, which allows students to meet face to face with their teachers in class, is known as conventional learning. This learning process is bound by time and space, with underutilizing technology and not in accordance with students' expectations. This leads to low student learning outcomes and activities, especially on the English and Physics subjects, which are discussed in this research. Therefore, learning is needed to be able to increase student motivation and enthusiasm, as well as to overcome these problems. Derlina, Dalle, Hadi, Abdul Mutalib, & Sumantri stated that teachers must be able to design and implement learning in accordance with student needs and technological developments. Advances in technology produce online-based learning sources and media with interesting e-learning and blended applications. E-learning provides pure electronic learning via the internet, intranet, or multimedia networks, while blended learning (BL) combines face-to-face and e-learning between teachers and students in the classroom.

There are various advantages associated with blended learning, especially in terms of flexibility in space and time, as well as variations in interactions between teachers and students. Albiladi & Alshareef (2019) stated that BL is a creative idea to connect technology, teaching platforms, and online learning approaches. It also helps teachers to design student-centered learning activities and facilitate lifelong learning (Rahim, 2019). English and Physics are two of the

subjects that are considered difficult by students, and less liked by them. One of the problems associated with learning subject is the low mastery of concepts and their learning activities.

Computer-assisted simulation and language learning activities encourage collaboration and language resources between students (Alkhudiry, Al-Ahdal, & Alkhudiry, 2020; Al-Ahdal, 2020). Studies show that such education goals are achieved by confirming the efficiency of the blended learning model in language education particularly in EFL and ESP (Almakrob & Al-Ahdal, 2020; Kacetl & Semradova, 2020; Petraki & Khat, 2020; Shariq, 2020).

A survey carried out at SMA Negeri 2 Lubuk Pakam in Indonesia illustrated that teachers had applied several learning methods, and teaching aids carried out practicum in laboratories, using information technology media such as Microsoft PowerPoint, video, and animation. However, despite using these media, student learning outcomes are still below the minimum completeness criteria with a score of 65 before remedial. This is due to the limited time associated with the face-to-face approach to the broad Englishmaterial scope. Therefore, teachers often explain and implement conventional learning, which tends to occur in one direction with low involvement and learning activities.

The use of BL learning in this school is possible because, based on a survey in the 2019/2020 odd semester, all students have a smartphone connected to the internet. Furthermore, the school has wifi facilities that can be used, therefore, it is predicted that assuming learning is carried out using information technology, the activities and outcomes changes for the better.

The implementation of BL in the teaching and learning process uses three media, namely augmented reality (AR), Edmodo, and tinkercad. Kong & Song (2014) defined Edmodo as a learning environment supported by social networks. This can be in the form of a platform used to mediate the learning process for teachers, students, and parents in digital classrooms, to allow them to share notes, links, documents, and design better instruction (Qomariyah et al., 2019).

Augmented reality (AR), as a learning medium, combine virtual and world reality to produce two (2D) and three (3D) real and unified dimensional objects. Media AR is one of the advantages because it is interactive and operates in a 3D environment that is integrated into mobile applications such as windows, IOS, tablets, and smartphones (Al-Said, 2015; Ambarwulan & Muliyati, 2016; Budiman, 2016; Qumilaila, Susanti, & Zulfiani, 2017; Vaquero-Melchor & Bernardos, 2019); Kerr & Lawson, 2020). In AR technology, users can determine the real world around them by adding virtual objects generated by the computer (Sáez-López et al., 2020).

Students' interest in learning motivates them, increases their understanding of abstract ideas in learning activities(Pedaste et al., 2020; Sirakaya & Cakmak, 2018). The AR technology can be assisted by tinkercad, which has several powerful features, such as the ability to import and export files used to create prototypes, decorations, minecraft models, and other unique shapes that can enhance students' creativity.

Edmodo is used as a mode of instruction to optimize the management of the learning environment. This application enables communication between teachers and students, irrespective of time and place. Teachers can provide instruction and learning assignments, review student assignments without having to meet face to face. Also, students can post assignments without meeting the teacher. Edmodo is an alternative to learning in online classes, therefore, for teachers, students, and parents, this application allows to share information, notes, links, and documents, with the ability to design a better and interactive learning instruction.

