

## **Effectiveness of a Gamification-Based Enrichment Program in Developing EFL Creative Writing Skills among the Intermediate School Students**

Asmaa Shaei Alshuaifan

Assistant Professor of English Curriculum and Instruction  
College of Education

Princess Nourah bint Abdulrahman University

Email : [asalshuaifan@pnu.edu.sa](mailto:asalshuaifan@pnu.edu.sa)

استلام البحث: ٢٠٢٣/١٠/١٦ قبول النشر: ٢٠٢٣/١٢/١٢ تاريخ النشر : ٢٠٢٤/٤/١

<https://doi.org/10.52839/0111-000-081-022>

### Abstract

This paper aims to verify the effectiveness of a gamification-based enrichment program in developing EFL creative writing skills (fluency, flexibility, originality, and elaboration) among third intermediate grade students. The researcher adopted the quasi-experimental method (one-group pretest-posttest design) and applied a validated test of creative writing skills in short stories and a validated gamification-based enrichment program, including a teacher's manual and textbook, to a sample of (20) third intermediate grade students of the intermediate school at Princess Nourah bint Abdulrahman University in the second semester of 2021/2022. The results showed a statistically significant difference between the mean scores of the experimental group in the pre-test and post-test of creative writing skills in fluency, flexibility, originality, and elaboration, as well as the total score in favor of the post-test due to the gamification-based enrichment program. The effect size of the gamification-based enrichment program on developing the EFL creative writing skills among third intermediate grade students was high in each skill and the overall score, suggesting the effectiveness of the program. Therefore, the researcher recommended utilizing and implementing the gamification-based enrichment program to equip intermediate stage students with EFL creative writing skills.

**Keywords: Effectiveness; Enrichment program; Gamification; Creative writing skills**

## فاعلية برنامج إثرائي قائم على اللعب في تنمية مهارات الكتابة الإبداعية باللغة الإنجليزية لدى طراب المرحلة المتوسطة

د. أسماء شايح راشد الشعيبان

استاذ مساعد في مناهج وطرق تدريس اللغة الانجليزية  
جامعة الاميرة نورة بنت عبد الرحمن /كلية التربية

الملخص:

يهدف هذا البحث إلى التحقق من فاعلية برنامج إثرائي قائم على اللعب في تنمية مهارات الكتابة الإبداعية باللغة الإنجليزية (الطلاقة، المرونة، الأصالة، والإسهاب) لدى طالبات الصف الثالث المتوسط. واعتمدت الباحثة المنهج شبه التجريبي (تصميم الاختبار القبلي البعدي للمجموعة الواحدة) وطبقت اختباراً مصدقاً لمهارات الكتابة الإبداعية في القصة القصيرة وبرنامجاً إثرائياً قائماً على اللعب متضمناً دليل المعلم والكتاب المدرسي على عينة من (٢٠) طالبات الصف الثالث المتوسط بالمرحلة المتوسطة بجامعة الأميرة نورة بنت عبد الرحمن في الفصل الدراسي الثاني للعام ٢٠٢١/٢٠٢٢. وأظهرت النتائج وجود فرق ذو دلالة إحصائية بين متوسطات درجات المجموعة التجريبية في الاختبار القبلي والبعدي لمهارات الكتابة الإبداعية في الطلاقة والمرونة والأصالة والإسهاب، وكذلك الدرجة الكلية لصالح التطبيق البعدي. وأظهر الاختبار حجم تأثير البرنامج الإثرائي القائم على اللعب وفاعليته في تنمية مهارات الكتابة الإبداعية في اللغة الإنجليزية لدى طالبات الصف الثالث المتوسط والذي كان مرتفعاً في كل مهارة وفي الدرجة الإجمالية. ولذلك توصي الباحثة باستخدام وتنفيذ البرنامج الإثرائي القائم على اللعب لتزويد طلاب المرحلة المتوسطة بمهارات الكتابة الإبداعية باللغة الإنجليزية كلغة أجنبية.

الكلمات المفتاحية: الفاعلية؛ برنامج إثرائي؛ التلعيب؛ مهارات الكتابة الإبداعية

## Introduction

English is the international language of communication because of its widespread use and popularity. It is the language of international conferences and teaching some sciences, including medicine, engineering, and modern technology. It is also the language of the age and the language medium of education, publication, and international relations. Therefore, scholars and thinkers call English the global language. Learning English has become more important, and its proficiency has been prioritized by educational systems worldwide. Therefore, it is important in education, and its teaching is necessary to promote and share knowledge and experience.

Mirza (2018) highlights the importance of learning English, which has become the main tool for joining the local and international markets. Alessa (2017) stresses that learning English, in which about 80% of knowledge and sciences are published is a priority, not a luxury. Moreover, Abdullah (2015) argues that English causes openness to different cultures, makes people more aware of culture and identity, and promotes professional capacities and features. Studying languages gives a person several personal, social, professional, and economic features (Bohdanska, 2012).

The intermediate stage is between the preparatory stage, in which the students' mental and linguistic capacities are developed, and high school before joining higher education. Therefore, developing thinking and creativity-based writing skills influence the next stages, necessitating further interest in deepening the creative operations in the writing of students (Abdulazim, 2009). Teaching English in the intermediate stage primarily aims to enable students to master speaking, listening, reading, and writing and allow pre-high school students to have a sound basis for their future studies (Almezeny, 2021, p.211). Aldemerdash (2008) recommends the interest in creative expression for all educational stages because it significantly influences discovering and fostering talents, the taste of literary works, motivating imagination, and achieving fun and amusement.

Therefore, it is important to empower students in the four skills of English (listening, speaking, reading, and writing). As a goal of education, learning writing promotes students' abilities to acquire grammar and new vocabulary. According to Parilasanti et al. (2014), teaching writing ultimately aims to allow students to express their ideas in writing. Writing is involved in the linguistic, cognitive, social, and psychological development of the individual. It plays a vital role in school because it is comprehensive, manifests the development of other language skills, and enhances the overall achievement level (Al-Salami, 2011; Raslan, 2005).

Writing is more difficult than other language skills (Kollogg, 2008). Al-Hoshani and Al-Nisan (2020) report that the practice level is higher in listening, speaking, and reading because they are required and practiced daily, but writing is individual and requires independent practice and continuing training to achieve proficiency and creativity. Accordingly, the author argues that creative writing is considered by the teachers of English so that students can practice creativity in writing.

According to Jones (2014), creative writing is “a complex process that involves creative opportunism, a consolidation of an imaginal space within the texts, and mythopoesis” (p. 118). It is prose in which the writer highlights linguistic capabilities logically and systematically and controls the generated ideas and feelings to the cognitive and linguistic background in a unique and exciting style to create a new text rich in fluency, originality, and flexibility. The methods of handling an issue differ from one person to another and evolve through practice and training (Khader & Morisat, 2019, p. 2). Importantly, creative writing is the best approach to stimulating creativity, curiosity, self-trust, language performance, and expressing opinions among students (Davies, 2015).

Furthermore, Abdulbary (2014) and Al-Masry (2006) pointed out that modern theories view the creative text as a science that reflects many considered psychological practices. Creative writing is more important for the intermediate and high stages because they are rich in science and knowledge, and the mental, emotional, social, and linguistic development of students makes their writings polished, beautiful, and creative. In these stages, students can express and share their ideas, emotions, and feelings in a well-written literary medium

(Al-Samman, 2011, p. 267).

Creative writing skills are related to creative thinking skills. They should have fluency, originality, flexibility, and elaboration (Abdulbary, 2014; Al-Harthy, 2009). Because of their importance, several studies addressed developing creative writing skills in the different stages of education. For instance, Aly (2014) recommended developing creative writing skills using a proposed language games-based strategy. Abdulazim (2009) concluded that the experimental group (using divergent thinking) achieved better results in creative writing skills. This strategy gives students free thinking, avoiding traditional restrictions, and creating new relationships and ideas. Despite the importance of creative writing, students' creative writings suffer weakness and shortcomings, such as the inability to express themselves and their needs and problems correctly, poor language, ambiguous and disorganized ideas, poor phrasing, and weak representation (Madkour et al., 2016). Bakhit (2013) and Jalhoum (2010) argue that this weakness results from the adopted educational strategies and programs for teaching language, especially creative writing, that affect higher-order thinking skills, promote awareness, trigger thinking, and utilize creative abilities among students. Traditional methods for teaching writing are no longer able to achieve the expected results, as reported by Al-Ardan (2010), Ahmed (2020), Talahmeh (2019), Kamel and Eid (2019), Al-Jubouri (2019), Qahuf (2018), Yassin (2018), Maktouf (2018), Al-Ahwal (2018), Al-Anzi (2018), Al-Hourani (2018), Al-Tuwairiki (2017), Al-Shammari (2017), Abu Jarad (2017), Ahmed (2016), Marisat (2015), and Al-Sayej (2014) that developing creative writing skills requires utilizing some motivating strategies, environment, and teaching methods that promote free expression.

Recently, some teaching models and strategies have emerged and achieved remarkable success in e-learning environments utilizing games due to their attractive features, such as gamification (Ibanez et al., 2014). This strategy uses game technology and thinking games in non-play applications to engage learners in education and develop their skills in solving various problems. It is a process of determining game elements to make games more fun and motivating for learners to continue playing and using them in a non-play context to affect behavior in different educational courses (Deterding et al., 2011).

It is based on the flow theory because flow, according to Krist (2014, p. 2366), is an ideal psychological state that people have when engaging in an activity that is a challenge appropriate to the skills of the individual and often causes more focus and engagement in the task, leading to deep learning and high levels of personal satisfaction about the work. There are eight components of flow: Complete concentration on the task, clarity of goals and reward in mind, immediate feedback, transformation of time, intrinsically rewarding experience, effortlessness and ease, a balance between challenge and skills, merging actions and awareness, and losing self-conscious rumination. Gamification supports and promotes structuralism ideas, which call students to learn actively as part of their learning because knowledge building is achieved through interaction with the surrounding environment and the freedom to seek knowledge (Sætre, 2013).

The basic notion of gamification is using the motivational gap for games for other purposes not related to entertainment. It emerges from the spread of marketing to different contexts, including business and education (Kapp, 2012). Kickmeier-Rust et al. (2014) describe gamification as a promising approach to using the strong motivational capabilities of games in the classroom without deficiencies, e.g., low efficiency and weakness of education. Jared and Peter (2018) argue that gamification exceeds mere playing to utilizing the exciting aspects of playing for other purposes. Moreover, Wolf (2020) points out that students can be trained in the basic principles of gamification to improve students' practices and outputs. Thus, the author argues that using gamification in education is based on an important principle that the student practices playing positively, namely learning while playing. Gamification also makes students active and effective while acquiring skills in authentic educational contexts.

Educators, such as Asiksoy (2017), Carmichael (2016), Kingsley and Grabner-Hagen (2015), Jovanovic and Davidzic (2015), and Hamari et al. (2014) highlight several features of gamification that can promote English as a foreign language (EFL) creative writing skills, e.g., developing positive personal skills and behaviors, including perseverance and creativity, strong motivation to handle various problems, acquiring different skills and knowledge to promote thinking, teamwork, discipline, more freedom, and fun learning. It allows students to integrate content learning with 21<sup>st</sup> century learning skills in an attractive learning environment, achieve self-

actualization, express autonomy by having unique personalities, and continue self-learning.

This strategy includes collecting points and badges; challenges, levels, comments, and skills that the learner must master; more comprehensive activities that affect students' skills through a sense of competition, interaction, and reinforcement associated with creating internal motivation toward developing thinking for new knowledge and skills (Kim et al., 2016; Yildirim, 2016). Barata et al. (2013) and Todor and Pitică (2013) reported that using gamification elements promotes student interest in the educational content and participation in learning. Furthermore, Almawaly (2011, p. 7) reported that gamification elements promote student interaction with content and classmates and develop communication and interaction with the surrounding environment to enhance creativity and free expression in a socially accepted framework.

