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## An Analysis on the Internationalization of the Objectives in English Curriculum

Muhammet Esad Kulođlu  
Muhammet Öcel

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## Research Article

# An analysis on the internationalization of the objectives in English curriculum

**Muhammet Esad Kuloğlu** ✉ ORCID

Lecturer, Abdullah Gül University, School of Foreign Languages, Kayseri, TURKEY

**Muhammet Öcel\*** ✉ ORCID

Research Assistant, Karabük University, Department of English Language and Literature, Karabük, TURKEY

### Abstract

Recently, the world has become a global village and people have become global citizens. Global elements should be included into the teaching and training of this new type of citizenship. The Ministry of National Education of Turkey (MoNE) has internationalized its curriculums as many other educational institutions did. In this context, it has added global, international and intercultural elements into its curriculums. In this study, learning objectives that exist in MoNE secondary education English curriculum were examined in terms of internationalization. The document analysis method of qualitative research design was mainly adopted to collect and analyze data. According to the findings of the study, (1) the curriculum needs to include more internationalization elements, and (2) the global, international and intercultural elements integrated into objectives of the curriculum did not show a homogenous distribution according to the grades and the themes of the curriculum.

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» \*Corresponding author

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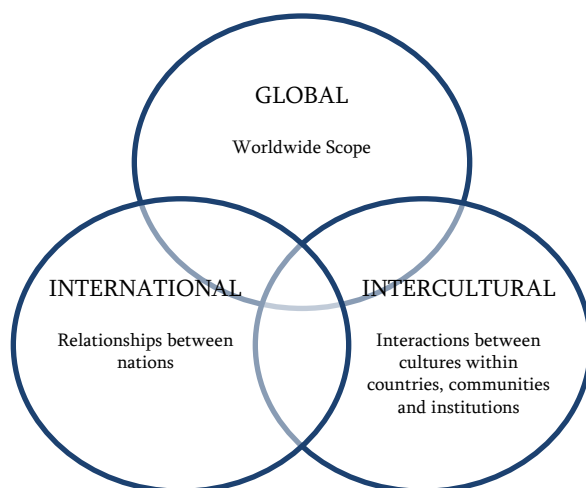
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## Introduction

The world population is getting larger and thanks to technology transportation and communication are becoming more convenient. This situation makes the world a global country and it also leads people who reside in this country to become global citizens. While the world and its people are changing constantly, it cannot be expected that education and the curriculum remain unchangeable (Dewey, 1967). It is essential that education and the curriculum need to be developed according to the requirements of the global country and the global citizens. Oxfam (2006), defines a global citizen as the one who; is aware of and understands the wider world and his/her place in it, respects and values diversities, understands how things work in the world, is bound to social justice desirously, integrates into the society not only in local extent but also globally, collaborates with other people and efforts to make the world fairer and more sustainable, takes responsibility for his/her own acts.

Internationalizing curriculum results from the necessity to develop education and the curriculum according to the new needs of the global world and the society. Meeting the educational needs of people who are connected to their local identities on the one hand and who see themselves as part of a wider community with their 'global souls' on the other is possible with the internationalization of the curriculums. The internationalization of the curriculums is more than adding some international elements to the curriculums (Bennett, 2008; Leask, 2015; Rhoads & Szelényi, 2011). Internationalization of curriculum is a process that includes adding (1) international, (2) intercultural, (3) global extents to the curriculum (Knight, 2004). To Leask (2009), the internationalization of the curriculum includes international and intercultural extents of the process of preparing, applying, and results of a curriculum.



**Figure 1.** Internationalization of curriculum (Barker, 2011)

Figure 1 shows the dimensions of Knight's (2004) definition of internationalization. According to Barker (2011), these dimensions include the following topics as global, international, and intercultural. The global dimension covers the issues like wars, epidemics, pandemics, immigration and immigrants, global warming, alternative energy sources, environmental issues like natural disasters; universal values and norms such as human rights and



equality; terms like world citizenship, shared planet, shared conscience, commonwealth; current issues in global dimensions such as technological developments, social media. The international topic includes information about and comparisons between countries and cities; social, economic and political issues among nations; treaties, clashes, conflicts between governments; international organizations, associations, newspapers etc. The intercultural topic involves elements from self-culture and different cultures; awareness of cultural diversity; cultural awareness and intercultural abilities; accepting cultural diversity and different cultures.

There are many different components to internationalizing the curriculum however the ultimate goal is to provide students with the necessary learning outcomes. Therefore, learning and teaching are at the heart of this process (Jones & Killick 2007). In order to understand the level of internationalization of the curriculums of an educational institution, it is necessary to examine the curriculums it follows and their components. Recently, many education councils/ministries reorganize and reshape the goals, contents, education conditions and outputs of their curriculums in terms of internationalization (Özdemir, 2011). Although this is common at the higher education level, it has become a phenomenon now being taken into account at various levels starting from primary school. In this study, the steps of internationalizing the curriculum taken by the Turkish Ministry of National Education, especially in the English secondary education curriculum will be examined.

The main objectives of the National Education Quality Framework have been written to make the Ministry of National Education in Turkey reach national and international standards. It has been emphasized that pupils are expected to learn and utilize at least one foreign language as a tool for recognizing other cultures and societies (MoNE, 2014). Furthermore, the Turkish Qualifications Framework (TQF), which has been referenced to and oriented with the European Qualifications Framework, has some key competencies as communication in the mother tongue, communication in foreign languages, competence related to social (intercultural), and citizenship (interpersonal), and cultural awareness and expression (VQI, 2015).

From this point of view, it is a fact that curricula written by MoNE in Turkey are expected to include internationalized objectives. Besides, some of the resolutions in the 17<sup>th</sup> National Education Council under the section “Globalization and Turkish National Education System in the process of European Union Integration” can be stated as; the curriculum of formal and informal educational institutions should be arranged in convenience with international standards; in the progress of globalization and accession to European Union, foreign language education should be taken highly into consideration and studies intending to enhance its efficiency should be made; there should be given importance to the education of environmental consciousness and democracy and the human rights; international mobility in education should be taken into consideration (BoDE, 2006).

According to the main approach which English curriculum (MoNE, 2018) has been based on and has been designed in convenience with the CEFR, the target language is not just a school subject; moreover, it should be seen as a tool through which learners can communicate. Accordingly, the main goal of the curriculum is to enable pupils to a proper language learning environment where they are expected to be competent in linguistics, and utilize it autonomously and fluently. That the learners are to use English fluently, productively and communicatively to be able to share their own ideas and cultures with people from other countries and cultures is

emphasized as one of the main goals of the curriculum. One of the main features that distinguish the new curriculum from the old ones can be stated that the new one aims to raise awareness towards universal, national, humanistic, ethical and cultural values as well as making learners acquire and learn basic language skills (MoNE, 2018).

The internationalization of curriculum means that it is much more than adding internationalized objectives to the curriculum. In other words, from school administrations to educational authorities; from teachers to parents, many stakeholders can be included into this process (Leask, 2015). By limiting such a wide scope, this study, however, was planned to be conducted on a level with objectives. In this respect, the following research question emerged to focus on the main goal of this study:

To what extent do the current high school English curriculum objectives include the aspect of internationalization?

## **Methodology**

### **Design**

The main purpose of the study is to elaborate the level of internationalization of the objectives in the current English secondary education curriculum in Turkey (MoNE, 2018). In this respect, by adopting mainly document analysis method, the examples of internationalizing curriculums in the literature were reviewed and based on the information obtained from literature review, objectives in the current high school English curriculum (MoNE, 2018), were examined considering the dimensions in Knight's (2004) definition of internationalization.

### **Data collection procedure**

The data were collected by two evaluators who are qualified in the field of English language teaching and curriculum instruction. Since there was not such efficient information available about the content in the curriculum, educational status and assessment, it was seen more convenient that they were excluded from the scope. As scrutinizing objectives of the curriculum, it was determined how often it included global, international and intercultural extents. While doing this, the expressions in the learning objectives were analyzed by considering the dimensions of internationalization included in Knight's (2004) definition and elaborated by Barker (2011). The same procedure was performed again one month later and double-checked to increase reliability and validity. Each evaluator examined the learning objectives in the curriculum by the criteria determined while collecting the data and revealed the frequency values containing the internationalization elements for each of them. Learning objectives that the evaluators disagree upon in terms of including internationalization elements were not added to the frequency values and were not included in the findings.

### **Data analysis**

In the data analysis procedure, the method of comparing the final data obtained as a result of the first and second evaluation at 1-month interval was followed (See Appendix1/2/3/4). The final data reached by the two evaluators were analyzed by Miles and Huberman's (1994) Inter Evaluator Reliability calculation method ( $\text{reliability\%} = \frac{\text{number of agreements}}{\text{number of}}$

agreements + disagreements] x 100) and the result was found to be 87.83%, which is expected to be between 70% and 90% to be at an acceptable level.

### Findings

In this part, findings related to the objectives of secondary education English curriculum of MoNE examined in terms of internationalization are presented in tables.

**Table 1.** Internationalization status of 9th grade English course curriculum objectives

Theme/Extent	Global	International	Intercultural	f	%
1: Studying Abroad	-	2	-	2	14.29
2: My Environment	-	1	-	1	7.14
3: Movies	-	-	-	0	0.00
4: Human in Nature	2	-	-	2	14.29
5: Inspirational People	-	-	-	0	0.00
6: Bridging Cultures	-	1	2	3	21.43
7: World Heritage	1	-	3	4	28.57
8: Emergency and Health Problems	-	-	-	0	0.00
9: Invitations and Celebrations	-	-	-	0	0.00
10: Television and Social Media	2	-	-	2	14.29
<b>Total Frequencies</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>14</b>	<b>100.00</b>

Global, international and intercultural elements included in the objectives in the 9th grade English course curriculum are shown according to the topics in Table 1. According to this table, it is observed that as none of the dimensions are included in some topics, certain topics are particularly emphasized. Global, international and intercultural dimensions are more common in especially “World Heritage”, “Studying Abroad” and “Bridging Cultures” themes. To illustrate, in the “World Heritage” theme intercultural elements are integrated in the curriculum as “E9.7.W1. Students will be able to write a series of sentences about historical places they visited in the past.”, “E9.7.S2. Students will be able to give a short simple presentation about an ancient civilization they have searched before.”, “E9.7.R1. Students will be able to ask and answer the questions about a text related to the world heritage.” (See Appendix A)

**Table 2.** Internationalization status of 10th grade English course curriculum objectives

Theme/Extent	Global	International	Intercultural	f	%
1. School Life	-	-	-	0	0.00
2. Plans	-	-	-	0	0.00
3. Legendary Figure	-	-	2	2	13.33
4. Traditions	2	-	2	4	26.67
5. Travel	-	-	-	0	0.00
6. Helpful Tips	1	-	-	1	6.67
7. Food and Festivals	-	-	4	4	26.67
8. Digital Era	2	-	-	2	13.33
9. Modern Heroes and Heroines	-	-	-	0	0.00
10. Shopping	1	-	1	2	13.33
<b>Total Frequencies</b>	5	1	9	15	100.00

Internationalization status of 10th grade English course curriculum objectives is shown in Table 2. According to data in the table, as international and intercultural elements are more common in “Traditions” and “Digital Era” units, these terms aren’t involved in “School Life”, “Plans”, “Modern Heroes and Heroines”, and “Travel” units. For example, in the theme “Food and Festivals” the intercultural element of the curriculum covers the objectives as “E10.7.S1. Students will be able to take part in a dialogue about introducing national and international festivals.”, “E10.7.S2. Students will be able to describe the steps of a process related to national and international festivals.”, “E10.7.R1. Students will be able to evaluate a text to classify various cuisines around the world.”, “E10.7.R2. Students will be able to diagrammatize a text about different festivals all around the world.” (See Appendix B)

**Table 3.** Internationalization status of 11th grade English course curriculum objectives

Theme/Extent	Global	International	Intercultural	f	%
1. Future Jobs	1	-	-	1	7.69
2. Hobbies and Skills	-	-	-	0	0.00
3. Hard Times	-	-	-	0	0.00
4. What a Life	1	-	1	2	15.38
5. Back to the Past	-	-	-	0	0.00

6. Open Your Heart	-	-	-	0	0.00
7. Facts about Turkey	-	-	4	4	30.77
8. Sports	-	-	-	0	0.00
9. My Friends	-	-	1	1	7.69
10. Values and Norms	-	-	5	5	38.46
<b>Total Frequencies</b>	2	-	11	13	100.00

Table 3 shows internationalization status of 11<sup>th</sup> grade English course curriculum objectives. According to this table, it is seen that global, international and intercultural elements aren't divided equally by units, and aren't involved in some units, and are more common in some units such as "Values and Norms", "Facts about Turkey". To exemplify, the global aspect of 11<sup>th</sup> curriculum can be seen in the themes "Future Jobs" and "What a Life" with the objectives "E11.1.R2. Students will be able to find the main idea of a text on successful entrepreneurs of the 21st century.", "E11.4.R1. Students will be able to order the events in the biography of a famous person/ inventor/ scientist/ celebrity." (See Appendix C)

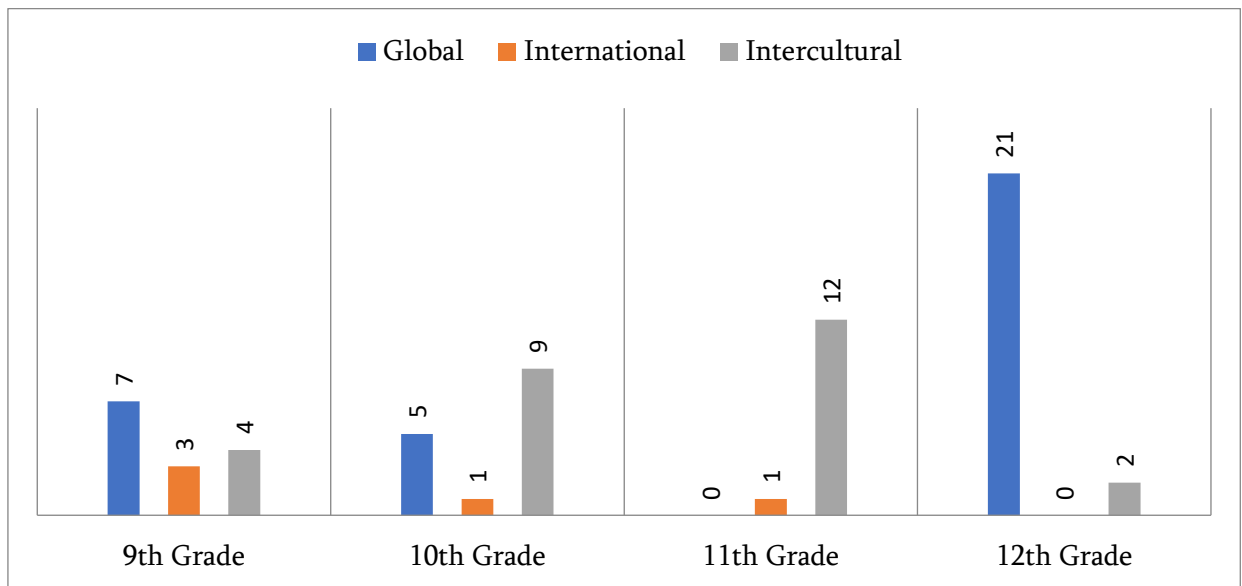
**Table 4.** Internationalization status of 12th grade English course curriculum objectives

