

# INTERNATIONAL BLACK SEA UNIVERSITY FACULTY of EDUCATION and HUMANITIES Education and Sciences Program

INVESTIGATING STUDENTS' PERCEPTION OF BLENDED LEARNING AND ITS ROLE IN THE DEVELOPMENT OF READING SKILLS IN ENGLISH FOR ACADEMIC PURPOSES (A CASE OF UNIVERSITY ENGLISH AS A FOREIGN LANGUAGE PREPARATORY COURSE)

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**Extended abstract of Doctoral Dissertation in Education Sciences** 

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# INTRODUCTION

# Significance

The ability to read in a foreign (especially, English) language is essential for all university graduates nowadays, due to several reasons:

- Lifelong or continuous learning is a must in any profession in this quickly changeable world. All the newest professional information is available on the internet in English.
- Communication with professional community nowadays is mostly done in English. The graduate needs not only to be able to write to his/her colleagues from other countries, but also to understand well their answers.
- If the graduate wants to continue his/her education abroad or to work in an international company, he/she will need to read a lot of materials / documentation in English.

Unfortunately, according to various international assessments, reading competence is not on desirable level in many countries. Even in those countries where the reading competence average level is appropriate, "some 15-year-olds lack the reading skills necessary for living in modern society. Reading proficiency is closely linked to the amount of time students spend reading in their free time and the diversity of materials they read" (OECD, 2018). PISA (2015) names Turkey among the countries who satisfy the minimum demand in reading in the native language competence (minimum points are 262, Turkey has a mean of 440, which is approximately equivalent to B1 level, while the maximum point is 698 which corresponds to C2 level). Neither Iraq, nor Georgia are in the list of the countries whose reading competence in the native language satisfies the minimum requirement. If the level in the native language is such, it would not be higher in the foreign language, definitely.

Reading is a difficult skill, it is time-consuming and requires a rich vocabulary and background knowledge in order to comprehend the texts well. Due to this fact, reading motivation is generally not too high, especially when it concerns on-paper reading. McKenna, Kear and Ellsworth (1995), for example, mention that primary school children's reading motivation is high enough, but then it declines with years.

Not only students are not too motivated or successful in reading, but also teachers feel they are insufficiently aware of the innovations in the sphere of teaching reading (Gunter, 2011). Most teaching reading is done traditionally, on-paper, which does not really contribute to students' motivation who prefer to deal with contemporary technologies.

Teaching reading at tertiary education institution should be mostly connected with reading for academic purposes. However, English teachers usually have problems both related to the knowledge of academic language and to the methods of teaching the language for academic purposes.

All the above makes the topic of this research significant.

#### Research Problem / Goal

As the level of reading skills is dissatisfactory while their role for university students is great, this is a problem to be solved. The dissertation aims to find out whether the application of blended learning can improve the level of students' English for Academic Purposes (EAP) reading skills and their motivation to be involved in reading professional texts.

# **Research Questions**

- Does blended learning develop university students' reading skills more effectively than the classical approach to their development?
- How do the English as a Foreign Language (EFL) university students perceive the blended and traditional ways of reading?

# **Novelty**

In recent years, advances in high technologies stimulated researchers to investigate blended learning (Dziuban et al. 2018; Ghazizadeh & Fatemipour, 2017; Kintu, 2017). There are some dissertations dealing with teaching reading in Iraq (Kanar, 2013; Kavlu, 2016; Yahci, 2016), none of them deals with teaching EFL or EAP reading via blended learning. This research will analyze different approaches to teaching/learning EAP reading and offer a variety of relevant activities / skills. Furthermore, this will be the first study conducted at Ishik University related to blended learning of reading.

#### **Practical Value**

The practical application of the suggested materials can significantly increase students' reading competence. Thus, the practical value of the research deals with the activities for blended EAP

teaching of reading. The activities developed by the researcher which can be applied by EFL program developers, teachers, students, course-book authors, and computer-assisted programs' designers.