Many studies proved the effectiveness of gamification in teaching. For instance, Alkhobaraa (2020) concluded the effectiveness of gamification in developing academic achievement, achievement motivation, and attitude among intermediate school students. Alnady (2020) showed that gamification positively impacted developing creative thinking skills among basic third graders in science in Amman. Alamir (2019) illustrated the effectiveness and impact of using a gamification-based e-learning environment on website development skills and learning motivation among high school students. Al-Shammari (2019) reported the effectiveness of gamification in developing motivation toward learning English among high school students in Ha'il. Al-Ghamdi (2019) concluded the effectiveness of gamification in developing motivation toward mathematics among six grade primary students in Makkah.

Alomari et al. (2019) concluded that gamification techniques affect student learning considerably. Al-Otaibi (2018) highlighted that computer science teachers use gamification largely because of its effectiveness. Al-Hafnawi (2017) revealed the effectiveness of gamification in developing mathematical concepts among deaf students. Leaning (2015) revealed that gamification is a useful and valuable activity. Behnke (2015) illustrated that gamification design techniques provide motivating opportunities for students to engage in educational materials. Moreover, Nevin et al. (2014) demonstrated that gamification-based educational operations are welcomed by learners and used to develop strategies to enhance learning.

In sum, gamification proved effective in developing EFL creative writing skills. However, no study, to the author's knowledge, tackled the use of gamification in developing these skills among intermediate stage students in Saudi Arabia. Thus, there is a need to investigate the effectiveness of the gamification-based enrichment program in developing EFL creative writing skills (fluency, flexibility, originality, and elaboration) separately and as a whole among third intermediate grade students.

Statement of the Problem

As a supervisor of field training students in public schools, the researcher noticed the weak performance of EFL creative writing skills among intermediate stage students probably because the teachers adopt traditional instructional methods and strategies. A pilot study was conducted on a sample of (12) students at (Tallam) School in the first semester of 2021/2022. It included a test of some creative writing skills that focused on writing diaries. The results showed a low level of creative writing skills that scored (14.1). The mean performance of originality, flexibility, and writing mechanisms was small, and the fluency was (inferior). The means of originality, flexibility, fluency, and writing mechanisms scored (16.1, 19.1, 69.0, and 50.1), respectively.

Then, the teachers (11) and supervisors (4) of English in the intermediate stage were interviewed about the level of students in creative writing skills, the difficulties facing students and their causes, and the complaints from parents and their causes, if any. The results of analyzing the responses were as follows:

- Nine teachers (81.82%) and 4 educational supervisors (100%) indicated a low level of the performance of intermediate stage students in EFL creative writing skills.
- All teachers and educational supervisors reported that the difficulties facing students could be because of their low level in mastering the basics of correct writing in terms of form and content and the inability to taste the language, generate creative ideas, and express emotions creatively.
- Three educational supervisors (75%) reported that these difficulties could be due to the adopted instruction method of English, as the teacher is largely uninterested in developing creative writing skills and chooses traditional topics.
- Seven teachers (63.64%) confirmed their inadequate knowledge of modern instruction methods that could help them resolve the difficulties and develop creative writing skills among students.
- All participants reported a continuous complaint from the parents about the difficulty of EFL creative writing and that students often have low grades in them, which negatively affects their achievement in English.

Many studies, e.g., Mohammadi and Izadpana (2018), Al-Zahrani and Shabbat (2017), Al-Ahmadi (2014), Al-Hawamdeh and Ashour (2013), Abdulbary (2013), Rababaa and Abujamos (2012), and Agiz (2011), recommended using modern instructional strategies to develop creative writing skills (fluency, flexibility, originality, and elaboration) by encouraging students to have intellectual production characterized by originality and freedom of choosing ideas and topics because these studies reported the poor skills of students.

Gamification is one of the latest strategies that have proven effective in education because it allows students to determine the problem and solution and develop their emotional, social, mental, and creative aspects to promote their level, utilize skills, and attain objectives shortly with high quality (Saputra, 2015, pp. 38-39). According to Gooch et al. (2016), gamification is utilizing educational games or their elements in an educational activity or a set of dynamic activities to achieve educational goals.

It applies game elements and mechanisms in non-related contexts and areas, such as marketing, business, and education, to engage users in solving problems and achieving specific goals (Al-Qaid, 2015).

Several studies, e.g., Al-Kanaan (2022), Alhatalia et al. (2020), Aljahny (2019), Van Roy and Zaman (2018), Aşıksoy (2017), Dreon (2016), Shingo and Manabu (2015), Ibanez et al. (2014), and Fabricatore and López (2014), recommended utilizing gamification in education because it is effective, creates reinforced content, helps solve problems, and promotes cooperation and communication skills. Al-Ghamdi (2020) argued that gamification is relatively new and urges researchers to address other variables than motivation, achievement, and engagement and to vary the population because most previous studies investigated gamification in the university context.

Conferences, such as gamification in Europe annually held since 2017, provided relevant recommendations (Al-Ghamdi and Al-Hafizi, 2021). Moreover, the Virtual International Conference on the Future of Digital Education in the Arab World (2020) recommended developing curricula in line with digital education in all forms by employing gamification and others.

Therefore, the problem of the study is defined in the poor level and lack of creativity of intermediate stage students in EFL creative writing skills. They need certain teaching strategies to deliver academic content attractively and handle shortcomings and weaknesses in creative writing. The study aims to answer the following major question:

What is the effectiveness of a gamification-based enrichment program in developing EFL creative writing skills among third intermediate grade students?

It is divided into the following minor questions:

1. What is the effectiveness of a gamification-based enrichment program in developing fluency as an EFL creative writing skill among third intermediate grade students?
2. What is the effectiveness of a gamification-based enrichment program in developing flexibility as an EFL creative writing skill among third intermediate grade students?
3. What is the effectiveness of a gamification-based enrichment program in developing originality as an EFL creative writing skill among third intermediate grade students?
4. What is the effectiveness of a gamification-based enrichment program in developing elaboration as an EFL creative writing skill among third intermediate grade students?
5. What is the effectiveness of a gamification-based enrichment program in developing EFL creative writing skills among third intermediate grade students?

Objectives:

The study seeks to verify



- 1.The effectiveness of a gamification-based enrichment program in developing fluency as an EFL creative writing skill among third intermediate grade students.
- 2.The effectiveness of a gamification-based enrichment program in developing flexibility as an EFL creative writing skill among third intermediate grade students.
- 3.The effectiveness of a gamification-based enrichment program in developing originality as an EFL creative writing skill among third intermediate grade students.
- 4.The effectiveness of a gamification-based enrichment program in developing elaboration as an EFL creative writing skill among third intermediate grade students.
- 5.The effectiveness of a gamification-based enrichment program in developing EFL creative writing skills among third intermediate grade students.

### **Significance**

The study is significant because

- 1.It is an objective response to recent trends that call for developing EFL teaching procedures with a focus on creative writing skills and adopting strategies that develop the creative writing skills of students.
- 2.The development and standardization of EFL creative writing can help teachers identify the level of writing and assess the performance of intermediate school students in Saudi Arabia.
- 3.The study provides a guide to teaching English to third intermediate grade students using a gamification-based enrichment program to help teachers adopt this strategy after providing a practical vision of the learning procedures of gamification in improving the learning outcomes and overcoming the challenges of creative writing skills.
- 4.It provides a comprehensive enrichment program for developing creative writing skills with many games of enrichment activities for third intermediate grade students.
- 5.The results can draw the attention of curriculum planners and the staff of EFL teacher preparation to develop the appropriate plans and programs that help develop creative writing skills among intermediate school students and include gamification elements in English course to develop creative writing skills.
- 6.The study provides the Arab literature with the theoretical framework and literature on gamification strategy and creative writing skills that may help researchers.
- 7.It paves the way for conducting further studies on gamification, as an independent variable for developing language skills in the different educational stages and the impact of this strategy on other relevant variables.

**Delimitations** The study was limited to

**Spatial and human limits:** A group of third intermediate grade female students of the intermediate school at Princess Nourah bint Abdulrahman University, Saudi Arabia

**Temporal limits:** The second semester of 2021/2022

**Objective limits:**

- A set of creative writing skills: Fluency, flexibility, originality, and elaboration
- The short story to develop the gamification-based enrichment program to develop creative writing skills

**Hypotheses**

The present study seeks to validate these hypotheses:

1. There is a statistically significant difference between the mean scores of the experimental group in the pre-test and post-test of fluency as an EFL creative writing skill in favor of the post-test due to the gamification-based enrichment program.
2. There is a statistically significant difference between the mean scores of the experimental group in the pre-test and post-test of flexibility as an EFL creative writing skill in favor of the post-test due to the gamification-based enrichment program.
3. There is a statistically significant difference between the mean scores of the experimental group in the pre-test and post-test of originality as an EFL creative writing skill in favor of the post-test due to the gamification-based enrichment program.
4. There is a statistically significant difference between the mean scores of the experimental group in the pre-test and post-test of elaboration as an EFL creative writing skills in favor of the post-test due to the gamification-based enrichment program.
5. There is a statistically significant difference between the mean scores of the experimental group in the pre-test and post-test of the total score of EFL creative writing skills in favor of the post-test due to the gamification-based enrichment program.

**Definition of Terms**

**Effectiveness**

Shehata and Najjar (2013, p.12) define effectiveness as “the impact of experimental processing, as an independent variable, on dependent variables.”

It is procedurally defined as the change in the performance of third intermediate grade female students after applying the gamification-based enrichment program for developing EFL creative writing skills and measured by the difference between the means of students' scores in the pre-test and post-test of creative writing according to the effect size by Eta squared ( $\eta^2$ ).

**Enrichment program**

According to Zayer and Dakhil (2015, pp. 124-125), it is “a comprehensive system of the educational content, including knowledge, operations, skills, experiences,

activities, and teaching strategies for developing knowledge and scientific thinking skills of learners to enhance their achievement and ability to solve problems adequately.”

It is procedurally defined as a set of educational experiences and activities related to the lessons of some units of English for the third intermediate grade that were developed, planned, prepared, and designed by the researcher to broaden students' experiences through gamification-based educational situations and develop creative writing skills (fluency, flexibility, originality, and elaboration) in the artistic short story.

### **Gamification**

Llorens-Largo et al. (2016, p. 227) define gamification as “the application of strategies, models, dynamics, mechanics, and elements of the games in other contexts than games, and the objective of producing a playful experience that fosters motivation, involvement, and fun.”

It is procedurally defined as a set of teaching steps adopted by the teacher in planning, implementation, and evaluation based on the game elements in non-game contexts for educational purposes to teach third intermediate grade students to create a motivating environment characterized by interaction and fun to master educational experiences, achieve the desired objectives, and make education and learning more effective.

### **Creative writing skills**

Yunes (2010, p.433) defines creative writing as “expressing the self or emotions in a poem, story, literary essay... etc., towards various contexts using a rhetorical style to achieve a strong effect among recipients.”

Ahmed (2016, p. 13) defines creative writing skills as “the student's ability to produce written texts with the highest fluency, flexibility, originality, and elaboration.”

EFL creative writing skills are procedurally defined as The ability of third intermediate grade students to select appropriate vocabulary and build and provide sentences in coherent paragraphs to express the self, feelings, ideas, emotions, and opinions about a certain topic in a literary, error-free, eloquent, clear, and accurate style through multiple vocabularies and structures (fluency), variety (flexibility), novelty (originality), and details (elaboration) in the artistic short story using a well-written, fun, and unique manner to achieve fun and persuasion among participants. They are determined according to the score of the student in the creative writing test developed for this purpose.

### **Theoretical Framework**

#### **I. Gamification strategy**

##### **-The concept of gamification**

Schöbel et al. (2020) define gamification as “adding game elements, e.g., points, badges, leaderboards, and rewards in various forms to non-play contexts and

environments to create a competitive environment that stimulates the desired behavior.”

Kim (2019) states it is “a set of interrelated activities and processes to solve challenges using game features and elements.”