Theme/Extent	Global	International	Intercultural	f	%
1. Music	-	-	-	0	0.00
2. Friendship	-	-	-	0	0.00
3. Human Rights	8	-	-	8	34.78
4. Coming Soon	2	-	-	2	8.70
5. Psychology	-	-	-	0	0.00
6. Favors	-	-	-	0	0.00
7. News Stories	-	-	-	0	0.00
8. Alternative Energy	7	-	-	7	30.43
9. Technology	4	-	-	4	17.39
10. Manners	-	-	2	2	8.70
<b>Total Frequencies</b>	21	-	2	23	100.00

Table 4 shows how often global, international and intercultural elements are included in the 12th grade English curriculum objectives according to the units. According to this table, 12th grade English course curriculum objectives aren't included international items and intercultural

items are included once. Unlike the other two dimensions, global elements (23) are much more common. Particularly in the theme “Human Rights” almost all the objectives reflect internationalization of the curriculum in the global aspects with its eight in nine objectives as “E12.3.L1. Students will be able to guess the meaning of lexis and jargon about human rights in a recorded text/video.”, “E12.3.L2. Students will be able to distinguish the positive and negative expressions about human rights in a recorded text/video.”, “E12.3.S1. Students will be able to make suggestions about improving human rights.”, “E12.3.S2. Students will be able to discuss the problems/difficulties of the disadvantaged people in the world.”, “E12.3.R1. Students will be able to find the supporting ideas in a text about good practices on human rights around the world.”, “E12.3.R2. Students will be able to match the paragraphs with the correct phrases/visuals (children rights/gender equality/animal rights/the rights of disadvantaged people, etc.)”, “E12.3.W1. Students will be able to write mottos/slogans about human rights.”, “E12.3.W2. Students will be able to write an argumentative essay including solutions for disadvantaged people’s problems.” (See Appendix D)

The internationalization status of the MoNE secondary education English course curriculum objectives is summarized in Figure 2.



**Figure 2.** Internationalization status of MoNE secondary English course curriculum objectives

As a result of the findings obtained, it was found that global, international and intercultural elements were distributed homogeneously only in the 9th grades in the objectives of MoNE secondary education English curriculum; it is observed that it is distributed heterogeneously at other levels. While in the 10th grade objectives international items (1) are included much less, intercultural items (9) are given much more place and in the 11th grade objectives, international elements are given no place which is one of the remarkable findings. In addition, the objectives in the 12th grade English curriculum differ from other levels in terms of internationalization. Because global items (23) are dominant in the objectives of the curriculum.

## **Discussion**

With globalization, important changes have taken place in the world and these changes have made it necessary to make important changes in the educational curriculums (Özdemir, 2011). Curriculum in a rapidly globalizing world should facilitate the adaptation of individuals to world citizenship; it should be open to different cultures and develop intercultural skills; it should include the skills of this century, such as critical, creative and reflective thinking (Demirel, 2009). In addition, the necessity of developing foreign language curriculum has emerged as a result of the societies' constant interaction with each other (Oliva & Gordon, 2018). Accordingly, many institutions, especially higher education institutions, have started to organize their curriculum for these needs worldwide. The Ministry of National Education has also aimed to develop foreign language curriculum within this framework by adopting CEFR, which was designed with principles such as providing students with intercultural skills, improving understanding and tolerance and international communication (Arslan & Coşkun, 2012). MoNE, which rearranges the English curriculum according to international qualifications, has added global, international and intercultural elements to its curriculum objectives in this context. However, based on the findings of this analysis, it was concluded that the objectives in the secondary education English curriculum were not as much as the world was in terms of internationalization, and the dimensions added to the curriculum did not show an equal distribution in terms of grades and themes. Also, it should be noted that internationalization of curriculum is beyond the inclusion of global, international and intercultural dimensions in the curriculum's objectives (Knight, 2004).

Heterogeneity of the distribution of internationalization elements may be due to the fact that the selection of current themes and the aspects of internationalization in the objectives specified within these themes may have emerged as a natural result of the themes themselves. Although the integration of internationalization elements into the curriculum was done purposefully, this integration may not have been done systematically.

This is a multidimensional process which needs to take into account the environment of educational institutions and the system of values: social, cultural, political and economic conditions of societies; and also, the geographical conditions of the region and the elements in the global context (Leask, 2012). In addition, although the objectives of the curriculums are updated in terms of the addition of internationalization items, the absence of specific institutions where these changes can be monitored is seen as a major deficiency in our country (Gündoğdu, Çelik, Yanar, Yolcu & Ceylan, 2016).

## **Conclusion and Suggestions**

In this study, internationalization extent of English secondary education curriculum was examined qualitatively. The data analyzed were taken from secondary level English curriculum of MoNE. The findings of the study showed that the curriculum was not as internationalized as it is expected to be; and the extent of the distribution of the internationalization elements was not homogeneous.

Because in the literature this aspect has not been studied much yet, this study will pave the way for making further investigations in different aspects of internationalization.

Furthermore, it can lead the decision makers and especially curriculum developers in this field to regard internationalization phenomena while planning and performing their duties.

This study also puts forwards some suggestions to researchers, curriculum developers and practitioners. MoNE curriculum can be analyzed more broadly in terms of internationalization considering all the objectives of the curriculum. Content and materials used in teaching can be selected and designed to include global, international and intercultural elements. Extra-curricular activities that support the internationalization can be integrated into the curriculum such as visiting an international organization if available, hosting an international citizens like students, professors in the school context, fostering students to contact with foreigners online. Assessment mechanisms can be designed to evaluate the internationalization objectives added to the curriculums. It can be controlled by the supervision of the school managements whether and to what extent the global, international and intercultural content added to the curriculums are applied. Curriculum practitioners can be trained on the internationalization of curriculums; they can be provided mobility to different countries in order to have international and intercultural skills. In order to create a multilingual and multicultural environment in institutions, increasing the number of staff and students coming from abroad to our country within the scope of exchange mobility can be supported.

Finally, because the investigation only in secondary level English curriculum is one of the limitations of this study, further researchers can widen their view to the other levels and fields other than English. They can also involve other instruments in their further research such as making interviews, observations, conducting surveys, etc.

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## Appendices

### Appendix.A

*Evaluator.1's (E.1) and Evaluator.2' (E.2) opinions on internationalization status of 9th grade English course curriculum*

Names of Themes	Objective code	Global		International		Intercultural	
		E1	E2	E1	E2	E1	E2
Theme 1: Studying Abroad	E9.1.L2.			X	X		
	E9.1.R2.			X	X		
Theme 2: My Environment	E9.2.W1.			X	X		
Theme 3: Movies	-						
Theme 4: Human in Nature	E9.4.R1.	X	X				
	E9.4.W2.	X	X				
Theme 5: Inspirational People	-						
Theme 6: Bridging Cultures	E9.6.S4.					X	X
	E9.6.R1.			X	X		
	E9.6.R2.					X	X
	E9.6.W2.				X		
Theme 7: World Heritage	E9.7.L1.	X	X				
	E9.7.S2.					X	X
	E9.7.R1.					X	X
	E9.7.W1.					X	X
Theme 8: Emergency and Health Problems	-						
Theme 9: Invitations and Celebrations	-						
Theme 10: Television and Social Media	E9.10.R1.	X	X				
	E9.10.W1.	X	X				

**Appendix.B***Evaluator.1's (E.1) and Evaluator.2' (E.2) opinions on internationalization status of 10th grade English course curriculum*

Names of Themes	Objective code	Global		International		Intercultural	
		E1	E2	E1	E2	E1	E2
<b>Theme 1: School Life</b>							
<b>Theme 2: Plans</b>							
Theme 3: Legendary Figure	E10.3.S1.					X	X
	E10.3.S3.					X	X
Theme 4: Traditions	E10.4.L1.	X	X				
	E10.4.R1.	X	X				
	E10.4.R2.					X	X
	E10.4.W1.					X	X
<b>Theme 5: Travel</b>							
Theme 6: Helpful Tips	E10.6.S1.	X	X				
	E10.6.W2		X				
Theme 7: Food and Festivals	E10.7.S1.					X	X
	E10.7.S2.					X	X
	E10.7.R1.					X	X
	E10.7.R2.					X	X
Theme 8: Digital Era	E10.8.R1.	X	X				
	E10.8.R2.	X	X				
<b>Theme 9: Modern Heroes and Heroines</b>							
Theme 10: Shopping	E10.10.R1.					X	X
	E10.10.W1.	X	X				

**Appendix.C***Evaluator.1's (E.1) and Evaluator.2' (E.2) opinions on internationalization status of 11th grade English course curriculum objectives*

Names of Themes	Objective code	Global		International		Intercultural	
		E1	E2	E1	E2	E1	E2
<b>Theme 1: Future Jobs</b>	<b>E11.1.R2.</b>	X	X				
<b>Theme 2: Hobbies and Skills</b>	-						
<b>Theme 3: Hard Times</b>	-						
<b>Theme 4: What a Life</b>	<b>E11.4.R1.</b>	X	X				
	<b>E11.4.W1.</b>					X	X
<b>Theme 5: Back to The Past</b>	-						
<b>Theme 6: Open Your Heart</b>	-						
	<b>E11.7.L1.</b>					X	X
<b>Theme 7: Facts about Turkey</b>	<b>E11.7.S1.</b>					X	X
	<b>E11.7.R1.</b>					X	X
	<b>E11.7.W1.</b>					X	X
<b>Theme 8: Sports</b>	-						
<b>Theme 9: My Friends</b>	<b>E11.9.W2.</b>					X	X
	<b>E11.10.S1.</b>					X	X
	<b>E11.10.S2.</b>					X	X
<b>Theme 10: Values and Norms</b>	<b>E11.10.R1.</b>					X	X
	<b>E11.10.W1.</b>					X	X
	<b>E11.10.W2.</b>					X	X

**Appendix.D***Evaluator.1's (E.1) and Evaluator.2' (E.2) opinions on internationalization status of 12th grade English course curriculum objectives*

Names of Themes	Objective code	Global		International		Intercultural	
		E1	E2	E1	E2	E1	E2
<b>Theme 1: Music</b>	-						
<b>Theme 2: Friendship</b>	<b>E12.2.W1.</b>						X
	<b>E.12.3.L1</b>	X	X				
	<b>E12.3.L2.</b>	X	X				
	<b>E12.3.S1.</b>	X	X				
	<b>E12.3.S2.</b>	X	X				
<b>Theme 3: Human Rights</b>	<b>E12.3.R1.</b>	X	X				
	<b>E12.3.R2.</b>	X	X				
	<b>E12.3.W1.</b>	X	X				
	<b>E12.3.W2.</b>	X	X				
	<b>E12.4.L2.</b>		X				
	<b>E12.4.S2.</b>		X				
<b>Theme 4: Coming Soon</b>	<b>E12.4.R1.</b>	X	X				
	<b>E12.4.R2.</b>		X				
	<b>E12.4.W1.</b>	X	X				
<b>Theme 5: Psychology</b>	-						
<b>Theme 6: Favors</b>	<b>E12.6.R1</b>				X		
	<b>E12.6.W1</b>				X		
<b>Theme 7: News Stories</b>	-						
	<b>E12.8.L1.</b>	X	X				
	<b>E12.8.S1.</b>	X	X				
	<b>E12.8.S2.</b>	X	X				
<b>Theme 8: Alternative Energy</b>	<b>E12.8.R1.</b>	X	X				
	<b>E12.8.R2.</b>	X	X				
	<b>E12.8.W1.</b>	X	X				
	<b>E12.8.W2.</b>	X	X				
	<b>E12.9.L2.</b>	X	X				
	<b>E12.9.S1.</b>	X					
<b>Theme 9: Technology</b>	<b>E12.9.S2.</b>	X	X				
	<b>E12.9.W2.</b>	X	X				
	<b>E12.9.W3.</b>	X	X				
<b>Theme 10: Manners</b>	<b>E12.10.L2.</b>					X	X
	<b>E12.10.S2.</b>					X	X

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## Acceptance and Use of Smartphones: AR-enhanced EFL Reading Practices

Gülin Zeybek  
İdil Sayın

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## Research Article

# Acceptance and use of smartphones: AR-enhanced EFL reading practices

Gülin Zeybek\*  ORCID

Assistant Professor, Isparta University of Applied Sciences, School of Foreign Languages, Isparta, TURKEY

İdil Sayın  ORCID

Research Assistant, Hacettepe University, Faculty of Education, Foreign Language Teaching Department, Ankara, TURKEY

## Abstract

The increasing technological practices in educational settings have boosted up a wide variety of mobile tools use. One of the most recent tools is Augmented Reality (AR). As this newest technology whets many educators' appetite in various fields, EFL learning has taken its place among the recent research related with AR enhanced practices. Although AR is a novel and promising tool for educational objectives, little is known about EFL learners' perceptions towards AR-enhanced reading practices and the effect of these practices on EFL learners' smartphone acceptance levels in EFL learning. Herewith, the aim of this study is to investigate EFL learners' perceptions regarding AR-enhanced reading practices and these practices' effect on EFL learners' smartphone acceptance levels in EFL learning. A total of 32 second year vocational school students studying in the department of culinary at a state university participated in this study. This present study adopted a quasi-experimental mixed methods research design. The participants were introduced reading passages in the target language enhanced with AR technologies to increase the comprehension of these texts. Survey of Acceptance and Use of Smartphone Applications for English Language Learning was used to gather quantitative data and a semi-structured focus-group interview was conducted to understand their perceptions on using AR and acceptance of smartphones in EFL learning. The results of this study revealed that these EFL learners have positive attitudes towards using smartphones in their English reading practices and have moderate levels of smartphone acceptance in EFL learning. They found these practices motivating and helpful for understanding the reading passages. Taken together, this study will contribute to the EFL education and technology-enhanced language learning research field.

