أثر المهام المتباينة والمتقاربة على قراءة الاستيعابية لطلبة العراقيين ألدارسي اللغة الإنجليزية كلغة أجنبية

الباحثة: هوازن راسم جلاب استاذ مساعد صبيحة حمزة دحام استاذ مساعد نادية علي اكبر جامعة بابل - كلية التربية الأساسية - قسم اللغة الانكليزية

The Impact of Divergent and Convergent Tasks on Iraqi EFL Students' Reading Comprehension Success

Researcher: Hawazen Rasim Chilp - Asst. Prof. Sabeeha Hamza Dehham - Asst. Prof Nadia Ali Akbar

University of Babylon —College of Basic Education -Department of English E-mail: Hawazenrasem86@gmail.com & sabeehadehham66@gmail.com

# **Abstract**

This research attempted to explore the effects of divergent and convergent tasks on the successful reading of EFL students at the preparatory stage. To verify the analysis, the null hypothesis was established that states "There are no differences of statistical significance at the level of (0,05) among the mean of scores of the experimental group who study according to divergent and convergent task technique and the mean of the scores of the control group who study according to the regular method". The experimental approach is used by designing two equivalent experimental groups of (32) students studying by the technique proposed, and an 8-week (2019-2020) control group of (32) students, three classes each week using the Google Classroom Platform and Telegram.

The present study utilized the platform of Google Classroom (GC) and Telegram as an educational platform to assist students during their course learning process.

The writing skills test was applied after checking of the experts. The results show that there are statistical differences at level (0,05) between the average of experimental and control groups in reading skills and the experimental group. This difference is because the experimental group uses divergent and convergent tasks.

Keywords: Convergent task, divergent task, EFL learners, reading comprehension.

الملخص

تهدف الدراسة الحالية إلى التعرف على دراسة أثر المهام المتباينة والمتقاربة على قراءة اللغة الإنجليزية كلغة أجنبية للطلاب السنة الرابعة في المرحلة الإعدادية. لغرض التحقق من الدراسة ، تم تطوير الفرضية الصغرية التي تنص على أنه "لا توجد فروق ذات دلالة إحصائية عند مستوى (0،05) بين متوسط درجات المجموعة التجريبية الذين يدرسون وفقًا للمهام المتباعدة والمتقاربة ومتوسط عشرات من المجموعة الضابطة الذين يدرسون وفقًا لطريقة التقليدية ". يتم استخدام المنهج التجريبي من خلال تصميم مجموعتين تجريبيتين متكافئتين من (32) طالبًا درسوا وفقًا لتقنية المقترحة ، ومجموعة ضابطة من (32) طالبًا تمت دراستهم وفقًا للطريقة العادية خلال الدورة الثانية (2019–2020) لمدة 8 أسابيع ، ثلاث فصول أسبوعيًا لكل مجموعة باستخدام منصة كوكل كلاس روم Google Classroom Platform ومنصة منصة كوكل

استخدمت الدراسة الحالية منصة (GC) Google Classroom (GC) و Telegram كمنصة تعليمية لمساعدة الطلاب أثناء عملية التعلم الخاصة بهم في الدورة .بعد التحقق من الخبراء ، تم تطبيق اختبار مهارات القراءة الاستيعابية. أظهرت النتائج وجود فروق ذات دلالة إحصائية عند مستوى (0.05) بين متوسط درجات المجموعات التجريبية والضابطة في مهارات القراءة ولصالح المجموعة التجريبية.

الكلمات الافتتاحيه: تأثير؛ المهام المتباعده, المهام المتقاربه,؛ طلاب الاعدادية الدارسي اللغة الإنجليزية كلغة أجنبية؛ أداء؛ مهارة القراءة الاستيعابية.