Several studies have shown the numerous advantages associated with the application of BL, such as an increase in students performance compared to those that use traditional methods (Poon, 2013; de George-Walker & Keeffe, 2010; Ceylan & Elitok Kesici, 2017; Oweis, 2018; Utami, 2018; Albiladi & Alshareef, 2019; Rahim, 2019; Qomariyah, & Rejekiningsih, 2019). They stated that the academic learning outcomes and student performance at BL were better than those taught conventionally. Furthermore, most students liked and had positive perceptions of BL learning. Therefore, based on various learning problems, it is necessary to improve the teaching process according to students' technological developments needs to improve their learning outcomes and activities. Numerous problems offer the use of BL combined with augmented reality, Edmodo, and tinkercad media to solve problems related to academics as follows: a) students can use smartphones as learning media when learning face-to-face. b) The use of learning resources that are relatively more numerous and varied. c) The school already has a wifi network that can be used by the residents. d). teachers and students have smartphones and laptops. Therefore, with this situation, the BL application in the teaching and learning process can be implemented at SMAN 2 Lubuk Pakam.

The problems associated with this study are as follows:

 Does BL learning using AR, Edmodo, and tinkercad media effectively improve student learning outcomes in English and Physics subjects in grade 2 SMAN 2 Lubuk Pakam odd semester in 2019/2020? 2. What is the level of student learning activity in blended learning using AR, Edmodo, and tinkercad media?

#### Method

This is a quasi-experimental study with a randomized pretest-posttest control group design. The experimental class applied BL using AR, Edmodo, and tinkercad media, while the control class used conventional face-to-face learning. The study population comprises 70 students of class XII SMA Negeri 2 Lubuk Pakam, Deli Serdang Regency, North Sumatra Province. The sample was divided into two classes, equal groups into the experimental and control groups using the random sampling technique.

The instrument used in this study was an objective form of learning outcome test, collected during the pre-test, post-test, and learning activity observation sheet. The outcome was validated by English and Physics education experts, which was further tested in class XII to determine those that have studied the material. This trial aims to determine the validity, reliability, differentiation, and difficulty level of the questions. After the trial, the questions were revised to obtain valid and reliable learning outcomes tests.

Data were collected during the pre and post-test as well as analyzing the use of the mean difference t-test (t-test for independent samples). Prior to the analysis, the normality and homogeneity prerequisite tests were conducted, while the data normality and homogeneity tests were analyzed using the Kolmogorov-Smirnov and Shapiro-Wilk statistics. Furthermore, to determine the BL model's effectiveness, the data were analyzed using a paired sample t-test, while the SPSS 17 software program assisted statistical calculations. The research design is shown in Table 1.

Table 1. : Research Design

R	Experimental	P <sub>1</sub>	X1	P <sub>2</sub>	
R	Control	$\mathbf{P}_1$	$X_2$	$P_2$	

Information:

R: Random sampling

X1: Treatment with BL learning

X2: Treatment with face-to-face learning conventionally

#### **Results and Discussion**

#### Results

The submission of results to determine the effectiveness of BL using AR, *edmodo* and *tinkercad* in improving learning outcomes is divided into the following.

- 1. Descriptive presentation of pre-test and post-test data from the experimental and control group.
- 2. Data analysis of pre-test and post-test in the experimental and control group
- 3. Hypothesis testing using independent t-test and paired sample t-test

## Descriptive Analysis Results of Pre-test Data

The *pre-test* data were tabulated and analyzed using SPSS 17. Table 2 shows the recapitulation of the *pre-test* data analysis results.

Table 2.

Description of Pre-test Data

Class	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test	35	23.33	76.67	41.2381	11.93901
Experiment	35	13.33	76.67	36.6667	14.11901
Pre-test	35				
controls					
Valid N					
(listwise)					

## Normality and Homogeneity of Pre-test Data

Tables 3 and 4 shows the results of the *pre-test* normality and homogeneity test data. The *pre-test* mean values of the experimental and control groups were analyzed using the Kolmogorov-Smirnov and Shapiro-Wilk statistics. According to the results, the significance values for the experimental and control groups were 0.200 and 0.154. This means that the data comes from a normally distributed population at the 0.05 significance level.

Table 3.

Pre-test Data Normality Test Results

Class	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-	Wilk	
Class	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre-test Experiment	.113	35	.200	.953	35	.142
Pre-test Control	.129	35	.154	.949	35	.104

Liliefors Significance Correction

Table 4.