# **Theoretical Value**

The theoretical bases of the research are:

- Psychological theories: Behaviorism (Skinner, 1974), Constructivism (Wadsworth, 2004),
   Social Learning Theory (Bandura, 1972), Sociocultural Theory (Vygotsky, 1979), and
   Information Processing Theory (Atkinson & Shiffrin, 1968);
- Pedagogical approaches: Student-centered, Interactive, Project-based, Problem-Based, Cooperative / Collaborative (based on Dewey, 2008);
- Krashen's (1989) Input Hypothesis;
- Communicative / interactive / authentic approach (Richards, 2006);
- Reading theories (Goodman, 2003; Rumelhart & McClelland, 1981; Rumelhart & McClelland, 1981);
- Computer-assisted (Chiaráin & Ní Chasaide, 2015; Underwood, 1984) and blended learning theories (Horn & Staker, 2011).

Based on the existing theories of reading and blended learning, the dissertation develops the views on teaching EAP reading and a set of efficient activities in order to increase the reading competence.

# **Hypotheses**

If EFL university teachers implement blended learning approach to teaching academic reading, the level of students' reading skills will significantly increase. The students will have:

- higher levels of reading motivation;
- higher academic achievement in EAP reading.

#### **Research Methods**

The research methods applied in the dissertation are both qualitative and quantitative:

- analysis of the literature on the issue
- student and teacher questionnaire
- experiment

- pre-, while-, post-, and delayed testing for experiment results' assessment
- statistical treatment of the obtained data

#### **Structure of the Dissertation**

The dissertation involves an introduction, four chapters, a conclusion, a list of references, and seven appendices. Chapter 1 deals with blended learning and its application in education in general and in ELT / EAP. Chapter 2 defines how the reading proficiency and especially in EAP reading proficiency is achieved. Chapter 3 aimed at the development of a model of blended learning application for EAP. Chapter 4 describes the research held by the author. There are thirty-four tables and eleven figures in the dissertation.

# CHAPTER 1. LITERATURE REVIEW - BLENDED LEARNING IN EDUCATION IN GENERAL AND IN EFL IN PARTICULAR

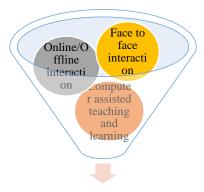
The first chapter involves a historic overview of education from the point of view f the involvement of technical means of education in it, definition of blended learning, theoretical foundations of blended learning (psychological and linguo-didactic theories), the process / steps of designing the blend, the relationship between blended learning and student achievement, and teacher and student perception of blended learning. Blended learning in EFL is viewed in a separate sub-chapter.

While computer-assisted learning began in the 1960s and spread widely in the 1980-90s, the term 'blended learning' has been in use since the end of the 1990s. Since then there have been many definitions offered, however, there is still much disagreement on the definition, however, this disagreement permits to understand the term widely enough, which is sort of advantage, as many people venture to apply and research it. In this dissertation the following definition will be used: Blended learning is a sort of mixture of traditional (on-paper) and computer (or other electronic / digital technical devices)-assisted learning, partially done in the classroom and partially – out of it (in the computer laboratory, at home or elsewhere), online and off-line (see figure 1.1). While designing blended learning, it is necessary to take into consideration:

- How much work (and which activities) will be on-paper and with the application of technologies?
- Which activities will be more effective F2F and which in distant regime?
- Which technology-assisted activities will be more effective online and which offline?

• Which activities will be done at home (more exactly, out of classroom) and which – in class?

Figure 1.4. Blended teaching and learning



Blended teaching and learning

(designed by the researcher)

Previous research of applying blended learning to various subjects, including foreign language, was mostly positive, however, the impact may depend on the qualification of the teacher and his/her desire to use it, the students' technical skills and readiness to apply it, and the quality of software involved blended learning. Thus, to make blended learning efficient, it is necessary to persuade educators in the usefulness of blended learning, train teachers (theoretically – methods of application and practically – technical and classroom management skills) and students (technical skills) to use technologies for teaching and learning. It is also important to develop and select effective software for educational purposes.

# CHAPTER 2. LITERATURE REVIEW - DEVELOPMENT OF ACADEMIC READING PROFICIENCY

This chapter discusses the role of reading in communication and education, the psycholinguistic nature of reading skills, reading comprehension strategies, definition of critical reading, tasks and activities to develop reading skills (on-paper and blended), reading for general and academic purposes, and assessment of reading skills.

