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The Effectiveness of Problem-Based learning Method for progress EFL Students in: Composition Writing of Intermediate Stage

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فعالية أسلوب التعلم القائم على حل المشكلات في تطوير مهارات كتابة الانشاء لدى متعلمي اللغة الإنجليزية في المرحلة المتوسطة

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Abstract

This research paper explores the impact of problem -based method in learning EFL writing composition of second-year intermediate school students at AL-Sediek Intermediate School For Boys, Diyala Governorate, Iraqi Public school. Students who were contributed in this study collected of (88) male students divided equally into two groups, the treatment group and control one, each one has (No.= 44students). The first course of the academic year(2025-2026) was concerned in this research .The empirical group was exposed with the treatment" problem-Based method" though the other group was taught by typical studying. Pre-posttest design was employed. Instruments comprised of an EFL test-writing ,writing composition and a schedule for calculating participants' writings. The research was sustained 8 weeks ,(t-test) for one and two clusters was utilized, the results have shown that the marks of students in the empirical group over preformed the regulator one on the developing skill of writing has a significant of teaching problem-based in writing composition. The outcomes also presented that participants of the empirical cluster in the post-test exceeded the other group .**Key words: Problem-Based method, Learning Problem-Based ,Writing skill**

الملخص

يكتشف هذا البحث أثر أسلوب التعلم القائم فى حل المشكلات على تعلم مهارة كتابة الانشاء في اللغة الإنجليزية لدى طلاب الصف الثاني المتوسط في مدرسة الصديق المتوسطة للبنين، محافظة ديالى، وهي مدرسة عراقية حكومية. شارك في هذه الدراسة (٨٨) طالبًا، قُسِّموا بالتساوي إلى مجموعتين: مجموعة المعالجة ومجموعة الضا بطة، عدد طلاب كل منهما (٤٤ طالبًا). تناول هذا البحث الفصل الدراسي الأول للعام الدراسي (٢٠٢٥-٢٠٢٦). خضعت المجموعة التجريبية لأسلوب المعالجة القائم على حل المشكلات، بينما دُرِّسَت المجموعة الضابطة بالطريقة التقليدية. استُخدم تصميم الاختبار القبلي والبعدي. تألفت الأدوات من اختبار كتابة اللغة الإنجليزية كلغة أجنبية، وكتابة الانشاء، ومقياس لتقييم كتابات الطلاب. استمرت الدراسة ثمانية أسابيع، واستُخدم اختبار "ت" لعينتين، وأظهرت النتائج تفوق درجات الطلاب في المجموعة التجريبية على المجموعة الضابطة في تنمية مهارات الكتابة، كدليل على أهمية تدريس مهارة كتابة الانشاءالقائمة على حل المشكلات. كما أظهرت النتائج تفوق طلاب المجموعة التجريبية في الاختبار البعدي لمهارات الكتابة على طلاب المجموعة الأخرى.لكلمات المفتاحية: طريقة حل المشكلات، التعلم القائم على حل المشكلات، مهارة الكتابة

١.Introduction English language as a means of communication, specially it is an universal used all over the world . It becomes the main EFL taught in Iraq from the first primary to university and higher education. Users of English language are required to master its four skills : "(listening, speaking, reading and writing)", when teaching EL. They distributed into 2 kinds:" (receptive and productive)" . Writing is somehow needed passions,

thoughts and mental state which are transferred into inscribed formulas. It is a challenging skill, needed to be mastered. Objectively, writer needs to interact his thoughts on a specific theme, enlarge his worth of words, structures and transcribe a masterpiece accurately, EFL learners need to capture attention to advanced training in structural skills of grammar, punctuation and word selection .So, it is extremely complex skill. (Stylianides & Childs, 2019:28). Students often suffer in written work inside class because they do not know how to write or follow a successful method and the technique can help them to write well.Searching associated works on writing a passage and during the teaching in the class , the researcher as an English teacher for 31 years of experiences, notes that the approaches used to assess the written works of Iraqi school students in public and private are neither active nor applicable to improve inscriptions skill (Chi lap, et al . , 2020). In the preceding syllabus teachers followed the traditional TEL approaches instead of the improvement methods of writings.While, in the current curriculum emphases on developing the fluency of language utilizing the novel approaches (Kareem, et al . , 2019). The investigator shed light on the use the of problem- based method as one of the communicative techniques to improve the writing abilities for EFL students.