Landers (2014) defines gamification as “utilizing game elements, e.g., excitement, evaluation, imaginative play, control, human interaction, immersion, rules, and objectives to facilitate the achievement of learning goals.”

According to Hsin et al. (2013), it is a training and educational approach to motivate students to pursue educational tasks using game elements, aiming to maximize fun and engagement.

Huotari and Hamari (2012) define it as “using game elements and thinking methods in non-play environments to promote behavior.”

Gamification is “using the mechanic based on playing, aesthetics, and thinking style to engage the individual, motivate work, encourage learning, and solve problems” (Kapp, 2012).

It is the application of game mechanics and design techniques to engage and motivate individuals to achieve their goals (Zichermann & Linder, 2011).

Deterding et al. (2011) define gamification as “using game design and features in non-game contexts to indicate life-related contexts.”

The basic idea of gamification is using the game rules and mechanisms to help students engage in enriching activities to exchange experiences in fun and stimulating ways to raise the quality of their lifestyle (Kim & Lee, 2015). The researcher concludes that gamification transfers the game elements and mechanisms, e.g., points, badges, stages, awards, challenges, and leaderboards, to authentic educational contexts and increase enthusiasm, suspense, and motivation to promote interaction with the educational content to develop EFL creative writing skills. Moreover, gamification differs from games as it uses game elements in non-play contexts and employs various elements (points, badges, levels, ...), of which one or more can be used in new environments.

### **- Gamification elements**

Hunicke et al. (2004) categorize gamification elements into three basic components.

#### **1. Mechanics:**

The various actions, behaviors, and control mechanisms afforded to the player in a game context. Bunchball.com (2012) lists the most common mechanisms as follows:

- Points: They are used to reward users, motivate certain behaviors, and indicate progress.
- Levels: They indicate the user’s access to a certain achievement level.
- Challenges and titles: Challenges provide users with tasks to be accomplished and rewarded. They give players goals and a feeling of accomplishment. Moreover, titles represent the visual perception of reaching a certain level.
- Virtual goods: They make the game more effective by finding a place to spend and redeem points.

- Leaderboards: Lists of the first contestants to motivate them and show progress.
- Feedback mechanisms: The method of providing feedback instantly to players.

## **2.Nature of interaction (dynamics):**

Dynamics determine reactions to using mechanisms. They form the players' behavior styles and describe the behaviors, practices, and reactions during play. They are at the top of abstraction and differ from the game rules and laws. Dynamics form the implicit structure that forms conceptual factors of the game's framework and make the game more coherent. Dynamics include the following human desires:

- Restrictions (binding limits);
- Feelings (curiosity, competition, happiness, and achievement);
- Narration (ongoing story);
- Progress (player's growth and development and competition);
- Relationships (social interactions, friendship, status, and altruism);
- Self-expression (avatars of the players).

Each mechanic is a way to randomly achieve one or more dynamics, such as the pop-up award that stimulates a sense of fun and curiosity in players.

### **1.Game aesthetics:**

Mechanics express how games or systems transform certain inputs into outputs, dynamics guide how players and game mechanisms interact, and aesthetics indicate the way of interaction of mechanics and dynamics with the game designer to achieve cultural and emotional outputs (Zichermann & Linder, 2011). Additionally, aesthetics express the appearance (visual elements) of the game, including colors, diversity, originality, fun, and display stages. They are more specific models that dynamics or mechanics can rely on.

### **-Gamification elements in education:**

They are the essence and main component of gamification. They vary from one angle to another. Gómez (2020), Rahili (2018), and Raymer (2011) mention that gamification elements in the learning environments are:

- Setting goals: Specific, measurable, scalable difficulty, and multi-level
- Feedback: Regularly illustrating progress and improvement of learning
- Scoring: After successfully completing lessons, students move to higher levels and more difficulty.
- Badges: After completing the task at each level at the required speed and efficiency.
- Individual progress: Each student answers at one's pace, receives feedback, collects points, and progresses in levels.
- Learning metrics: Learning time, badges, and levels.
- Rewarding effort, not just success: Several small rewards with every effort are better than just one big reward at the end.
- Reward scheduling: Awards are provided throughout the learner's study with three main elements, i.e., prerequisites, response, and motif.
- Peer motivation: In shared tasks, goals, or group rewards.

- Redeemable points: Strategically grouped with a special event and redeemed for other valuables or with other participants.
- Reactions: Instant and closely related to the intrinsic motivation to overcome the challenge.
- Pop-ups: A pop-up disappears if the required action is not implemented immediately.
- Assignment dynamics: A time is set for an event.
- Sanction breaks: A sudden stop usually used in the required procedures.
- Random rewards: An unknown reward for doing the action based on chance and luck.
- Videos: Embedded in an activity.
- Avatar: Visual representation of the learner.

Glover (2013) reports that the main element of gamification is that learners perform tasks by scoring, moving to higher levels, and rewarding to achieve the desired educational goals. Ejsing-Duun and Karoff (2014) and González and Carreño (2014) illustrate that gamification elements are often used in learning contexts to motivate students to learn because gamification fulfills some basic human desires or needs: Appreciation, reward, achievement, competition, cooperation, self-expression, and altruism. People need these elements clearly in the real or virtual world.

Alexe et al. (2013) explain that gamification allows the instructional designer to choose adequate gamification elements to make the experience attractive without compromising the educational value. Furthermore, Hamari (2014) indicates that points, levels, and badges are the most common gamification elements in education. Therefore, the researcher argues that studying all these elements and their impact on students is difficult, so they should vary because some elements largely stimulate the student's internal motif, and others stimulate the external motif.

#### **-Gamification types:**

**According to Kapp et al. (2014), gamification has two types.**

-Structural gamification: In this type of gamification, game elements are added to the structure of the content, but the content itself remains unaltered. The content is not similar to the game, but the surrounding structure is, such as progression-based. Its most common elements are points, badges, achievements, and levels.

-Content gamification: In this type, gamification elements are integrated into the content to be more like a game, such as turning the lesson into a story or a set of stages and challenges with gamification elements included in the activities.

Chou (2017) mentions that some teachers wrongly believe that gamification is about adding points, badges, and leaderboards to the usual boring tasks because the fun is achieved by external gamification elements, strategic elements, and important activities. In addition, Wilson et al. (2016) argue that the effective design of gamification is through including its elements in the task. Thus, the researcher believes in the importance of both types for students.

Al-Qahtani (2017) categorizes the types of gamification in education into:

1. Electronic gamification: It relies on technology in applying game elements in the learning environment.
2. Blended gamification: It blends tradition and technology in applying game elements in the learning environment. It is the strategy adopted in the present study.
3. Traditional gamification: It is about applying some game elements in learning environments and relies on the teacher for classroom management.

#### **-Requirements for the effective use of gamification in education:**

Hakak et al. (2019) identify a set of specifications for effective gamification in education as follows:

- Motivation: A large set of included stimuli that help learners continue learning
- Short-term tasks: Because long-term tasks cause boredom and loss of concentration
- Reward system: Once the task is completed, the learner should receive some reward, such as points or gift cards.
- Task design: A difficult task design may cause tension and discourage the learner; thus, the design should balance the task with its requirements.
- Determining the nature of gamification elements in each task by the teacher:

Al-Zuhair (2017) mentions a set of controls for the successful use of gamification in the classroom, such as adhering to the official evaluation criteria, linking rewards to learning objectives, understanding learners' behavioral patterns and motifs for rewarding and peer motivation, and rewarding all learners with rewards of various levels.

#### **-Principles and steps of the effective use of gamification in education:**

Understanding the principles of the appropriate use of gamification helps its success. According to Hsin (2013) and Simoes (2013), these principles are:

##### **1. Determining the characteristics of learners and the circumstances surrounding learning:**

Analyzing the target group in terms of the age group, circumstances, identifying the abilities and skills, defining the type and duration of the program, and determining the requirements and environment.

##### **2. Setting learning objectives and outcomes:**

Accurate knowledge and clear learning objectives among teachers help achieve the required learning outcomes better.

##### **3. Creating content and educational activities for gamification:**

Educational content should be interactive, participatory, and rich in multimedia elements.

3. **Forming experiences:** Gradual achievement of the content's objectives, dividing them into small ones, and progress in difficulty, and considering students' abilities because the stage or objective enhances motivation and goal achievement.

#### **4.Determining resources:**

Correct implementation of gamification should include these elements: Resources for applying gamification, a clear mechanism of progress measurement, mastery criterion for each level or goal, clear applicable rules, and feedback for the teacher and learner.

#### **5.Application of gamification elements:**

Gamification elements can be divided into subjective and social. Subjective elements make the student have self-competition and take pride in achievement and self-realization, such as points, badges, medals, and personal achievements. Social elements require students to exist in a society with common achievements and progress, such as leaderboards.

In sum, these principles are important. Coherent application of these principles, steps, and procedures involving a deep analysis of the current circumstances and available software tools causes the success of gamification in education.

#### **-Importance of using gamification in education:**

Tomei (2017) illustrates that using gamification in education mainly aims to make students involved, practitioners, and motivated to learn. Moreover, it provides teachers with better tools to guide, reward, and encourage students to pursue learning.

Using gamification in education provides several benefits reflected in promoting learners' skills and levels, such as maintaining teamwork, promoting discipline, more freedom, attaining better results, enjoying content, higher motivation, and instant feedback to learners (Al-Qahtani, 2019; Al-Mallah & Fahim, 2016).

The researcher concludes that the advantages of gamification are the same as those of educational games. In addition, gamification helps eliminate the difficulties of educational games. Challenge, motivation, interaction, participation, and fun exist in the gamification environment that does not require a special design.

In sum, gamification benefits from the game elements and simulation in a non-play manner to achieve certain objectives or solve educational problems to help students learn in a unique and fun manner. It increases positive competition that stimulates learning motivation based on features, needs, and individual differences. It also reduces a feeling of failure, promotes positive participation, and has a sequence of tasks.

## **II. Creative writing**

### **The concept of creative writing:**

According to Al-Khudari (2020), it is "a language activity that a learner employs to express thinking, feelings, and emotions in responses to a stimulus to attain a strong effect, provoke emotions, and achieve emotional participation with the writer to be convinced with the case in an original, flexible, accurate, and aesthetic writing."

Taha and Al-Zahrani (2020, P. 70) define creative writing as "a form of writing that expresses personal feelings and emotions, differs from one person to another according to culture and knowledge, and has flexibility, originality, and aesthetics."



It is a productive process that requires a set of overlapping mental and linguistic abilities and skills that make the writer able to choose the appropriate vocabulary and build clear structures, sentences, and paragraphs due to mixing current and background knowledge to provide them to the recipient in a usual coherent manner (Rababaa & Abujamos, 2012).

According to Abdulbary, (2014), creative writing stimulates an issue or case for clarification in a framework of aesthetic form and content and emotionally affects the recipient.

The researcher concludes that creative writing relates to two issues: The first is concerned with the written expression of thoughts and feelings, and the other relates to the unique expression of such thoughts and feelings. The student experiences some mental, intellectual, and emotional processes to distinguish a student from the other according to one's language abilities and employing creative potential via broad imaginations and mental images reflected in the aesthetics of writing.

### **Fields of creative writing:**

In teaching creative writing, a teacher should consider a set of creative writing fields by choosing the topic to motivate the learner to master the language style. Maley (2012) and Scrivener (2011) define the fields of EFL creative writing as follows:

Books and records: A written activity aimed at recalling the goals set.

Diaries: A record of all daily events in a clear sequence

Articles: Personal, descriptive, and persuasive

Storytelling: It is the most creative type of writing because it gives way to fiction and fictional reality, including folk, short stories, and novels.

Personal memoirs: Personal stories about certain topics, focusing on specific personal experiences

Messages: They demonstrate the ability to communicate effectively with classmates.

Manuscripts: e.g., writing scripts for films and programs that can reach a new audience.

The study is limited to one field, i.e., artistic short stories.