The written word surrounds us everywhere daily in absolutely every sphere of life. It may confuse or enlighten us, depress or amuse, make us sick or heal. At every stage, we who are the members of a literate society, come across with the written symbols, which we depend on significantly.

For many foreign language learners reading receives a special focus for a number of reasons. These are some of the widely spread:

- 1. Written text serves learners with a good source of knowledge about the language (grammar, vocabulary, etc.), which is used not only to improve learners' reading abilities, but also writing, speaking and listening skills. In addition, knowledge about the culture of the language (which is widely reflected by written word) helps learners to reach a better understanding.
- 2. Nowadays traveling (for pleasure, business, education, health service, etc.) has become a norm, which many people can easily afford. Without basic language abilities the trips are usually very difficult to manage, so at least a very primitive ability to recognize written text / information / symbols is vitally important.
- 3. There are a number of professions which require a good ability to read in a foreign language, for example: politicians, diplomats, pilots, air-traffic controllers, workers of military service, etc. People of these profession communicate with other people from other countries (language of which may vary) in English, which has become a language of international communication.
- 4. Psycholinguists offer three models of development and application of reading skills: bottom-up (letters  $\rightarrow$  sounds  $\rightarrow$  words  $\rightarrow$  meaning), top-down (meaning  $\rightarrow$  syntax  $\rightarrow$  letters  $\rightarrow$  sounds) and interactive or mixed (depending on the personality of the reader, the level of development of his/her reading skills, general knowledge, knowledge of the topic, the linguistic and contents complexity of the text, one or the other model is chosen to achieve comprehension). The interactive model is viewed as most appropriate today, this is why it should be used while teaching reading.
- 5. There are a lot of learners of foreign language students for whom reading is the most important goal. They want to be able to read for pleasure, for their education, or for career. In fact, whether learners do it consciously or unconsciously, the most English language learners for academic purposes primarily want to acquire is the ability to read effectively (Grabe, 2002). In any academic institution, reading is what students mostly do from the beginning to the end of the program. It is not possible to imagine a scientific research without reading and all required strategies applied to understand, analyze or synthesize of written material.
- 6. In many educational institutions project work is applied to motivate students on learning through discovering things themselves. The main source of information the students use for their project research is written material, so they need not only the ability to read, but also the ability to analyze,

filter, synthesize, select, etc., what they read. In this case, project work helps develop students' reading skills, useful for their academic development.

Today researchers emphasize the importance of reading strategies implemented in English language learning classroom (Renandya & Jacobs, 2002). They claim that developing learners' reading abilities and strategies they use in dealing with the written text, give them information and help them understand not only *whats* and *hows*, but also *whys* delivered in written text. Teachers/students choose the most appropriate strategies according to their needs, purposes, type of written text, and the choice may vary from one reader/situation/time/circumstance to another.

Among the huge amount of information available today the selection of the material learners need is not an easy task. That is why learners' critical reading ability is one of the most important to be improved. This goal can be reached by training students by involving them into various activities and tasks while working with written texts, that will help learners to master their skills, because "Practice, the master of all things" (Augustus Octavius (63 BC - AD 14)) (Juli, 2010).

# CHAPTER 3. DEVELOPING A MODEL FOR THE EFFICIENT APPLICATION OF BLENDED TEACHING OF ACADEMIC READING

This chapter is dedicated to the development and implementation of an efficient model for blended EAP teaching. It also discusses the classroom management issues related to the realization of the model.

Table 3.1: Reading tasks and activities distribution of blend inventory

Reading stage	Task Examples	Face- to-face	Off- set	Examples of Online/Offline applications
Pre- reading	• Guessing the topic of the text using illustrations, tables, graphics or headlines.			Edmodo poll/quiz, Google Docs, Google Blog, etc.
	A group discussion/brainstorming about the predicted topic.			Edmodo poll/quiz, Google Docs, Google Blog, etc.
	Trying to infer what the text will say.			Edmodo poll/quiz, Google Docs, Google Blog, etc.