### I. INTRODUCTION

Teachers will not be replaced by technology, but teachers who do not use technology will be replaced by those who do." Krishna's thinking-inspiring remark (2015) certainly turns the world upside down for those teachers who do not dare explore the technological advantages and prefer to follow traditional methods of teaching. The Internet is one of the vital ways of providing research and learning resources for the sharing and acquisition of information both for teachers and students (Richard and Haya 2009). E-learning based on technology involves internet use and other essential technologies for the development of learning materials, teaching materials, and controlling courses in an organization (Fri, 2001). To allow access to online learning/learning resources, e-learning means using information and communication technologies. Abbad et al (2009), in their broadest sense, defined learning as all electronically enabled learning. Other researchers have also called e-learning a revolutionary approach to enable a workforce with the know-how to turn change into advantages (Jennex, 2005; Twigg, 2002) (Jennex, 2005). Twigg (2002) for example described the approach to elearning that focuses on the learner as well as its design, which involves an interactive, reproductive, self-paced, and adaptable system. Welsh et al. (2003): Also referred to as the use, primarily through the Internet, of computer network technology to provide people with information and information. Modern technology now includes innovative applications for teaching methods, strategies, tools, and materials. Experiments worldwide for their application to ELT are being carried out. Teachers play a significant role in the use of development tools and resources for the second language teaching of English. The telegram application is one such new tool. 100,000 users can access it from various locations from time to time. If teachers are hindered from attending a classroom for a few reasons, they are forced to rely on these applications.

Teaching can not be stopped because classes stop and education must go on. A previously planned research application could for example use this app to collect data for experimental research at a time such as a lockdown due to a worldwide pandemic like COVID 19 instead of putting the project on hold indefinitely. Telegram is a mobile application for users to use mobile Gadgets and computers for communicating with them. For the following reasons, telegram can be used to teach and learn: 1. Platforms: smart phones, PC, laptops, iPad, Tab, and web-based devices. 2. Audio, video, pdf, super, word, PowerPoint, JPG file format is compatible. 3. Wide transfer of files. 4. Structures: 1000 members, ancient/past messages access, and members add members. 5. Improved storage and management capacity 6. Better management and memory framework 7. Improved encryption security. When working with students for a mixed learning mode and roll-over mode, a telegram can easily be run on the laptop. All posts or messages that Heba (2015) [5] received and issued; The following Telegram usage benefits listed: 1. 1. It is more secure than any other messenger application and the secret chat that uses encryption is an example of security and privacy. 2. Telegram provides an extremely rapid messaging service; it is immediately supported by telegram in real-time. 3. It's free and it doesn't have any ads. 4. Its cloud storage is unlimited. 5. The regular conversations and the secret conversations are on the telegram. The following benefits for teaching and learning were provided by Denis (2017)[2]: 1. Confidentiality: several tests have confirmed that Telegram is the safer application on the market From chat to calls, all are encrypted. 2. Cloud and security: All discussions and information are saved in the cloud. Therefore, nothing is lost because of the configuration or alteration of the system. 3. Controlling Password: No more messages read by unwanted users of strangers. 4. It makes a chat with anyone: students can communicate only by nickname and not necessarily by the phone number saved in their contact list with someone who is searching for him/her. 5. Community Power: Telegram enables students to create super groups of up to 5,000 members. And they will get much bigger with the next update. Telegram is a student-centric asynchronous teaching approach that uses online learning tools to enable the exchange of knowledge beyond the time and place constraints of a human network. A student-centered approach that emphasizes the importance of peer-to-peer interactions is a basis for asynchronous learning. This approach combines self-studies in conjunction with syncretic interactions, to promote learning, to enhance learning on a traditional field (Denysiuk, Plavutska & Fedak, 2018).

'Reading is defined as a passive/receptive language learning know-how since the position of the student is believed to be only a passive recipient of data from what he/she is reading.(Kareem,et,al,2019)However, because of the increasing interest and factors that may influence this ability, researchers are stressing the reader 's role and viewing him/her as an active reader. "The essence of reading is understanding.' Readers are thinking of interpreting the meaning of the text and the rebuilding of the message of the author (Kibui, 2012:15).Reading comprehension (now RC) is a complex task, which requires many different cognitive abilities and abilities to orchestrate. In a simplistic view, the variability in the ability to read is expressed in two key components: reading word (the ability to interpret individual words from the context) and understanding language. "( the ability to understand words, sentences, and text ) (Oakhill, et al ,2015:3). "Many EFL-students do not have the know-how to understand a written text effectively. For teachers of school reading, this is an important issue. They should pay attention to the strategies and techniques(Rahoomi, et, al,2019)