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## Note(s)

\* Corresponding author

## Author(s)' statements on ethics and conflict of interest

**Ethics statement:** We hereby declare that research/publication ethics and citing principles have been considered in all the stages of the study. We take full responsibility for the content of the paper in case of dispute.

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## Introduction

Smartphones have globally become the most widely used mobile technologies (Jamrus & Razali, 2019). Apart from daily activities, they have started to be used in educational contexts. Implementing Augmented Reality (AR) in EFL learning is one of the latest trends in EFL learning/teaching (Chang et al., 2020; Lee, 2020; Fan et al., 2020; Larchen Costuchen et al., 2020; Parmaxi & Demetriou, 2020). AR offers its users a huge spectrum of modalities such as texts, visuals, animations and videos that are embedded in their environment (Schmalstieg & Hollerer, 2016). These embedded realities provide more engaged learning and motivation and positive attitudes towards learning the target language (Taskiran, 2018; Vedadi et al., 2019). Recent studies reveal numerous advantages of using AR for foreign language learning from increased motivation, authentic language tasks, context-awareness to situated language learning experience (Fan et al., 2020; Lee, 2019; Parmaxi & Demetriou, 2020).

Chang et al. (2010)'s study found that the reading motivation in foreign language learning can be improved with AR integration. As a highly complex process, reading comprehension requires many variables such as previous knowledge, strategy use interest in text and understanding of text types (Klinger et al., 2015). Furthermore, readers need to possess various complex abilities which may be affected by language abilities, motivation and tasks (Grabe & Stoller, 2013). Skimming/scanning problems, poor mastery in vocabulary, lack of skills for prediction and inference, poor comprehension and lack of interest are also considered among the major problems that EFL learners face in reading (Iqbal et al., 2015; Nezami, 2012). Researchers agree that a mere solution for such problems in EFL reading is using mobile technologies to break down the barriers in terms of place and time and allow learners to reach original sources to enhance comprehension during reading (Gilgen, 2005; Miangah & Nezarat, 2012). At this point, AR boosts all human senses by reinforcing the real world (Kipper, 2013) and promotes reading abilities (Rau et al., 2018).

Several limitations of AR in EFL reading have also been underlined in the literature. For instance, learners can be frustrated to use such technologies since an AR application may not work properly or they may consider using AR as a burden to access information (Bacca et al., 2014). Furthermore, extra cognitive load can be imposed to EFL learners (Radu, 2014) and as a result -considering the cognitive capacities of these learners- it may be difficult for less proficient learners to make full use of AR (Brooks & Kempe, 2019). Learners may get distracted by AR and technology use (Kesim & Ozarslan, 2012). Finally, the natural classroom interaction among learners and between their teachers can be interrupted by AR technologies as it may provide an individualized learning experience (Zarraonandia et al., 2013). Despite all these drawbacks, previous research still highly endorses EFL learners' positive attitudes towards AR technologies (Bacca et al., 2014; Tobar-Muñoz, et al., 2017; Vata-U-Lan, 2012; Yılmaz, 2014).

In this light, the current study aims to investigate the perceptions of EFL learners regarding AR-enhanced reading practices and the effects of these practices on EFL learners' smartphone acceptance levels in EFL learning based on a series of reading sessions enhanced with AR. In the context of this study, EFL learners studying in a vocational school have been included. Using smartphones to learn English might offer them a whole new vision, considering that students enrolled into the vocational schools are generally considered to have low motivation and negative attitudes towards language learning (Şevik et al., 2018). There are



several studies that reveal positive learner attitudes towards AR use in EFL learning (Chen & Wang, 2018; Han et al., 2015; Küçük et al., 2014; Majid et al., 2018; Rau et al., 2018; Wojciechowski & Cellary, 2013; Yang & Mei, 2018) and particularly in EFL reading (Tobar-Muñoz et al., 2017; Vate-U-Lan, 2012; Wu et al., 2013). However, the scarcity of research on technology acceptance –especially smartphones– through AR enhanced practices in EFL reading stands out in the literature. Therefore, this study aims to investigate ELF learners’ acceptance towards using smartphones in EFL learning. Additionally, this study seeks to find out the perceptions of EFL learners on AR-enhanced reading practices. In this line, the following research questions were posed:

1. What is the effect of Augmented Reality (AR)-enhanced reading practices on EFL learners’ smartphone acceptance levels?
2. What are the EFL learners’ perceptions on Augmented Reality (AR)-enhanced reading practices?

### **The use of smartphones in conceptual understanding of English reading**

Mobile technologies have been implemented from primary to higher education all over the world (Fleischer, 2012) and involves both the mobility of devices and the users’ time and experiences (Lai & Zheng, 2018). Mobile devices offer opportunities like ubiquity in learning environments and inspire many researchers for the investigation of attitudes of teachers and learners towards using these technologies (Lai & Zheng, 2018; Papadokostaki, 2018; Pegrum, 2016; Read et al., 2016; Yaman et al., 2015). In higher education contexts, mobiles have attracted many university students and teachers (Gimeno-Sanz et al., 2020) and various studies have been conducted in higher education contexts to find out the ways of implementation, acceptance and perceptions of mobile device users (Edmunds et al., 2012; Gikas & Grant, 2018;). Studies have revealed positive effects of mobile devices for enhancing foreign language proficiency (Andujar, 2016; Foomani & Hedayati, 2016; Majid et al., 2018; Tobar-Muñoz et al., 2017). Furthermore, these studies also pinpointed the benefits of Mobile Assisted Language Learning (MALL) for sub-skills like collaborative learning (Roschelle et al., 2010), problem-solving and communication skills (Warschauer, 2007). In terms of foreign language vocabulary achievement, mobile devices were found as helpful in enhancing EFL learners’ vocabulary (Li & Cummins, 2019; Stockwell & Liu, 2015), motivation and academic success especially in the field specific EFL learning environments (Alkhezzi & Al-Dousari, 2016; Valeeva et al., 2019). Foreign language learners and teachers mostly stated positive attitudes towards integrating mobile devices in language learning (Bradley et al., 2017; Wrigglesworth, 2019). Moreover, mobile devices were found to be helpful in accessing information quickly, experiencing contextualized and multimodal learning, enabling communication and collaboration with peers (Gikas & Grant, 2013; Stockwell & Hubbard, 2013).

### **The use of augmented reality in EFL**

AR is described as “human-computer interaction, which adds virtual objects to real senses” (Ludwig & Reimann, 2005, p. 4). Studies have put forward many advantages of integrating AR into EFL learning in terms of increasing users’ motivation and attention (Kim et al., 2013; Kwon, 2013; Lakarnchua & Reinders, 2014; Mahadzir & Phung, 2013; Santos et al.,

2016; Solak & Cakir, 2015; Steel, 2013), optimizing learners' performances (Liu & Tsai, 2013; Santos, et al., 2016; Solak & Cakir, 2015) and creating meaningful and compelling learning (Lara-Prieto et al., 2015). AR is also claimed to meet diverse needs and learning styles of learners through the multimodalities it provides such as audio, text, 2D and 3D illustrations (McNair & Green, 2016). With this multimodal aspect, AR offers learners a richer and meaningful learning content (Billinghurst et al., 2001; Klopfer & Squire, 2008).

In the reading context, findings of studies revealed that AR contributes to learner-satisfaction (Liu et al., 2010; Santos et al., 2016), cultural understanding (Holden & Skyes, 2011; Liu et al., 2016), English vocabulary knowledge (Barreira et al., 2012; Solak & Cakir, 2015), active engagement both inside and outside the classroom (Billinghurst & Dunser, 2012; Kenema & Waller, 2016), language performance (Liu et al., 2016; Mahadzir & Phung, 2013), writing skills (Liu, & Tsai, 2013), interaction for knowledge construction (Chiang et al., 2014) and positive attitudes towards English (Küçük et al., 2014).

### **Acceptance and use of smartphones**

Technology acceptance is defined as the willingness of a user to use technology in tasks for which that specific technology is designed (Teo, 2011). The recent advancements in technology and its widespread use stimulated many researchers in various areas to investigate users' technology acceptance (Venkatesh et al., 2003). As a result of this motivation, several theoretical models on technology acceptance have been proposed and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) has been considered as the most recent and valid among all the other theories and believed to propose more comprehensive and highly predictive variables for the behaviors of technology users (Ahn, 2018; Venkatesh et al., 2012). Recent studies on MALL, which especially focus on smartphones as tools, have adapted the constructs of the UTAUT model as predictors for learners' attitude towards the use of MALL. Ahn (2018) developed a model of technology acceptance in order to find out specifically the EFL learners' intentions to use smartphones apps for English language learning (SAELL) in his study.

According to this model, perceived usefulness (PU), perceived convenience (PC), social influence (SI), perceived enjoyment (PE) and self-management of learning (SL) are considered as the predictors of learners' intention to use SAELL. PU is the degree to which learners believe that using a particular technology system would enhance their academic performance. PC is the degree of convenience regarding time, place, and execution, while learners are participating in m-learning. SI is the degree to which learners perceive that important others believe they should use a new technology system. SL is the degree to which learners perceive that they are self-disciplined and able to engage in autonomous learning. Finally, PE is an individual's state of mind including concentration, curiosity, and enjoyment while participating in smartphone language learning (Ahn, 2018). The results of his study revealed that PU was the strongest predictor of the students' intention to use SAELL which was followed by SL.

In a recent study, researchers investigated EFL learners' acceptance towards the use of mobile applications in EFL learning and found out that the major influence for the positive acceptance of learners' intention to use mobile applications is the ease of use offered by them (Deris & Shukor, 2019). EFL learners also found these mobile tools convenient and practical.

Performance Expectancy, which is the construct of the UTAUT model and is a similar concept to 'perceived usefulness' in this study, was found to be the most important predictor for learner attitude in MALL (García Botero et al., 2018; Hoi, 2020). Moreover, a research conducted in a similar context to the current study revealed that vocational school students had positive perceptions towards mobile technologies and both PU and PE were found to be highly predictive in regard to explaining their attitudes (Azli et al., 2018).

Even though there are a number of studies focusing on explaining learner acceptance to use mobile technologies in EFL learning, the limited empirical evidence to explain the intentions of EFL learners' use of smartphone applications, especially through AR enhanced reading activities stands out and has driven the current study (Kuru Gönen & Zeybek, 2021). Therefore, with this study, it is aimed to understand the effect of AR-enhanced reading activities on EFL learners' smartphone acceptance levels.

### **Methodology**

This mixed method quasi-experimental study adopts a one-group pretest-posttest design, in which the researchers collect both qualitative and quantitative data before and after the manipulation of dependent variable of a group of participants in order to answer different research questions directed for the study (Allen, 2017; Creswell & Creswell, 2018). In this way, the various angles of a phenomenon can be investigated thoroughly. Quantitative data were collected through a scale to answer the first research question and qualitative data were collected through a one-hour long focus group interview to answer the second research question to gain more insight in the topic being investigated.

#### **Participants and context**

Participants consist of 32 vocational school EFL learners studying at the Department of Culinary in 2-year vocational schools at a state university in Turkey. Convenience sampling method, which is a nonprobability sampling method that involves participants available for the researcher (Allen, 2017), was used in the selection of participants. At the time of this study, they were enrolled to Vocational English I course. All of the students took A1-A2 level English courses (according to Common European Framework of Reference for Languages) in their first year of study and were successfully completed these courses. Thus, it is assumed that the participants have at least A2 level English level prior to Vocational English I course. The participants' age ranged from 18 to 25.

During Vocational English I, the participants were trained on field specific English in Culinary context. In this lesson, the course book *Flash on English for Cooking, Catering and Reception* (Morris, 2012) was recommended for students as a reference book. This book includes language activities mainly focused on vocabulary and reading comprehension skills. There are various vocabulary practices for recycling newly learned vocabulary items and these new words related with cooking and kitchen are introduced to learners with reading texts.

#### **AR-enhanced reading texts**

Each week the activities in the course book were implemented during the lessons. However, six of the reading texts were introduced in an AR-enhanced way to the participants.

The aim of using AR with these texts was to make them more comprehensible to the readers and activate schemata for the unknown vocabulary. These reading texts were transformed into AR enhanced texts by embedding multimodal sources to explain some field specific concepts/words. The target items from the reading texts were selected by the two researchers based on the following criteria:

- Vocabulary that are hard to be understood from the context.
- Field specific words and concepts that are hard to be understood by a dictionary definition.
- Culture-specific terms that cannot be understood by a dictionary definition.
- Things that need to be presented through multiple modes to be able to be understood.

Texts that were comprehensible, brief and suitable for participants' level; images and videos that are high in quality, visible and to-the-point; and animated gifs that are comprehensible enough for the participants and high in quality were chosen as multimodal sources to embed in these AR-icons. The distribution of AR-enhanced target vocabulary items according to the reading texts is presented in Table 1.

**Table 1.** Distribution of AR-enhanced target vocabulary items according to reading texts

The name of the text	N*	Distribution of content type
Kitchen Areas with Their Uses	4	2 images (image + text), 2 videos (video + text)
Different Types of Food	1	1 video
Menu	4	3 images, 1 video
Service Techniques	3	3 videos
International Cooking	9	7 images, 2 videos
Recipes from Different Cuisines	3	3 images

N\* Number of selected items

The selected target items in these texts were introduced to the students with AR icons located in an appropriate place next to the text. The participants were expected to scan the icons to enhance the comprehension of the reading text.

### HP Reveal as an AR tool

In this process, researchers used the HP Reveal application to incorporate the learners into the AR experience. In HP Reveal application, predefined images are scanned by the smartphone, and the user is automatically guided to the pre-defined 2D or 3D image, animation, video, website or text. An example of using HP Reveal is shown in Figure 1.