	• Writing questions that can be answered in the text.	Edmodo Poll, Google blog, Pear deck, etc.
	Exploring key vocabulary.	Google Docs
	• Reflecting on or reviewing information from previously read texts in light of the topic of the new text.	
	Watching a video or listening to a recorded material connected to the topic.	YouTube, Podcast, VOA, etc.
	• Other	
While- reading	• Scanning for some specific items of information (dates, numbers, names, etc.)	
	• Skimming for gist.	
	Answering questions.	Edmodo Poll, Blog, Google Docs/Classroom, etc.
	• Examining emotions and attitudes of key characters.	
	Completing the sentences using information from the text.	Edmodo poll/quiz, Google Docs, Google Blog, etc.
	• Filling gaps in a table, map, picture, etc.	Edmodo poll/quiz, Google Docs, Google Blog, etc.
	Creating students own questions (based on text) and asking each other.	Edmodo poll/quiz, Google Docs, Google Blog, Flip Grid, etc.
	• Determining sources of difficulty and seeking clarification.	Google Hangouts, Edmodo Messaging, etc.
	Writing down predictions of what will come next	Edmodo poll/quiz, Google Docs, Google Blog, etc.

	Other	
Post- reading	Discussion of what was new or interesting in the text.	Edmodo poll/quiz, Google Docs, Google Blog, Flip Grid, etc.
	Debates on controversial topics	
	Comparing to the students' own culture/traditions/norms/morals/etc.	
	Summarize the text (orally or in writing).	Edmodo poll/quiz, Google Docs, Google Blog, etc.
	Other	

Reading an academic text, whether in the traditional way or reading eBooks, can be quite boring for students even in a quite relaxed environment. Integration of some technologically assisted tasks aims to engage students into reading effectively and share the obtained knowledge with the peers. There is not a single recipe for the reading class. The choice of the task and the style of its application may differ one from another. Thus, it should be modified according to the situation, students' needs, the nature of the text, etc. Blending the tasks will allow teachers to save time for face-to-face discussions by implementing some of the tasks outside the classroom.

# CHAPTER 4. RESEARCH DESIGN AND METHODOLOGY

Chapter 4 describes the setting, participants, goals, and procedures of the research, the obtained results are analyzed and conclusions concerning the hypothesis are drawn.

The current study was held in the Language Preparatory School, Ishik University, Erbil, Iraq during 24 weeks in 2016-2017 academic year.

There were approximately 100 students in the IU Preparatory School with the average of 20 students per class. The target population of this research were the students who obtained the A2 level in the proficiency test, as this is the minimal level on which students can understand some very basic English, so information about the intended learning outcomes, content, and assessment can be explained without translation into the students' first language. Having received the school and university administrations' official permission for the experiment and research in general, A2 level students (according to the results of the online Oxford Placement test, so their levels at the beginning of the academic year were the approximately same) were randomly placed into groups.

Two groups were chosen for the experiment, one was randomly nominated as a control group and the other group was experimental. All students expressed their consent to take part in the study. It was brought to their minds that the results would be anonymous and would not harm them in any way. Still, they were informed that they could quit any time if they felt like.

There were 19 students in the experimental group and 21 in the control group, thus, totally 40 students participated in the experiment. Initially there were 43 students who agreed to participate in the research, but due to some reasons three students could not take either pre-, while- or the post-test that is why their results were not taken into consideration in the statistical analysis.

Table 4.1 presents the obtained mean results in both groups.

Table 4.1. CG and EG 1

**Group Statistics** 

		Toup Clation			
	Group	N	Mean	Std. Deviation	Std. Error Mean
PreTest	Control Group	21	55.14	3.554	.775
	Experimental Group 1	19	55.37	4.633	1.063
While-OneTest	Control Group	21	58.95	4.477	.977
	Experimental Group 1	19	60.95	3.965	.910
While-TwoTest	Control Group	21	64.43	4.214	.920
	Experimental Group 1	19	66.74	4.954	1.136
Post-est	Control Group	21	68.95	3.801	.829
	Experimental Group 1	19	71.89	4.630	1.062
Delayed Post-Test	Control Group	21	66.81	4.020	.877
	Experimental Group 1	19	70.32	4.989	1.145