The goal of understanding to prevent the problems of RC students and to improve their RC '(Dean 2003:6). Strive for understanding. "Most Iraqi English learners do not effectively use RC skills; they do not link their previous knowledge or recognize the ideas of the author (Hammad, et, al,2018."Also, these readers have no more knowledge of the organizational texts, which adversely affects the performance of their RC. They are untrained readers.' (see Al-Saady, 2000: 120; Munshid, 2002, 113, 2003: 23; Gatte, 2004: 32 and Al-Jaf, 2009: 45). They also lack the skills and knowledge to think in terms of their RC. Researchers in literature define reading in several ways. Millrood (2002:117 -118) indicated that reading is a visual and cognitive process by which written text is understood as information processed and connected with the existing experience is extracted from the meaning. The two major components (1) are the word recognition or the decoding of written symbols, as stated in Ward and Skail and (1983:9); and (2) meanings are attached to written forms of language. It is not only on one or the other component that you can read independently; you need both. Nuttall (1996:11) believes that reading is essentially connected to meaning, especially by transferring meaning from mind to mind, that is, by transferring a message from the author to the reader. The term "comprehension" can be defined as being capable of connecting and interpreting both oral and written languages (Bell, 1991:2). The reading is strongly linked to the term "Comprehension", as the ultimate objective of all educative readings (7) is to build readers who can understand various kinds of texts beyond academic achievement. RC has multiple definitions and explanations, on the other hand. Pardo(2004:272): states that RC is "a process in which readers construct meaning by interacting with a text through the combination of prior knowledge and previous experience, the information in the text, and the stance the reader takes concerning the text ". As Harvey and Goudvis (2008:1) conclude, true comprehension comes from integrating readers with the text, asking questions, drawing inferences, thinking about what is relevant, and summarizing. RC allows you to use your new understanding to ask additional questions and guide new learning. This active and constructive process of strategic thinking involves more than just rethinking(Ali, et al,2019).

### 1.3. Statement of the problem

Many EFL students suffer from a lack of communication tools that enable them to effectively understand a written text. Studies do not link up or organize ideas of the writer since they do not have a high-quality thinking and text organization that affects their understanding of reading(Zahraa, et, al,2019, and as the majority of English students are well-known, they are unqualified readers and usually do not understand what they read. The current study aimed at seeking the effectiveness of

education through diverging and convergent tasks regarding the understanding of reading by Iraqi EFL students; and also attempted to examine whether divergent or convergent tasks could improve reading understanding for EFL students.

Convergent tasks are described as tasks that are genuinely justified Knowledge, abstract concepts, and active experiments. They enable cooperation in negotiating where an It is required a single goal; it is, therefore, necessary to collaborate (Chilap, et al,2020). "Only one correct reply, make certain tasks Working with short responses that are not very cognitive Required, no reference is necessary "(Astika, 2004, p30). convergent tasks encourage apprentices to agree to a reasonable solution (Wegerif, Mercer, & Dawes, 1999.) Students also have to interact and communicate interdependently in a way that will require further negotiations and interaction (Cropley, 2006). Unlike converging tasks, Divergent tasks These require new and significant knowledge and possibly different outcomes with more than one objective (Hommel, 2011 This kind of task allows independent work which can be performed differently by individuals according to their cognitive styles and which can lead to different results "(Swan, 2005, p. 382). Different tasks allow students to ask questions with more than one correct answer. No correct answer or answers can be found in such a case as the potential answers depend on one's viewpoint or experience (Nielsen, Bayard, Pickett, & Simonton, 2008). Duff (1986) said that pairs of learners are asked to solve the particular problem together in convergent tasks so that they can agree on a justifiable solution to that problem. While tasks differ in status, a wide range of subjects and operations is being called upon by pairs of students and different opinions on the matter are assigned and the position is being defended and their partners are being refuted with as many arguments as possible.

# 1.4. Hypothesis

By verifying the following hypothesis, the objective of this study will be achieved:

It is assumed that the mean values of the EC that will be trained in divergent and convergent works are not statistically significantly distinguished" at the level of meaning (0,05) by that of the CG, who will be taught using the method suggested in the Teachers' Guide.

### This research is restricted to:

- 1- Iraqi EFL 4th grade Students in the preparatory school.
- 2- A sample in Najaf Governorate has been selected.
- 3- 2020-2019 .academic year.
- 4- Tasks that diverge and converge.
- 5. Thematerial is taken from the 'English for Iraq' textbook.

