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# Using a web project-based learning program to develop Faculty of Education EFL students' life skills

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## Abstract

### Using a web project-based learning program to develop Faculty of Education EFL students' life skills

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The present study aimed at investigating the effect of using a web project-based learning program on developing Faculty of Education EFL students' life skills. The research followed the quasi experimental design of one experimental group. The participants of the study were twenty third year Hurghada Faculty of Education EFL students. The researcher designed and used the instruments and materials of the study, which included: a list of life skills, a life skills test, and a web project-based learning program. The results showed that using the web project-based learning program has positive effect on developing Faculty of Education EFL students' life skills.

**Keywords:** Web project-based learning, Life skills, Faculty of Education EFL students

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## المستخلص

استخدام برنامج التعلم القائم على المشروعات الشبكية لتنمية مهارات الحياة لدى طلاب اللغة الانجليزية كلغة أجنبية بكليات التربية

إعداد

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هدفت الدراسة الحالية إلى التعرف على أثر استخدام برنامج التعلم القائم على المشروعات الشبكية فى تنمية مهارات الحياة لدى طلاب اللغة الانجليزية كلغة أجنبية بكليات التربية. اتبعت الدراسة التصميم شبه التجريبي ذو المجموعة التجريبية الواحدة. كان المشاركون فى البحث عشرين طالب و طالبة من طلاب اللغة الانجليزية كلغة أجنبية بالفرقة الثالثة بكلية التربية بالگردقة. قامت الباحثة بتصميم واستخدام أدوات و مواد الدراسة التي تضمنت: قائمة بمهارات الحياة، واختبار مهارات الحياة، و برنامج التعلم القائم على المشروعات الشبكية. أشارت النتائج إلى أن استخدام برنامج التعلم القائم على المشروعات الشبكية كان له أثر إيجابي فى تنمية مهارات الحياة لدى طلاب اللغة الانجليزية كلغة أجنبية بكليات التربية.

**الكلمات المفتاحية:** التعلم القائم على المشروعات الشبكية، مهارات الحياة، طلاب اللغة الانجليزية كلغة أجنبية بكليات التربية

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## Introduction of the study

English is an important language and is considered one of the most commonly used language all over the world. It has a remarkable impact on several fields of life. It is one of the most major and influential language in the world. English also has become the crucial language of communication and the method of expressing people's requests, feelings and thoughts. Moreover, English is the most widely used language of communication for many purposes like education, business, and information technology. In addition, it has become compulsory subject at schools, educational institutions and universities. As life today is more complicated and complex than it was, students in the 21<sup>st</sup> century requires levels for information and technological literacy that go far beyond the basic knowledge that was sufficient in the past. Thus, "life skills" need to be fully integrated into classrooms to prepare the students for this century.

Life skills are the skills that one needs to deal with the challenges in everyday life effectively whether at school, college, work place, or in personal lives. They are known to be 21<sup>st</sup> century skills, soft skills and livelihood skills. Life skills include *cognitive skills* such as (logical, analytical, critical thinking, creativity, decision making and problem-solving skills), *social skills* such as (communication, interpersonal relationship, negotiation, leadership and value prioritizing skills), *human skills* such as (self-awareness and empathy skills), and *coping skills* such as (coping with emotions and stress) (Panduranga, 2018).

The World Health Organization (WHO) declared that life skills are a group of psychosocial competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and cope with and manage their lives in a healthy and productive manner (Michelle, 2019:5). In addition, El Sawi and Smith (1997:12) clarified life skills such as leadership, teamwork, decision making, problem

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solving, reasoning, communication and personal qualities such as responsibility, self-esteem, and integrity. Bender (2002:41) mentioned a set of skills that contains decision making, problem solving, creativity, critical thinking, effective communication, interpersonal relations, self-awareness, ability to empathize, coping with emotions and coping with stress.

Moreover, Boleman (2004) considered life skills as follows: develop and maintain records, decision-making, ability to relate to others, accept responsibility, self-motivation, build positive self-esteem, develop organizational skills, develop oral communication skills, ability to solve problems, set goals, work in teams, and develop self-discipline. Maass (2006) categorized life skills into teamwork, goal setting, critical thinking, communication, managing feelings, problem solving, cooperation, decision-making, and leadership. Duerden (2012) emphasized the following life skills: communication, critical thinking, decision making, leadership, problem solving, responsible citizenship, self-esteem, self-responsibility, and collaboration.

According to Michaels, Truesdell and Brown (2015), life skills that are suitable for learners of the present and future life are called the four C's. They explained each "C" as follows: firstly, "collaboration" indicates the ability to work productively and equitably while valuing others in diverse educational settings. Secondly, "communication" refers to the ability to use the components of literacy (reading, writing, speaking, and listening) successfully in teaching and learning. Thirdly, "critical thinking" indicates to the ability to use higher-order thinking skills to plan, teach, and reflect on instructional practice. Fourthly, "creativity" refers to the ability to develop, choose, and integrate innovative approaches for teaching and learning.