2.Aim

The main objective of the study is figuring out the effectiveness of Problem-based method in learning EFL composition writing of intermediate stage.

3.Research Questions

This research paper answered the following interrogations:

1- Have the PBL method an effect on developing EFL writing composition of 2nd year intermediate school students?

2- What are the writing skills of problem-based learning method for advancing writing abilities for EFL students at intermediate stage?

3- How do EFL students obtain composition writing skills by the use of problem-based learning method?

4.Significance of the Study

It is expected that the present study contributes to:

1. Shed the light on the significance of applying Problem-Based learning to enhance writing skills in EFL classrooms.
2. Provide literature about the utilization of Problem-Based learning Method to develop compositional skills in EFL learning in general.
3. Assist lecturers with new effective strategies and instructional methods in teaching EFL writing skill.
4. Supply the information and knowledge of how the Problem-Based learning Methods' tasks and drills were approved so that the profits of each task or drill could be sustained while the shortcomings could be withdraw.

5.Limits

The study is specified to:

1- Second Intermediate stage at AL-Sediek Public Iraqi School for Boys, Diyala Governorate.

2-The 1st term of the studying year (2025-2026).

3-Problem-Based learning Method.

6.Literature Review

6.1.Problem-Based learning Method

PBL was originally "employed in the(1970) at the Medical Faculty of McMaster University in Canada" (Amir, 2009).The primarily purpose was emphasis on humans' behaviors towards any problem and it as a social commitment strategy to reach the solution of the difficulty .Markham et al. (2003:10), ", identified PBL, as an organized teaching method that engages learners in learning knowledge and skills through an extended inquiry process established around complicated, authentic questions and attentively designed products and tasks" . While," Moss and Van Duzer (1998) also referred to PBL as an instrumental approach to contextualizing by giving the learners products to develop or problems to solve"" Fried-Booth (2002) also defined PBL as a student-centered approach driven by the desire of establishing an end product"So.it is an instructional teaching linked to actual straggles for obtaining and integrating novel information (Legg, 2007). It is sounded to be suitable aide could be used in the classes of EFL to improve teaching EL. It helps the construction of significant situations in EFL settings. Students discover these situations belongs to problem, the tasks required activate interaction and communication (Bosuwen & Woodrow, 2009).Accordingly," Lapuz and Fulgencio (2020), PBL enhances the improvement of critical thinking skills levels among students, and it also ensures the improvement of the process

of teaching and learning". It leads learners to discriminating, examining, seeking, exploring; those tasks were directed maybe in clusters or individual, It is a vital for implementation the activity . Additionally, it involves apprentices to classify tools and connect their readings with their writings into prior knowledge (Torp & Sage, 2002). Therefore, teaching/learning script via PBL helps to influence in the EFL written works of the students, could be a practicable instruction to teach inscription . (Wigglesworth & Storch, 2012). It could be employed in many circumstances in the class. Within a little creativeness lecturers may applied PBL at any topic or position. Students work collectively or individually to reach resolution , with discussion and conversations among members of group. They need a deep comprehension to these problems from different resources relating to the difficulties they faced . Usually, we may face many the complications inside/outside class, such as in social network, books, newspapers , magazines, news on TV, real-life situations and extra.

6.2. Using problem-based learning in EFL Classes

PBL needs students have a deep metal state to think about the problem to be solved. Teacher offers clues to gain material and tools , confirm facts and involve students in autonomous learning, it certainly encourages students' thinking critically and skills of analysis, (Cooke & Moyle,2002).Teacher should follow some stages to create an ideal problem .These stages are: selecting the correct content, working out available resources, write the statement of the problem, choosing a motivated topic, rising inquires, finding out assessments procedures(Delisle, 1997).