**Figure 1.** Demonstration of using HP Reveal

### **Data collection instruments**

#### ***Survey of acceptance and usage of smartphone applications in EFL learning***

The Survey of Acceptance and Usage of Smartphone Applications in EFL Learning developed by Ahn (2018), which is a scale in its nature, was used in order to find out whether AR-enhanced reading practices effect EFL learners' attitudes towards using smartphones in learning English. This scale includes six subsections: perceived usefulness (PU), perceived convenience (PC), social influence (SI), perceived enjoyment (PE), self-management learning (SL), and intention to use (IU). The scale consists of 24 items in total. The participants were expected to choose from a 5-point Likert scale (5-strongly agree, 1-strongly disagree) to indicate their level of agreement to the given statements. The scale was translated into Turkish and back-translation was done in order to eliminate any misunderstandings that can arouse from the translation. This study was conducted in a vocational school and the number of participants was limited. Therefore, this study did not reach the sufficient sample size required for CFA (DiStefano, 2005). Additionally, the back translation method was preferred to minimize the misunderstandings that may occur due to translation. The scale was also piloted with 69 EFL learners within a similar learning context in the same university. Stratified Alpha Coefficient was chosen to estimate the reliability of the scale due to the scale's multi-dimensional nature, and reliability coefficient was found as .95 which indicates a high level of reliability for the scale items. This scale was implemented as a pre-test and a post-test.

#### ***Semi-structured focus group interview***

Focus group interviews are conducted with a small group to explore their attitudes and views on a particular subject (Denscombe, 2010). In the semi-structured interview, the interviewer has certain topics on hand, but the focus is on the interviewee's elaboration on the topic, making the topic flexible by changing according to the answers of the interview (Denscombe, 2010). Accordingly, in the interview conducted in the study, the interviewees were allowed to elaborate on the topic flexibly and the new topics that emerged while elaborating the topic were observed. Questions directed to the interviewees were prepared by both researchers and checked by an expert from an English Language Teaching Department of

a state university. The aim of these questions was to gain a deeper understanding on the views and experiences of the participants. The interview took an hour and was conducted in participants' native language and the questions were directed to the randomly chosen seven participants at the end of the AR-enhanced reading sessions. The interview questions were:

1. How would you evaluate the English reading activities you experienced with HP Reveal application in general?
2. Would you like to continue using this application in your further field specific EFL courses? Why? /Why not?

### **Data analysis**

Data collected through pre- and post-tests were analyzed with statistical tests. Before the data analysis began, preliminary data analysis process was conducted. No missing data was found. The assumptions of the parametric tests were checked and it was concluded that data met the assumptions of parametric tests; therefore, Paired Samples T-test was performed on the data. After the analysis, effect sizes of the significantly different results were examined with Cohen's d. The effect size was interpreted according to Cohen's suggestion,  $d = .2$  is small,  $d = .5$  is medium,  $d = .8$  is large (Cohen, 1992).

Data collected through the semi-structured focus-group interview were analyzed qualitatively using Constant Comparative Method (CCM). In this method, the researcher uses the data to form categories instead of referring to preexisting categories (Corbin & Strauss, 2015). The analyst in this study started with coding. Next, similar coded ideas are gathered together into categories by constantly comparing and contrasting. Then, the analyst pared off irrelevant properties, merging similar details of properties into major inter-related categories. In the end, the original set of categories occurred to the analyst. Two researchers experienced in qualitative analysis analyzed the data separately and by using the formula suggested by Miles and Huberman (1994) inter-rater reliability was found as .96, which ensures high inter-rater reliability.

### **Procedure**

The study was conducted in the fall term of 2019-2020 academic year. EFL learners took "Survey of Acceptance and Usage of Smartphone Applications" prior to the AR-enhanced reading sessions and at the end of these sessions. These reading sessions lasted six weeks and each week one AR enhanced reading text was distributed to the learners during the EFL lesson. The learners read the texts on their own using their smartphones to scan AR icons. After reading the texts, the learners were expected to finish the related post reading tasks such as comprehension questions, matching activities, etc. When learners finished their tasks, a whole class discussion to check the post-reading tasks were held. After learners completed the scale at the end of the whole process, a semi-structured focus group interview was conducted.

### **Results and Discussion**

The aim of this study was to investigate the effect of AR-enhanced reading sessions on EFL learners' smartphone acceptance levels in EFL learning. Also, this study tried to understand the perceptions and experiences of EFL learners on using AR in EFL reading. The

study results are presented and discussed in sub-sections under the titles of each related research question.

### R.Q.1. The effect of Augmented Reality (AR)-enhanced reading practices on EFL learners' smartphone acceptance levels in learning English

Paired Samples T-test results for pre- and post-tests for the general attitudes towards acceptance and use of smartphone applications in EFL learning are presented below in Table 2.

**Table 2.** Paired samples t-test results for general attitudes of participants towards acceptance and use of smartphone applications in EFL learning

		Mean	Sd	t	df	Sig (2-tailed)	Cohen's d
General	Pretest	80.12	16.30				
Attitude				-2.74	31	.010*	.635
	Posttest	90.75	17.16				

\* $p < .05$

Table 2 indicates that the post-test score (*avg. 90.75*) is significantly higher ( $p < .05$ ) than the pre-test score (*avg. 80.15*). These results can be interpreted as the participants' attitudes towards acceptance and use of smartphones have increased. When the effect size is examined (*d. .635*), it can be said that the effect of AR-enhanced reading practices on the participants' attitudes towards acceptance and use of smartphones is meaningful and on a medium size. This shows that EFL learners' mobile application acceptance levels in learning English increased after AR enhanced reading sessions. Previous studies on mobile technology acceptance also found out similar results concerning positive attitudes towards MALL (Azli et al., 2018; Deris & Shukor, 2019). One of the reasons for this finding can be the motivating nature of MALL tools in the EFL learning process (Salman, 2014; Wang & Smith, 2013). Another reason for this result can be the effect of positive learning experiences of students on the attitude towards technology use (Ting, 2012). Furthermore, as proposed by Ahn (2018), there are other predictors of this smartphone acceptance in learning English. In order to understand the difference in the participants' attitudes according to the sub-dimensions of the scale, Paired Samples T-Test was conducted and the results are presented in Table 3 below.

**Table 3.** Paired samples t-test results for sub-dimensions of acceptance and use of smartphone applications in EFL learning

	Mean Difference	t	df	Sig (2-tailed)	Cohen's d
Pair 1 (Perceived Usefulness) Pretest-Posttest	-2.12	-2.80	31	.009*	.544
Pair 2 (Perceived Convenience) Pretest-Posttest	-1.25	-1.45	31	.156	
Pair 3 (Social Influence) Pretest-Posttest	-1.12	-1.68	31	.102	

Pair 4 (Perceived Enjoyment) Pretest-Posttest	-2.90	-3.69	31	.001*	.844
Pair 5 (Perceived Self-Management of Learning) Pretest-Posttest	-1.71	-2.44	31	.020*	.710
Pair 6 (Intention to Use) Pretest-Posttest	-1.50	-1.53	31	.135	

\* $p < .05$

According to the results presented in Table 3, the participants perceived using AR technology and their mobile phones useful for learning English vocabulary related to their profession. When the results of the sub-dimensions in pre- and post-test are examined, it is observed that the mean differences between post-test and pre-test scores of the perceived usefulness (*MD. -2.12*) (PU), perceived enjoyment (*MD. -2.90*) (PE), and perceived self-management of learning (*MD. -1.71*) (PSML) sub-dimensions are significantly different, post-test scores being higher. According to effect size, it can be said that the PE sub-dimension has the highest effect size and has a large-size effect (*d. .844*), PSML sub-dimension has an effect between the medium and large-size (*d. .710*), and the PU sub-dimension has a medium-size effect (*d. .544*) on acceptance and use of smartphone applications in EFL learning. According to the results, EFL learners were found to enjoy their experience with mobile technologies during their reading activities. According to Venkatesh et al. (2003), when users of a specific technology are motivated, they accept and use that technology more. Besides, mobile technology integration is found to contribute learners' feelings positively and motivate them to use those technologies in EFL learning (Rau et al., 2008; Salman, 2014; Wang & Smith, 2013). Thus, the results found in this study may signify a positive impact of AR enhanced reading sessions on using smartphones in EFL learning.

Furthermore, these results also demonstrate that AR helped learners manage their learning speed and method pursuant to their needs and pace. The ubiquity of mobile technologies enables EFL learning to be anytime and anywhere (Cheng et al., 2010; Demmans Epp, 2016; Hung, 2011; Kukulka-Hulme, 2013; Liu, 2016). By providing limitless education beyond the classroom and school hours, these technologies offer autonomy for students' learning process (Kacetyl & Klímová, 2019; Leis et al., 2015). Also, another reason for this result may be that the use of mobile technologies in the classroom has increased students' use of mobile technologies for educational purposes in their free time (Leis et al., 2015). Bearing this feature of mobile technologies and AR in mind, the results of the current study may have highlighted that EFL learners could fine-tune their own learning according to their learning speeds. As AR-enhanced reading texts were available for these learners outside the classroom, the scaffolding feature of these texts still helped them when they were on their own. Thus, this may have yielded to an increase in EFL learners' perceived self-management of learning levels. Another meaningful result has been observed in learners' perceived usefulness. This finding is in line with the previous research results (Azli et al., 2018; Botero et al., 2018; Deris & Shukor, 2019; Hoi, 2020) which also revealed PU as the most powerful predictor for learner acceptance in EFL learning with mobiles. As Brandtzæg et al. (2011) assert, when users consider a



technology useful, more beneficial outcomes are obtained. Thus, the significant difference in participant's perceptions of the usefulness of the AR technology after the intervention may signify that EFL learners comprehended the texts better, and AR integration were considered as useful. Another interpretation can be made according to Teo and Noyes (2011)'s assertions who indicate that the reason for the increase in PU sub-dimension may be the result of the observable increase in the PE sub-dimension. That is, when learners enjoy the process with smartphones, they also find it useful for their learning. Therefore, as the most significant result was observed in EFL learners' PE levels in this study, it can be stated that their enjoyment may have effected how useful they perceived the smartphone technologies for EFL learning.

The dimensions perceived convenience, social influence and intention to use showed no significant difference between pre- and post-tests. Considering that the students were enrolled in this course and participated in this study with the convenient sampling method, the intention to use a smart phone in English learning, the social impact and its usefulness may have been provided by the researcher who gave the course, as the EFL learners were expected to do the AR-enhanced reading activities during the courses. Apart from this, considering the age range of the EFL learners, it can be thought that they already have the intention to use smartphones as a generation that lives with technology. Also, many applications such as social media that have penetrated our daily lives may suggest that students might have already been under social influence outside the classroom. Therefore, the absence of significant differences in these three dimensions can be considered as an expected situation.

#### R.Q.2. EFL learners' perceptions towards Augmented Reality (AR)-enhanced reading practices

A focus group interview was conducted in order to better understand the views of participants on using AR-enhanced texts. The interview was transcribed and coded using CCM to find out the main categories that emerged from their views. One main category '*Contributions of AR-enhanced reading practices*' and two sub-categories have emerged as a result of this process. According to the participants, AR-enhanced reading practices contributed to their '*comprehension*' (n=37) and '*positive feelings towards learning English*' (n=8). The distribution of sub-categories is presented in Table 4 below.

**Table 4.** Distributions of sub-categories according to the main category: the contributions of AR-enhanced reading sessions

Sub-categories according to the contributions of AR-enhanced reading practices	N*
<i>AR-enhanced reading practices increase...</i>	
comprehension	37
positive feelings	8
Total	45

N\*: Number of codes

The EFL learners stated that AR-enhanced reading sessions increased their '*comprehension*' (n=37) of the reading texts. According to them the visualization of the concepts and the processes helped them understand the field-specific texts better. One of the students stated her view as:

*Since it has pictures and videos, it gets more place in the mind, it is more easily engraved in our mind.’ (participant 6)*

As uttered by *participant 6*, the AR-enhanced reading texts made it possible for them to see the unknown field specific items through videos, pictures and gifs. Lee et al. (2019) assert that language limitations can be overcome through multimodal resources since they offer a variety of possible modes for the process of meaning-making. Thus, in this situation it could be argued that AR enhancement for the target vocabulary provided multimodality which is a necessary component in meaning-making in the language being used. Along with this multimodality, these texts were found to be helpful for preventing misunderstanding of the concepts. One of the participants stated her views as:

*In one of the words embedded here, there was a word called plated. There are plates we use in the kitchen. There are plates used for grilling. I can describe it as flat or grill stoves. For example, when I saw the plate here, I could think of it. I might have thought it was something close to it, but when we look at it with HP reveal, augmented reality, I learned today that plated are plates that are prepared for presentation, more visually colored plates. If it just had passed in a sentence or if I had seen it on the exam, I would probably be wrong. I could have misunderstood, but I think it also improved my English in terms of vocabulary.’ (participant 1)*

As echoed by *participant 1*, some concepts can be understood and interpreted differently by different users of the language. Researchers state that reading is an active process of creating meaning and new knowledge through negotiation with the text (Armbruster et al., 2001). In this situation, it is possible to state that AR-enhanced reading helps learners negotiate with the text and eliminate any confusion that can arise in their minds related to the vocabulary presenting field-related concepts and processes. Wu et al. (2013) argue that when students encounter unfamiliar words, they can quickly improve their reading comprehension by using AR to find the exact meaning of the word they do not know. Thus, AR-enhanced reading can signify a fruitful process for EFL learners in order to increase their reading comprehension.

Another sub-category emerged from the qualitative analysis was increased ‘positive feelings’ (n=8). According to the participants, this intervention with AR was an enjoyable experience for them and provoked positive feelings towards learning English. One of the participants stated her view as:

*‘There is a stereotypical English system we have been taught to this day. I know that we have started to learn English since primary school and we still do not understand ... We still forget. We still cannot use English properly. I think learning English with this kind of practice can be more supportive, more encouraging, catchier and more fun.’ (participant 3)*

It can be understood from the utterances of *participant 3* that the language learning process should be attractive and enjoyable so that the learners can engage more with the target content to achieve better. It has been stated in the literature that considering all language skills, reading in the target language requires mastery of various linguistic, metalinguistic, lexical and strategic processes and is a cognitively demanding task (Grabe, 2009). Furthermore, many long-

term reading difficulties are the results of lack of confidence and motivation in learning due to reading failure (Armbruster et al., 2001; Nation et al., 2002). Therefore, it can be argued from these findings that AR-enhanced reading texts increased joy and motivation among learners and consequently decreased the negative factors that can result from the above stated nature of the reading in the target language.