Pre-test Data Homogeneity Test Results

	Levene Statistic	df1	df2	Sig.
Pre-test	.411	1	68	.524

The data homogeneity test using SPSS 17 had a significance value of 0.524> 0.05, hence the *pretest* data is declared homogeneous. Table 5 shows the results of the mean difference test and independent t-test Table 5.

Table 5. *T-test results for pre-test data* 

		Levene's	Test	for		t-te	st fo	r Eq	γualit	y of Me	ans
		Equality o	f Varia	nces							
							niled)	4.571 Mean Difference	3.125 Std. Error Diffe-Rence	95% Confidence	Interval of the Difference
		<b>-</b>	Sig.		ľ	Df	.148 Sig. (2-tailed)	Mean D	Std. Err	-1.665 Lower	10.808 Upper
	Equal	.411]	.524 Sig.		1.463	68	148	571	125	[999]	808
	variances	••	• •		<u>`</u>		•	4.	3.	1.	10.8
les	assumed										
teon	Equal				1.463	66.173	.148	4.571	3.125	-1.668	10.811
g out	variances				1,	.99	•	4.	w.	-1.0	10.8
ning	not										
Learning outcomes	assumed										

Table 5 shows the *pre-test* data had a significance value of 0.148> 0.05, hence no difference in the mean pre-test of the experimental and the control class.

## Results of Post-test Data Analysis

Table 6 shows a recapitulation of the *post-test* mean scores, where there is a difference in the mean score between the experimental (84.1905) and the control class (71.8095).

Table 6.

Description of Post-test Data

Class	N	Minimu	Maximum	Mean	Std.
Class	m		Maxillulli	Mean	Deviation
Post-test Control	35	43.33	96.67	71.8095	13.77557
Post-test Experiment	35	70.00	100.00	84.1905	7.38055
Valid N (listwise)					35

## Normality and Homogeneity of Post-test Data

Tables 7 and 8 show the results of the *post-test* normality and homogeneity test data. The *post-test* mean scores of the experimental and control groups were analyzed using the Kolmogorov-Smirnov and Shapiro-Wilk statistics. According to the results, the significance values for the experimental and control groups were 0.196 and 0.056. This means that the post-test data come from a normally distributed population at the level  $\alpha = 0.05$ .

Table 7.

Post-test Data Normality Test Results

Class	Kolmogoro	v-Smir	nova	Shapiro-Wilk			
Class	Statistic	df	Sig.	Statistic	Df	Sig.	
Post-test Control	.124	35	.196	.966	35	.337	
Post-test Experiment	.146	35	.056	.955	35	.164	

Liliefors Significance Correction

Table 8.

Post-test Data Homogeneity Test Results

	Levene Statistic	df1	df2	Sig.
Post-test	2.151	1	68	.147

Testing statistics based on the mean significance obtained 0.147> 0.05, hence the *post-test* data is declared homogeneous.

## Blended Learning Effectiveness Test in Improving Learning Outcomes

Table 9 shows the results of the BL effectiveness test using AR, *edmodo*, and *tinkercad* in improving learning outcomes from different tests between the experimental and control groups. These results are based on the difference in values between the *pre-test* and *post-test* following the t-test statistical sample in pairs. Table 9 shows the level of significance at sig. 000 for the two-party t-statistic. Therefore, there is a significant difference in the average value between the experimental and the control class. BL using AR, *edmodo*, and *tinkercad* were tested effectively to improve student learning outcomes.

Table 9.

The results of the effectiveness test between pre-test and post-test (t-test for Paired Samples)

		Paired	d Differe	Differences			Df	Sig. (2-
	Mean	Std. Deviation	Std. Error Mean	Interva	nfidence al of the rence			tailed)
		Std.	St	Lower	Upper	-		
Pair 1 Pre-test – Post-test	-39. 048	18.608	2.224	-43.485	-34.661	-17.557	69	.000

## Student Learning Activity Data

Learning activities include various physical and mental events in interrelated learning for optimal outcomes. The learning activities referred include face-to-face (offline) and online student activities, and the responses to the implementation of BL using AR, edmodo, and tinkercad. Offline student activity data were obtained from observations with measuring instruments as observation sheets. Furthermore, online student learning activities are analyzed based on reviews of assignments sent to edmodo. Table 10 shows the description of student learning activity data.

Table 10.