According to Mohamed (2012), it is a set of narrated events that depict a life sector limited to one or more mutually related events. A writer creates a separate issue with characters and components and depicts a complete position in terms of analysis, treatment, and influence on the recipient.

It is a fictional expression of a realistic composition to entertain the reader and introduce events or personal experiences that have changed a way of life in a literary style with components and elements. It stimulates feelings, triggers emotions, and captures the mind more than other literary arts (Al-Sufi, 2009).

Ashour and Makdadi (2013) argue that the short story achieves pleasure and fun for the student, enhances learning motivation, develops language, and enriches the language lexicon with vocabulary, expressions, and structures. It refines one's style and develops imagination by depicting events and things in a way that differs according to the stages of cognitive development.

This affirms that training in writing or tracking a story develops the students' creative writing skills by enabling them to define ideas clearly and creatively, generating original ideas, and enriching the details that clarify the general idea and link and narrate ideas in a manner that achieves the aim of the story (Abdulbary, 2014).

### **Creative writing skills:**

Alouzi and Qatami (2008) report that creative writing skills are "the sum of language, creative, and intellectual skills that a talented student can utilize to write in a creative elaborated style. Creative writing requires some performance, mental, and language skills involved in the higher mental processes (Khasawneh, 2008, p. 63). Abdulbary (2013, p. 64) categorizes creative writing skills into structural, visual, stylistic, and writing mechanisms skills.

Abu Saif (2017), Al-Qarni (2012), and Al-Salami (2011) agreed on classifying creative writing skills into four main skills with minor ones, as follows:

- Fluency skills: Providing the largest number of ideas related to the topic, writing as many titles appropriate for one idea as possible, writing as much synonymous of a word as possible, writing the largest number of results of a certain idea, writing as many similarities and differences between two ideas as possible, and highlighting linkers between sentences.
- Flexibility skills: Providing various ideas related to the topic, varying methods of expressing ideas, combining the composition and rhetoric methods, changing the written meanings based on the context, and writing various uses related to an idea.
- Originality skills: Writing creative ideas, expressing feelings and emotions with unduplicated words and structures, linking the ideas of the issue creatively, creating an original conclusion, and employing words and sentences in a non-recurring.
- Elaboration skills: Adequate use of the figures of speech, providing illustrative and supporting ideas, writing explanatory sentences of the topic sentences, elaborating minor ideas, and stimulating ideas and topics relevant to the issue.

### **The present study utilizes the previous creative writing skills in the short story as follows:**

1. **Fluency:** It is the student's ability to generate many verbal and performance ideas about an issue. It is determined by the number and speed of responses, such as
  - Writing as many headlines as possible for the story;
  - Generating as many sub-ideas as possible;
  - Varying sentences and phrases to express the story actions;
  - Using many figures of speech;
  - Writing as many complexes of a story with a definite beginning and end;
  - Generating secondary characters that help develop the story's actions.

1. **Flexibility:** It is the diversity and uniqueness of ideas provided by the student who can move from one idea to the other freely, such as

1. Writing multiple and diverse actions;
2. Changing the course of actions, if any;
3. Introducing secondary characters that support the actions;
4. Gradual introduction of the conflict;
5. Sequence of ideas;

- Writing several endings for one beginning and several beginnings for one end.

3. **Originality:** It is the most related skill to creativity and expresses the student's ability to generate ideas or innovative solutions, such as

- Creating a distinctive title for the story;
- Formulating a new general idea for the story;
- Writing novel ideas;
- Linking story actions creatively;
- Writing an unfamiliar conclusion.

4. **Elaboration:** It is the student's ability to add new and diverse details to an idea or find a solution to a problem, such as

- Elaborating the story with details that illustrate the general idea;
- Adding multiple aspects to the story's characters;
- Providing details explaining the roles of the characters in the story;
- Reporting the plot's details;
- Illustrating the effects in the setting.

Accordingly, the researcher concludes that creative writing has unique special skills that must be determined to distinguish it from other writings and develop a criterion for measuring the creative performance of students.

#### **Creative writing characteristics:**

According to Taha and Al-Zahrani (2020, pp. 70-71) and Al-Ardan (2020, p. 66), creative writing has many characteristics, such as language innovation, using more rhetorical and literary methods, using several figures of speech and words with multiple connotations, good phrasing, depending on the broad background and life experiences of the writer, originality, flexible presentation of ideas, providing a socially valuable structure, and concluding results from the introduction and plot.

#### **Principles of teaching creative writing:**

Some requirements for creative writing tasks should be met (Maley, 2012):

- Creating a pleasant, relaxed, and supportive classroom environment.
- Encouraging and developing cohesion and collective cohesion among learners.
- Increasing learners' expectations of the success of certain tasks and learning, in general.
- Making learning exciting and enjoyable by overcoming the dullness of events in the classroom.
- Making learning stimulating and enjoyable with more attractive writing tasks

- Making learning stimulating and enjoyable by engaging in groups with active colleagues.
- Presenting and managing writing tasks in a stimulating manner.
- Providing learners with experiences to succeed often.
- Building learners' self-confidence through words of encouragement regularly.
- Developing motivation by enhancing learners' cooperation.
- Developing learning motivation by promoting autonomy in writing tasks.
- Increasing learner satisfaction.
- Offering material and moral rewards in a motivational manner.
- Bland (2011) mentions a set of the basics of teaching EFL creative writing, namely:
  - Allowing the teacher adequate time to teach well and quickly;
  - Scrutinizing details and identifying similarities and differences between ideas;
  - Classifying vocabularies and sentences;
  - Planning writing to keep time and effort and making and organizing ideas according to the allocated time
  - Continuous review of writing styles, sentence writing methods, and vocabulary use;
  - Using a good dictionary to ensure using appropriate words and structures;
  - Varying writing styles;
  - Balancing the introduction of ideas.
- Thus, the researcher argues that a teacher should consider some principles for teaching EFL creative writing:
  - Teaching in an inspiring environment to promote the desire to write original pieces that express their ideas and feelings towards experiences.
  - Avoiding criticism and stress to students; the teacher accepts even naive attempts, rewards brilliant students, and accepts attempts as long as they are based on independent free thinking and creative expression of ideas and emotions patiently.
  - Objective evaluation of students and considering individual differences; not all students can provide distinguished literature, and their self-expression is accepted.
  - Providing students with equal opportunities to express themselves; the teacher's role is motivation, providing several writing styles, and guidance.
  - Diversity of students' writing and self-expression without affecting their ideas.

### **Importance of creative writing:**

Creative writing promotes self-expression, expressing powers, and satisfying self-needs, which causes comfort, satisfaction, self-confidence, and self-assertion. It makes the individual express feelings and emotions, interact with others, and plays a part in solving community issues and problems appropriately

(Al-Doyan, 2015, p. 15).

Abdulbary (2013) argues that creative writing is important because of the language activity that allows students great opportunities to express emotions and feelings elegantly, stimulates intellectual, language, and visual expression of the intended meaning, promotes literary taste and thinking, develops a good selection of

vocabulary, and helps identify the gifted and linguistically talented students to develop their skills and promote their abilities.

Maley (2012) illustrates that creative writing achieves the pleasure of the learner, helps refine and develop his literary talents, develops self-expression, promotes self-confidence and self-esteem, urges exploring things themselves, and enhances personal and language development.

Moreover, Scrivener (2011) asserts that creative writing is the best reliable method for training the learner in syntactic structures, using them in different life situations, and practicing figures of speech, parts of speech, conditionals ... etc.

According to Al-Sarraf and Khayyal (2018), Farraj (2015), Katerina (2015), and Yunes (2010), creative writing skills are important because

-Creative writing allows students to practice and use language skills as a tool for expressing the self, feelings, thoughts, and imaginations and discover their inner talents that can be refined and developed.

-Creative writing satisfies students' attitudes and needs.

-It is a language activity that addresses and communicates thoughts, emotions, and feelings to others. It helps students attain new goals.

-It enriches students' language with words, structures, and awareness.

-Teaching creative writing triggers students' enthusiasm and confidence, so they can write about things that matter to them to control language production.

-It gives a broader area for imagination and mind and develops observation, sequence, linking, and discovery to develop student thinking.

The researcher argues that teaching creative writing and developing its skills is important because it promotes literary taste and encourages expressing ideas and opinions in a literary style and guiding them appropriately in the different arts, including short story, poetry, or essay.

### **Gamification and the development of creative writing skills:**

Creative writing skills are intricate because when a student can err when writing any sentence, so they should be taught well (Rababaa and Abujamos, 2012). A student needs to take care of one's reflective ideas and writing skills, which requires time, practice, and training.

The poor writing ability of students is due to the type and quantity of writing teaching, which is irregular (Al-Haddad, 2005). To develop creative writing skills, researchers are interested in employing modern teaching methods centered on the student (Al-Zubaidi et al., 2013).

Because of its characteristics, capabilities, features, and advantages, gamification is expected to play an active and influential role in developing cognitive aspects and skills. It also motivates learners to learn by adding game elements to educational contexts (Hayek, 2017). Rasool et al. (2014) and Goehle (2013) report that gamification mainly promotes students' skills and encourages implementing steps at their own pace, which helps them understand most aspects of education.

Han (2015) argues that gamification must allow students to learn and practice basic skills to master advanced tasks, set clear short-term and long-term goals, learn at their own pace safely, and create a learning environment. Gamification helps students to have intrinsic motivation with a focus on the content.

Thus, gamification has great potential to develop creative writing skills to motivate students to participate in educational activities and acquire such skills. Additionally, gamification is easy to use and only requires integrating the gamification elements with educational activities. The researcher argues that there is a relationship between strategy and treating deficiencies and weaknesses in creative writing skills. Acquiring these skills requires highly complicated mental practices, e.g., planning, organization, interpretation, restructuring, brainstorming, free imagination, as well as observation, discovery, various knowledge, and innovation. It requires an educational strategy that stimulates thinking, brainstorming creatively, and forming and transforming creative ideas in written forms to promote writing quantitatively and qualitatively. Gamification elements, e.g., tasks, challenges, levels, competition, rewards, and storytelling, affect the level of creative writing among students, as follows:

- Gamification allows employing tasks that stimulate thinking and using organized mental processes, which positively influences developing creative writing skills among students.
- The fun of gamification directs students' attention to writing-related academic tasks; benefiting from creative thinking methods to develop EFL creative writing skills.
- The tasks and challenges of gamification may require students to generate ideas and employ imagination in a fun way, which develops creative writing skills.
- Gamification allows students to start with simple levels and progress to difficult ones, which may develop their ability to creatively use background knowledge and the ability to produce multiple creative and elaborated answers. This issue develops the students' EFL creative writing skills.
- Gamification encourages student competition and rewarding, which makes students motivated and active, develops challenge and perseverance, and promotes creative writing skills. Having a stimulus can motivate students to influence and interact with what the teacher presents and express ideas, attitudes, and values of the story to be expressed in creative writing.
- Adding a story to gamification allows students to apply knowledge in new situations, which develops the creative use of background knowledge and generates various creative responses.
- Some gamification elements, such as clear goals, promote students' understanding of the purpose of learning and reduce confusion, fear, or other negative academic feelings. It can enhance positive academic feelings, such as joy and excitement. Thus, it positively develops creative writing and develops its skills. Jaafara (2018) stresses that developing any skills requires developing students'

responses towards it because developing positive attitudes is one of the basic goals of education.

- In gamification, the student receives instant feedback, which increases early success and promotes self-confidence. Even in cases of failure, providing feedback gives the student information for other trials, which enhances self-efficacy and develops creative writing skills.
- Some gamification elements allow students to engage in teamwork, competition, and creative situations, which promotes creative writing according to fluency, flexibility, originality, and elaboration.
- Gamification, among others, insists on meaningful learning and focuses the activity of students on enhancing understanding, linking information, and retaining the learning impact longer.
- Gamification promotes freedom, e.g., freedom of experience, freedom of failure, and freedom of self-expression, which denotes an educational shift in handling students with high educational aspirations that are hindered by traditional teaching methods.
- By providing the motivation to learn, gamification makes difficult educational tasks, e.g., creative writing in English, fun and achievable. Hence, students spend more time, which positively affects skill development.