It is possible to see that the pre-test results in the groups are almost equal: 55.14 in the control one and 55.37 — in the first experimental. On each next stage the experimental group is doing a little better than the control group, the post-test results show a considerable improvement in the experimental group ( $55.37 \rightarrow 71.89$ ) and a slower growth in the control group ( $55.14 \rightarrow 68.95$ ). In the delayed test both groups decreased their results, but not much:  $71.89 \leftarrow 70.32$  and  $68.95 \leftarrow 66.81$  in the control group. The experimental group results decreased less, which reveals greater sustainability of results in it. To see whether this difference is statistically significant, an Independent Samples Test was held. The significance in the pre-test is 0.863 / 0.865 (>0.05), which means that the difference between the groups' results before the experiment is insignificant. Then it decreases (0.146/0.143 during the while-test 1 and 0.120/0.123 during the while-test 1), but is still statistically insignificant. Both in post-test (0.034/0.036) and delayed test (0.019/0.020) the difference is statistically significant (<0.05).

Table 4.2. Independent Samples Test (CG and EG 1)

Pre-Test Equal variances   1.217   .277  174   38   .863  226   1.298   -2.854   2.4			Levene's	s Test									
Pre-Test   Equal variances not assumed   Equal variances not ass			for Equa	lity of									
Pre-Test   Equal variances not assumed   Equal variances not assumed   Equal variances not assumed   Equal variances assumed   Equal variances assumed   Equal variances not assumed   E			Variar	nces		t-test for Equality of Means							
Pre-Test   Equal variances not assumed   Equal Test 2 variances not assumed   Equal variances not assumed   Equal Test 2 variances not assumed   Equal Var									Std.	95% Confide	ence Interval		
Pre-Test         Equal variances assumed         1.217         .277        174         38         .863        226         1.298         -2.854         2.4           While Equal variances not assumed        171         33.674         .865        226         1.316         -2.900         2.4           While Equal variances not assumed        401         .530         -1.485         38         .146         -1.995         1.343         -4.714         .7           While Equal variances not assumed        240         -1.494         37.987         .143         -1.995         1.335         -4.697         .7           While Equal Test 2 variances assumed Equal variances not assumed        388         .537         -1.592         38         .120         -2.308         1.450         -5.243         .6           Post- Equal        1.579         35.565         .123         -2.308         1.462         -5.274         .6									Error	of the Di	fference		
Pre-Test Equal variances   1.217   .277  174   38   .863  226   1.298   -2.854   2.4							Sig. (2-		Differe				
variances assumed assumed         1.217         .277        174         38         .863        226         1.298         -2.854         2.4           Equal variances not assumed        171         33.674         .865        226         1.316         -2.900         2.4           While Equal variances assumed         .401         .530         -1.485         38         .146         -1.995         1.343         -4.714         .7           While Equal variances not assumed         -1.494         37.987         .143         -1.995         1.335         -4.697         .7           While Equal variances assumed Equal variances not assumed         -1.579         35.565         .123         -2.308         1.462         -5.243         .6           Post- Equal         -1.579         35.565         .123         -2.308         1.462         -5.274         .6		-	F	Sig.	t	df	tailed)	Difference	nce	Lower	Upper		
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variances not assumed        171         33.674         .865        226         1.316         -2.900         2.4           While Equal Test1 variances assumed Equal variances not assumed         .401         .530         -1.485         38         .146         -1.995         1.343         -4.714         .7           While Equal Test 2 variances assumed Equal variances not assumed         .388         .537         -1.592         38         .120         -2.308         1.450         -5.243         .6           Post- Equal         -1.579         35.565         .123         -2.308         1.462         -5.274         .6		assumed			l l						•		
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While Equal       Equal       .401       .530       -1.485       38       .146       -1.995       1.343       -4.714       .7         Equal       Equal       -1.494       37.987       .143       -1.995       1.335       -4.697       .7         While Equal       Equal       .388       .537       -1.592       38       .120       -2.308       1.450       -5.243       .6         Equal       variances not assumed       -1.579       35.565       .123       -2.308       1.462       -5.274       .6         Post- Equal		variances not			171	33.674	.865	226	1.316	-2.900	2.449		
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Equal variances not assumed  While Equal Test 2 variances assumed  Equal variances not assumed  Equal variances not assumed  Equal variances not assumed  Equal variances not assumed  Post- Equal	Test1	variances	.401	.530	-1.485	38	.146	-1.995	1.343	-4.714	.724		
variances not assumed       -1.494       37.987       .143       -1.995       1.335       -4.697       .7         While Equal Test 2 variances assumed Equal variances not assumed       .388       .537       -1.592       38       .120       -2.308       1.450       -5.243       .6         Post- Equal       -1.579       35.565       .123       -2.308       1.462       -5.274       .6		assumed			v								
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Test 2 variances													
assumed Equal variances not assumed  Post- Equal													
Equal variances not assumed -1.579 35.565 .123 -2.308 1.462 -5.274 .6	Test 2		.388	.537	-1.592	38	.120	-2.308	1.450	-5.243	.627		
variances not assumed													
assumed Post- Equal													
Post- Equal					-1.579	35.565	.123	-2.308	1.462	-5.274	.658		
·	-												
			1.005	204	2 205	20	024	2.042	1 224	5.642	241		
	Test		1.085	.304	-2.205	38	.034	-2.942	1.334	-5.643	241		
assumed													
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Delayed Equal	Doloved												
			1 025	215	_2 459	38	010	2 506	1 427	.6 304	618		
Test assumed 1.053 .515 -2.458 58 .019 -5.506 1.427 -0.5940			1.033	.313	-2.436	30	.019	-3.300	1.44/	-0.394	018		