### **Conclusion and Suggestions**

The results of the current study revealed that using AR enhanced reading through smartphones has a meaningful effect on mobile technology acceptance of EFL learners. Furthermore, EFL learners consider smartphone applications in EFL learning enjoyable, useful and advantageous for autonomous learning. Therefore, EFL instructors should seek ways to integrate such technologies in order to trigger even hard-to-reach students' motivation for learning the target language. Especially with the growing interest to latest technologies among many learners, integrating mobile tools into their learning process can help them develop more positive perceptions towards EFL learning which is also signified in the findings of this research.

In the light of these findings this study suggests several implications. First of all, EFL instructors can effectively integrate technology into their classrooms by considering the needs and technology availabilities of their students and contribute to their students achieving more successful results in vocabulary learning. Considering the wide variety of advantages that mobile technologies provide for learners (Jee, 2011; Kukulska-Hulme et al., 2017; Liu, 2016; Vavoula et al., 2009; Wang & Smith, 2013) and the challenges that learners face in EFL reading (Iqbal et al., 2015; Nezami, 2012), it is highly suggested to include AR technologies to ease the path and motivate learners. Second, EFL learners' can be provided opportunities practicing AR-enhanced reading outside the class through specifically designed EFL textbooks that promote the use of mobile technologies for learning English. Third, EFL instructors can be encouraged to use technologies like AR in the classroom by raising awareness of the benefits that new technologies can offer them and their students.

This study was only conducted with culinary EFL learners, other field areas taking EFL courses can also be included in further research to see a wider effect of AR enhanced EFL reading on smartphone (or technology) acceptance. Furthermore, the application utilized in this study is no longer available for use. Bearing this in mind, it is important to highlight that the purpose of this study was not to promote this application, but to treat AR as a tool that can be used in field specific EFL reading. Due to constantly changing and developing technologies, available applications may change or disappear over time. Accordingly, this study provides an example of how AR can be integrated into EFL learning situations, regardless of application. AR technologies are constantly improving, bringing new opportunities such as holograms and AI-integration, thus, further studies may focus on the most recent forms of AR. Additionally, due to the nature of the study design, it was impossible to eliminate nor analyze the effects of control variables that could affect the dependent variables alongside the independent variables. Therefore, future studies can adopt static group comparison design to illuminate this issue. Future studies can also analyze the relationship between the amount of exposure to this technology and the achievement levels of students.

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## Mother Tongue Use in EFL Grammar Classroom: Attitudes and Impact

Marwan Saeed Saif Moqbel

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## Research Article

# Mother tongue use in EFL grammar classroom: Attitudes and impact

Marwan Saeed Saif Moqbel  ORCID

Associate Professor, Center for Languages & Translation, Ibb University, YEMEN

### Abstract

The use of mother tongue (MT) in EFL classrooms has been a controversial topic among researchers and teachers. While some claim that MT should not be used in EFL classrooms, others argue that MT can contribute to English language learning. The present study was conducted to investigate the use of Arabic as a mother tongue in EFL grammar classroom in the Centre for Languages at Ibb University in Yemen with a view to identifying when EFL learners favour the use of MT and the impact of that on learners and their English learning. Data were collected from EFL intermediate learners through a questionnaire administered to (51) learners and focus group discussions in which 22 learners participated. The collected data were analysed quantitatively using descriptive statistics and inferential statistics ( $t$ -test) and qualitatively. The findings showed that although the EFL learners favoured English as a medium of instruction, they showed positive attitudes towards a judicious use of their MT for some functions. Regarding the impact of MT use, the findings revealed that the EFL learners believe that the use of their MT in EFL grammar classroom is necessary due to the vital role that it can play in facilitating and enhancing their language learning as well as their cognitive ability. Statistically significant differences were not found in the mean scores of responses according to gender. Based on the findings, some recommendations to be considered to ensure effective use of MT in EFL classroom and suggestions for further research were given.

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## **Introduction**

The use of the mother language (MT/L1) in foreign/second language (FL/SL) teaching has been a controversial issue amongst language teachers and researchers since a long time (Alsied, 2018). Tracing back the use of MT in language classroom will take us to the early method of FL/SL learning, namely grammar-translation method, which emphasized the use of the native language as a medium of instruction and translating the reading texts to students' MT. However, towards the end of the nineteenth century, the Direct Method appeared as a reaction to the grammar-translation method in terms of emphasizing learning a foreign language in the same way as a child acquires his MT and preventing the use of L1 in foreign language teaching and learning (Cook, 2001).

In the early 1970s, due to the change in the view of the functions of language, the Communicative Approach emerged. Although this approach emphasized the use of the target language as a vehicle to learn it and for classroom communication (Richards & Rodgers, 2001), judicious use of L1 is accepted where feasible in communicative language teaching (Al Asmari, 2014; Knežević, 2019; Larsen-Freeman & Anderson, 2011; Richards & Rodgers, 2001). Additionally, during the last few decades, the use of MT in L2 classroom started to be considered and a body of literature on the use and the role of MT in FL classroom has grown (Alshammari, 2011), indicating a shift in approach to teaching foreign languages using ML in EFL classroom. In fact, a lot of researchers (e.g., Akkaya & Atar, 2015; Çelik & Aydın, 2018; Cook, 2001; Kaymakamoğlu & Yiltanlılar, 2019; Kaynaradağ, 2016; Mohebbi & Alavi, 2014; Sali, 2014; Sert, 2005; Tang, 2002) and teachers have recently argued in favour of systematic and judicious use of MT in EFL classroom.

During the last three years, believing in the important role that MT can play in enhancing learning EFL and responding to the learners' desire, the researcher, as an English teacher at the Centre for Languages and Translation - Ibb University, started to think seriously about using ML in EFL grammar classroom to enhance learners English learning. At the beginning, the teacher started using ML to explain the meaning of difficult words or grammar rules and concepts or to give learners instructions on how to carry out classroom activities, especially when he gets some hints from learners' faces about their confusion.

The teacher believes that the actual role of grammar rules is to help learners to speak, write, and comprehend texts, so, in his EFL grammar classroom; he usually gets EFL learners to focus on the form and then ask them to reflect their understanding of the forms by producing their own examples. However, when the teacher asks the learners to give their own examples, only few learners respond even when the teacher points some learners to give their own examples. An idea that triggered to the teacher's mind one day was to create scenarios in MT (Arabic) and to ask the learners to reflect them in English. Fortunately, the teacher found that such a technique works well; the EFL learners use the scenarios created by the teacher to speak in English. In general, the idea behind the current investigation has its underpinning in previous research (e.g., Ellis, 2005; Ellis, 2006; Ellis, Basturkmen, & Loewen, 2001; Trendak, 2015).

To identify the attitudes of the EFL learners towards MT use and the impact of the approach the teacher followed in using MT in EFL grammar classroom, the current study was conducted. While the study represents an extension of similar studies conducted in the Arab

context (e.g., Ahmad, Radzuan, & Hussain, 2018; Al Asmari, 2014; Al-balawi, 2016; Ālfaḥān, 2018; Almohaimeed & Almurshed, 2018; Alshehri, 2017; Alsied, 2018; Galali & Cinkara, 2017), it stands by itself as the solo study in the local context.

### **Research questions**

To achieve the objectives of the study, the study addressed the following questions:

1. What are EFL learners' attitudes towards using MT in EFL grammar classroom?
2. What is the impact of using MT in EFL grammar classroom on EFL learners and their language learning?
3. Are there statistically significant differences in the means of EFL learners' responses in relation to their attitudes towards MT use and their perceptions of the impact of MT use in EFL grammar classroom according to *gender*?

### **Significance of the study**

The present study adds to the growing body of literature related to the use of MT in EFL classroom. It contributes to the long-standing debate among ELT educationalists and researchers regarding the use of monolingual and bilingual approaches in EFL classroom by investigating the attitudes of EFL learners towards MT use and their perceptions of the impact of MT use in EFL grammar classroom. In this, the study provides insights for EFL teachers on how and when they can use MT in EFL classroom. Besides, the study highlights a particular way of using MT in EFL grammar classroom, which can be adopted by EFL teachers to encourage their EFL learners to speak in English. Moreover, supporting the positive evidence of using MT in EFL classroom, the study may motivate policy makers and theorists to reconsider the status of MT in EFL learning.

### **Literature Review**

The current study stems from some theories that provide evidence of a facilitative effect of MT in the target language classroom. It builds on Vygotsky's cognitive and sociocultural theory, which highlights the role of MT in SL classroom (Wu, 2018). Vygotsky's cognitive and sociocultural theory is also about Zone of Proximal Development, which individuals can develop cognitively with the help of other people. In language learning context, learners' MT can be used by teachers to scaffold learners in learning L2 (Wu, 2018). Besides, from the perspective of sociocultural theory, it can be stated that MT helps learners involved in interaction to establish "a shared perspective on the task at hand, which is an important element of language learning within a task-based situation" (Dailey-O'cain & Liebscher, 2009, p. 136). It can also be viewed in terms of the teachers' anticipation of some difficulties learners are likely to encounter with some concepts or points and the teacher' use of the MT as a device to control those difficulties which are beyond the learners' competence to allow them to focus on the elements within their ability (Dailey-O'cain & Liebscher, 2009).

The study is also based on Cummins' linguistic interdependence hypothesis (1978, 1981, 1991). In general, according to Cummins' hypothesis, L1 and L2 are not independent of each other; rather, they are linked in the mind and operate through the same processing system. Cummins went further, suggesting that learners' competence in L2 partly depends on their competence in L1 (Wu, 2018). Due to the common underlying competence between L1

and L2, it can be stated that competence in L1 can support L2 learning and that the transfer of cognitive, academic or some skills across languages can be possible (Wu, 2018). In addition, the study takes its impetus from the theory of codeswitching in naturalistic environments. This involves teacher codeswitching to L1 in the classroom to enhance students' learning without causing detriments to the development of their linguistics skills in L2 (Macaro, 2009). Macaro (2009) added that the 'optimal use' of codeswitching to L1 can enhance SL acquisition/proficiency better than using L2 solely.

Moreover, the study stems from research on SL acquisition, which highlighted the interaction of the components of L1 and L2 and that the development and use of L2 is affected by the already-existing L1 (Cook, 2003). According to Meisel (2011), the initial linguistic knowledge of L2 learners is shaped and constrained by their previously acquired grammatical competence. Furthermore, the study is stimulated by previous debate for using MT in L2 teaching/learning (e.g. Auerbach, 1993; Afzal, 2013; Rosales & Gonzalez, 2020; Stapa & Majid, 2012).

In relation to teaching a target language, two approaches have been identified: the monolingual approach and the bilingual approach. The monolingual approach involves using the target language solely in teaching to enhance learning it (Alsied, 2018; Imani & Farahian, 2016; Tang, 2002) through promoting extensive L2 input and interaction among learners (Rosales & Gonzalez, 2020). In contrast, the bilingual approach involves using learners' MT as a learning aid when teaching the target language (Burat & Çavuşoğlu, 2020; Kaymakamoğlu & Yıltanlılar, 2019; Rosales & Gonzalez, 2020).

Each approach has its own supporters who argue for its advantages. The monolingual approach to EFL/ESL instruction is "by no means the taken-for-granted norm everywhere in the world" (Auerbach, 1993, p. 10). This may be due to the belief that teaching target languages should be based on the characteristics of L1 acquisition as many teaching methods (e.g., the Direct Method, the Oral Approach, the Audio-lingual Method, Total Physical Response) have claimed since the Reform Movement (Cook, 2001). The supporters of this approach (e.g., Krashen, 1981; Kellerman, 1995; Ellis, 2005) argued that learners should be exposed only to the target language to enhance it effectively (Burat & Çavuşoğlu, 2020) and that using ML in a target language classroom may have a negative influence on the development of the learners' target language and the autonomy of learners during target language learning (Kaymakamoğlu & Yıltanlılar, 2019).

However, due to denying the rights of learners to draw on their language resources and strengths and believing in the importance of using the learners' MT in the target language classroom, the monolingual approach has been rejected (Auerbach, 1993) and the bilingual approach to teaching target languages has appeared. The supporters of this approach (e.g., Vygotsky, 1962; Atkinson, 1987; Cook, 2001; Alptekin, 2002; Tang, 2002; Nation, 2003; Afzal, 2013; Mahmutoğlu & Kicir, 2013) believed that using learners' MT is necessary for learning the target language (Burat & Çavuşoğlu, 2020; Kaymakamoğlu & Yıltanlılar 2019) as that provides scaffolding for learners' learning process (Burat & Çavuşoğlu, 2020). Arguing against the monolingual approach, Cook (2007) stated that this approach neglects learners' culture, which leads to the danger of neglecting their identity as well. Similarly, Alptekin (2002) argued that the strict adherence to native speaker norms within the culture of the target language seems to be no longer valid, particularly when it comes to English language teaching methodology.

During the last few decades, a lot of research was conducted in relation to the use of MT/L1 in L2 classroom. In the light of the previous studies, it can be stated that learner's MT has various functions and uses in EFL classrooms: explaining complex grammar points causing trouble to learners (Al-balawi, 2016; Ālfārĥān, 2018; Auerbach, 1993; Burat & Çavuşođlu, 2020; Cook, 2001; Edstrom, 2006; Mirza, Mahmus, & Jabbar, 2012; Mohebbi & Alavi, 2014; Neokleous, 2016; Ngoc, 2018; Paker & Karaađaç, 2015; Sharma, 2006; Tang, 2002); explaining and checking meanings of words, sentences, complex concepts and ideas (Al-balawi, 2016; Ālfārĥān, 2018; Alshehri, 2017; Çelik & Aydın, 2018; Cook, 2001; Mirza et al., 2012; Mohebbi & Alavi, 2014; Neokleous, 2016; Ngoc, 2018; Rosales & Gonzalez, 2020; Paker & Karaađaç, 2015; Sharma, 2006; Tang, 2002); checking for comprehension (Akkaya & Atar, 2015; Al-balawi, 2016; Ālfārĥān, 2018; Atkinson, 1987; Auerbach, 1993; Çelik & Aydın, 2018; Edstrom, 2006; Kaymakamođlu & Yıltanlılar, 2019; Kaynardađ, 2016; Neokleous, 2016; Sharma, 2006); giving instructions (Al-balawi, 2016; Atkinson, 1987; Auerbach, 1993; Çelik & Aydın, 2018; Cook, 2001; Mirza et al., 2012; Neokleous, 2016; Rosales & Gonzalez, 2020; Sharma, 2006; Tang, 2002); clarification purposes (Afzal, 2013; Alshammari, 2011); language analysis (Atkinson, 1987; Auerbach, 1993; Kaynardađ, 2016); providing feedback and explaining errors (Akkaya & Atar, 2015; Auerbach, 1993; Mohebbi & Alavi, 2014; Ngoc, 2018); communicating content to learners (Sali, 2014); establishing connections between the grammar of MT and that of L2 (Neokleous, 2016); discussing cross-cultural issues (Auerbach, 1993; Ngoc, 2018); classroom management (Akkaya & Atar, 2015; Alshehri, 2017; Auerbach, 1993; Çelik & Aydın, 2018; Cook, 2001; Edstrom, 2006; Ngoc, 2018); discussing classroom methodology at early levels (Atkinson, 1987); making humor to make learners relaxed and motivated (Akkaya & Atar, 2015; Al-balawi, 2016; Burat & Çavuşođlu, 2020; Ngoc, 2018); building and developing rapport with learners (Alshehri, 2017; Mohebbi & Alavi, 2014; Paker & Karaađaç, 2015; Sali, 2014; Sert, 2005); as part of students' collaborative learning and individual strategy when conducting activities; translation (Neokleous, 2016); communicating with learners outside the class; talking about the exam and about administrative information (Paker & Karaađaç, 2015); and testing (Atkinson, 1987; Cook, 2001). According to Atkinson (1987), using learners' MT in testing can maximize the validity and reliability of many types of tests and constrain the complexity of the tests as Cook (2001) claimed.