**In sum**, gamification is an important modern strategy that can be employed to develop creative writing skills through the stages experienced and processed by students to produce creative writing and develop its skills. It allows students to learn in a fun and thought-provoking manner to overcome the traditional method of thinking. It also has elements of creativity and excitement. Thus, the researcher selected this strategy to develop creative writing skills among intermediate stage students in Saudi Arabia.

Gamification makes students totally free to retain learning and motivated to continue self-learning. It provides more learning opportunities to increase pleasure and joy in the classroom, links learning to real life, gives students unlimited tasks and stimulates students to discover their self-motivation to learn. Hence, it benefits in training students to formulate ideas and feelings well through self-planning and strengthening the creative effort to achieve personal standards and quality writing.

## **Review of Literature**

### **I. Studies on gamification:**

Elsherif (2022) aimed to investigate the effectiveness of electronic feedback styles through a digital gamification environment in developing cognitive achievement and motivation for learning among postgraduate students at Taibah University. The results highlighted statistically significant differences in cognitive achievement and motivation in favor of the experimental group.

Alsobhy and Salim (2020) aimed to study the effectiveness of gamification styles via digital platforms in developing motivation for academic achievement among the students of the College of Education, University of Jeddah. The study illustrated the

impact of gamification on the motivation of academic achievement and recommended employing gamification in all educational stages.

Hunter and Fitzgerald (2020) aimed to identify the effectiveness of gamification-based learning and illustrated that students learn more effectively, and the students expressed their satisfaction with and interest in the gamification-based program.

Petrovich et al. (2020) aimed to determine the features and facilities of gamification elements. The results showed that gamification helps players discover themselves through virtual practices and express knowledge, interests, assessments, organizational practices, and self-perception.

Williams and Farber (2020) aimed to investigate gamification. The results demonstrated the effectiveness of gamification in education, and the participants' perspectives about guidance and learning principles were positive.

Aljrewy (2019) aimed to determine the impact of online gamification-based learning on developing academic achievement and creative thinking among primary school students. The results showed high academic achievement and creative thinking using gamification that develops higher-order thinking skills.

Al-Qahtani (2019) aimed to identify the effectiveness of a gamification-based interactive educational environment in developing automatic and deferred achievement in English among high school students and their attitudes toward it. The results showed a statistically significant difference in automatic and deferred achievement in English in favor of the group that used gamification. They also illustrated positive attitudes toward the gamification environment.

Al-Ghamdi (2019) aimed to investigate the effectiveness of gamification in mathematics among six grade primary students in Makkah. The study showed differences in the mean scores of the students of the experimental and control groups in the post-test of the motivation towards mathematics scale in the challenge, enjoying learning, confidence, self-efficacy, and the overall score favoring the experimental group. It recommended using gamification in teaching mathematics.

Aljahny (2018) aimed to examine the impact of gamification via Blackboard on developing problem-solving skills in mathematics among the first high grade gifted students. The results showed the effectiveness of learning gamification in developing these skills.

Turan et al. (2016) aimed to investigate the effects of gamification strategies on cognitive load levels and achievement among students. The results illustrated highly statistically significant differences between both groups in the achievement and cognitive load levels in favor of the experimental group. Moreover, the students had positive attitudes toward the gamification strategies.

Terrell (2016) aimed to identify the impact of using gamification on the results of educational skills and participation level according to (time, frequency, responses to cognitive comprehension, perceived ease of use, and perceived benefit). The results showed no statistically significant differences between the two groups in the levels of skill or participation. In contrast, they showed indicators of an improved



understanding of APA in favor of the experimental group with higher levels of control and concentration.

Gooch et al. (2016) aimed to identify the impact of gamification on motivating students with dyslexia. The study concluded that gamification highly influenced students' motivation and achievement in reading.

Şahin and Namli (2016) aimed to highlight the impact of gamification on students' science lesson achievement and concluded the high impact of gamification on enhancing students' academic achievement.

Hanus and Fox (2015) aimed to determine the impact of gamification in the classroom in four aspects (motivation, academic performance, effort, and learner satisfaction). The results showed that using gamification enhanced self-motivation, satisfaction, effort, academic performance, and student participation in the classroom.

Saputra (2015) aimed to identify the impact of gamification on the learning and motivation of students with dyslexia through applying (7) strategies: story, clear goals, levels and points, rewards, feedback, achievements, and badges, to improve desired outcomes, such as participation, enjoyment, and motivation. The results illustrated that gamification increases students' interest. Most students with dyslexia were keen to participate in the assessment, ensuring the effect of gamification in improving student participation. The study concluded that gamification could increase reading enjoyment, achievement, and improved levels.

Hamzah et al. (2015) aimed to identify the influence of gamification on students' motivation in using learning applications based on the motivational design model. The results illustrated that gamification positively affected students' motivation to use learning applications. Moreover, there were statistically significant differences in the domains of confidence and satisfaction in favor of the experimental group.

Hong and Masood (2014) aimed to identify the effects of gamification on lower secondary school students' motivation and engagement in Malaysia. The results illustrated that gamification influenced students' motivation and engagement.

Ibanez et al. (2014) aimed to determine the impact of gamification-based educational activities on the participation and achievement of students in the course of (C). The results showed the positive impact of gamification on students' participation and achievement.

Grant et al. (2014) aimed to identify the impact of gamification on the attendance and motivation of students in the computer course at the University of North Dakota. The study showed the positive impact of gamification.

## **II. Studies on developing creative writing skills:**

Al-Hourani et al. (2022) aimed to highlight the impact of an instructional program based on Mayer and Salovey's model on improving creative writing skills among seventh-grade female students and their attitudes toward them. The study showed the very strong impact of the program on the attitudes of the students of experimental attitudes toward creative writing.

Dashty (2021) aimed to identify the effectiveness of a proposed strategy based on the communicative approach to develop creative writing skills among high school students in Kuwait. The study showed the effectiveness of the strategy and recommended the interest in teaching these skills in early school stages.

Elsherif (2020) aimed to identify the effectiveness of using the generative learning model in teaching English to develop creative writing skills among third high school students. The study showed the effectiveness of this model in developing creative writing skills and recommended focusing on renewal models to develop language acquisition and creativity in learning English.

Salim et al. (2020) aimed to define the impact of literature cycles on developing EFL creative writing skills among high school students. The results showed the impact of these cycles on developing such skills.

Elsayed (2019) aimed to identify the effectiveness of a program based on the totalitarian approach in developing creative writing skills and functional writing among the first grade intermediate students. The results proved the effectiveness of the program.

Khader and Morisat (2019) aimed to examine the effect of using caricatures on improving creative writing skills in the tenth basic grade in Jordan. The results showed the effectiveness of using caricatures in improving overall and individual skills.

Al-Ahwal (2018) aimed to highlight the effectiveness of suggested teaching procedures in the light of text grammar and its impact on improving the writing skills of high school students. The study concluded that these procedures were effective in developing creative writing skills.

Hanna (2018) aimed to explore the effectiveness of a proposed strategy based on information processing theory to develop creative writing skills among gifted high school students. The study showed the effectiveness of this strategy and recommended similar strategies to develop the writing skills of students.

Al-Sarraf and Khayyal (2018) aimed to identify the effectiveness of a proposed learning by the contract-based program to develop some creative writing skills among intermediate stage students. The results showed the effectiveness of this program.

Abu Jarad and Sawalha (2018) aimed to identify the effectiveness six thinking hats program in developing creative writing among the basic stage students in Jordan. The study indicated statistically significant differences in the level of creative writing due to the six thinking hats training. It recommended using this strategy in composition classes because of its clear impact on improving creative writing levels.

Al-Shammari (2017) aimed to examine the impact of a proposed educational program based on Jensen's model of brain-based learning in improving creative writing among third intermediate grade students in AlQurayyat. The results indicated statistically significant differences between the mean scores of the experimental and

control groups in the post-test of critical and creative writing in favor of the experimental group.

Al-Tuwairiki (2017) aimed to explore the effectiveness of a strategy based on habits of mind in developing the creative writing skills of high school female students in Taif. The results showed the effectiveness of that strategy.

Saudi (2017) aimed to identify the effectiveness of a generative learning-based strategy for developing creative writing skills and self-regulation among high school students. The results showed statistically significant differences between the mean scores of students in the pre-test and post-test of creative writing and self-regulation skills in favor of the post-test.

Abu Laban (2016) aimed to identify the effectiveness of a proposed program based on SCAMPER strategy for enhancing some skills of literary taste and creative writing among first-year high stage students. The results demonstrated the effectiveness of that strategy.

Abu Saif and Moqabala (2017) aimed to identify the effect of using SCAMPER strategy on improving Jordanian female tenth grade students' creative writing skills. The study showed statistically significant differences between the mean scores of students in all creative writing skills. It recommended focusing on elaboration and linking it to creative thinking while teaching of creative writing.

Jordaan (2015) aimed to identify the effectiveness of using dramatic activities in teaching creative writing skills to students in South Africa. The study showed the effectiveness of using dramatic activities in teaching creative writing skills because they stimulated students to experience the enjoyment of writing, generating ideas, accurately expressing self-knowledge and ideas through writing, and developing verbal expression. It recommended using similar strategies to develop creative writing in other stages.

Saylik (2014) aimed to determine the effectiveness of using interactive whiteboards in developing creative writing skills. The study revealed the effectiveness of using whiteboards in developing creative writing skills among the experimental group of students due to the freedom afforded to students to express their opinions and beliefs, use imagination, integrate, and relate background knowledge to new and unfamiliar ideas students. It recommended using strategies based on interaction in developing creative writing skills because they allow students to express themselves freely, use imagination, and develop their creative writing skills.

Adam and Babiker (2014) aimed to highlight the role of English literature in promoting creative writing skills among university students in Sudan. The results showed the effectiveness of this method in promoting students' levels.

Alhadad and Hasan (2014) aimed to examine the impact of an imagination-based strategy on developing creative writing expression among tenth grade students in Kuwait. The results showed the excellence of the experimental group in creative writing skills.

Rahimi and Norooziasiam (2013) explored the effect of strategies-based instruction on the improvement of EFL learners' writing quality. The results showed a statistically significant difference between the mean scores of the study groups in the post-test of creative writing skills in favor of the experimental group.

### **Commentary**

Reviewing the literature on gamification and creative writing skills, the researcher noticed their novelty starting in 2014, suggesting the fertility of gamification in education as a research field. Moreover, the courses targeted by the literature varied and covered many countries and groups, demonstrating that developing creative writing skills exists in all educational stages.

Gamification is useful in learning. Additionally, creative writing skills are highly needed by the students of English. Therefore, the present study explored the effectiveness of a gamification-based enrichment program in developing creative writing skills among intermediate stage students.

Similarities and differences between the present study and the literature:

-This study resembles the literature in the method, i.e., the quasi-experimental (one group design) method

-The results of the literature agreed on the importance of utilizing gamification to achieve the desired outcomes with several positive impacts on providing a motivating educational environment.

-The study differs from the literature regarding the time, problem, objectives, and sample.

### **Benefits of the literature:**

-Reviewing the literature helped the researcher have an overview of the topic, develop the theoretical framework, and define the relevant terms, which helped form the statement of the problem accurately. The study utilized suggestions and recommendations, objectives, questions, hypotheses, sampling, method, tools and materials, statistical processing of the data, and discussion of the results of the literature. The results of the study and the literature were compared.

-Reviewing the literature on gamification showed that all studies proved the effectiveness of gamification in developing several variables, which helped the present study in building the gamification-based enrichment program to develop EFL creative writing skills of intermediate stage students and preparing the teachers' manual and student textbook.

-The literature offered some tests to measure the improvement of creative writing skills of students, which helped the study develop the test of creative writing skills among the third intermediate grade students to identify the effectiveness of the suggested program in developing creative writing skills among the intermediate stage students.