#### The present study may be beneficial to:

- EFL teachers who have to consider students 'ability to learn best when participating actively, and their focus in their input and work in a safe social environment in the form and meaning of specific language structures.
- EFL Students in preparation to help them overcome the problems and to follow the right way to give Iraqi teachers knowledge and meaning, which will help them remove the opposing feelings in writing and overcome the difficulties, faced with RC learning and education, EFL Preparatory students, which will enable them to address difficulties.
- Textbook writers (curriculum designers) who can use this model to guarantee flexibility in advance in the materials and activities that they intend to develop students' understanding skills;
- Assist teachers in appreciating the particular methodologies used for teaching Iraqi EFL students (Kareem:2019).

#### **Procedures**

- Choose a sample of students from EFL 5. Preparatory school,
- Dividing the selected student sample into two groups (experimental and control groups)
- Construction of a pre-test and post-test for reading comprehension and ensuring its validity and reliability;

- Teaching writing skills to the subjects of the experimental group by using Divergent and Convergent tasks.
- Conducting a post-test to the subjects of both groups to determine whether or not the suggested technique has any effect on the subjects;
- Using the Google Classroom platform to teach the two samples of the study. O Choose a sample of students from EFL 5. Preparatory school,
- Dividing the selected student sample into two groups (experimental and control groups)
- Construction of a pre-test and post-test for reading comprehension and ensuring its validity and reliability;
- Teaching writing skills to the subjects of the experimental group by using Divergent and Convergent tasks.

As for Gacula et al. (2009:16), experimental design is "a complete sequence of steps taken ahead of time to ensure that the appropriate data will be obtained in a way that permits an objective analysis leading to valid inferences for the stated problem". Initially, it is the kind of "Experimental Control Group" design that designs this experiment. It randomly presents the selection of two groups. Both groups (experimental and control groups) are submitted to pre-and post-tests, after which the independent variable is administered to the experimental group only. Their scores on the dependent variable measured by the post-test are compared to see whether or not there is a significant difference between the two groups.

An experimental group is a group taught through the technique of divergent and converging questions. The Control GroupThe group that is taught by the traditional method. The design is called "pre-post test design".

The study population and sample: In the academic year 2018-19 the student population is the fifth year of the Preparatory School in the governorate of Baghdad. The study includes (64) Asmaa Bent Amaise Preparatory School students. Preparatory. The choice was made deliberately in cooperation with the Director of the Center for Education. The experimental class (A) consists of the experimental group (32) students and (D) the control group (32 students). Then the experiment is chosen from two groups of three, randomly, to implement the experiment.

### **Equivalency of the two groups:**

Although the two sample groups are randomly selected from a social, cultural, and economically homogeneous community, non-equivalence between the students is likely. Researchers are therefore working on control variables which can affect the two dependent variables such as age and earlier performance shown in the table below:

Table 1: Some variables of the equivalency of the two groups

Variable	Group	Mean	Standard deviation	Freedom degree	T-test		Significance
					Calculated	Tabular	
Age by month	Experimental 32	20.83	3.030	62	0.576	2	insignificant
	Control 32	21.33	3.661				
1st-semester English	Experimental 32	75.25 8	11.754	62	0.008	2	insignificant
achievement	Control 32	75.23 3	11.802				

# **Control introduced variables:**

The researchers have checked that the two groups are equivalent to major variables ( age and performance) and the processing of the experiment is expected to influence it. The effect of certain variables introduced is avoided (experimental depreciation, physical condition,

maturity factor, the confidentiality of the analysis, date of experimentation, and distribution of rations ... etc.) (Hussam:2018).

# Requirements of the Study

# 1. Materials of Study:

Materially, for the fourth stage of the preparatory phase, the education ministry in Iraq has prepared for the academic year 2019-20020 the textbook 'English for Iraq.'

#### 2. Behavioural Goals:

To describe the behavioral objectives in the following order, according to Bloom's taxonomy of the cognitive domain (knowledge, comprehension, implementation, and analysis), the researchers analyze the content of the six chapters of the textbook / second part of the textbook. A group of specialized arbitrators is formulated and presented with (163) behavioral objectives.

# Third: Preparing daily teaching plans:

Researchers recognize that teaching planning is an essential step in the organization of the work. With this in mind, the researchers plan to cover the period of the experiment; (3) weekly plans for each research group, which means: (6) weekly plans for (8) weeks, including: (24) divergent or convergent tasks for the experimental group, and (24) regular control group planning. Before the experiment started, the arbitrator and specialists in education and learning methods (Ali:2019) received two samples of educational programs with the educational content.