Data on Offline Learning Activity

Sub Indicator	Mean	Criteria
Getting to class on time	96,76	Very active
Preparing for learning needs	92,00	Very active
Behaving orderly not to interfere with the learning process	93,52	Very active
Studying the learning that will be delivered	76,57	Active
Paying attention to the information conveyed by the teacher	90,86	Very active
Speaking as necessary so as not to interfere with the learning process	88,38	Very active
Giving responses to information conveyed by the teacher	82,29	Very active
Expressing opinions during the discussion	82,28	Very active
Thinking critically	74,86	Active
Carrying out group discussions until the specified time limit	85,72	Very active
Summing up the learning material in your own words	82,48	Very active
Total	945,72	Very
Average	85,97	active

According to Table 10, the results of *offline* student activity from the observation sheet has an average of 85.97%, which is in the very active category. This means that BL using AR, *edmodo*, and *tinkercad* media increases student activity, especially discipline in class. However, the sub-indicators of learning the material before entering class and students' critical thinking still needs to be improved. This is because it is still at 76.57 and 74.86%, still far from the other sub-indicators.

Table 11.

Data on Online Learning Activities

Sub Indicator	Mean	Criteria
Preparing for learning needs	92	Very active
Behaving orderly so as not to interfere with the	93,52	Very active
learning process		-
Studying the learning that will be delivered	76,57	Active
Paying attention to the information provided by the teacher	80,19	Very active
Doing assignments given by the teacher	85,91	Very active
Making a series according to the instructions on the Student Activity Sheet	80,19	Very active
Thinking creatively as such can vary the range	72,38	Active
Collecting assignments on time	86,28	Very active
Total	667,04	Vary active
Mean	83,38	Very active

According to Table 11, the value of student activity during online learning has an average of 83.3, which is in the very active category. This means that BL using AR, *edmodo*, and *tinkercad* media increase student learning activities.

Table 12.

Student Response Activity Data

Sub Indicator	Mean	Criteria
Having the motivation to learn	82,28	Very good
It is easier to understand the subject matter	82,67	Very good
Increase curiosity	84,38	Very good
Students can take the test anytime and anywhere	90,09	Very good

The learning media used makes students enthusiastic	80,38	Very good
Students can study independently	85,15	Very good
Making students active	87,24	Very good
Easily understand the steps to take to start the test	87,43	Very good
The test given is according to the material and LKPD	82,10	Very good
The test results can be seen directly	92,57	Very good
Total	854,29	Very good
Mean	85,43	

Table 12 shows that the students responded very well to the implementation of BL learning. The implementation of BL using AR, *edmodo* and *tinkercad* media can make students active in learning.

### **Discussion**

# Effectiveness of Blended Learning Using Augmented Reality, Edmodo and Tinkercad in Improving Student Learning Outcomes

Blended learning combines face-to-face (offline) with online learning using AR, Edmodo, and tinkercad. It involves alternating offline and online learning using computer-mediated instructions. Implementation of BL in the experimental class consists of 6 and 12 hours of offline and online lessons. In offline learning, students are taught using AR media and supporting teaching materials, such as LKPD and video. Contrastingly, teaching involves using AR, edmodo and tinkercad in online learning. The BL learning process begins with offline class meetings. In offline classes, the teacher provides information about the subject matter, guides students on activities to be conducted online, an explanation of AR, edmodo, and tinkercad media, as well as discussions and questions and answers on the tasks and the pre-test. After offline activities, students take online classes within a specified time. During online classes, teachers use edmodo facilities, including assignment features, quizzes, and others to deliver assignments and news, such as student activity

sheets (LKPD) listed on AR media. In general, AR contains core and basic competencies, indicators, learning objectives, subject matter supported by images, AR cameras assisted by markers, 2D animation, learning videos, LKPD, and learning outcome tests. The LKPD contains several activities that should be conducted with the help of *tinkercad*, such as making electronic circuits and simulating them. Assignments are sent via *edmodo* on a predetermined time. After *online* learning, *offline* class resume, where group representatives present the results of their discussions and assignments before the class. Other students are given the opportunity to ask questions and submit opinions, while teachers are facilitators during the discussion. Afterwards, the learning material is concluded. This pattern was followed repeatedly, and a test was carried out to obtain *post-test* data at the last meeting.