6.3.Teacher in Problem-Based Class

Duch et al. (2001), suggests some ways that teachers should follow when create the problem in the class to implement PBL and makes it practical for students to be solved:

1- Motivated learners to gain a deep comprehension of the topic
2- Provided students with keys to make rational choices to solve the problem.
3- Presented authentic and real-life situations form students' lives.
4-Making a group discussion, to enable learners work cooperatively and resolve the problematic topic.
5- Clarified the topic or problem in some steps so that, this will be helpful for them to work out the solution.

Therefore, is it very essential to an instructor selects correct subject , plan a problem appropriately so , PBL could be applied.

6.4.Student in Problem-Based Class

Generally, Throughout the steps problem- solving instruction, students should:

1- Describing problem
2- Working out what they know about the problems presented .
3- Finding out the conceivable answers or keys of the problems.
4- Brainstorming the proofs or reasons for the problem.
5- Determining the materials and tools to solve the problems.
6- Seeking for information.
7- Finding out the right solution for the problem.
8- Taking notes for the responses to solve the problem.
9- Presenting and supporting the selected answers.
10- Reviewing students' presentation. (Nilson, 2010, p. 187)

6.5.Advantages of problem-based Method

Several studies conducted benefits of PBL the teacher should plan a well-planned problem which support learners by chance to improve their abilities associated for:

1- **Group-work**: It encourages Students to work effectively and cooperatively to solve a problem and reach a target outcomes (Ahamad et al., 2017; Azer, 2001).

2- **Organizing problems & assigning characters of leaders** :It offers students with some opportunities for leadership throughout the reading and discussing as the primary stage to solving- problem. (Bridges & Hallinger, 2009).In conversation assigned a leader grasps group together to the best answers and reveal the facts of the problems.

3- **Verbal and script communication**: There is a time for communication since students talk, chat and share ideas and experiences in dialogues. They have more occasions to practice the language and communicate in real situations. Consequently, they develop their verbalization skills. (Azman & Shin, 2012).

4- **Self-realized and assessment of group practices:** Students have better chance to learn from themselves during their cooperation and sharing of their ideas. They have self-awareness about their strongest and weakness and about their group members

(Fenwick, 2010).

5- **Autonomous learning**: On the task, students may have to work individually to look for information, (Azer, 2001). They are free to choice the options and reach the solutions for difficulties.

6- **Thinking critically and analytically**: PBL certainly encourages skills of thinking and analyzing . Leaners have probabilities to use mind and training it to reveal the possible resolutions . (Yuan et al., 2008).

7- **Explanation of facts**: Learners can work hard on a deep comprehension of the problem. So, they can find materials and ways to look for reliable explanation then, they can explain what they have discovered (Ahamad et al., 2017).

8- **Self-directed learning**: Since it is student-centered method ,and this needs students work on their own, reach their aims. It is a helpful method which leads students for long-life learning , rather than to become passive listeners inside the class.
(Malan & Ndlovu, 2014)

9-**Employing authentic and real-world problems:** Teachers can apply real-life situations that exist in students' lives(Akcay, 2009). So, this will help them to solve problems in/out class.

10- **Looking for information/ knowledge**: PBL also a successful strategy can be used in
medical sciences , to support the workers thinking critically and reach information literateness (Carderet al., 2001).