Ratama, Padmadewi and Artini (2021) declared that collaboration skill was taught while students work effectively with their classmates. For communication skill; it was taught where the students had opportunity to share their ideas about their reading

experience. According to critical thinking skill; it let the students run the process of think and re-thinking about what they had read. It was taught while the students made a summary of what they had read and share it to their friends and have a feedback from the teachers. Furthermore, students would re-think about what they had thought previously and had chance to revise their work. In the creativity skill, they could collaborate with their partners to accomplish their work and had process of editing creatively.

However, these skills are not easy to be achieved as traditional learning has been playing a prevailing role where teachers are “the transmitter of the knowledge, the development of technology changed the way people communicate in academic contexts from printed to screened messages, and from face-to-face classroom to virtual classes. This has prompted the shift from traditional practices to student-centered in which students are guided by their teachers to develop life skills through using project-based learning (PBL) where students are provided with the opportunity to participate in real problem-solving and knowledge construction in authentic professional contexts (Saimon, 2023).

Project-based learning is a learning approach that focused on activities which attempt to produce learning product through project works. It is considered to be an approach and means to achieve life skills (Harun, 2006). Project based learning promotes these skills due to its learning activities. It allows the learners to work together with hands-on experience in an authentic and meaningful context (Thomas, 2000). Project-based learning builds on individual strengths, and allows individuals to explore their interests and ability. It is a process of learning that students are responsible for their own education. Project-based learning provides opportunity to create productive and enjoyable classroom atmosphere through the integration of students’ knowledge, attitude, and skills (Solomon, 2003).

Mergendoller and Thomas (2001:3) assured that if the classroom methodology is focused on PBL, “students spend the

majority of their time working on their own or in small groups, finding their own sources, conducting their own research, and securing their feedback”. In addition, Kokotsaki, Menzies and Wiggins (2016) indicated that PBL “is characterized by students’ autonomy, constructive investigations, goal-setting, collaboration, communication and reflection within real world practices”. Ralph (2015) emphasized that PBL increased the development of both learners’ knowledge and skills. Moreover, students also felt that PBL encouraged their collaboration and negotiations within the group.

Stivers (2010) emphasized that PBL activities and real tasks lead challenges for students to solve the problem. The activities show the types of learning that learners do in their daily lives outside the classroom, and the projects are done cooperatively by groups of students working together toward a common goal. Many research studies revealed the positive effects of using PBL on students’ language skills, e.g. Anuyahong (2015) and Simpson (2011) who investigated the implementation of PBL in English classroom and found that students developed English proficiency.

Nowadays, the development of digital technology grows globally and the use of the web has had many positive effects on education. As a result, web project learning has emerged and provided an appealing way for students to gain internet skills while being engaged in regular classroom activities. Through these projects, students are encouraged to develop a range of skills relating to reading, writing and researching as well as developing their abilities in selecting, presenting and communicating information. Moreover, when students work on their project, they strengthen research and organization skills while being responsible and self-motivated all skills they will need in the information age. In addition, students feel a sense of engagement because they work with topics that they have chosen for themselves (Jung, Jun and Gruenwald, 2001).

With an attempt for enhancing EFL students' life skills, the researcher would like to use a web project-based learning program (WPBL) which can be a good alternative for EFL students to participate actively and effectively in classroom activities. Students can join the active learning atmosphere, and at the same time they can get more knowledge from using the web. Therefore, this study aimed to investigate the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' life skills.

### **Context of the study**

- As a lecturer in the curriculum and instruction department (TEFL) at Hurghada Faculty of Education, the researcher observed that many of third year EFL students lack life skills. They seemed to encounter difficulty in collaboration skills (e.g. participating in discussions through group work), in communication skills (e.g. communicating ideas clearly with classmate), in critical thinking skills (e.g. distinguishing between powerful and weak utterance), and in creativity skills (e.g. giving reasons for specific issues logically and in giving several ideas about a topic). As a result, they need a program based on using a web project-based learning to develop EFL students' life skills.
- The researcher administered a test to find out the lack of third year Hurghada Faculty of Education EFL students' life skills and the following points could be concluded:
  - **Most students had problems in:**
    - participating in dialogues effectively,
    - expressing thoughts clearly,
    - sharing information effectively,
    - arranging ideas in a logic sequence,
    - giving unique ideas.
  - **They need to develop life skills through a program based on using web project learning.**

Various studies mentioned that students encounter several problems in life skills and emphasized the effect of using web project-based learning such as: Praba, Artini and Ramendra (2018), Bani-Hamad and Abdullah (2019), Abdallah (2020), Abu El-Magd (2021), and Somphol (2022).

### ○ Aim of the study

The present study aimed to:

- Identify the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' life skills.

### ○ Question of the study

The present study attempted to answer the following question:

- What is the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' life skills?

➤ This main question branched into the following questions:

- What is the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' collaboration skills?
- What is the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' communication skills?
- What is the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' critical thinking skills?
- What is the effect of using a web project-based learning program on developing third year Hurghada Faculty of Education EFL students' creativity skills?