Table 9 shows the results of the BL effectiveness test using AR, *edmodo*, and *tinkercad* between the experimental and control groups. This is obtained from the difference in values between the *pre-test* and *post-test* from the paired sample *t-statistic test*. Table 9 shows the .000 level of significance for the *t-statistic (2-tailed)*. This means that there is a significant difference in the average value between the experimental and the control group in the BL application. Therefore, BL using AR, *edmodo*, and *tinkercad* effectively improves student learning outcomes, hence recommended in the learning process. The results of this study are in line with (Ceylan & Elitok Kesici, 2017; Utami, 2018; Albiladi & Alshareef, 2019), which stated that student learning outcomes in classes taught with BL are better than using conventional face-to-face learning.

Learning outcomes in the BL class can be attributed to the superiority of AR, *edmodo* and *tinkercad* media, which has better means and interactions for learning. BL is effective in improving learning outcomes because students interact with the subject matter, peers, teachers, and parents anytime and anywhere. AR has the following advantages: (1). Downloading a unidirectional electrical circuit application to a student's smartphone does not require an internet network, (2). It is flexible because it can be used anywhere and anytime, (3). The implementation is widely in various media, (4). It is a media for smartphones, *game consoles*, educational and corporate products, printed media such as magazines, brochures, and books.

Augmented Reality is designed as slides supported by a menu panel for students to choose the desired slide menu easily. The AR menu panel contains tutorials on using AR, AR cameras, core and basic competencies, indicators, learning objectives, subject matter, LKPD, and learning outcome tests. When using AR, students learn through the material presented in 3D, such as

images, animations, and videos. Students can: 1) observe the current and electron flow, as well as the potential differences in both simple circuits and Kirchoff's law, 2) see the flow of currents and electrons when measuring currents and voltages in a circuit using a measuring instrument, 3) see a simulation of the flow of electricity to residents' homes and can be used in electrical equipment in daily life.

After scanning a 2D image, students can see a series of images in 3D that almost resemble the original. This activity is enjoyed because students were curious to see the appearance of the series appearing when the 2D image was scanned. This curiosity is a motivation to improve learning outcomes. AR contains sight and sound features that far exceed rigid images in books. It can combine virtual objects with 2D into virtual and real information, interactive and operate in a 3D environment integrated with mobile applications, including windows, IOS, *tablets*, and *smartphones*. Furthermore, AR helps students understand the subject matter, hence can be used as an effective tool to increase motivation and learning activities, cognitive acceleration, and self-management (Pedaste et al., 2020).

Tinkercad's features consist of class, teach, 3D Design, Circuits, and 3D Designs Codeblocks, Circuits, Codeblocks, and Gallery. It has several advantages, including (1). Has complete electronic components to assemble circuits from simple to complex, (2). Can be opened via the web, hence no need to install and download applications on *smartphones* or PCs that take up storage space, quota, and battery life, and (3). Students electronic circuit assignments are stored in their respective accounts.

Tinkercad is a web-based program used for solid modelling and 3D printing. It has electronic circuits with complete components for creating circuits and simulations. Importantly, it is used to support the completion of LKPD on AR while making electric current circuits. Students may compare the results when practising in the laboratory with *Tinkercad* or vice versa. Also, *Tinkercad* supports collaboration between teachers and students by providing a classroom platform, where only students with codes follow it. However, it can only send a link to the electrical circuit assembled, hence takes Edmodo to support collaboration between teachers and students more broadly.

Edmodo has several features, including Assignment, File and Links, Quiz, polls, Gradebook, Library, Award Badges, and Parents Codes. It has several advantages, including (1). No need to use a PC because it can be utilized on a smartphone, (2). There is no need to download applications

on a smartphone for students' storage space, quota, and battery life not to be drained with because of frequently opening applications via the *Edmodo web*, (3). The class grouping system is the same as classes at school, (4). Can be monitored by parents and the school.

Edmodo plays essential in optimizing the learning environment. This is because it can increase student activity and participation in the learning process and provides flexible opportunities for students to learn, discuss, obtain and share learning resources through images, articles, animation, journals, blogs, presentation slides, videos, or e-books. Edmodo is also a forum for teachers to provide assignments, news, and tests and serves as a media for students to collect assignments and take tests. It helps view and relearn the collected assignments any time, irrespective of the place. Furthermore, Edmodo media makes classroom management tidier. For instance, students' assignments are not in piles of paper that might be scattered.