**Contribution**

- The present study covers creative writing skills as one of the ultimate goals of language learning because it is productive and reflects the culture and thinking of students.
- To the researcher's knowledge, no study addressed the effectiveness of a gamification-based enrichment program in developing EFL creative writing skills among intermediate stage students. Thus, it adds to the literature due to developing the program and identifying its effectiveness among the third intermediate stage students.

**Methodology****Method**

The study adopted the quasi-experimental (one-group design) method because of its appropriateness. This method includes "an attempt to control all major factors affecting the dependent variable(s), except for one variable controlled and directed by the researcher in a certain direction to affect the dependent variable(s)" (Motawe and Alkhalifa, 2014, p.122). It was employed to identify the effectiveness of the gamification-based enrichment program in developing EFL creative writing skills for intermediate stage students. The pre-test and post-test were applied. The tool, i.e., the test of creative writing, was pre-tested, the gamification-based enrichment program was delivered to the experimental group, and the tool was post-tested.

**Population:**

The population comprised all third intermediate grade students in the schools affiliated with the Education Department in Al-Ryafi in the second semester of 2021/2022 number (137,735) according to the statistics of the Ministry of Education (2021/2022).

**Sampling:****Pilot sample:**

The pilot sample included (15) second intermediate grade students in the intermediate and high school of Princess Nourah bint Abdullrahman University, Riyadh, in the first semester of 2021/2022.

**Main sample:**

The study sample included (20) students intentionally selected from the intermediate and high school of Princess Nourah bint Abdullrahman University, Riyadh, in the first semester of 2021/2022 because they met the study requirements, their numbers suited applying the tool and program, and the school administration helped facilitate the study procedures and provided a good environment for applying the tool.

Additionally, the school is affiliated with Princess Nourah bint Abdullrahman University, and the tool and program were applied as social work.

Material and instruments:

### **I. creative writing test:**

The test was developed as follows:

A. Setting the objective of the test

The test aimed to measure the level of creative writing among the third grade intermediate students before and after teaching the gamification-based enrichment program.

### **B. Sources of constructing the test**

- The educational literature on creative writing, its skills, and creative thinking, such as Al-Hourani et al. (2022), Dashty (2021), Elsherif (2020), Taha and Al-Zahrani (2020), Alsobhy and Salim (2020), Al-Khudari (2020), Khader and Morisat (2019), Elsayed (2019), Al-Sarraf and Khayyal (2018), Abu Jarad and Sawalha (2018), Hanna (2018), Al-Ahwal (2018), Al-Tuwairiki (2017), Saudi (2017), Abu Saif and Moqabala (2017), Al-Shammari (2017), Abu Laban (2016), Ahmed (2016), Jordaan (2015), Adam and Babiker (2014), Saylik (2014), Aly (2014), Alhadad and Hasan (2014), Abdulbary (2013), Rahimi and Norooziasiam (2013) and Rababaa and Abujamos (2012).
- Outcomes of the course of English for the third intermediate grade.
- Reviewing the opinions of the curriculum and instruction of English specialists in interviews to determine the major creative writing skills and their measurement indicators.
- Determining the test content: short story, as follows
- Selecting the story content of the test to consider the age of students, provoke thinking and imagination, and provide a social value that handles ethical issues with attractive texts and pictures.
- Phrasing the test items in a fun educational manner with clear and easy language, presenting the questions with gradual difficulty
- The test questions were five open-ended to measure the level of students in the targeted creative writing skills.
- Formulating the test instructions:
- The instructions were clear, aiming at illustrating the objective of the test, answer method, and grading system appropriate for the students, as follows:
- Inserting data in the specified place in a table containing the student's name, school, grade, and date.
- Time allowed.
- Reading questions and asking about any difficult items.

- Using sound language with clear script.
- Answering all test items.
- The test score would be used for scientific research purposes, not achievement.
- Preliminary form of the tes
- Writing the draft after reviewing the relevant literature,the tests and scales of writing skills, and then developing a preliminary list of creative writing skills and sub-skills

**-The final form of the test includes two parts**

Part I: personal data and test instructions

Part II: Four major skills (fluency, flexibility, originality, and elaboration) with their sub- skills.

- Each section of the four covered a short story followed by four questions representing the sub-skills of each major skill.

C.Test marking and scoring: The test was marked using a gradual assessment matrix: Excellent (5) mentions more than three answers for one question, very good (4) mentions three answers for one question, good (3) mentions two answers of the question, pass (2) mentions one answer of the question, and poor (1) mentions no answer. Half a score is reduced in case of grammatical and spelling mistakes. Each section with a major skill receives 20 scores distributed to 4 questions, 5 scores/ question. Thus, the final score is 80.

D.Calculating time allowed: Each section is answered in 20 minutes. Therefore, the test took two classes of 45 minutes to each one , with 10 minutes in the beginning to read the story and questions.

**E.Test validity**

- Face validity

The preliminary formof the test was presented to a group of ten reviewers of the faculty of Saudi universities specialized in the curriculum and instruction of English and the teachers and supervisors of English to determine the suitability of the test to measure creative writing skills to the third grade intermediate students, format and clarity of the test instructions, appropriateness of the selected short stories for students, and appropriateness of the behavioral indicators of the writing skills. Modifications were made, and the final form of the questionnaire was obtained.

**-Discriminant validity**

Recruiting a pilot sample of 23 students, the researcher calculated the discriminant validity of the achievement test of EFL creative writing skills by ranking the students' scores in the total of the achievement test and dividing them into two groups: High and low. The differences between the two groups were calculated, as shown in table (1).

(1) Discriminant validity of the achievement test of EFL creative writing skills (n=23)

Tool	variables	No.	Mean	Standard deviation	T value	Freedom degree	Significance level	Significance type
Achievement test	High group	13	28.08	2.53	5.66**	20	0.000	Statistically significant
	Low group	9	22.33	1.95				

(\*\*) statistically significant at the level of 0.01

Table (1) illustrates that the value of t-test of differences between the two groups is statistically significant at the level of (0.01), suggesting the ability of the items of the achievement test to discriminate both groups and ensures the discrimination validity of the test.

### **Cronbach's alpha reliability:**

The test reliability was calculated using Cronbach's alpha coefficient, as shown in table (2).

Table (2): Reliability values of the achievement test

Tool	Alfa Cronbach's
Achievement test	0.71

Table (2) illustrates that Cronbach's alpha scored 0.71 for the achievement test, indicating appropriate reliability.

## **II. Educational materials**

**1. Developing the gamification-based enrichment program to develop creative writing skills:**

It required reviewing the literature on developing enrichment programs for the steps, procedures, fundamentals, and stages of the program, as well as designing the material using gamification in English. It also required reviewing the results of studies on developing creative writing skills regarding the general and special objectives of writing and the document of the curriculum of English developed by the Ministry of Education in 2019.

Philosophy of the enrichment program: The program is based on a fundamental that familiarity with high-order thinking skills, including flexibility, working memory, planning, and self-judgment, develops students' creative thinking skills and abilities,



such as discussion, generating ideas, utilizing language knowledge seriously, and influence.

The general objective of the enrichment program: The present enrichment program aimed to use gamification and its elements, including points, badges, levels ... etc., to develop creative writing skills among the third intermediate grade students and provide a program based on gamification.

Behavioral objectives: The behavioral objectives of the program included a set of cognitive, skillful, and emotional objectives, as follows:

-Cognitive objectives

1. Recognizing the concept, importance, nature, and characteristics of creative writing.
2. Organizing sentences and using appropriate words in the essay.
3. Using linkers and writing skills that ensure having complete sentences to illustrate the meaning.
4. Selecting the topic, determining the writing objective, and selecting the appropriate writing form for the recipient.
5. Employing appropriate vocabulary to illustrate the meaning and figures of speech rich in meanings and emotions.
6. Avoiding grammatical and spelling mistakes, punctuation marks, and aesthetics of technical writing.
7. Selecting the topic and writing the paragraph that illustrates the purpose to have a useful and concise essay.
8. Expressing ideas, feelings, and emotions of sadness and happiness and describing natural manifestations and people's affairs in a beautiful manner.

-Skill objectives

1. Generating creative ideas characterized by fluency, flexibility, originality, and elaboration.
2. Expressing emotions and perceptions and distinguishing true and false ones in writing.
3. Awareness of the important information and emotions and expressing the attitudes towards accepted emotions.
4. Analyzing emotions by including them in writing activities to categorize emotions, perceive the relation between classifications, express meanings that show emotions, and develop the ability to understand and evolve them
5. Using creativity-provoking questions.
6. Utilizing other materials in creative writing.

**-Emotional objectives:**

1. Forming positive attitudes to creative writing.
2. Supporting the correlation between the positive attitude and skills of creative writing.
3. Promoting awareness that creative writing is a means of expressing pleasant feelings and avoiding negative ones.
4. Using imagination in learning.
5. Cooperation, sharing ideas, and avoiding criticism of others' ideas.
6. Developing sensitivity to various social settings that require writing a message, a greeting card, a story, or a note about something.

**Basics of building the enrichment program:****-Psychological basics:**

1. Developing the students' positive attitudes to the material and themselves.
2. Promoting the self-confidence of students to be a part of the learning process.
3. Fostering students' initiatives in making activities and decisions to be more responsible about learning and develop self-confidence.

**-Language basics**

1. Developing language skills, especially writing in proper English, among students.
2. Making students more capable of verbal communication with others.
3. Promoting expression by equipping students with creative writing skills.
4. Using gamification elements to enrich the language of students.

**-Social basics**

1. Making students more capable of handling problems because they experienced these problems in the short stories presented using gamification and its elements.
2. Developing cooperation and teamwork among students.
3. Promoting communication with others.

**-Cognitive basics**

1. Helping students retain and store information.
2. Helping students be creative and innovative by stimulating ideas and knowledge.
3. Enabling students to make decisions on any issue after knowing and understanding all its items.
4. Transferring acquired information into new contexts.

**Program content:** The enrichment program included a set of short stories appropriate for the third intermediate grade students that were delivered as lessons, a set of enrichment activities in English, as well as language, mental, and writing exercises that allowed positive training opportunities by implementing writing activities related to the implications of the short stories to improve the understanding and develop creative writing skills of students to express their emotions and feelings. The lessons of units were structured, planned, developed, and designed by the researcher. Each unit comprised a set of gamification-based lessons, aiming to develop the minor skills of each major one. The lessons were distributed into three

enrichment classes/ week for five weeks. Each lesson included behavioral, educational objectives, requirements, educational activities, and assessment questions.

### **Program techniques**

- Positive reinforcement: The points, badges, levels, awards, leaderboards, etc. given to the student after passing some tasks and activities included in the lessons of the enrichment program.
- Fun and amusement: They were objectives of the gamification-based enrichment program to develop creative writing skills and positively influence students.

**Educational aids and tools:** They were determined based on the structural principles and objectives to fit the nature of the program and creative writing skills to be developed among the third grade intermediate students. Various educational aids and tools were used, such as the data show, computer, videos, presentations, and attached photos.

### **Evaluation methods aimed to identify the achievement of the program's objectives and the improved performance of creative writing skills.**

1. Formative evaluation: Continuous evaluation with feedback, such as performance-based evaluation and self-review
2. Summative evaluation: an evaluation at the end of each stage to ensure goal achievement using the test of creative writing skills

Because gamification used points to reward players and show progress, the students were assessed at the end of the stage as follows:

1. Three stars: 100% proficiency, denoting the goal achievement with a medal and gift box
2. Two stars: 90% proficiency, denoting the goal achievement with a medal
3. One star: 80% proficiency, denoting the goal achievement
4. Less than 80%: Failed

**Reviewing the enrichment program:** To ensure the validity of content and get the final form, the draft of the program, including stories, situations, tasks, and questions, was presented to experts in curriculum and instruction, supervisors, and teachers of English to ensure its validity and appropriate content to creative writing skills and performance indicators, appropriateness to the level of students, and adequacy of dedicated time. The reviewers made some notes, especially concerning modifying the time of achieving the writing tasks and modifying some behavioral indicators to fit the goal and development of creative writing skills. The researcher made use of the reviewers' opinions and suggestions and developed the final form of the program.