Equal								
variances not		-2.431	34.609	.020	-3.506	1.442	-6.435	577
assumed								

Then control group and experimental group results were compared analogously.

Table 4.3. CG and EG 2

**Group Statistics** 

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-	Control Group	21	55.14	3.554	.775
Test	Experimental Group 2	20	55.75	4.833	1.081
While-	Control Group	21	58.95	4.477	.977
One Test	Experimental Group 2	20	59.60	4.570	1.022
While-	Control Group	21	64.43	4.214	.920
·	Experimental Group 2	20	67.90	4.315	.965
Post-	Control Group	21	68.95	3.801	.829
Test	Experimental Group 2	20	75.10	5.675	1.269
Delayed	Control Group	21	66.81	4.020	.877
Pos- tTest	Experimental Group 2	20	73.90	5.656	1.265

It is possible to see that the pre-test results in the groups are almost equal: 55.14 in the control one and 55.75 – in the second experimental. On each next stage the experimental group is doing a little better than the control group, the post-test results show a considerable improvement in the experimental group ( $55.75 \rightarrow 75.10$ ) and a slower growth in the control group ( $55.14 \rightarrow 68.95$ ). In the delayed test both groups decreased their results, but not much:  $75.10 \leftarrow 73.90$  and  $68.95 \leftarrow 66.81$  in the control group. The experimental group results decreased less, which reveals greater sustainability of results in it. To see whether this difference is statistically significant, an Independent Samples Test was held. Here the statistical difference is achieved already on the while-two test (0.013<0.05), so, starting with the while-test-two the better results of the experimental group 2 have statistical significance.

Table 4.4. Independent Samples Test (CG and EG 2)

			e's Test ality of		t-test for Equality of Means								
						Sig. (2-	Mean Differe	Std. Error	95% Cont Interval Differe	of the			
		F	Sig.	t	df	tailed)	nce	Difference	Lower	Upper			
Pre- Test	Equal variances assumed	2.557	.118	460	39	.648	607	1.320	-3.278	2.063			
	Equal variances not assumed			456	34.832	.651	607	1.330	-3.308	2.094			
While- One	Equal variances assumed	.001	.973	458	39	.649	648	1.413	-3.506	2.211			
Test	Equal variances not assumed			458	38.807	.649	648	1.414	-3.508	2.213			
While- Two	Equal variances assumed	.002	.963	-2.606	39	.013	-3.471	1.332	-6.166	777			
Test	Equal variances not assumed			-2.604	38.789	.013	-3.471	1.333	-6.168	775			
Post- Test	Equal variances assumed	3.538	.067	-4.094	39	.000	-6.148	1.502	-9.185	-3.110			
	Equal variances not assumed			-4.055	32.985	.000	-6.148	1.516	-9.232	-3.063			
_	Equal variances assumed	2.457	.125	-4.645	39	.000	-7.090	1.527	-10.178	-4.003			
Test	Equal variances not assumed			-4.607	34.168	.000	-7.090	1.539	-10.218	-3.963			