In relation to attitudes, the literature is full of studies that highlighted the positive attitudes towards the use of MT in EFL classroom. For instance, in Arab context, there are several studies that indicated that EFL teachers, EFL students, or both teachers and students have positive attitudes towards the use of MT in EFL classroom (e.g., Ahmad et al., 2018; Al Asmari, 2014; Al-balawi, 2016; Ālfārĥān, 2018; Almohaimeed & Almurshed, 2018; Alshammari, 2011; Alshehri, 2017; Alsied, 2018; Galali & Cinkara, 2017). In spite of this, the results of these studies showed that teachers believe that English should be the main language used in the classroom and that MT can be used to serve learning functions when necessary, suggesting that the use of MT in EFL classroom should be limited, judicious and systematic.

The positive attitudes of teachers and learners towards the judicious use of MT in English classroom have also been reported in various non-Arabic contexts, including Chinese (e.g., Tang, 2002; Wang, 2005), Turkish (e.g., Kayaođlu, 2012; Mahmutođlu & Kicir, 2013; Burat & Çavuşođlu, 2020), Persian (e.g., Hashemi, 2013; Sa'd & Qadermazi, 2015), Nepali (e.g., Sharma, 2006), Indonesian (e.g., Pardede, 2018), Bengali (e.g., Mirza et al., 2012; Obaidullah,



2016), Spanish (e.g., Alvarez, 2014), Greek (e.g., Neokleous, 2016), and Japanese (e.g., Serag, 2017)

Regarding the benefits of using MT in the target language classroom, literature highlighted the importance of using learners' MT to enhance the target language learning. In general, and apart from pure language leaning benefits, MT can play a "supportive and facilitating role in the classroom" (Tang, 2002, p. 39) in terms of managing and saving time when establishing tasks (Ahmad et al., 2018; Atkinson, 1987; Kaymakamoğlu & Yıltanlılar, 2019; Kaynardağ, 2016; Mansory, 2019; Sali, 2014; Sharma, 2006), establishing positive classroom atmosphere (Kaymakamoğlu & Yıltanlılar, 2019; Neokleous, 2016), giving clear instructions, especially in lower levels (Burat & Çavuşoğlu, 2020; Kaymakamoğlu & Yıltanlılar, 2019; Kaynardağ, 2016; Sali, 2014), following administrative requirements (Kaymakamoğlu & Yıltanlılar, 2019), and managing discipline (Ahmad et al., 2018; Sali, 2014). Additionally, using MT in EFL classroom makes learners feel at ease and comfortable, decreases their foreign language anxiety level, lessens their cognitive and affective burden (Ahmad et al., 2018; Albeshir, Hussain, & Farid, 2018; Ālfārĥān, 2018; Çelik & Aydın, 2018; Kaymakamoğlu & Yıltanlılar, 2019; Sali, 2014; Sharma, 2006), makes them more receptive (Ālfārĥān, 2018), increases their confidence, and enhances their rapport with their teachers (Çelik & Aydın, 2018). According to Alvarez (2014), MT plays an important role in English learning of students in terms of fostering their affective, motivational, cognitive, and attitudinal aspects.

In terms of benefits related to language learning, generally speaking, the use of learners' MT can be a needful and pedagogical aid in the teaching and learning of English as Afzal (2013) indicated. Its use in EFL classroom properly and judiciously can support the development of learners' target language in a positive way (Kaymakamoğlu & Yıltanlılar, 2019). It can also speed up the target language learning process in a natural way (Albeshir et al., 2018). Research (e.g., Ahmad et al., 2018; Al-balawi, 2016; Alshammari, 2011; Cook, 2001; Kaymakamoğlu & Yıltanlılar, 2019; Sali, 2014; Sert, 2005; Tang, 2002) showed that the occasional and judicious use of L1 in EFL classroom by both learners and teachers can enhance learners' comprehension and learning of L2. Sali (2014) argued that using MT can be effective to check learner comprehension as it is much easier for the learners to understand and for teachers to monitor the learners as it strengthens the seriousness of the messages that teachers want to convey.

Using MT in EFL classroom can be helpful in terms of clarifying ambiguous grammar rules and structures and abstract words, making them more understandable and meaningful for EFL learners (Adil, 2019; Burat & Çavuşoğlu, 2020; Çelik & Aydın, 2018; Kaymakamoğlu & Yıltanlılar, 2019; Tang, 2002), improving metalinguistic awareness for complex grammatical sentences and vocabulary in L2, helping learners make use of their knowledge of MT in L2 (Kaynardağ, 2016) and understand the meaning of new and abstract words more better (Adil, 2019; Almohaimeed & Almurshed, 2018; Kaynardağ, 2016), making rather complex aspects of English more straightforward for learners (Sali, 2014), and helping EFL learners even those of advanced level retain vocabulary (McCann, 2005). Besides, using MT to compare English grammar with the grammar of the learners' MT can be very positive, especially with low and beginning level students (Cole, 1998; Damra & Qudah, 2012). According to Damra and Qudah (2012) and Galali and Cinkara (2017), raising learners awareness and knowledge of similarities and differences between the grammar and cultures of MT and L2 can be beneficial and may lead to more effective learning of L2. This can also help EFL learners avoid mistakes by

breaking erroneous MT transfer habits (Neokleous, 2016) and may improve their accuracy of translations (Afzal, 2013). In support for the use of MT in L2 classroom, the findings of the experiments conducted by Miles (2004) showed that the use of Japanese in English classroom can help students learn and improve.

Although there is a huge body of literature that highlights the importance of using learners' MT in the target language classroom, there are still some questions regarding the extent MT should be used, the purposes and functions it should be used for, when and how it should be used without causing harm to learners' learning of the target language, the skill and aspect of the language, the level of the learners, and who should use it in the classroom. In fact, educationalists warned about the overuse of the ML in the target language classroom as that may lead learners to feel that they cannot really understand any item in the target language until it is translated and that they can speak in the classroom in their MT even when they can use the target language (Atkinson, 1987). Similarly, Nation (2003), Mirza et al. (2012), Neokleous (2016), Kaymakamoğlu and Yıltanlılar (2019) and Rosales and Gonzalez (2020) stressed that MT should not be overused as that can make learners dependent on it, which may negatively affect their target language acquisition and learning (Kaymakamoğlu & Yıltanlılar, 2019; Mirza et al., 2012) due to reducing the amount of learners' exposure to comprehensible and meaningful input and output in their learning process (Mirza et al., 2012; Rosales & Gonzalez, 2020), which can negatively affect the development of the learners' communicative skills in the target language, especially if the primary concern is the communicative skills development (Adil, 2019; Kaymakamoğlu & Yıltanlılar, 2019; Kaynar dağ (2016). In agreement with these arguments, the researcher thinks that MT can be useful in EFL classroom, yet it should be used when needed. According to Nation (2003) and Mohebbi and Alavi (2014), a balanced approach that considers the role of the MT in L2 learning context and ensures the importance of maximizing the use of the target language in the classroom should be adopted.

Another important factor that should be considered when using MT in L2 classroom is the proficiency and level of learners (Miles, 2004; Mirza et al., 2012; Paker & Karaağaç, 2015; Serag, 2017). In other words, there is a correlation between learners' level and their desire to use their MT in English classroom as Pardede (2018) indicated. Research (e.g., Adil, 2019; Almohaimeed & Almurshed, 2018; Alzamil, 2019; Auerbach, 1993; Cole, 1998; Kaymakamoğlu & Yıltanlılar, 2019; Mahmutoğlu & Kicir, 2013; Ngoc, 2018; Pardede, 2018; Sali, 2014) highlighted this point, indicating generally that while EFL learners and teachers agree that using MT in EFL classroom is useful at beginning and low levels and to some extent at intermediate level as learners at these levels have little knowledge of the target language, they prefer the use of English at advanced level because they are competent enough to understand meanings in English. In brief, the more advanced level of learners, the more negative attitudes EFL learners and teachers may have towards the use of their MT in EFL classroom and vice versa.

The language aspects or skills should also be considered when thinking about the use of MT in L2 classroom (Paker & Karaağaç; Sali, 2014). Supporting the bilingual approach, Cook (2001) claimed that learners can learn grammar and vocabulary more effectively by using their L1. Similarly, Çelik and Aydın (2018) stated that "cross-lingual references and code-switching" can serve communicative purposes while dealing with grammatical aspects in EFL classroom (p. 8).

In this vein, the findings of some previous studies, including experimental ones (e.g., Tang, 2002; Paradowski, 2007; Damra & Qudah, 2012; Sali, 2014; Sa'd & Qadermazi, 2015; Al-balawi, 2016; Imani & Farahian, 2016; Galali & Cinkara, 2017; Ahmad et al., 2018; Almohaimeed & Almurshed, 2018; Kaymakamoğlu & Yıltanlılar, 2019; Knežević, 2019) indicated that teachers and learners found using MT in EFL classroom beneficial when learning new vocabularies and explaining grammatical structures, especially the difficult ones. Actually, the need for using MT in EFL grammar classroom emerges from the fact that teaching grammar is so complex and that it is sometimes so difficult to make grammar points comprehensible through L2, which makes it difficult for EFL learners, especially at lower level, to comprehend unless MT is used (Edstrom, 2006; Miles, 2004).

Regarding the role of MT in EFL reading classroom, the findings of the experimental study of Nayeri (2015) indicated that schema activation in L1 leads to improving Iranian high school students' reading comprehension ability in English. Similarly, the results of Imani and Farahian (2016) revealed that lecturers believe that the use of MT has a facilitating role and helps improve EFL learners' reading comprehension. In relation to EFL reading classroom, Paker and Karaağaç (2015) showed that the teachers used MT in EFL writing classes to explain how to identify and write topic and supporting sentences, paragraphs, thesis statements, types of essays, and to give feedback about their writing; which helped students to improve their writing. Likewise, the findings of Stapa and Majid (2012) revealed that the use of L1 in L2 writing with low level proficiency ESL learners can help them generate ideas and produce better quality essays.

In relation to speaking and listening activities, the use of MT is not usually recommended. Cole (1998) argued that using MT is considered inappropriate and unjustifiable unless difficult instructions are required or there are cultural content that is vital to comprehension. Similarly, Mansory (2019) revealed that EFL students have negative attitudes towards speaking in L1 during group and pair work in EFL classroom.

According to Cook (2001), there are some factors that should be considered when thinking about using learners' MT in the target language classroom. The first factor is 'efficiency,' which involves asking if something can be done more effectively through the MT. The second factor is 'learning,' whether the use of MT alongside the target language can be helpful for learning the target language. The third factor is 'naturalness,' whether the learners feel more comfortable about some functions and topics in their MT rather than the target language. The fourth factor is 'external relevance,' whether the use of both languages can help learners master specific uses of the target language and use in real-life situations.

### **Methodology**

The present study is descriptive. It adopted a mixed-method approach whereby both qualitative and quantitative data were collected. The quantitative part is reflected in the responses to the three-point Likert items of the questionnaires, while the qualitative part is reflected in the responses to the points involved in the questions used to direct the focus group discussions (FGDs). Using the case study method and the teacher-as-researcher method, the researcher was able to investigate the attitudes of EFL students towards using MT and their perceptions of the impact of using their MT in EFL grammar classroom in depth and in real context.

### **Participants**

The participants in the current study were (51) intermediate EFL learners (males and females) who joined the Centre for Languages and Translation, Ibb University. Most of the learners were secondary school graduates, except five of them who were university graduates. They joined the centre to improve their proficiency in English. To get a diploma in English (intermediate level), the learners have to study English for two semesters. In each semester, they have to take four English courses, namely Speaking, Reading, Writing, and Grammar. Each course is of 12 classes, each class of two hours.

### **Instruments**

In the light of literature – mainly Alshammari (2011), Kayaoğlu (2012), Hashemi (2013), Alvarez (2014), Galali and Cinkara (2017), Serag (2017), Alsied (2018), and Burat and Çavuşoğlu (2020) – and the comments of referees, the researcher developed a questionnaire and a focus group discussion to collect data for this study. The questionnaire encompassed two sections: the first section (12 three-point Likert items) aimed at identifying the learners' opinions about when MT should be used, while the second section (13 three-point Likert items) aimed at identifying the impact of using MT in EFL grammar classroom on EFL learners and their English learning. Regarding the FGDs, they were used to collect more data with a view to achieving the study objective and answering its questions. Using the FGDs, the researcher could probe deep into the learners' minds in order to improve a better understanding of when and how teachers should use MT in EFL classroom and the impact of the approach the teacher followed in using MT in EFL grammar classroom on the learners and their English learning.

The content and the face validity of the items of the instruments were first verified through giving them to two colleagues. Then, they were translated into the respondents' MT and the translated versions were checked and edited for accuracy through the suggestions of one more expert. Besides, the instruments were piloted to two respondents to identify any ambiguities or problems with the items of the instruments. To estimate the reliability coefficient of the questionnaire and to measure its reliability, Cronbach's alpha coefficient was calculated. The values of alpha coefficient were (0.86) for the entire questionnaire, (0.76) for the first section, and (0.80) for the second section of the questionnaire, indicating good levels of reliability.