### ○ Hypothesis of the study

The present study tested the following hypothesis:

- There are statistically significant differences between the mean scores of the participants in the pre/post testing of life skills favoring the post one.
- This main hypothesis branched into the following hypotheses:
  - There are statistically significant differences between the mean scores of the participants in the pre/post testing of the collaboration skills favoring the post one.
  - There are statistically significant differences between the mean scores of the participants in the pre/post testing of the communication skills favoring the post one.
  - There are statistically significant differences between the mean scores of the participants in the pre/post testing of the critical thinking skills favoring the post one.
  - There are statistically significant differences between the mean scores of the participants in the pre/post testing of the creativity skills favoring the post one.

### ○ Significance of the study

The study was supposed to be significant for the following:

1. Third year EFL students: as it develops life skills: collaboration skills (e.g. participating in discussions through group work), communication skills (e.g. presenting ideas clearly in public), critical thinking skills (e.g. distinguishing between powerful and weak utterances), and creativity skills (e.g. giving reasons for specific issues logically and giving several ideas about a topic).
2. Teachers: as it directs their attention to the effect of using the web project-based learning program on teaching life skills.

3. Course designers: they may include certain activities based on web project learning for developing life skills.

### ○ **Delimitations of the study**

The study was delimited to:

1. Twenty third year Hurghada Faculty of Education EFL students.
2. Life skills are delimited to: collaboration skills (e.g. participating in discussions through group work), communication skills (e.g. presenting ideas clearly in public), critical thinking skills (e.g. distinguishing between powerful and weak utterances), and creativity skills (e.g. giving reasons for specific issues logically and giving several ideas about a topic).
3. The first semester of the academic year (2023/2024).

### ○ **Instruments and materials of the study**

The researcher designed and used the following:

1. A life skills test.
2. A list of life skills. (collaboration, communication, critical thinking and creativity).
3. A web project-based learning program.

### ○ **Definitions of terms**

- **Life skills** (are delimited to the four C's skills in this study): They are collaboration, communication, critical thinking, and creativity.

**Collaboration** refers to students working together to achieve a shared goal when every member has a role to play in accomplishing tasks towards that goal (Saleh, 2018).

**Communication** is the ability to successfully use interpersonal skills and components of literacy (reading, writing,

speaking, and listening) to contribute to teaching, learning, and development (Michaels, Truesdell and Brown, 2015).

**Critical thinking** is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information which gathered from observation, experience, reflection, reasoning or communication as a guide to belief and action (Nair, Girjia and Stamler, 2013).

**Creativity** is the ability to produce something useful, original, transfer and adaptation of ideas (Kolk, 2022).

➤ Operationally, life skills are defined as the ability of the third year Hurghada Faculty of Education EFL students to participate with each other in group works, communicate in discussions effectively, use logical thinking critically and write unique ideas.

• **Web project-based learning**

➤ It refers to a teaching method which provides students with chances to manage project as a medium to complete learning goals, and the project is carried out or accessed by means of digital technology (Pratumchat, 2020).

➤ It is defined as a problem-oriented learning within the framework of a small group, a whole class, or an individual project and using web support for the project activities (Jung, Jun and Gruenwald, 2001).

➤ Operationally, web project-based learning is defined as a teaching method which provides third year Hurghada Faculty of Education EFL students with chances for managing projects to complete learning goals through using the web in communicating ideas clearly with classmate, participating in dialogues effectively, arranging ideas in a logic sequence and giving several ideas about a topic.

## ○ Review of literature

### 8.1. Life skills

Stauffer (2020) expressed the four C's of life skills as follows; first, "collaboration" is the practice of working together to achieve a common goal. Second, the art of delivering information rapidly and is known as "communication". Third, "critical thinking" is the practice of solving problems. Finally, "creativity" is the practice of thinking outside the box.

#### **Collaboration skill**

Collaboration has been widely accepted as a teaching and learning approach implemented by putting students to work in groups to complete a task, to solve problems, or to work on a project (Harmer, 2007). Erdogan (2019) declared that collaboration skill is the ability to work as a group to achieve a common goal whereas; during collaboration one has to take his/her weakness as a learning opportunity thus being flexible in changing his/her perspective. Moreover, he emphasized that for developing collaboration students should share their ideas and get feedback from others whereas when students are used to be listened to by others and listening to others while working on a certain task, they internalize the value of collaboration.

Ortega (2003) indicated that group work involves frequent learner-learner interaction and provides the students chances to learn from each other. So, it is consistent with the sociocultural approach viewing learning as a social process that occurs through interaction among learners in situated contexts. Storch (2005) reported that group work provide students with some advantages such as: enriching ideas, enhancing achievements, improving accuracy, and increasing social interactions.

#### **Communication skill**

It entails the ability to access, evaluate and comprehensively share information using both traditional and new media such as

print-based text and digital texts (Kolk, 2022). Eaton (2010) argued that knowing a language alone is not enough in the 21st century to make someone an effective communicator unless it is accompanied by other skills such as computer skills. As a result, communication ability in both traditional and digital media becomes imperative.

In the teaching and learning process, communication skill can be integrated through the student-centered learning approach, particularly the cooperative learning or project-based learning, in which groups of learners work together to complete a task, solve a problem, or create a product. In this case, the role of the teacher is vital because they have to manage the entire environment by planning, organizing and motivating students to communicate with each other (Srinivas, 2011). Moreover, Farrell (2009) indicated that teachers' fostering communication in the classroom will serve three main purposes: stimulate the relevant knowledge from the students that have previously acquired the information but are unable to correlate it to the question, allow them to interact with what is being discussed by others and be able to properly describe what experiences with others to add their own input and impact on the discussion.