Table 4.5. EG 1 and EG 2

# **Group Statistics**

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-Test	Experimental Group 1	19	55.37	4.633	1.063
	Experimental Group 2	20	55.75	4.833	1.081
While-One Test	Experimental Group 1	19	60.95	3.965	.910
	Experimental Group 2	20	59.60	4.570	1.022
While-Two Test	Experimental Group 1	19	66.74	4.954	1.136
	Experimental Group 2	20	67.90	4.315	.965

Post-Test	Experimental Group 1	19	71.89	4.630	1.062
	Experimental Group 2	20	75.10	5.675	1.269
Delayed Post-Test	Experimental Group 1	19	70.32	4.989	1.145
	Experimental Group 2	20	73.90	5.656	1.265

The means in the first experimental group  $(55.37 \rightarrow 60.95 \rightarrow 66.74 \rightarrow 71.89)$  are increasing from test to test. But the results of the second experimental group are increasing faster  $(55.75 \rightarrow 59.60 \rightarrow 67.90 \rightarrow 75.10)$ . In the delayed test both groups decrease their results insignificantly, still the decrease in the second group  $(75.10 \leftarrow 73.90)$  is less than in the first one  $(71.79 \leftarrow 70.32)$ , which shows that the second experimental group's results are more sustainable.

Table 4.6. Independent Samples Test (EG 1 and EG 2)

F				Ŧ.						
			ene's							
		Tes	t for							
		Equa	lity of							
		Varia	nces			t-test	for Equalit	y of Means		
						Sig.			95% Co	nfidence
						(2-	Mean	Std. Error	Interva	l of the
						tailed	Differenc	Differenc	Differ	ence
		F	Sig.	t	df	)	е	е	Lower	Upper
Pre- Test	Equal variances assumed	.152	.699	251	37	.803	382	1.517	-3.456	2.693
	Equal variances not assumed			252	36.996	.803	382	1.516	-3.453	2.690
While -One	Equal variances assumed	.415	.523	.981	37	.333	1.347	1.373	-1.435	4.130
Test	Equal variances not assumed			.985	36.710	.331	1.347	1.368	-1.425	4.120
While -Two	Equal variances assumed	.400	.531	783	37	.439	-1.163	1.485	-4.173	1.847
Test	Equal variances not assumed			780	35.720	.440	-1.163	1.491	-4.187	1.861
Post- Test	Equal variances assumed	.794	.379	-1.927	37	.062	-3.205	1.663	-6.576	.165
	Equal variances not assumed			-1.937	36.196	.061	-3.205	1.655	-6.561	.150
Delay ed	Equal variances assumed	.313	.579	-2.094	37	.043	-3.584	1.711	-7.052	117
Post- Test	Equal variances not assumed			-2.101	36.807	.043	-3.584	1.706	-7.041	127

The difference is significant only in delayed test (sig=0.043<0.05), which means that only in the long run the 2/3 ratio is more efficient than the 1/3 ratio.

# CONCLUSION AND RECOMMENDATIONS

- 1. The development of reading skills while learning the English language is very important for overall academic success at a university. It provides learners with the chances to increase the comprehension of the learning materials.
- 2. Although students may have developed their reading skills in their first language, comprehension of an academic text in English is difficult from linguistic and psychological perspective. Every individual learner has his/her own pace of reading. That can cause huge problems in the acquisition of new material if students are asked to read and perform reading tasks within the same for all learners limited time during the lessons.
- 3. Blended teaching and learning is the hybrid of face-to-face and online/offline technology-assisted instruction. The proportions of the blend are distinguished according to the teacher and student technology competency, learning goals, availability of technology inside and outside the classroom, the level of the language skills, students' culture, etc.
- 4. In respect to conclusions 1 and 2, the researcher hypothesized that the application of blended learning could create a more productive environment for practicing and improvement of academic reading skills, as well as to prepare students for receiving the professional instruction in English language at a university.
- 5. Although digital technologies have been used in education for a quite long time and numerous researches yielded both positive and negative results concerning the level of knowledge and skills in various programs and subjects, it turned out to be necessary to make further investigations. The researcher's idea was that blended learning was perceived too simplistically, just as delivering the study materials (course notes, Power Point Presentations, additional reading texts, etc.) to the learners via digital platforms. In reality, the idea of blended learning (in particular, for teaching target language reading) can be developed much further. An effort to create a new model for BL applied for teaching language (reading skills) was made in the dissertation.
- 6. The suggested by the researcher BL model, with a 1/3 or 2/3 blend, is in detail presented in chapter 3. Language teaching methodology should shift to more student-centered and constructivist. The teacher should apply more communicative approach to language