#### **Tools of the Study**

# The validity of the Tests

Test validity means that a test genuinely tests and examines what it is supposed to assess, Shipley and McAfee, say (2008:6). EFL specialists have proposed several types of validity, such as face validity, content validity, the validity of the building, etc. They were referred to a jury of experts to determine the validity and content of the tests. The members of the jury reviewed the instrument and expressed their views on the clarity, adequacy, and level of difficulty of the test items and their relevance for the reading understanding to be assessed.

## 8 Statistical Tools

The following statistical tools are used in this study:

### 1- test for Two Independent Samples

T-tests are used in experimental and control groups for equality in student age, current results, and the last score.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{(n_1 + n_2) - 2} \times \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where:

X1 = the mean score of the experimental group.

X2 = the mean score of the control group.

n1= the number of subjects of the experimental group.

n2= the number of subjects of the control group.

 $S1^2$  = the variance of the experimental group.

 $S2^2$  = the variance of the control group.

(Stevens, 2007: 159)

#### Chi-Square

It is used for the assessment of the parenting degree of equality in both classes (experimental and control).

X2= (O-E)2 Where:

X2= the value **bf**-chi- square

O = the observed frequencies E= the expected frequencies

(Best & Kahn, 2006:77)

# Alpha Cronbach Formula

To measure the reliability of the subjective pre and posttests, Alpha Cronbach Formula was used.

$$a \quad \frac{n}{n-1} \left[ 1 - \frac{\sum s\dot{t^2}}{sx^2} \right]$$

N= Number of items in a test.

 $Si^2$ = The variance of single items.

 $Sx^2$ = The variance of the total test.

(Mehrens and Lehman, 1984:255)

#### The Results

The data for pre- and post-test are statistically analyzed at the end of the experiment and to achieve the objective of the study and to test its null hypothesis. It should be remembered that this study is carried out to assess if the two groups vary substantially in the pre-test and post-test.

#### **Discussions of the Results**

This results in a mean score of 74.7188 for the experimental group and 40.3750. The results showed The calculated t- a value of 10,494 is greater than that of the Tablet- value (3) at 0,05 and below 60 degrees of freedom. In this result, the difference between a statistically significant community that teaches English according to the use of the tasks of Divergent and convergent and one which teaches the same material according to recommended results is statistically significant.

muserian acceraming to recommend a results is summissionally significant.									
Cwann	N	Mean	Std.	Std.	Error				
Group		Mean	Deviation	Mean					
Control	32	40.3750	2.63659	.46609					
Experimental	32	74.7188	10.75605	1.90142					

#### Conclusion

Finally, all participants in experimental and control groups participated in the last stage of data collection in a reading comprehension post-test. After statistical analyzes, significant differences in EFL learner performance could be observed and those with different and convergent tasks could better understand their reading than the other group.

#### REFERENCES

- Abbad, M. M., Morris, D., & de Nahlik, C. (2009). Looking under the Bonnet: Factors Affecting Student Adoption of E-Learning Systems in Jordan. The International Review of Research in Open and Distance Learning
- Abbas Ibaa'ddeen Hussam, Dehham Sabiha Hamza, Akbar Nadia Ali. (2018). The psychological effects of clickers technology on English language students. Indian Journal of Public Health Research & Development. Volume 9. acquisition, (pp. 147-181). Rowley, MA: Newbery House.