11- **Problem-solving through commitment:** The method of solving- problemmentions 4 stages " PDCA (Plan-Do-Check-Act)", that includes
8 processes, as showed in Table 1. Satyendra (2019:22**)**

Table .1. Four stages to solve the problem

	PDCA: Plan-Do-Check-Act
Plan	Plan1. Generating group-work 2. Introducing a topic
Do	3. Applying control accomplishment 4. Recognizing & confirming the base reason 5. Recognizing & electing helpful events
Check	6. Employing rightness events & chasing the efficacy
Act	7. Classifying & conducting self-directed events 8. Concluding & acknowledging group

6.6.Difficulties in utilizing(PBL)

It is a process of creating and teaching an instruction via a problem dependson students' activities. PBL lessons start with problem ratherthan a direct presentation of the central topic by teachers (Boud &Feletti, 2013). Teachers should guides students to gain knowledge and skills through the steps of solving problems. There are some difficulties that the teachers might be encounter habitually, as addressed below:

1-Getting real-word problem can be problematic:

Perhaps, it is difficult for the teachers to find and plan a real- word problems that suitable with PBL (Armitage et al., 2015) PBL instructions are still linked to the syllabusof the schools. Indicating the correct topic aids students to comprehend that PBL is both individually created and uniquely. It is a bottomless instructional teaching practice required actual problems, actual resolutions, and actual learning.

2- Challenging unawareness for the circumstances

This is another difficulty that may be faced the teacher in the PBL courses. Teachers, must consider, that when designing or describing problem in the class, and throughout the class task, instructor and leaners may not realize the proposed resolution(Wheeler et al., 2016)..

3-Gainning familiarization with PBL This is an important matter for any teacher who wants to apply PBL inside classroom. Teachers are often needed to develop the qualifications of proficient and be skilled in

implementing PBL. Regarding to"(Ahamad etal. 2017:19),when students seem to be unfamiliar with problem ,it is important to give support and assistance for them.

4-Identifing & willing failure Failure in employing PBL is not a depraved matter (Fatokun & Fatokun, 2013). It is an alternative way for both teachers /students to take into account other options to solve the problem (Akcay, 2009). In fact, learners may not always can gain the correct key to solve any problem. Sometimes, "Failure is just a piece of the process toward success " (Tick, 2007).

7.Writing Skill As we are in the digital region , writing skill is one of the significant skill in teaching and learning EL. language users should master it. This will enable them to communicate and describe views or thoughts clearly and accurately in written forms. This is reinforced by "Nunan (1989) and Harmer (2007) that say writing is the process to discover the ideas through statements and paragraphs in order to communicate clearly to the readers to produce and convey the language through ideas, feeling, and opinion". Furthermore, inscription is a way to transfer writers' thoughts and putting them on a paper to share them with others . So, teacher can apply innovative methods and helping learners , practicing skill of writing during the process of teaching / learning writing. Several , profits can be gained when teacher utilizes these communicating and cooperative methods in the process of teaching-learning. Therefore ,with development of the current Iraqi curriculum (English for Iraq) students must be proactive, imaginative one and be able to discover and effectively participate their opinions, thoughts in teaching / learning writing skill. Following, the current, active techniques, writers may develop skills of writing and turn out to be self-sufficient writer (Sundeen, 2017). Students can employ some types of approaches and methods to learn creative writing and be proactive one. Writers must consider some writing stages like; thinking, create various copies, correct them, and reread them more than once, before printing. Santangelo and Olinghouse (2009) " stated that the writing process emphasizes that writers learn by doing: that is engaging in daily writing opportunities". Learners have chances to practice writing during problem-based method of learning and permit themselves for self-determining development throughout time of writing (Alkodimi & Al-Ahdal, 2021).

8.Previous Studies Several studies related to the current study. Firstly, Van Loggerenberg-Hattingh (2003) explored in his study that utilizing of PBL is an active aids in science studies than the typical process. Students studied by PBL recorded higher scores than other group. Another study come from Lombard and Grosser (2008). The findings showed that PB instruction has a progressive influence to think critically, in the medicinal studies. A study from Padmavathy and Mareesh (2013) accompanied the efficacy of "PBL" in Math. The outcomes were discovered that PBL has an influence in studying Math and advance learners' comprehension and the capability to use facts in real-life problems. Also Temel (2014) studied" the effect of PBL on pre-service teachers' critical thinking disposition and perception of problem-solving ability" . The study showed that PBL is a powerful in growing views towards solving the problem than the conventional teaching.Moreover, Baysal (2017) examined the issue in Social Studying's Courses "The Problem-based learning process: Reflection of pre-service elementary school teachers". The outcomes showed that PBL echoes/profits has a progressive effect in learning and the acquisition of skills . Additionally, an empirical study by Tong et al. (2021) studied the efficiency of PBL. The findings proved the advancement of empirical group than control one in the presentation of PBL.