### **Critical thinking skill**

It implies the ability of an individual to make reasonable decisions supported by evidence instead of emotions. Critical thinking is centered on updating existing knowledge by analyzing new situations through performing comparisons, establishing relationships, extracting new ideas and evaluating truth and consequences of findings (Florea and Hurjui, 2015). Kivunja (2015) indicated that critical thinking is an individual's ability to use a number of his/her general cognitive processing abilities which fall into high-order thinking levels of analyzing, evaluating and constructing new ideas which enables students to think deeply to solve unfamiliar problems of various real-life aspects in different ways. Erdogan (2019) assured that asking students to engage in tasks that involve classification, prediction, justification, and

evaluation of diverse issues is a good example of an effective environment for developing critical thinking among learners.

Lai (2009) emphasized that critical thinking helps individuals to achieve understanding, evaluate different perspectives, improve problem-solving ability and to become active and effective life-long learners. Moreover, Pardede (2019) highlighted that critical thinking increases the student' ability to apply their thinking skills (question, analyze, criticize, reflect, and synthesize), and accept or reject new ideas, concepts, and viewpoints". In addition, Vaseghi, Gholami and Barjesteh (2012) assured that critical thinking encourages the students for being open minded and mindful of alternatives, judge well the credibility of sources, identify conclusions, reasons, and assumptions, and judge well the quality of an argument including its reasons, assumptions and evidence.

## **Creativity skill**

Although creativity is often synonymized with creative thinking, both are two different things. Creativity is the products, processes or interactions that generate new ideas, thoughts, and objects, whereas creative thinking refers to the thinking skills which enable a person to generate creative original or new ideas, thoughts, and objects. Thus, creative thinking is one of the elements which build creativity because creativity is formed by creative thinking skills, motivation, and expertise (Pardede, 2020).

Haarmann, Rourke and Ragusa (2013) declared creativity in terms of two sorts of thinking: the first is "divergent thinking" which involves multiple perspectives and numerous solutions to a problem unlike the second type "convergent thinking" which considers the existence of only one solution to a problem. In the creative process, both types complement each other; divergent thinking helps in the generation of many new ideas and convergent thinking seeks to evaluate these ideas and select the one that solves the problem.

Karademir (2021) indicated creativity teaches students to think in a way that's unique to them. Lau (2011) outlined creativity in three principles: (i) reorganizing previous ideas; (ii) choosing practical ideas; and (iii) exploring relations of ideas. Moreover, Renaud and Murray (2008) suggested six characteristics of creativity: fluency (i.e., degree of fluent language uses), originality (i.e., the degree of uniqueness), elaboration (i.e., the amount of details in language uses), openness (i.e., the degree of psychological openness to diverse information), closures (i.e., the degree of rounding up the issues and reminding them) and creative strength (i.e., several creative abilities such as expressiveness, visualization, humor, and breaking boundaries and fantasy).

Ghonsooly (2012) indicated that creativity covers multiple attributes such as flexibility, fluency, originality, synthesis, analysis, reorganization, redefinition, complexity and elaboration. These constructs constitute the most fundamental divergent thinking skills that shape the concept of creativity.

- Flexibility: the production of ideas from different approaches that show different possibilities.
- Fluency: the production of great number of ideas or alternate solutions to a problem.
- Originality: the production of novel and unusual ideas
- Elaboration: enhancing ideas by providing more details and clarity.

## **8.2. Web project-based learning program**

### **Features of project-based learning**

Projects are some kind of educational materials that encourage students to learn in project-based learning. Generally, projects require a question and problem that directs the activities. Projects also include the improvement of a product, presentation or a performance that can be observed and utilized. Projects deal with

real life problems that arouse interest in students and they interact with the real life through these projects (Curtis, 2002).

One of the major features that differ project-based learning from traditional education approaches is in project-based learning, students can define the problems, discuss the views or predictions, collect information, evaluate the collected information, make conclusions, combine views and create a product. These tasks involve the students' problem solving, decision making and investigative skills. Throughout the tasks, students are encouraged to take charge of their learning and become autonomous for their decisions (Liu and Hsiao, 2002).

### **Characteristics of project-based learning**

**Pratumchat (2020) indicated the following:**

#### **1) Driving question**

It is an open-ended question related to a real-world problem that students find interesting and important. According to Simpson (2011), driving question guides students to think and learn how to uncover topics and generate solutions, it also inspires students to seek information, and solve problems. Thus, students learn through the driving questions which interest them to seek deeper information, solve problems and complete their projects.

#### **2) Co-operative and skill-based**

During this process, students work together in their group, and they make the decisions which related to the topic, working method and the final project. In addition, students gain the skill-based learning whereas, PBL offers students to receive the knowledge through classroom and encourage them to experiment the learning process. Thus, the skills that occur during the learning will be transferred to students naturally.