- Ali, Dh. B, Dehham Sabeeha. H. & Hasan A. A. (2019). *The Effect of Using Index Cards Games Technique on Iraqi EFL Intermediate Students' Performance on Writing Skills*Skills. V 10. Issue 1.Indian Journal of Public Health Research & Development.
- Al-Jubouri, N.H.(2003)."The Effect of Using Interactive Processing as a Teaching Technique on the Achievement of Intermediate stage Pupils in Reading comprehension in English.". Unpublished M.A. Thesis. The University of Baghdad.
- Al-Saady, N.H.(2000). " Assessment of Teaching Techniques Used in Teaching Reading comprehension". Unpublished M.A. Thesis. The University of Baghdad.
- Astika, G. (2004). A task-based approach to reading English for specialist purposes. EA Journal, 22(2), 22-35...
- Chilap, H.R., Sabeeha H.D., Nadia A.A.(2020). *Using divergent and convergent questions in developing creative thinking of Iraqi EFL preparatory students' performance in writing skills.* Volume 24 Issue 6. International Journal of Psychosocial Rehabilitation.
- Cosimo A, Massimo C, Marco G. Forensic analysis of telegram messenger on Android smartphones. International Journal of Digital Investigation. 2017; 23(12):31-49. 2. Denis G. 21 reasons why you should abandon WhatsApp and start using Telegram. Retrieved from, 2017. https://www.spicytechs.com.ng>21-reasons-ab...
- Dean, G. (2003). Teaching Reading in Secondary Schools (2nd ed.). London: David Fulton Publishers.
- Duff, P. A. (1986). Another look at interlanguage talk: Taking task to task. In R. R. Day (Ed.), Talking to learn: Conversation in the second language
- Fry, K. (2001). E-learning markets and providers: some issues and prospects. Education Training, 233-239.
- Haboush, Z. Y. (2010). "The Effectiveness of Using a Program Based on Multiple Intelligences Theory on Eight Graders' English Reading Comprehension Skills". Unpublished M.A. Thesis. Gaza. Islamic University.
- Hammad, A.A.; Dehham, S.H.; Akbar, N.A.(2018). The Impact of Using Tablets on Developing Listening Skill & perception as a Brain Process of EFL Primary School Pupils.V.9.Issue 12. Indian Journal of Public Health Research & Development
- Hussam, Ibaa'ddeen Abbas, Dehham Sabiha Hamza, Akbar Nadia Ali. (2018). The psychological effects of clickers technology on English language students. Indian Journal of Public Health Research & Development. Volume 9.
- Kareem, Hawraa Hafudh; Dehham, Sabeeha Hamza; Al-Wahid, Muhataram Abid. (2019)<u>The Impact of Teaching Creative writing by FOCUS Strategy to Develop</u>. Indian Journal of Public Health Research & Development. Jun2019, Vol. 10 Issue 6, p876-880. 5p.
- Kibui, Agnes, W. (2012). Reading Comprehension in the African Context. Kijabe: Zapf Chancery Published Africa Ltd.
- Krashen, S. (1982). Principle and Practice in Second Language Acquisition. New York: Prentice-Hall
- Nielsen, H., Bayard, M., Pickett, C., & Simonton, D. (2008). Conceptual versus experimental creativity: Which works best on convergent and divergent thinking tasks? Psychology of Aesthetics, Creativity, and the Arts, 2(3), 131-138[6]
- Pardo, L. S. (2004). What Every Teacher Needs To Know About Comprehension. The Reading Teacher, 58(3), 272-280.
- Rahoomi, Rana Kadhim; Dehham, Sabeeha Hamza; Al-Wahid, Muhataram Abid. (2019). The Impact of Reading Strategy Knowledge and Science Knowledge on Developing Reading Skills of School Students. Vol. 10 Issue 10, p3028-3031. 4p. Indian Journal of Public Health Research & Development.

- Richard, H., & Haya, A. (2009). Examining student decision to adopt web 2.0 technologies: theory and empirical tests. Journal of computing in higher education, 21(3), 183-198.
- Richards, J. C., & Rodgers, T. S. (2001). Approaches and methods in teaching language. Cambridge: Cambridge University Press.
- Skehan, P. (2001). A framework for the implementation of task-based instruction. Applied Linguistics, 17(1),38-62.
- Swan, M. (2005). Legislation by a hypothesis: The case of task-based instruction. Applied Linguistics, 26(3), 376-401.
- Twigg C. (2002). Quality, cost, and access: the case for the redesign. In The Wired Tower. Pittinsky MS (ed.). Prentice-Hall: New Jersey. p. 111–143.
- Ward, B., and Skailand, D.(1983). Teaching Reading as Decoding: A Mini course Teacher's Handbook. New York: MacMillan Educational Services.
- Welsh ET, Wanberg CR, Brown EG, Simmering M.J. (2003). E-learning: emerging uses, empirical results, and future directions. International Journal of Training and Development 2003(7): 245–258
- Zahraa, M. Hussein, S.H Dehham, A.A.N. Hasan. (2019). The Impact of Using Chunking Technique on Developing Reading Skills and Perception of Intermediate School Students. Indian Journal of Public Health Research and Development 10(6):1186.