### **Procedures**

During the academic year 2020-2021, the teacher taught two English grammar courses for two groups of intermediate EFL learners at the Centre for Languages and Translation, Ibb University. As the level of the learners is intermediate, the teacher used their MT judiciously and systematically during the EFL grammar classes for specific functions with a view to encouraging them to speak in English and enhancing their learning of English grammar.

To identify the attitudes of the EFL learners towards MT use in EFL grammar classroom and the impact of the approach the teacher followed in this regard, the researcher collected data using a questionnaire of two sections and FGDs. The first section of the questionnaire was administered to (51) learners (20 males and 31 females) who were present in the first class of the second semester to identify their opinions about when their MT should be used, while the

second section was administered to (48) learners (20 males and 28 females) who were present in the last class of the course; i.e., after teaching the course to identify their perceptions of the impact of MT use in EFL grammar classroom.

For the FGDs, the researcher formed four WhatsApp groups of five to six learners, two for males and two for females to discuss the six questions used to direct the FGDs. The researcher posed the questions one by one, giving the participants enough time to discuss the point of each question. The researcher acted as a moderator for the discussions. To ensure good communication with the participants, the FGDs were conducted in learners' MT, yet English was used during the discussions to some extent.

### Data analysis

Both the qualitative and quantitative methods were used to analyze the data collected. The data collected via the FGDs were analyzed qualitatively. The data collected via the questionnaire were computed and analyzed using SPSS for Windows (version 20). The researcher calculated the descriptive statistics for each item of the questionnaire. Besides, the researcher used *t*-test to identify whether there are statistically significant differences in responses of the respondents according to *gender*.

For statistical analysis, three distinct levels (high, medium, and low) were created to describe the means of respondents' estimation of their attitudes towards using MT in EFL grammar classroom and the impact of using MT on them and their learning of English:

- from 1.00 to 1.66 indicates a low-value mean,
- from 1.67 to 2.33 indicates a medium-value mean, and
- from 2.34 to 3.00 indicates a high-value mean.

This categorization was calculated by identifying the difference between the high value in the Likert scale (i.e., 3.00) and the low value (i.e., 1:00) and then dividing the figure by the number of levels (i.e., 3) to get (0.66).

## Findings and Discussion

### Descriptive analysis

#### RQ #1: What are EFL learners' attitudes towards using MT in EFL grammar classroom?

To answer the first question; i.e., to identify the EFL learners' opinions about when MT should be used in EFL grammar classroom, the researcher calculated the means, the standard deviations, and the percentages for each item of the first section of the questionnaire and arranged them in descending order as shown in Table (1).

**Table 1.** Descriptive statistics of the items sorted in a descending order

#	Item	Descriptive Statistics			Estimation
		M	SD	%	
5	Using MT to explain difficult English grammar rules.	2.90	0.31	96.52	high
10	Using MT to clarify doubts about understanding some	2.88	0.33	95.82	high

	English grammar rules and concepts.				
4	Making use of MT in English grammar classroom when necessary.	2.85	0.36	95.13	high
7	Using MT to explain new and difficult English vocabulary items.	2.83	0.48	94.43	high
1	Using MT to explain difficult concepts or ideas.	2.81	0.53	93.83	high
8	Using MT to explain the differences and similarities between Arabic and English grammar rules when teaching English grammar.	2.79	0.50	93.05	high
3	Using English as a medium of instruction in English grammar classroom.	2.54	0.71	84.71	high
12	Using MT to express my ideas and feelings that I cannot explain in English.	2.40	0.82	79.85	high
9	Using MT to explain how to carry out classroom activities.	2.38	0.79	79.16	high
2	MT should never be used when teaching English grammar.	2.35	0.73	78.47	high
6	Using MT to establish rapport with students: making jokes, showing concern to the students, and showing empathy.	2.25	0.81	75.00	medium
11	Asking the teacher questions in MT.	1.81	0.82	60.41	medium

**Note:** Scoring of the negative item, namely Item No. (2) was reversed so that a high score reflected a more positive attitude towards MT use.

As data in Table 1 indicates, the average of items ranged from (1.81) to (2.90) with corresponding percentages from (60.41%) to (96.52%), indicating a high level of agreement among the respondents on when MT should be used in EFL grammar classroom. Similar to the findings of some previous studies (e.g., Afzal, 2013; Almohaimed & Almurshed, 2018; Galali & Cinkara, 2017; Hashemi, 2013; Mahmutoğlu & Kicir, 2013; Mirza et al., 2012; Neokleous, 2016; Paker & Karaağaç, 2015; Tang, 2002), the respondents of this study are in favour of using their MT to explain difficult English grammar rules ( $M = 2.90$ ;  $SD = 0.31$ ), to clarify doubts about understanding some English grammar rules and concepts ( $M = 2.88$ ;  $SD = 0.33$ ), and to explain new and difficult English vocabulary items ( $M = 2.83$ ;  $SD = 0.48$ ) and difficult concepts or ideas ( $M = 2.81$ ;  $SD = 0.53$ ). In consistency with Neokleous (2016) and Damra and Qudah (2012), the EFL learners in this study like teacher to use their MT to explain the differences and similarities between Arabic and English grammar rules ( $M = 2.79$ ;  $SD = 0.50$ ).

Regarding when EFL learners want to use their MT in EFL classroom, Table (1) shows that the respondents have a consensus to use MT to express ideas and feelings that they cannot explain in English ( $M = 2.40$ ;  $SD = 0.82$ ). This finding is in line with Hashemi (2013) and Imani and Farahian (2016). Actually, if EFL learners are not allowed to use their MT to express their feelings and ideas that they cannot explain in English due to their low level of English proficiency or lack of appropriate English words, they may not be able to participate well in the classroom (Imani & Farahian, 2016).

The findings of this study also indicated that EFL learners like teacher to use their MT to explain how to carry out classroom activities ( $M = 2.38$ ;  $SD = 0.79$ ). This function of MT was highlighted in literature (e.g. Al-balawi, 2016; Ālfarhān, 2018; Burat & Çavuşoğlu, 2020; Damra & Qudah, 2012; Kaymakamoğlu & Yıltanlılar, 2019; Paker & Karaağaç, 2015; Rosales & Gonzalez, 2020; Turin, 2017), which indicated that students prefer to get instructions in their

MT. This may be due to the effectiveness of MT in such situations in terms of saving time and ensuring that students are clear about what to do.

Besides, the finding of the study revealed that EFL learners like teachers to use their MT to establish rapport with them ( $M = 2.25$ ;  $SD = 0.81$ ). In relation to this finding, literature (e.g., Alshehr, 2017; Burat & Çavuşoğlu, 2020; Mohebbi & Alavi, 2014; Paker & Karaağaç, 2015) revealed that EFL teachers use MT for making jokes, showing concern to the students, showing empathy, which can help develop a good relationship and reduce social distance with students (Paker & Karaağaç, 2015). According to Turin (2017), developing a good relationship with students is a key factor to keep them open to the learning process.

The lowest mean score was given for the function ‘asking the teacher questions’ ( $M = 1.81$ ;  $SD = 0.82$ ). It seems that the EFL learners at this level are quite competent to sometimes ask the teacher their questions in English. This finding is supported by findings from previous studies (e.g., Alsied, 2018; Hashemi, 2013; Imani & Farahian, 2016; Mahmutoğlu & Kicir, 2013; Turin, 2017) regardless of the percentage of consensus among the EFL students involved in previous studies about using MT to ask questions to teachers, which is affected by the level of English proficiency of the respondents. Similarly, Kayaoğlu (2012) indicated that there is a consensus among teachers to allow students in grammar classroom to ask questions in their MT to reduce their anxiety.

In spite of the disagreement of the respondents that MT should never be used when teaching English grammar ( $M = 2.35$ ;  $SD = 0.73$ ), there is a high agreement among them that EFL teachers should make use of MT in English grammar classroom when necessary ( $M = 2.85$ ;  $SD = 0.36$ ) and that English should be the medium of instruction in English grammar classroom ( $M = 2.54$ ;  $SD = 0.71$ ). These findings are in harmony with those of some previous studies which indicated that EFL students (e.g., Ahmad et al., 2018; Almohaimeed & Almurshed, 2018; Alshammari, 2011; Alsied, 2018; Galali & Cinkara, 2017; Mahmutoğlu & Kicir, 2013; Neokleous 2016; Tang, 2002) and teachers (e.g., Ahmad et al., 2018; Al Asmari, 2014; Alshehr, 2017; Burat & Çavuşoğlu, 2020; Hashemi, 2013; Tang, 2002) have positive attitudes towards the judicious and systematic use of students’ MT in EFL classroom and towards using English as the medium of instruction.

**RQ #2: What is the impact of using MT in EFL grammar classroom on EFL learners and their language learning?**

To answer the second question; i.e., to identify the EFL learners’ perceptions of the impact of using their MT in EFL grammar classroom, the researcher calculated the means, the standard deviations, and the percentages for each item of the second section of the questionnaire and arranged them in descending order as shown in Table (2).

**Table 2.** Descriptive statistics of the items sorted in a descending order

#	Item	Descriptive Statistics			Estimation
		M	SD	%	
2	Using MT in the classroom helped me understand English grammar rules better.	2.90	0.37	96.52	high

9	Using MT to explain new and difficult English vocabulary items helped me understand them more.	2.88	0.39	95.82	high
8	Using ML to explain the differences and similarities between Arabic and English grammar rules helped me understand English grammar better.	2.85	0.41	95.13	high
4	Creating scenarios in Arabic and asking students to reflect them in English encouraged them to participate in the classroom.	2.79	0.50	93.05	high
3	Creating scenarios in Arabic and asking students to reflect them in English encouraged me to speak in English.	2.77	0.56	92.35	high
7	Using ML in the classroom had no negative impact on my learning of English grammar.	2.75	0.53	91.66	high
10	Using MT to explain how to carry out classroom activities helped me to participate in classroom activities successfully.	2.67	0.60	88.88	high
11	Using MT in the classroom made me more comfortable and receptive.	2.63	0.57	87.49	high
12	Using MT made me less stressed in the classroom.	2.60	0.68	86.80	high
6	Using ML in the classroom reduced the difficulty of learning English grammar.	2.58	0.71	86.10	high
1	Using MT in the classroom helped me learn English language in general.	2.56	0.68	85.41	high
13	Using MT in the classroom made me more focused.	2.46	0.74	81.94	high
5	Creating scenarios in Arabic and asking students to reflect them in English prevented me from thinking in English.	2.38	0.76	79.16	high

**Note:** Scoring of the negative item, namely Item No. (5) was reversed.

As Table 2 indicates, the average of items ranged from (2.38) to (2.90) with corresponding percentages from (79.16%) to (96.52%), indicating a high level of agreement among the respondents on the positive impact of using MT in EFL grammar classroom. Table (2) also shows that the respondents agreed that using MT in EFL grammar classroom helps them understand English grammar rules better ( $M = 2.90$ ;  $SD = 0.37$ ), reduces the difficulty of learning English grammar ( $M = 2.58$ ;  $SD = 0.71$ ), and has no negative impact on their learning of English grammar ( $M = 2.75$ ;  $SD = 0.53$ ). In line with these findings, Tang (2002), Mirza, Mahmus, and Jabbar (2012); Afzal (2013); Imani and Farahian (2016); and Galali and Cinkara (2017) indicated that EFL students found the use of their MT helpful to explain complex grammar points. Similarly, Damra and Qudah (2012), Mahmutoğlu and Kicir (2013), Paker and Karaağaç (2015), and Almohaimeed and Almurshed (2018) revealed that EFL students believe that using their MT in English grammar classroom helped them understand English grammar rules better. Likewise, Mohebbi and Alavi (2014), Al-balawi (2016), and Ālfārhān (2018) indicated that EFL teachers found that using L1 in EFL classroom can help learners to understand grammatical points better.

Besides, Table (2) shows that using ML to explain the differences and similarities between the grammar rules of MT and English helps EFL learners understand English grammar better ( $M = 2.85$ ;  $SD = 0.41$ ), which can enable them to avoid making mistakes in English that result from mother tongue interference. This finding is in line with that of Mahmutoğlu and



Kicir (2013), who showed that the EFL student participants support the use of their MT to understand the differences between the grammar of their MT and that of English. Similarly, Neokleous (2016) indicated that the EFL students think that the use of their MT when explaining grammar rules not only broaden their knowledge but also enable them to build links with both languages, which will help them to avoid mistakes by breaking erroneous MT transfer habits.

The findings of this study showed that using MT to explain new and difficult English words can help EFL learners understand them more ( $M = 2.88$ ;  $SD = 0.39$ ). In harmony with this finding, Tang (2002), Damra and Qudah (2012), Mirza et al. (2012), Afzal (2013), Mahmutoğlu and Kicir (2013), Galali and Cinkara (2017), Turin (2017), and Almohaimeed and Almurshed (2018) revealed that EFL learners found the use of their MT beneficial when presenting new vocabulary items and useful for understanding the meaning of new and difficult words better. Similarly, Mohebbi and Alavi (2014), Al-balawi (2016), and Ālfarhān (2018) indicated that EFL teachers found using L1 in EFL classroom useful for EFL learners to understand difficult concepts and vocabulary items.

Additionally, the findings indicated that using MT to explain how to carry out classroom activities can help EFL learners to participate in classroom activities successfully ( $M = 2.67$ ;  $SD = 0.60$ ). In fact, without understanding the instructions of how to perform an activity or a task, learners won't be able to participate in classroom activities. This is similar to Damra and Qudah (2012) and Serag (2017), who revealed that EFL students agree that the use of MT in EFL classroom help them to participate successfully in classroom activities. In the same vein, Ngoc (2018) revealed that EFL teachers use students' MT to explain instructions of activities to enhance students understanding and to encourage them to complete the tasks.