The program was presented to some third grade intermediate students to ensure its clear content and readability. Some of its items were modified, and others were summarized to get the final applicable form.

## **1. Developing the teacher's guide for teaching the gamification-based enrichment program**

It was developed to illustrate the teaching method according to gamification to train students in teaching the gamification-based enrichment program to the third intermediate grade students. It highlighted the teacher's role, displayed the educational tasks, including behavioral goals, and showed some concepts, conclusions, and generalizations to be made by the student in a task.

The manual was developed after reviewing some pieces of the literature, such as Al-Kanaan (2022), Elsherif (2022), Alhatalia et al. (2020), Alsobhy and Salim (2020), Hunter and Fitzgerald (2020), Petrovich et al. (2020), Williams and Farber (2020), Aljrewy (2019), Al-Qahtani (2019), Al-Ghamdi (2019), Aljahny (2019), Aljahny (2018), Van Roy and Zaman (2018), Aşiksoy (2017), Dreon (2016), Terrell (2016), Turan et al. (2016), Gooch et al. (2016), Şahin and Namli (2016), Shingo and Manabu (2015), Hanus and Fox (2015), Saputra (2015), Hamzah et al. (2014), Hong and Masood (2014), Ibanez et al. (2014), Grant et al. (2014), and Fabricatore and López (2014).

The manual included these elements: Introduction to the concept, objectives, and elements of gamification; the general and behavioral objectives of teaching the program themes; the objectives, means, activities, and evaluation methods; the schedule of teaching the program themes; a set of guidelines and instructions to be considered in teaching; a detailed statement of each lesson, e.g., time of teaching the lesson, behavioral objectives, educational tools and activities, plan, assessment, and enrichment activities. It comprised two parts:

The theoretical part introduced the gamification strategy, concept, elements, and role in developing creative writing skills. The applied part included a collection of short stories as educational examples and a list of the references that a teacher of English can use to teach the gamification-based enrichment program.

It was presented to 13 reviewers specialized in the curriculum and instruction of English to give opinions. It was modified in the light of their notes and became applicable in its final form.

### **The steps of implementing gamification in the short story included**

1. Introduction by the teacher: Giving an overview on gamification, learning and acquiring skills, leveling up, assessment methods, leading the leaderboard, and giving points, badges, and rewards to enable the student to achieve the program objectives
2. Determining the learning objectives to include the general educational objectives and behavioral ones that require the student to concentrate in the classroom and complete the tasks quickly

- 1.Introduction: Presenting the short story with experiences, situations, and events in the story to create a focus point
- 2.Lesson presentation: The teacher presented the material, tasks, exercises, and competitions via the short story to help the students read the story well away from any distortion.
- 3.Allowing the student some time to reflect on the short story accurately based on her capabilities.
- 4.Giving the opportunity to student to express opinions on reading the short story.
- 5.Discussing the student's opinion on the story and correcting misconceptions.
- 6.Giving the opportunity to students to write on the story.
- 7.Guiding students: The students were followed up, and their learning and work were supervised while making the required guidance to achieve the desired learning.
- 8.Determine the level at certain stages while allowing students to use the levels and rules to provide and receive feedback.
- 9.Determine and classify gamification elements: Personal elements, including points, badges, levels, and time limits, and social ones, i.e., leaderboards.
- 10.Assessment and feedback: The teacher could obtain indicators of the student performance and assess their level against the desired objectives by collecting the points for achieving the tasks, reflecting their performance level (current points, redeemable points, badges, and levels to take the required measures. This could be done in the light of the desired skills, i.e., fluency, flexibility, originality, and elaboration. The content was reviewed and assessed, and the game was selected to ensure achieving the desired objectives and modify the game elements.
- 11.Notifying the student about the errors made to avoid them in future tasks

### **I-Preparing the student textbook**

It contained activities and exercises on creative writing themes in the form of short stories.

#### **The book aimed to:**

- Educate the student about the objective and teaching method of the program.
- Familiarize the student with creative writing skills.
- Provide a prepared material for training, education, and assessment.

#### **The book comprised**

- An introduction to the aim of the program.
- A set of themes, each with exercises and activities on creative writing skills; the book was presented to reviewers to ensure its validity for training students in the writing tasks, and modifications were made. After that, it became valid for application.

### **Testing procedures**

- The creative writing test was applied to the pilot sample of 23 second intermediate grade students on 6/12/2021 to verify the validity and reliability of the test and set the testing time.
- The sample was consisted of 20 third grade intermediate students. The researcher post-tested creative writing on 13/12/2021. Then, an orientation week was organized to familiarize students with the mechanisms and elements of using gamification in the relevant educational content. After that, the researcher carried out the experiment for 8 weeks/ 4 classes a week from 26/12/2021 to 17/2/2022. She post-tested creative writing to the same sample on 20/2/2022. Finally, she analyzed the data and concluded the results.

### **Results and Discussion**

- 1.To answer the first question and validate the first hypothesis, the T-test of the significance of differences, Eta squared, and effect size were calculated. Table (3) shows the significance of differences between the mean scores of the experimental group in the pre-test and post-test of fluency as an EFL creative writing skill and effect size.

Table (3): The significance of differences between the mean scores of the experimental group in the pre-test and post-test of fluency as an EFL creative writing skill and effect size

Degree of freedom-(19)

Tool	N.	Applic ation	Mean	Standa rd deviati on	“T” value	Sign ifica nt leve l	Eta square d	Effect size
Test of fluency	20	Pre	6.20	1.38	-32.07	0.00	0.982	High
		Post	18.10	0.91				

Table (3) illustrates that

- The difference between the mean scores of the experimental group in the pre-test and post-test of fluency as an EFL creative writing skill is statistically significant at 0.01 in favor of the post-test, with a “T” value of (32.07), which validates the first hypothesis, indicating the higher performance level of the experimental group in the post-test.
- The effect size of the independent variable, i.e., the gamification-based enrichment program, on the dependent one, i.e., fluency as an EFL creative writing skill, was high, with Eta squared of (0.982), indicating the effectiveness of the gamification-based enrichment program in developing fluency as an EFL creative writing skill for the third grade intermediate students. Accordingly, the first question is answered.

**The researcher denotes** the high performance of the experimental group in the post-test of fluency as an EFL creative writing skill to the features and activities of the gamification-based enrichment program and adequate selection of the short stories to be taught and analyzed in the writing lessons, which requires asking questions as brainstorming, determining vocabularies and phrases related to the answer and generating emotions. This issue caused a variety of knowledge, skill, and emotional goals, generated several ideas about the short story and using them in meaningful sentences, and enhanced fluency among students.

1. To answer the second question and validate the second hypothesis, the T-test of the significance of differences, Eta squared, and effect size were calculated. Table (4) shows the significance of differences between the mean scores of the experimental group in the pre-test and post-test of flexibility as an EFL creative writing skill effect size.

Table (4): The significance of differences between the mean scores of the experimental group in the pre-test and post-test of flexibility as an EFL creative writing skill and effect size

Degree of freedom-(19)

Tool	N.	Application	Mean	Standard deviation	"T" value	Significant level	Eta squared	Effect size
Test of flexibility	20	Pre	7.00	0.97	-40.56	0.00	0.989	High
		post	18.75	0.75				

Table (4) illustrates that

- The difference between the mean scores of the experimental group in the pre-test and post-test of flexibility as an EFL creative writing skill is statistically significant at 0.01 in favor of the post-test, with a T value of (40.65), which validates the second hypothesis, indicating the higher performance level of the experimental group in the post-test.
- The effect size of the independent variable, i.e., the gamification-based enrichment program, on the dependent one, i.e., flexibility as an EFL creative writing skill, was high, with Eta squared of (0.989), indicating the effectiveness of the gamification-based enrichment program in developing flexibility as an EFL creative writing skill for the third grade intermediate students. Accordingly, the second question is answered.

**The researcher denotes** the high performance of the experimental group in the post-test of flexibility as an EFL creative writing skill to the activities and writing exercises related to the short story of the gamification-based enrichment program that focused on directing the attention of students to the important information of the story, expressing their opinions on it, and forming attitudes. Gamification-based activities are sometimes done in a competitive group setting. They allowed students to engage in the stories, write various attractive and appropriate titles, suggest other conclusions or solutions, replace minor ideas with meaningful synonyms, create links, and make interpretations and conclusions, which promoted their flexibility.

1. To answer the third question and validate the third hypothesis, the significance of differences between the mean scores of the experimental group in the pre-test and post-test of originality as an EFL creative writing skill and effect size were calculated, as shown in table (5).

Table (5): The significance of differences between the mean scores of the experimental group in the pre-test and post-test of originality as an EFL creative writing skill and effect size



Degree of freedom-(19)

Tool	N.	Application	Mean	Standard deviation	"T" value	Significant level	Eta Squared	Effect size
Test of Originality	20	Pre	8.20	4.35	-7.65	0.00	0.755	High
		Post	15.52	1.17				

Table (5) illustrates that

- The difference between the mean scores of the experimental group in the pre-test and post-test of originality as an EFL creative writing skill is statistically significant at 0.01 in favor of the post-test, with a T value of (7.65), which validates the second hypothesis, indicating the higher performance level of the experimental group in the post-test.
- The effect size of the independent variable, i.e., the gamification-based enrichment program, on the dependent one, i.e., originality as an EFL creative writing skill, was high, with Eta squared of (0.755), indicating the effectiveness of the gamification-based enrichment program in developing originality as an EFL creative writing skill for the third grade intermediate students. Accordingly, the third question is answered.

**The researcher denotes** the high performance of the experimental group in the post-test of originality as an EFL creative writing skill to the method of treating short stories in the gamification-based enrichment program, expressing emotions, noticing the sequence of emotions of the characters, and expressing them in writing. The students exerted more effort to deliver better and more creative work. This affected the development of their skills of adding new original ideas, building new relations between the information and ideas of the stories, and changing their thinking attitude to new patterns.

1. To answer the fourth question and validate the fourth hypothesis, the significance of differences between the mean scores of the experimental group in the pre-test and post-test of elaboration as an EFL creative writing skill and effect size were calculated, as shown in table (6).

Table (6): The significance of differences between the mean scores of the experimental group in the pre-test and post-test of elaboration as an EFL creative writing skill and effect size

Degree of freedom-(19)

Tool	N.	Applicat ion	Mean	Standard deviation	“T” value	Signi fican t level	Eta squar ed	Effect size
Test of elaborati on	20	Pre	6.50	1.10	43.13	0.00	0.990	High
		Post	17.72	0.96				

Table (6) illustrates that

- The difference between the mean scores of the experimental group in the pre-test and post-test of elaboration as an EFL creative writing skill is statistically significant at 0.01 in favor of the post-test, with a T value of (43.13), which validates the second hypothesis, indicating the higher performance level of the experimental group in the post-test.
- The effect size of the independent variable, i.e., the gamification-based enrichment program, on the dependent one, i.e., elaboration as an EFL creative writing skill, was high, with Eta squared of (0.990), indicating the effectiveness of the gamification-based enrichment program in developing elaboration as an EFL creative writing skill for the third grade intermediate students. Accordingly, the fourth question is answered.

**The researcher denotes** the high performance of the experimental group in the post-test of the elaboration skill to the activities, applications, and contexts of the gamification-based enrichment program that makes the classroom environment free by providing relevant ideas and adding characters that develop the story. These advantages also increase creativity in writing without fear, stress, or shyness. Accordingly, the students' effectiveness and interaction with the story increased, with instant corrective feedback, allowed the written expression of negative and positive emotions towards the themes and implications of the short story, promoted positive emotions, and reduced negative emotions. They also were motivated to demonstrate written creative abilities by paraphrasing some items, adding new information, and providing further details on the characters, actions, and items in the story.