#### **3) Thinking skills**

Stivers (2010) declared that, PBL develops both metacognitive and cognitive thinking skills such as collaboration, self-monitoring, analysis of data, and evaluation of information. Furthermore, these skills help students to make thoughtful decisions. During the project, questions challenge learners to think and make relations to concepts that matter in the real world. Students need to apply thinking skills to collect, evaluate and make use of information effectively and appropriately. Therefore, students are able to use their thinking skills to investigate problems, ask questions, pose new answers, and discover new information that can be used for their projects.

## **Advantages of project-based learning**

### **1) PBL helps students to become more confident:**

Fried-Booth (2002) mentioned that PBL provides chances for students to become more independent in learning; allowing them to decide who to work with, what materials or resources to use, and what to create.

### **2) PBL promotes students' engagement:**

In PBL, students learn to discover, check, and understand their world. It helps to make learning relevant and useful to students by linking relationship to life outside of the classroom (Fragoulis, 2009).

### **3) PBL promotes students' creativity:**

Gustina and Sweet (2014) declared that students can create new product designs for their projects whereas teachers select, organize, and plan activities for students to engage in creativity.

### **4) Students gain some needed skills:**

Students learn communication and collaboration skills while generating ideas together, whereas, it helps students to search for information, find the answer, solve the problem and succeed their projects efficiently. As a result, PBL encourages students to

collaborate and communicate with their group members while doing their projects (Larmer, Mergendoller and Boss, 2015).

**Spalek (2014) pinpoints the following benefits of PBL:**

1. Enhancing collaborative teamwork, inquiry-based learning and knowledge retention.
2. Increasing students' achievement as they are engaged deeply with the topic, gather information and continuously improve language ability.
3. Promoting students' creative thinking.
4. Helping students become explorers and think about new information.
5. Allowing students to design meaningful products as it consolidates language skills.

Similarly, Mihic and Zavrski (2017:4) explain that project-based learning “enhances critical thinking, encourages collaboration and teamwork, increases communication skills, develops higher order thinking, teaches decision making, fosters creativity, provides knowledge application and contextualization of learning, provides knowledge transfer, enables integrated understanding, and builds conceptual understanding”.

Nowadays, digital technology has been playing significant role and can be utilized for many aspects in our life around the globe especially in educational purpose. It offers new opportunities for teachers and students to apply online resources to help both teaching and learning interesting and meaningful. Many studies investigated the use of technology with project-based learning which provided chances for students to collaborate in class activities and engaged students in deeper learning. For example, Taylor (2017) studied on the best uses of technology in support of project-based learning. The result showed that teachers and learners are aligned with regards to the importance of technology.

## **Benefits of using web project-based learning (WPBL)**

### **Kosea (2010) showed that:**

- it helps students to gain knowledge through experience.
- it connects students' classrooms with real world and investigate their own interest.
- students have the chance to learn by doing.
- students' motivation is increased.
- students communicate and collaborate with each other effectively.
- an expanded view of the subject matter is presented.
- students' interest is increased by involving them in solving real problems.

## **Stages of using WPBL:**

### **Speculation**

In this stage the teacher has to map out the projects that the students will follow during the learning process (Railsback, 2002). If the project is planned well, students will success in doing it. The teacher will give his students the chance to choose the topic of the project because they have the ability to decide the way they will learn with (Bell, 2010). During this stage, the students will create accounts on the website. Then they will modify their information. Finally they will download the attached materials.

### **Designing the project activities**

Students start to look for related topics. Then they relate information and relate answers for the problem they have chosen before (Castaneda, 2014). After that students have to decide what steps to follow, what sources to use. And that will be through working in groups. The teacher will be responsible for assigning every student's role in the group (Papanikolaou and Boubouka,

2010). Students will log into the website again to see the new information and messages added by the teacher.

## **Conducting the project activities**

Students start to gather information and they will discuss it within the group members. They try to solve the problems that they are encountering with the help of teacher. Students conduct the project and present it in front of other groups. They will use different sources to look for information. These sources are like: internet, library, magazines and elders' experiences. Students will be asked to upload their different projects on the website and they have to download the projects of the other groups (Maulany, 2013).

## **Evaluation**

It would be in different shapes: self-evaluation; from the members of the group, peer-evaluation; from the other groups and teacher evaluation (Fragoulis, 2009).

### **8.3. Integrating web project-based learning in teaching life skills**

Integrating web project-based learning (WPBL) on authentic context and students' interest increases students' motivation and enjoyment in the class. Allen (2004) assured that using it in a classroom develops life skills which are very important to face the new century requirements. He emphasized that it helps students to increase social and communication skills. Whereas after applying them in classrooms, students can easily make decisions. Moreover, students' critical thinking is increased. In addition, technology projects provide opportunities for parents, students, teachers and other community members to interact with students and their work in meaningful ways.

Students can learn communication and collaboration skills through some methods such as project-based learning. Thus, project-based learning allow students to learn in-depth instead of using methods that direct students down order thinking and to have

integrative thinking that can be adapted and success in their lifestyle (Dimmitt, 2017). In addition, Duran and Dokme (2016) explained that when PBL is part of the learning process, the discussions that arise from the development of the projects “enhance the critical thinking levels of participants‘ helping students to improve their ability to make connections between claims and evidence”.