9.Research Methodology

9.1.Participants Contributors in this paper were88 from 2th Intermediate at AL-Sediek school. They were studied English for 7 years, aged between 13 and 14 years old, and distributed equally into two clusters, (44 students) for the empirical and, (44students) for the control one.

9.2.Research DesignA quasi-experimental design was traced in this research. The pretest, posttest were operated for the two groups. The groups exposed to a unrelated teaching procedures. The experimental was exposed to Problem-Based method while, the control group was exposed to the typical teaching. They were pre tested in order to measure the homogeneity of the two groups ,then at the end of the study they post tested. Pretest, posttest marks were scored to ensure the influence of the employed method.

9.3.Instrumentation Writings' components that are essential for scoring phase , they are the following: "capitalization, punctuation, spelling, organization and paragraphing". In the pretest the contributors were asked to write a composition. Students post-tested on the same topic after the accomplishment of PBL periods, that required weeks after implemented several activities related to the PBL method such as pair-work or group work discussions about the problems that they were given. Then, the applicant's presentation were recorded on videos after requested the school administration for the two groups. While an experimental group, had directly

taught by PBL strategy for up to 3 weeks, the control group was not received the treatment .Each group was divide up into 4 small clusters, each video was recorded in 3 periods for (20 min)in every subdivisions' dialogues for the two groups. Coding the video clips was accompanied by the research who practiced coding of the students' conversations in Arabic and in English. A few minutes had given for the EFL students to chat, talk and communicate while they working in writing for roughly (20 min) inside class as a phase of training to write short paragraphs . In the previous week, they wrote a paragraph about the topic (Healthy lifestyle). To write a short composition they were directed to use the past tense in PBL. Students were interacted in the finest mode to write utilizing past tense correctly during the conversation. They encounter certain difficulties like; arranging , selecting of the thoughts, also in grammar , spelling while they were writing English composition . The researcher noted that they made an intensive work to assist one another and work cooperatively; they can express communications orally and in writings together, although, their works were not very good . In general, developments were obviously in their writings.

9.4.validity Two language experts reviewed the tests, their notes are applied in the main version of the study to ensure the validity .Rubric to correct students' writings was suggested for all writings' components ; "capitalization, punctuation, spelling, organization and paragraphing". . For 1 false, the students got 10 degrees, for 1 -2 two false, the students got 7 degrees, and for 3-4 false, students got 5 degrees. If there were 5-6 false in special writing part, testers got 2degrees in the particular part, and no degrees, if there were 7 or more mistakes. testers can reach up to 10 degrees for every part , getting them a full degrees of 50 .

9.5.Reliability The inter-rater reliability method was employed to compute the reliability of the study. It was found that the inter-rater reliability (value-0.91), and It was a sophisticated value that indicates the tests were reliable (Selman& Murad,2012:23).

10.Procedures The experimental study continued 8 weeks which includes of composition writing and recorded their conversations and discussions about what they wrote . The lessons was mainly chosen from units of their textbook (English for Iraq-Second Intermediate schools). A pre-test was implemented to the two groups. Four sessions a week for a period of 8 weeks, students in the empirical group learned according to the Problem- based method whereas, students in other group studied by typical technique. After that, the posttest was employed to the participants in each group. Data were gathered to specify any development in writings . To obtain the difference between experimental and control group students' tests, and differences between the pre, post scores of the experimental group in writings. The utilization of t-test was employed.