Moreover, the respondents indicated that using MT in the classroom made them more comfortable and receptive ( $M = 2.63$ ;  $SD = 0.57$ ), less stressed ( $M = 2.60$ ;  $SD = 0.68$ ), and more focused ( $M = 2.46$ ;  $SD = 0.74$ ). Actually, the feeling of anxiety and stress can be an obstacle before learners to actively participate in the classroom. These findings are consistent with those of some recent studies (e.g., Al-balawi, 2016; Hashemi, 2013; Mahmutoğlu & Kicir, 2013; Neokleous, 2016; Rosales & Gonzalez, 2020; Serag, 2017; Turin, 2017) which indicated that the use of EFL learners make them feel at ease, comfortable and less stressed in EFL classroom. Contrary to the findings of this study, Tang (2002), Afzal (2013), and Almohaimeed and Almurshed (2018) revealed that very few EFL students stated that the use of their MT makes them feel at ease, comfortable and less stressed in EFL classroom, which can be attributed to the level of respondents of these studies.

Regarding the distinct approach adopted to using MT in EFL grammar classroom in this study, the findings indicated that creating scenarios in MT and asking EFL learners to reflect them in English encourages the EFL learners to participate in the classroom ( $M = 2.79$ ;  $SD = 0.50$ ) and to speak in English ( $M = 2.77$ ;  $SD = 0.56$ ). Besides, there was agreement among the respondents that this approach to using MT does not prevent them from thinking in English ( $M = 2.38$ ;  $SD = 0.76$ ). This indicates that the respondents found this approach of MT use in EFL grammar classroom effective as it can encourage EFL learners to participate and to speak in EFL classroom. In contrast, Hashemi (2013) indicated that a lot of the participants (teachers and students) agreed that the use of MT in English classroom can prevent EFL students from thinking in English. Similarly, Almohaimeed and Almurshed (2018) indicated that most

advanced EFL students agreed that the use of MT may prevent them from thinking in English, whereas few beginner and intermediate students agreed upon that.

Generally speaking, the findings reached by this study highlighted the vital role that learners' MT can play in EFL classroom, if used judiciously and systematically, in terms of helping EFL learners learn English language in general ( $M = 2.56$ ;  $SD = 0.68$ ). This findings is supported by many previous studies (e.g., Afzal, 2013; Ahmad et al., 2018; Albeshar et al., 2018; Almohaimeed & Almurshed, 2018; Mahmutoğlu & Kicir, 2013; Mirza et al., 2012; Mohebbi & Alavi, 2014; Serag, 2017) which revealed that the use of learners' MT can help them improve language learning.

**RQ #3: Are there statistically significant differences in the means of EFL learners' responses in relation to their attitudes towards MT use and their perceptions of the impact of MT use in EFL grammar classroom according to gender?**

The *t*-test for independent samples analysis was used to explicate any significant differences in the respondents' opinions about when MT should be used and their perceptions of the impact of using MT in EFL grammar classroom. The results of *t*-test are outlined in Table (3).

**Table 3.** T-test results for respondents' responses based on 'gender'

	Variable	N	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>Sig.</i> (2-tailed)
Attitudes	Male	20	2.58	0.29	49	0.234	0.816
	Female	31	2.56	0.36			
Impact	Male	20	2.60	0.34	46	1.434	0.158
	Female	28	2.73	0.30			

Table (3) shows that no statistically significant difference was found [ $t(49) = 0.234$ ,  $p = 0.816$ ] between *males* ( $M = 2.58$ ,  $SD = 0.29$ ) and *females* ( $M = 2.56$ ,  $SD = 0.36$ ) at the (0.05) level of significance in relation to their opinions about when MT should be used in English grammar classroom. With respect to the impact of using MT in English grammar classroom, Table (3) also shows that no statistically significant difference was found [ $t(46) = 1.434$ ,  $p = 0.158$ ] between *males* ( $M = 2.60$ ,  $SD = 0.34$ ) and *females* ( $M = 2.73$ ,  $SD = 0.30$ ) at the (0.05) level of significance. This implies that both male and female EFL learners have similar attitudes towards using their MT in English grammar classroom and perceive the impact of that in the same way although it was noted that the females perceived the positive impact of using MT more highly than that of males. In respect to gender, this study is in line with Burat and Çavuşoğlu (2020), who indicated that there was no difference in EFL teachers' perceptions and practice of L1 in EFL classroom based on gender and with Ahmad et al. (2018), who revealed that there was no statistically significant difference in the beliefs of EFL teachers about the use of L1 in EFL classroom.

**Qualitative data analysis**

The main purpose of the FGDs was to identify more ideas about EFL learners' opinions about using Arabic in EFL classroom and to evaluate the strategy that the teacher used to

involve Arabic in EFL grammar classroom.

The first question was asked to identify the participants' opinions about when the teacher should use MT in EFL classroom. Based on the ideas raised during the discussions, it can be stated that there was an agreement that MT can be used in EFL classroom to explain difficult grammar rules and the meaning of difficult and new words and concepts, to give instructions, to check learners' comprehension, to create humour, to explain the differences and similarities between Arabic and English grammar rules, to give learners advice on how to improve their English as well as when teacher finds it difficult to convey a particular idea or when the teacher feels that learners are unable to understand a particular point as this can make them feel uncomfortable and stressed. In this, the study echoes the findings of a lot of recent studies that highlighted when MT should be used in EFL classroom (e.g., Adil, 2019; Akkaya & Atar, 2015; Al-balawi, 2016; Almohaimeed & Almurshed, 2018; Burat & Çavuşoğlu, 2020; Damra & Qudah, 2012; Kaymakamoğlu & Yıltanlılar, 2019; Sali, 2014; Sert, 2005; Tang, 2002).

The second question was allotted to identify the opinions of the participants about the technique adopted by the teacher to use MT to encourage EFL learners to speak in English. The technique involved creating scenarios in MT for EFL learners who cannot give their own examples and then asking them to reflect the scenarios in English. Based on the discussions with the participants, it can be stated that there was an entire consensus that the said technique is helpful in terms of encouraging EFL learners to apply grammar rules and speak in English and reducing their stress and cognitive burden.

To quote a participant's words (the excerpts given are translated from Arabic),

*I like it. It helped me to apply the grammar rules. It also enhanced my confidence that I could speak in English.*

A second participant commented,

*In the classroom, we sometimes feel stressed and cannot use our own words to give examples, but the scenarios given by the teacher encourage us to participate.*

A third participant said,

*It is really useful. It doesn't only help us to apply the rules and speak in English, but also enhances our translation skill.*

A fourth participant said,

*I sometimes want to participate in the classroom but I feel I have no examples to give. When the teacher gives us scenarios, I get encouraged to participate.*

A fifth participant added,

*What is interesting about the technique is that it encourages us to speak in English and helps us to retain grammar rules.*

The third question asked the participants about how the teacher encouraged them to apply grammar rules and speak in English in the classroom. The aim of this question was to verify the answer to question two. Based on the discussions, it can be stated that the teacher encouraged the learners to apply grammar rules and speak in English in the classroom through asking them to give their own examples from their daily life and to do exercises related to the grammar rules in question, praising students, creating scenarios in Arabic and asking EFL learners to reflect the scenarios in English, and correcting learners' mistakes in friendly manner.

A participant commented,

*I like the way of asking volunteers to give examples and then pointing to particular learners to participate, encouraging them to speak through creating scenarios in Arabic and asking them to reflect the scenarios in English.*

The fourth question asked the participants about the approach (bilingual or monolingual) and the main language (Arabic or English) EFL teachers should use in EFL grammar classroom. In the light of the discussions, it can be asserted that there was an agreement among the participants that the bilingual approach should be adopted in EFL grammar classroom, yet the participants stressed that Arabic should be used only when necessary (e.g., explaining difficult grammar rules and words, giving instructions when students feel confused) and that English should be the medium of instruction in order to ensure identifying the correct pronunciation of words, improving listening skill, and increasing the amount of exposure to English in the classroom. A participant commented,

*I am for the bilingual approach. Arabic should be used in the classroom when necessary; for example to explain difficult words and difficult grammar rules.*

Another participant commented,

*I prefer the bilingual approach, yet English should be the medium of instruction.*

In this, the study is in agreement with many recent studies that highlighted the preference of EFL learners and teachers for the bilingual approach; i.e., using the target language as a medium of instruction and MT when necessary (e.g., Ahmad et al., 2018; Al Asmari, 2014; Almohaimeed & Almurshed, 2018; Alshehr, 2017; Alsied, 2018; Galali & Cinkara, 2017; Mahmutoğlu & Kicir, 2013; Tang, 2002).

The fifth question was allotted to identify the advantages that EFL learners may get from using their MT in EFL grammar classroom. The participants confirmed that using Arabic in EFL grammar classroom is beneficial in terms of enhancing EFL learners' comprehension of difficult grammar rules and concepts and abstract words more better, especially of low proficiency learners; facilitating content transfer to learners; reducing the stress of EFL learners and making them more receptive; encouraging EFL learners to participate in the classroom as they know what they have to do; removing ambiguity of difficult points, which results in better understanding of the lesson; reducing cognitive burden of learners, especially of low proficiency learners; and retaining grammar rules and new vocabulary items. A participant commented,

*Sometimes, when the teacher explains grammar rules in English, I say to myself it is not clear enough but I cannot ask him to repeat the explanation. When the teacher asks us if it is understood, and one of the students requests him to re-explain the point and the teacher explains the point again using Arabic, I say to myself, yes, now it is clear.*

In this, the study mirrors the findings of previous studies in other contexts which highlighted such benefits of using MT in EFL classroom (e.g., Ahmad et al., 2018; Albeshier et al., 2018; Ālfarhān, 2018; Almohaimeed & Almurshed, 2018; Burat & Çavuşoğlu, 2020; Kaymakamoğlu & Yıltanlılar, 2019; Sali, 2014).

The sixth question was allotted to identify the disadvantages of using Arabic in EFL grammar classroom. During the discussions, one main concern was raised by almost all the participants, namely the overuse of Arabic in EFL grammar classroom, which may reduce EFL

learners' exposure to English and makes them depend on their MT. This mirrors the findings of some previous studies (e.g., Albeshier et al., 2018; Kaynaradağ, 2016; Mahmutoğlu & Kicir, 2013; Ngoc, 2018).

Actually, using ML in L2 classroom cannot be avoided, especially with low level proficiency learners. However, this should not be taken as a call for the overuse of L1 in a FL/SL classroom as that may lead to reducing the amount of students' exposure to the target language, which can have a negative effect on the target language learning. Rather, it is a call for EFL teachers to make use of L1 in EFL classroom judiciously, purposefully, and effectively (Çelik & Aydın, 2018; Kaynaradağ, 2016; Mansory, 2019; Mohebbi & Alavi, 2014; Tang, 2002) with a view to enhancing the FL/SL learning and making learners less stressful in the classroom, taking into account the proficiency level of the learners, the language aspect in question, and the purpose of the MT use.

Like Cook (2001), Tang (2002), Damra and Qudah (2012), Afzal (2013), Mohebbi and Alavi (2014), Sa'd and Qadermazi (2015), Imani and Farahian (2016), Ahmad et al. (2018), and Çelik and Aydın (2018); the researcher thinks that, if used properly, systematically and judiciously, learners' MT can be advantageous pedagogically in the teaching and learning of English and psychologically in terms of reducing the cognitive overload and anxiety of EFL students in the classroom.

### **Conclusion and Implications**

The present study has significant and pedagogical implications for EFL learners and teachers. It revealed that the EFL learners are in favour of judicious bilingual approach in EFL classroom, in which English is the medium of instruction and their MT is used judiciously as a supportive and facilitating means. Based on the findings obtained from this study, it can be stated that the use of learners' MT in EFL classroom is important due to the vital role and the key functions that it can play in enhancing learners' language learning, including helping EFL learners to understand English grammar rules and new and difficult English vocabulary items better; reducing the difficulty of learning English grammar; encouraging EFL learners to participate and speak in English in the classroom; enhancing EFL learners' understanding of the instructions of classroom activities and tasks, which can ensure their active involvement and participation in the classroom; and making EFL learners more comfortable and receptive, less stressed, and more focused in the classroom, which can contribute to their cognitive ability and their participation in the classroom. However, in order to obtain all these advantages, the learners' MT should be used systematically and judiciously as its overuse in EFL classroom may have a negative impact on EFL learners, including limiting the amount of their exposure to English in the classroom and encouraging them to be extremely dependent on their MT.

In the process of learners' MT integration into EFL classroom, the EFL teacher is the one who can take the right decisions on when, where, how, how often, and with whom to use MT. Besides, the teacher is the one who can judge whether MT use enhances or hinders learners' language learning because what may work well for one group of EFL learners may not work well for others. In other words, the right decision of the permission or prohibition of using the bilingual approach in EFL classroom cannot be taken by the education management at upper level; but rather by the EFL teachers in the classroom.

In brief, the use of MT in EFL classroom is a double-edged sword. While its systematic

and judicious use can enhance learners' learning of English, its overuse can reduce the amount of exposure to English language, and thus EFL learners language learning. In the light of the findings obtained and the arguments raised, the following recommendations are given:

- EFL teachers should be provided with proper training, so that they can use MT in an effective way in EFL classroom.
- EFL teachers should maintain a balance between MT and English use in EFL grammar classroom.
- MT should be used in EFL classroom effectively and judiciously with a view to facilitating and enhancing learners' learning of English.
- EFL teachers are recommended to use learners' MT in order to help them understand the meaning of abstract and difficult vocabulary items and difficult grammar rules and concepts, especially with low-level EFL learners.
- Learners' MT should not be overused in EFL classroom as that may make learners dependent on their MT and limit the exposure to English.
- Factors such as learners' proficiency level and language aspects and skills should be considered by EFL teachers when using MT in EFL classroom.
- Curriculum developers should take into consideration the role of MT when developing curriculum for EFL learners.

### **Limitations and Further Research**

The findings of this work are limited to the responses of a relatively small number of EFL intermediate learners on a self-report three-point Likert scale and their opinions given in FGDs about using their MT in EFL grammar classroom. Therefore, caution should be considered when making generalizations from the findings to other contexts. However, such limitations give directions for further research on more EFL learners at different proficiency levels and at different EFL classrooms. In fact, using MT in EFL classroom is an important topic that should be examined closely to develop effective practices of using MT in such ways that enhance learners' learning of English. Further studies on the effectiveness of MT use and the attitudes of EFL teachers and learners towards using MT in EFL classroom at various proficiency levels and for different language aspects can be conducted. This includes carrying out experimental studies to identify the impact of such strategy and how to make it more useful. Although previous studies highlighted the importance of using students' MT in EFL classroom, conducting a longitudinal study is recommended to identify the exact contribution of MT to the success of EFL learners.

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