Moreover, Hsieh (2012), for example, indicated in his study on twenty-five college senior students that besides critical thinking, problem-solving and decision making skills, participants’ collaboration was improved tremendously by doing group work. Moreover, Tanner (2012) assured that PBL promoted students’ collaboration, as well as provided students with opportunities for attaining and assimilating knowledge. He found that PBL approach enhanced students’ innovation and other skills, which help close the gap between skills and knowledge needed in future workforce and what is provided in school.

Nguyen (2017) conducted a case study to explore how effective PBL was to students’ life skills development. Thirty-three students and an instructor in a university participated in the study. The study showed that PBL dramatically helped improve the students’ problem-solving, critical-thinking, time-management, and interpersonal relationship skills. PBL also promoted some students’ creativity, information technology (IT), research, leadership and film-making skills.

Praba, Artini and Ramendra (2018) indicated in their research that critical thinking is promoted by project-based learning. Furthermore, since project-based learning activities mostly done in group, the interaction in the classroom was also improved. It makes the communication as one skill which also encouraged in project-based Learning. In addition, as the students expected to produce learning product, the students get opportunity to explore their creativity. Thus, project-based learning revealed potentially promotes students’ critical thinking, communication, and creativity through collaborative work.

Valls-Barreda (2016) explored analysis of PBL in a digital environment at a networked high school. The participants were taught based on digital collaborative learning projects. The results revealed that the positive, students-centered, collaborative learning environment which were provided were good in teaching and learning. Thus, using technology could engage students in deeper learning.

Bani-Hamad and Abdullah (2019) investigated a study aims to discover the effect of project-based learning on improving the four C's among Emirati secondary level students. The study sample comprises of twelve male secondary level students. The results show that project based learning approach has significant effect on improving four C's among Emirati secondary level students who participated in Think Science National Competition.

Abdallah (2020) investigated a study aimed at developing EFL speaking fluency skills among Faculty of Education students using electronic project based learning (EPBL). The participants of the study consisted of first year English section students enrolled in Faculty of Education, Benha university (n=27). Results showed that the participants' EFL speaking fluency skills were developed significantly as a result of implementing the EPBL. Therefore, it can be concluded that EPBL is effective in developing fluency skills among first year EFL students.

Pratumchat (2020) investigated a study aims to enhance English-speaking skills of EFL students through digital project-based learning (DPBL). The participants consisted of (60) twelfth grade students divided into two groups. The research instruments included twelve lesson plans, an English-speaking test, a questionnaire, a semi-structured interview, and a rubric of speaking skills. The results revealed that DPBL had positive effects on students, and the results from the questionnaire revealed that students had highly positive opinions about learning speaking through DPBL.

Abu El-Magd (2021) investigated a study aimed to develop the academic English speaking skills among student teachers of English via web project based language learning. The participants were (66) 4th year (senior) student teachers of English at Ismailia Faculty of Education in Suez Canal University. The findings revealed that web project based language learning had a high positive impact on the academic English speaking skills among the senior teachers of English.

Somphol (2022) conducted a study to develop the 4 C's skills of secondary school students using project-based learning. It is found that the analysis of communication, critical thinking, creativity, and collaboration skills of grade (8) students after using PjBL accounts for 83.33, 70.83, 80.56, and 85.42%, respectively. In conclusion, students have 4 C's skills higher than the criteria (70%).

### ○ **Participants of the study**

Twenty third year EFL students were chosen voluntarily as the participants of the study from Hurghada Faculty of Education. They were instructed through using a web project-based learning program to develop life skills.

### ○ **Design of the study**

The study adopted the quasi-experiment of "one-group pre/post testing design".

## **11. Instruments and materials of the study**

### **1. Life skills list**

- Based on the literature review, the researcher designed a list of life skills. The list was submitted to a jury of TEFL specialists, who judged the relevance of those skills and indicated its validity to the participants of the study. The list consisted of (4) main skills and divided into (18) sub-skills:
  - **Collaboration skill** included three sub-skills.
  - **Communication skill** included eight sub-skills.

- **Critical thinking skill** which included four sub-skills.
- **Creativity skill** which included three sub-skills.

## 2. Life skills test

### ➤ **Aim of the test:**

The test was designed to assess third year Hurghada Faculty of Education EFL students' life skills.

### ➤ **Construction of the test:**

The test was in the oral form and consisted of reciprocal exchanges where both the examiner and the students had to adjust messages and take each other's' contributions into account. Questions were presented according to the degree of their difficulty so that, they ranged from easy to difficult. It consisted of eight questions:

- Students read the text carefully and answer the questions that followed.
- Some questions demand to divide the students into groups; four students in each group.
- **The examiner should avoid:**
  - Correcting the students' errors,
  - Interrupting the student unless necessary,
  - Giving a specific feedback,
  - Giving more explanation about the given questions.

### ➤ **Scoring the test**

- **It was based on the following categories:**
  - (1) mark for the low level in answering.
  - (2) marks for the intermediate answers with some mistakes.
  - (3) marks for the correct answer.
-

- The total test scores were (75).