11.Data analysis & Discussion

t- test for one sample to compare the marks of pre , post tests in control group students is utilized. See Table(1)

Table(1)

T-test value for one sample, between pre-test and post-test in the controlgroup

Level of significance	d. f	M.		Compute d t- value	S.D. D	M. D	S,D	Tabulate d t- value	N	Test
No significance	43	23.55		0.795	3.60	0.43	5.86	2.00	44	Pre-test
-	-	23.98	-	-	-	-	5.99	-	-	post -test

A contrasting concerning the average of pre and post- test in the control group students .Since, the calculated t-value(0.795) is fewer than t-tabulated value (2.00) beneath (43)the degree of freedom at (0.05)level of significance in the above table. This points out there is no an importance variance between the students' control group presentations in pre , post- tests . As, the controller cluster did not taught by the employed method (PBL) in writing skill. table (1).

Table(2)T-test for one sample, between the pre and post- tests in the emperical group.

Level of significance	d.f	Tabulated t- value	Computed t- value	S.D.D	M.D	S,D	M.	N	Test
Significance at level 0.05	43	2.00	12.497	3.86	7.27	5.26	31.91	44	Pre-test
-	-	-	-	-	-	2.97	24.64	44	Post -test

From the contrasting between the average of , the pre and the post-test in the above table. As ,that calculated t-value(12.497)is upper than tabulated t-value(2.00)beneath the degree of freedom (43) at(0.05) the level of significance ,the outcomes showed that there are importance variances in the students' writings who received training in PBL method, ,which means that students have improved writing ,when they studied in PBL strategy. see table(2).

Table(3)

T- test for two clusters, experimental and control betweenthe average of the post-tests .

Level of significance	d.f	Tabulated t-value	Computed t-value	S,D	M.	N	Groups
Significance at level 0.05	86	1.99	7.50	5.26	31.91	44	Experimental group's post-test
-	-	-	-	5.86	23.55	٤٤	Control group's post-test

Due to the fact, the calculated t-value (7.50) is higher than the tabulated t-value (1.99), beneath the degree of freedom(86) at 0.05 level of significance ,and this variance is in a favor to PBL group students' writings work who have studied in the treatment method in the post-test. The findings illustrate a statically important variance in the writing of students while they work in a PBL method , This indicates that students' marks of the experimental group is more than the marks of the other group owed to the type of method was utilized. see table (3).

Table(4)

T- test for two testers, experimental and control groups betweenthe average of the pre-tests .

Level of significance	d.f	Tabulated t-value	Computed t-value	S,D	M.	N	Groups
No Significance at level 0.05	86	1.99	0.65	2.97	24.64	44	Experimental group's pre- test
-	-	-	-	5.99	23.98	44	Control group's pre-test

From the above table reveals that the t-test formula for the two groups is used for the sake of equal of variance In fact ,the calculated t-value(0.65)is fewer than tabulated t-value(1.99)beneath the degree of freedom (86)

at(0.05) the level of significance. It refers there is no importance variances in the writings of students in pre-tests for both groups. It was meant that students have the same background knowledge and this shows a homogeneity between both samples . see table(4). Generally, the findings of the empirical cluster exceeding the regulator one in EFL written composition can be concluded that students who were studied via Problem-based as a method for teaching writing gain trust, accuracy ,self-learning ,since they interact and communicate in a more enjoyable, interest and comfortable atmosphere when they learn all components of writing in the progressive level.

12.Conclusions

The main aim of the study belongs to the examination of the effectiveness of PBL rely on the skills of writing a paragraph ,a quasi -experimental method was conducted and the qualitative data gathered . To figuring out the development and enrichment the skills of writing a composition amongst EFL learners. The findings specify that the empirical group over performed the control one in post-test writing a composition while the application of the PBL method in the class. The employment of this instructional strategy was fruitful in helping learners to be hard- workers purifying their skills of writing composition, revealed in the higher marks in the post-test. The PBL as an instructional classroom adds learners a chance for communication , collaboration and share their thoughts and experiences. In spite, that they encounter some difficulties when putting down their words in papers.

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