Blended learning is effective improves performance because it generates internal students' motivation, which encourages them to study learning material, do assignments, and conduct other learning activities. According to Oweis (2018), learning outcomes increase in case there is internal student motivation to be involved in various learning activities.

AR, *Edmodo*, and *tinkercad* are advantageous because a combination of online learning media is effective, yet cannot be meaningful without the support of conventional face-to-face *offline* meetings between teachers and students. However, learning is a two-way process, where students need feedback from teachers and vice versa. Through this method, effective and targeted learning outcomes can be obtained.

Offline meetings are needed for teachers to guide students using AR, edmodo, and tinkercad media. However, these media cannot replace the role of peers, teachers, and the social environment to shape student character as the main point of educational goals. In the face-to-face class, students deliver assignments in groups before the class, discuss their work results, and take written tests. The teacher reviews student assignments and plans for the next lesson. This means the advantages of AR, edmodo, and tinkercad are maximized when combined with face-to-face learning, different from the situation in the control class. In general, learning in the control class does not use AR, edmodo, and tinkercad media. The activities are very limited, with a minimal number of learning hours only during face-to-face meetings following curriculum stipulations. Learning in class starts from explaining the material with makeshift PowerPoint media, providing sample questions, recording subject matter, working on questions, and doing homework.

There are several advantages of BL using AR, *edmodo*, and *tinkercad* in improving student learning outcomes. For instance, learning is attractive to students because they can study anywhere, anytime, and with anyone. This can be from home, office, a mall, a cafe, or anything else as long as students bring their *smartphones*. The flexibility of learning without time and place limits allow students to study individually based on their needs. For instance, they can stop or continue learning a concept according to their level of mastery of the concept. In case there is something difficult to understand, they can ask questions to teachers or friends online. Additionally, they can access and select the information needed. AR media is installed on students' *smartphones* in the form of an application that can be opened without using a quota. For this reason, it can be used anytime, irrespective of the place. In case students do not understand or want to better contextualize a concept, they can watch the learning video in AR.

The unidirectional electric circuit AR media contains a menu panel to make it easier for students to choose the desired menu. The panel includes a menu to start an AR camera or scan marker, usage tutorials, core competencies, basic competencies, learning indicators, two-dimensional (2D) and three-dimensional (3D) images, illustration images, learning videos, 2D animation, LKPD containing online practicum guides, and practice questions supported by the value and *smile emoticons*. BL flexibility facilitates productive discussion and increases student interaction, hence improves learning outcomes (Sajid et al., 2016).

Secondly, BL, AR, Edmodo, tinkercad, 3D animation (generated from AR cameras), learning images, and videos make it easier for students to understand the concept of physics. This is because they are able to learn and visualize electrical concepts, such as the flow of electrons, current sources, and the concept of electricity in everyday life using practicum tools in the laboratory. Furthermore, animations and videos of learning materials and LKPD on unidirectional electric circuit AR help students use the existing tools and materials in the laboratory with online tinkercad. This is in line with research carried out by Sumardi & Muamaroh (2020), which stated that learning media makes it easier for students to understand and remember the subject matter. Thirdly, BL, AR, Edmodo, and tinkercad enrich students' learning experiences. Furthermore, the combination of these makes learning activities more numerous and varied, which is in contrast to conventional learning in class with very limited activities, such as listening to the teacher, working on questions, etc. In BL, students are more experienced during discussions, tend to ask questions actively, being peer tutors, virtually practice, learning to make studies, which can be discussed

offline, share learning material from various sources, and provide constructive ideas in groups. In addition, through Edmodo, students are also encouraged to determine references to complete assignments given by the teacher independently. They also share documents in various forms, pictures, animations, and videos. Students can also download teaching materials from shared links and share them in class through Edmodo. Therefore, it acts as a means of discussion between students and teachers. Apart from the freedom to share and obtain teaching materials, students are also given writing papers and articles to enable them to possess the right writing experience. Online learning activities at BL help students prepare for offline learning activities and be actively involved in the process (Utami, 2018).

Fourthly, BL encourages independent learning, increases student involvement in class, and improves communication, discussion, and collaborative skills. This tends to discipline students, thereby enabling them to have good motivation and spend time learning lessons individually and in groups on BL's media. Furthermore, it enables them to learn independently, examine learning material, and use multimedia tools, which are accessed online, irrespective of the time and location. Students also have the opportunity to develop communication skills both inside and outside the classroom through online interactions. Therefore, teachers use this to optimize learning and increase independence learning, thereby enabling them to interact with others and complete their assignments using Edmodo. Furthermore, teachers and students responded to the assignments sent through Edmodo, therefore motivating them to do better.