➤ **Instructions of the test**

The instructions were presented in English. They were brief, simple to understand and free from any possible ambiguities. They contain information about the aim of the test, and the time allowed for answering it.

➤ **Piloting the test**

It was conducted prior to the real administration of the test. Twenty students were chosen of third year Hurghada Faculty of Education EFL students. Those students were excluded from participating in the real experiment. The piloting aimed to:

- Ensure the clarity of instructions,
- Suitability of the linguistic level of the participants, and
- Determine the validity, reliability and duration of the test.

In light of the pilot study, it was found that period of (60 + 5 for test instructions) minutes would provide enough time to perform the required answers. In addition, the results confirmed the clarity and the suitability of the test items to the students.

- The test was submitted to the jury members to report its validity. There was a consensus that the test was comprehensive and covered the aim and the intended learning outcomes.
- The reliability of the test was determined by using Cronbach Alpha formula. The reliability coefficient of the test (0, 775) and it was found to be significant at (0,01) level.

The researcher determined the test time by calculating the average of the time as follows:

$$\text{Test Time} = \frac{\text{answer time of the first student} + \text{answer time of the last student}}{2}$$

2

### 3. Web project-based learning program

It includes the behavioral objectives of each lesson, a description of the teaching procedures for achieving those objectives, and the learning activities which are varied to encourage students involving in deep practicing of life skills. Texts selected in the program are authentic and the topics are of students' interest.

The program requires every learner to have an account on Zoom clouding Meeting to practice the oral activities. As the learners are asked to practice in groups and pairs various language activities collaboratively. Thus, the teaching procedures in each session include presentation, practice for collaboration and evaluation. Moreover, learners were trained previously to communicate and join online through the application and how to interact with the group members.

The program was designed as a reference for the instructor to describe the procedures, directions, and guidelines for instructing the content in light of the web project-based learning. To design the program, the following steps were followed:

1. Reviewing the literature using web project-based learning in EFL classrooms.
2. Designing the initial version of it, which should have :
  - An introduction including the objectives and how to use it.
  - Suggested teaching procedures for the selected sessions.
3. Consulting a jury of TEFL experts to judge the suitability of it for teaching third year Hurghada Faculty of Education EFL students, the consistency of it with the procedures of web project-based learning, the sufficiency of activities and drills, the appropriateness of objectives, teaching aids, and evaluation techniques for students' level.

4. In light of the jury suggestions and recommendations, some modifications were carried out: adding some evaluation items to assess the achievement of all the objectives, modifying some behavioral objectives, and adding more instructions for executing activities.
5. Adapting the program and preparing the final version.

## **Procedures of implementing web project-based learning program**

### **Project Launch**

In this stage, teacher warms up students to the basic project of the sessions; he encourages curiosity, support and interest of students to explore the content. These elements can vary depending on the content (e.g., simulation of a real-world scenario, a video, hands-on activity). After an entry event, students should be able to start considering their “need to know”, the relevance of the question, and how the target audience could be.

### **Ideation & Inquiry**

Students build knowledge and understand the skills to do the project. They find resources that they can use, determine and assign roles for collaborative components, and engage in activities that build their knowledge.

### **Develop, Critique & Revise**

This process guides students through questions such as “Do I need more information?” and “Is this clearly communicated?”. Then peer critique, feedback from the teacher and product revision are interwoven throughout the inquiry process (involved in an oral discussion).

### **Presenting & Defending Products**

This process consists of presenting the project to other group to demonstrate the value of the students’ learning processes and their place in the group. Additionally, students are actively and

authentically reflecting on their work and its future applications as they present and explain their product.

## 12- Results of the study

The quasi experimental design of the study depended on comparing the experimental group scores in life skills test before and after teaching by using the web project based-learning program. The researcher analyzed the quantitative data using “Z” test formula.

### ➤ Testing Hypothesis (One):

- There were statistically significant differences between the mean scores of the participants in the pre/post testing of life skills favoring the post one.

**Table (1)**  
**Wilcoxon Signed Ranks Test Analysis of Scores Obtained by the Participants in the Pre/Post Testing of life Skills**

Group	No.	Mean	Std. Deviation	"Z" value	Sig.	Effect Size
Pre	20	31.500	5.093	3.929	0.01	0.88
Post		60.100	2.511			

**Maximum score = 75**

According to the data in table (1), "Z" value is (3.929), which is significant at (0.01) level. This finding affirmed and supported hypothesis one and indicated that the participants surpassed in the post testing of life skills. It is clear that using the web project-based learning program has a positive effect on developing EFL students' life skills.

### ➤ Testing Hypothesis (Two):

- There were statistically significant differences between the mean scores of the participants in the pre/post testing of the collaboration skills favoring the post one.

**Table (2)**

**Wilcoxon Signed Ranks Test Analysis of Scores Obtained by the Participants in the Pre/Post Testing of the Collaboration Skills**

Group	No.	Mean	Std. Deviation	"Z" value	Sig.	Effect Size
Pre	20	9.000	3.026	3.767	0.01	0.84
Post		16.600	1.095			

**Maximum score = 21**

According to the data in table (2), "Z" value is (3.767), which is significant at (0.01) level. This finding affirmed and supported hypothesis two and indicated that the participants surpassed in the post testing of the collaboration skills. It is clear that using the web project-based learning program has a positive effect on developing EFL students' collaboration skills.