- teaching in respect to different learning styles and pace, where the use of technology aims to open more room for enhancement of learning experiences, collaboration, practice, and flexibility in terms of space and time.
- 7. The questionnaire results showed that students are in favor of using technology inside and outside the classroom. On the other hand, it appeared that technology is mostly used by teachers to share study materials with students and rarely used for practice and studying. The clear majority of the participants (students) believe that working at their pace allows them to better comprehend reading texts. The great number of students would like to have technology-integrated reading courses, however, the shift on total online format is rather not preferred. So, the hypothesis was supported.
- 8. The suggested BL model for improvement of university students' reading skills was tested experimentally. The results obtained are quite satisfactory. The experimental groups were taught according to the suggested model - in one group 1/3 blend ratio (1/3 off-set, 2/3 face-to-face) was applied, in another 2/3 (1/3 face-to-face, 2/3 off-set) ratio was implemented. While the control group followed the face-to-face traditional regular procedure without the application of off-set technology-assisted learning. The obtained results echoed the findings of the previous researches, proving the effectiveness of BL on the development of students' reading skills (Bataineh & Mayyas, 2017; Ghazizadeh & Fatemipour, 2017; Kheirzadeh & Birgani, 2018). The improvement in all three groups was observed, however, students in the experimental groups demonstrated more significant improvement. According to the results of the while-test 1, EG 1 showed a slightly higher increase than in EG 2 (EG 1=60.95, EG 2=59.60), however, later on, students in the EG 2 increased their grades proportionally to the amount of off-set instruction applied (EG 1=71.89, EG 2=75.10). Moreover, the EG 2 demonstrated a higher resistance to change within a period of two month after the end of the experiment. The statistical difference between the control group results, on the one hand, and both experimental groups' postand delayed results, on the other, was confirmed (p<0.05).
- 9. Thus, it is possible to conclude that the change of the dependent variable (level of reading skills) was caused by the independent variable (the application or its absence of the suggested BL model. The researchers' hypothesis was proven.
- 10. The difference between the two experimental groups was not as large as between them and the control group, and the statistical difference was found only in the delayed test results, which means that both ratios (1/3 and 2/3) are effective enough, however, the ratio 2/3 in the long run is more effective.

- 11. The surveys applied to the participants of the experiment demonstrated the attitudes toward the use of suggested BL model on the development of reading skills. It was revealed that the students of the experimental groups in the post-experimental questionnaire revealed a more positive perception of BL than those in the CG. Moreover, it was found out that the application of technologies helped learners to meet their needs and achievement of the learning goals.
- 12. The research results have limitations. While the population of the questionnaire is representative of the student profile in Ishik University to a certain extent, so the generalizations can be made only for the university. Besides, the period of the experiment was only one semester. A larger-scale research is recommended to obtain more generalizable results. However, together with the literature review, certain generalizations can be made.
- 13. Based on the conclusions stated above, the researcher would like to recommend English language teachers to implement the BL approach to teaching reading and advise the stakeholders of higher education institutions to provide support on its application.

# The major findings of the dissertation are published in:

- 1. Ulker, U. (2017). Reading Comprehension Strategies. *International Journal of Social Sciences and Educational Studies*, 4, 3, 140-145.
- 2. Ulker, U. & Ulker, V. (2016). Psycholinguistic nature of reading skills. In 6<sup>th</sup> *International Research Conference on Education, Language & Literature (IRCEELT)*, p. 185-190. Tbilisi: IBSU.
- 3. Ulker, U. (2019). Reading Activities in Blended Learning: Recommendations for University Language Preparatory Course Teachers. *International Journal of Social Sciences and Educational Studies*, 5, 3, 83-94.