Students also gain independence and form the habit of opening their material more often, such as during breaks. Some of them preferred to study using videos, group discussions, asking their closest friends' questions in AR, and by guiding those that are not proficient through chaining tools on tinkercad. They also show other differences in classes on the AR applications used in classes, as well as their learning outcome and assignments carried out to their parents. They carry out these activities to enable their parents to appreciate them and lend them their smartphone with better camera resolution to get better images. The interactions between students, such as sharing teaching materials, discussing through whats app groups, during offline class hours, carrying out group assignments at home, guiding friends that have not finished working on LKPD, asking questions, getting feedback from the teacher, as well as appreciating friends, teachers and parents, is an interesting experience and motivates them to learn. In addition, BL can increase their learning independence because when students need remedial or material enrichment, they only need to open

the material in Edmodo or in AR. This interaction and collaboration between students, teachers, and parents raise their motivation, enthusiasm, and independence in learning (Okaz, 2015).

Fifthly, BL makes students accustomed to studying inside and outside the classroom. This means that the learning facilities displayed by Edmodo, AR, and tinkercad, such as teaching materials, content, and videos available on AR, can be viewed at any time, thereby creating a positive habit. Students can study with their smartphones when sitting with friends, for example, during class breaks, on their way to school, or while waiting for a public vehicle without feeling embarrassed. However, conditions associated with conventional learning, such as opening textbooks in public places, can cause resentment. This is in line with the research carried out by Junco (2012), which stated that in BL, student interactions and activities are more numerous and varied because they are involved in learning activities both inside and outside the classroom.

**Sixth**, students have a positive response to the implementation of learning because their perceptions and responses are influenced by the interpretation of the teacher's learning activities. The appearance of learning concepts that are attractive and easy to understand encourages interest. It provides a willingness for them to participate and join in conversations related to the concept being discussed. A positive response to learning is related to the novelty of studying English and Physics via smartphones, where new things are always interesting and tense. Furthermore, they use the internet and visual elements in AR, Edmodo, and tinkercad media to encourage active participation in various learning tasks.

A positive response is shown from a voluntary attitude and being happy to complete the assigned task. Students tend to independently discuss with friends or teachers inside and outside the classroom. With this enthusiasm, they showed each other their results, especially those related to the 2D scanned images in AR. In addition, their positive responses also occur because their active learning can always be monitored by teachers, fellow classmates, and parents. Online monitoring of how students learn by teachers, classmates, and parents is one of the advantages of e-learning that positively impacts learning outcomes. Students' positive responses to learning are shown by their attitudes to possess a high desire and enthusiasm to convey their interests, needs, and learning problems to teachers and others online.

Furthermore, they participate actively during the preparation, implementation, and follow-up of their online learning. Students also tend to be more creative in completing each learning activity until the objectives are achieved. In addition, they tend to complete their assignments voluntarily

without being under pressure from the teacher (Sumardi & Muamaroh, 2020). Overall, they generally possess a positive perception of BL implementation because learning allows them to repeatedly and review the subject matter.

## **Conclusion**

Based on data analysis on BL learning using AR, Edmodo, and tinkercad media in English and Physics subjects at SMAN 2 Lubuk Pakam, the following was concluded. Firstly, BL learning using AR, Edmodo, and tinkercad media proved to be effective in improving student learning outcomes through independent tests sample t-test with sig. 0.148 and paired sample t-test results with sig. 0,000, which means that there is a significant difference in student learning outcomes in the experimental and control classes. Secondly, blended learning can make students active in acquiring knowledge. Finally, this study implies that a blended learning model can be a powerful and efficient way to promote quality instruction for ESP teachers. It is anticipated that the findings would encourage further studies at other university levels, in particular for ESP, and could also enhance language education and the education in English-medium Physics Institutions as well.

## Acknowledgement

The authors are grateful to the Students, Teachers, and Principals of SMA Negeri 2 Lubuk Pakam, for their sincere and voluntary contribution. The authors are also grateful to the Directorate of Research and Community Service of the Ministry of Research, Technology, and Higher Education for funding this research in accordance with contract number 054 / SP2H / DRPM / 2020.

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