➤ **Testing Hypothesis (Three):**

- There are statistically significant differences between the mean scores of the participants in the pre/post testing of the communication skills favoring the post one.

**Table (3)**

**Wilcoxon Signed Ranks Test Analysis of Scores Obtained by the Participants in the Pre/Post Testing of the Communication Skills**

Group	No.	Mean	Std. Deviation	"Z" value	Sig.	Effect Size
Pre	20	12.050	2.502	3.912	0.01	0.88
Post		22.300	1.031			

**Maximum score = 27**

According to the data in table (3), "Z" value is (3.912), which is significant at (0.01) level. This finding affirmed and supported hypothesis three and indicated that the participants surpassed in the post testing of the communication skills. It is clear that using the web project-based learning program has a positive effect on developing EFL students' communication skills.

➤ **Testing Hypothesis (Four):**

- There are statistically significant differences between the mean scores of the participants in the pre/post testing of the critical thinking skills favoring the post one.

**Table (4)**

**Wilcoxon Signed Ranks Test Analysis of Scores Obtained by the Participants in the Pre/Post Testing of the Critical Thinking Skills**

Group	No.	Mean	Std. Deviation	"Z" value	Sig.	Effect Size
Pre	20	7.300	1.040	3.359	0.01	0.98
Post		14.900	718			

**Maximum score = 18**

According to the data in table (4), "Z" value is (4.359), which is significant at (0.01) level. This finding affirmed and supported hypothesis four and indicated that the participants surpassed in the post testing of the critical thinking skills. It is clear that using the web project-based learning program has a positive effect on developing EFL students' critical thinking skills.

➤ **Testing Hypothesis (Five):**

- There are statistically significant differences between the mean scores of the participants in the pre/post testing of the creativity skills favoring the post one.

**Table (5)**

**Wilcoxon Signed Ranks Test Analysis of Scores Obtained by the Participants in the Pre/Post Testing of the Creativity Skills**

Group	No.	Mean	Std. Deviation	"Z" value	Sig.	Effect Size
Pre	20	2.950	1.356	3.779	0.01	0.85
Post		6.300	923			

**Maximum score = 9**

According to the data in table (5), "Z" value is (3.779), which is significant at (0.01) level. This finding affirmed and supported

hypothesis five and indicated that the participants surpassed in the post testing of the creativity skills. It is clear that using the web project-based learning program has a positive effect on developing EFL students' creativity skills.

## **11- Discussion of the study**

The web project based learning program is directed to develop EFL students' life skills, the teacher received the students' ideas and gave them appropriate support in answering the questions and performing the tasks. The program consists of seven sessions of various interesting topics, in each session students are exposed to various activities to conduct specific project. Projects targeted are of group work where students are required to prepare a magazine article, design a digital story, design a poster, or narrate an experience.

According to the results of this study, it is obvious that using web project-based learning program has positive effect on developing EFL students' life skills and there are many reasons to explain these results; firstly, web project-based learning supported students' confidence when they collaborate with each other and communicate in English. According to Fried-Booth (2002), it provides chances for students to become more independent in learning and doing their projects. Larmer, Mergendoller and Boss (2010) assured that collaboration and communication skills encourage students to work together with their group members while doing their projects and solve problems to complete these projects.

Secondly, it motivates the students' ability to reason effectively, analyze, interpret, summarize and evaluate alternative perspectives, and think critically about choices and procedures (Trilling and Fadel, 2009). Moreover, it helps the learners to think creatively by using and creating a wide range of ideas; expound, refine, investigate, and assess unique ideas to improve and expand creative endeavors. In addition, implement

innovation through acting on creative ideas to make a tangible and valuable contribution to the field in which the innovation will happen.

Thirdly, this teaching method offered technology skills which supported students to become successful in the 21<sup>st</sup> century. During the sessions, technology provided more options for students to enhance their projects and help them to acquire the knowledge they needed. According to Stivers (2010), technology supports classroom instruction by creating chances for students to search for information, find the answer, solve the problem and succeed their projects efficiently. In addition, it involves students in the learning process and fosters their desire to explore relevant real-world topics or problems (Krajcik and Czerniak, 2018). It overcomes time and space limitations in traditional sessions. Teachers and students were using the web to access vast amounts of information and resources.

## **12- Conclusion of the study**

To conclude, it is clear that student will not develop one skill without developing the others. Thus, collaboration requires communication. Similarly, to collaborate effectively one has to analyze and evaluate others' perspectives, which involves critical thinking. Moreover, collaboration involves creating new ideas to the task one engages in.

## **13- Recommendations of the study**

Based on the results of the study, here are some recommendations for EFL third year students, teachers and course designer.

1. The students should be trained on and acquire life skills.
2. The teachers should avoid depending on traditional methods of teaching and start using modern methods, techniques and strategies to improve life skills.
3. The course designers should include life skills activities to prepare the students to the present and future life.

### **Suggestions for Further researches**

- Using web project-based learning to develop the soft skills of secondary stage students.
- Using web project-based learning to develop the negotiation skills of EFL students.

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