1. To answer the fifth question and validate the fifth hypothesis, the significance of differences between the mean scores of the experimental group in the pre-test and post-test of the overall creative writing skills and effect size were calculated, as shown in table (7).

Table (7): The significance of differences between the mean scores of the experimental group in the pre-test and post-test of the total creative writing skills and effect size

Degree of freedom-(19)

Tool	N.	Application	Mean	Standard deviation	"T" value	Significant level	Eta squared	Effect size
Total Creative writing skills	20	Pre	27.90	4.64	-35.19	0.00	0.985	High
		Post	70.10	2.37				

Table (7) illustrates that

-The difference between the mean scores of the experimental group in the pre-test and post-test of the total creative writing skills is statistically significant at 0.01 in favor of the post-test, with a T value of (35.19), which validates the second hypothesis, indicating the higher performance level of the experimental group in the post-test.

-The effect size of the independent variable, i.e., the gamification-based enrichment program, on the dependent one, i.e., the total creative writing skills, was high, with Eta squared of (0.985), indicating the effectiveness of the gamification-based enrichment program in developing EFL creative writing skills for the third grade intermediate students. Accordingly, the fifth question is answered.

**The researcher argues that this result** suggests that developing creative writing skills cannot be unplanned because they require special skills that necessitate training and planning. Moreover, **the researcher denotes** the high performance of the experimental group in the post-test of EFL creative writing skills individually or as a group to the advantages of using gamification in teaching, which positively affects developing these skills because:

-Gamification encourages students to effectively participate in the content and activities, which develops students from being passive recipients of information to being active and positive through reducing fear and shyness, increasing activity in learning, encouraging participation in criticizing ideas, and generating new ones, as demonstrated in their creative writing.

-Gamification provides students with feedback, instant assessment, and instant responses when fulfilling individual and group tasks actively through personal stimuli (points, badges...etc.) and social stimuli (leaderboards), which helps master the task quickly and encourages progress and achievement of learning tasks effectively.

-Gamification causes fun, amusement, and excitement, which facilitates several intricate processes for students, such as EFL creative writing, to acquire self-learning skills and develops creative writing skills.

- Gamification allows students to solve problems through learning tasks based on challenges and competitions in a collaborative instructional context; thus, they link experience with background knowledge to support constructive learning, stimulate thinking creatively, and develop their creative writing skills.
- Gamification fields, e.g., short story, allows students to apply knowledge to new contexts, which helps develop the ability to generate multiple original answers in full sentences that stimulate creativity and mental abilities, such as thinking and asking questions.
- Gamification allows students to discuss during tasks and reward valuable participation, which allows sharing ideas and experiences and stimulates creativity, as demonstrated in creative writing.
- Gamification fosters intrinsic motivation, self-satisfaction, and efficient performance of tasks and activities because it is exciting and attractive, which promotes motivation for creative writing.
- Gamification is interested in clear objectives, organized content, quality of short written stories, clear badges, and clear stages, which makes learning meaning-oriented and develops creative writing skills.

This result agrees with Alnady (2020), Aljrewy (2019), and Aljahny (2019) regarding the effectiveness of gamification in developing thinking skills, especially creative thinking. It agrees with Al-Shammari (2019) and Al-Zuhair (2017) regarding the effectiveness of gamification in teaching English.

This result also agrees with Al-Kanaan (2022), Elsherif (2022), Al-Ghamdi and Al-Hafizi (2021), Alhatalia et al. (2020), Alkhobaraa (2020), Alsobhy and Salim (2020), Hunter and Fitzgerald (2020), Petrovich et al. (2020), Williams and Farber (2020), Aljrewy (2019), Al-Qahtani (2019), Alamir (2019), Al-Ghamdi (2019), Aljahny (2019), Aljahny (2018), Van Roy and Zaman (2018), Aşıksoy (2017), Dreon (2016), Terrell (2016), Turan et al. (2016), Gooch et al. (2016), Şahin and Namli (2016), Shingo and Manabu (2015), Hanus and Fox (2015), Saputra (2015), Hamzah et al. (2014), Hong and Masood (2014), Ibanez et al. (2014), Grant et al. (2014), and Fabricatore and López (2014) regarding the effectiveness of gamification in improving the educational process and developing the different variables among students.

## **Recommendations**

Based on the results, the study recommends

1. Delivering training courses and workshops to the supervisors and pre-service and in-service teachers of English to identify gamification strategy: Features and use for creative writing to improve the quality of education and promote sustainable human development;

- 2.Implementing the gamification-based enrichment program to equip intermediate stage students with creative writing skills;
- 3.Delivering action manuals to the teachers of English on utilizing gamification to serve educational objectives successfully;
- 4.Paraphrasing the content of English for the different stages to keep pace with gamification strategies to provide flexible and fun educational applications;
- 5.Including exercises and activities modeled as those in the creative writing test of the present study in the textbooks of English for the different stages to develop EFL creative writing skills;
- 6.Delivering the content of English in the intermediate stage in a short story form that suits students' level, attitudes, and desires, which improves their creative writing;
- 7.Drawing the attention of English courses' planners and researchers to include student abilities and thinking skills besides the cognitive achievement aspects in the books;
- 8.Developing the objectives of English for the intermediate stage to stress the development of creative writing skills;

## References

1. Abdulazim, R. (2009). Effectiveness of a program based on divergent thinking strategies in developing creative writing skills and some habits of mind among intermediate school students. *Journal of Reading and Literacy*, 94, 32-112.
2. Abdulbary, M. (2013). Effectiveness of synectis in developing creative writing skills among preparatory stage students. *Arab Gulf Mission*, 34(130), 55-88.
3. Abdulbary, M. (2014). *Functional and creative writing: Fields, skills, activities, and assessments* (2<sup>nd</sup> ed.). Dar Almasira for Publication and Distribution.
4. Abdullah, A. (2015). *Causes of the weak reading skill in English in the basic education stage from the teachers' perspective: Al-Qatina Municipality, White Nile State* [Master's Thesis]. Al Neelain University.
5. Abu Jarad, M. & Sawalha, M. (2018). Effectiveness six thinking hats' program in developing creative writing among ninth grade students in Jordan. *IUG Journal of Educational and Psychological Sciences*, 26(2), 568-590.
6. Abu Laban, W. (2016). Effectiveness of a proposed program based on SCAMPER strategy for enhancing some skills of literary taste and creative writing among first-year high stage students. *Arab Studies in Education and Psychology*, 71, 251-295.
7. Abu Saif, A. (2017). *Impact of using SCAMPER's idea generation strategy on improving creative writing skills of tenth grade female students in Jordan* [Doctoral dissertation]. Yarmouk University.
8. Abu Saif, A. & Moqabala, N. (2017). Effect of using SCAMPER strategy on improving Jordanian female tenth grade students' creative writing skills. *IUG Journal of Educational and Psychological Sciences*, 25(3), 289-306.
9. Al-Ahmadi, M. (2014). Effectiveness of a proposed program based on the teaching thinking program (unidentified talents) in developing creative writing skills among intermediate school students. *Journal of Educational and Psychological Sciences*, 15(1), 487-521.
10. Alamir, L. (2019). *Designing a gamification-based e-learning environment and its impact on website development skills and learning motivation among secondary school students* [Master's thesis]. Damietta University.
11. Aldemerdash, N. (2008). *A proposed strategy for developing creative writing skills among the second secondary grade students* [Master's Thesis]. Suez Canal University.
12. Alessa, A. (2017). *Education reform in Saudi Arabia between the lack of a political vision, the narcissism of religious culture, and the inability of the educational administration*. Dar Alsaqi.
13. Alexe, I., Zaharescu, L., & Apostol, S. (2013). *Gamification of learning and educational games*. The 9<sup>th</sup> International Scientific Conference eLearning and Software for Education, Editura Universitatii Nationale de Aparare.
14. Al-Ghamdi, A. & Al-Hafizi, F. (2021). Effectiveness of employing gamification via Class Dojo platform in developing classroom discipline skills among primary school students. *International Journal of Educational and Psychological Studies*, 64, 321-408.
15. Al-Harthy, I. (2009). *Teaching thinking*. Rawabat Press.

16. Al-Hawamdeh, M. & Ashour, R. (2013). The efficiency of Forest's storytelling model in developing the written expression skills of the grade three students in Irbid. *Journal of Educational and Psychological Sciences*, 13(3), 65-93.
17. Al-Hoshani, A. and Al-Nisan, A. (2020). The teaching practices status-quo of English language teachers in teaching writing in the high school. *Journal of Al-Azhar Faculty of Education*, 158(2), 725-765.
18. Al-Hourani, R., Alhawada, M., & Alattom, K. (2022). Impact of an instructional program based on Mayer and Salovey's model on improving creative writing skills among the seventh-grade female students and their attitudes toward them. *Mu'tah Journal for Humanities and Social Sciences*, 37(4), 93-136.
19. Aljahny, Z. (2018). Impact of gamification via Blackboard on developing problem-solving skills in mathematics among the first high grade gifted students. *Journal of Scientific Research in Education*, 11(19), 643-666.
20. Alkhobaraa, S. (2020). Two types of gamification strategy (badges/ points) and their impact on developing academic achievement and achievement motivation among intermediate school students and their attitudes towards them. *Educational Technology: Research and Studies*, 3, 80-145.
21. Al-Khudari, Y. (2020). Effectiveness of a program based on the 7E's learning cycle in developing creative writing skills among high school students. *Journal of Reading and Literacy*, 221, 321-367.
22. Al-Masry, Y. (2006). *Effectiveness of a multimedia program in developing and retaining writing skills among the eighth-grade students* [Unpublished Master's Thesis]. Islamic University of Gaza.
23. Almawaly, H. (2011). *Education in the age of informatics*. University Book Press.
24. Almezeny, S. (2021). Difficulties facing intermediate school students in learning EFL reading from the teachers' perspective. *Journal of Mansoura Faculty of Education*, 115, 205-237.
25. Alnady, H. (2020). *Impact of gamification on developing creative thinking skills among the third basic graders in science in Amman* [Master's thesis]. Middle East University.
26. Alouzi, M. & Qatami, Y. (2008). *Creative writing for the gifted: Model and application* (1<sup>st</sup> ed.). Dar Wael for Publication.
27. Al-Qaid, M. (2015). *What is gamification? What is gamification in education?*. <https://www.new-educ.com/gamification-education>.
28. Al-Qarni, D. (2012). *Effectiveness of using the self-questioning strategy in developing Arabic creative writing skills among first-year high school students* [Master's Thesis]. King Khalid University.
29. Al-Samman, M. (2011). A program based on integrating the constructivist and meta-cognitive learning for developing creative writing skills among high school students. *Journal of Al-Azhar Faculty of Education*, 146 (2), 265-329.
30. Al-Shammari, B. (2019). Effectiveness of gamification in developing learning motivation in English among high school students in Ha'il. *Journal of the Faculty of Education-Assiut*, 35(2), 602-657.

31. Alsobhy, A. & Salim, Y. (2020). Effectiveness of gamification styles via digital platforms in developing motivation to academic achievement among the students of the College of Education, University of Jeddah. *Arab Studies in Education and Psychology*, 123, 23-58.
32. Al-Sufi, A. (2009). *Art of writing: Types, skills, and instructional principles to the young*. Dar Alfikr.
33. Aly, A. (2014). *A proposed strategy based on language games for developing creative writing skills among elementary school students in Kuwait* [Master's Thesis]. Cairo University.
34. Al-Zahrani, S. & Shabbat, A. (2017). Creative writing of talented students in Alqunfudah in the light of some variables. *Journal of Scientific Research in Education*, 18, 223-248.
35. Agiz, A. (2011). Effectiveness of brainstorming in developing creative writing skills and creative thinking capabilities among STEM talented secondary school students. *Journal of Reading and Literacy*, 145, 136-199.
36. Ashour, R. & Makdadi, M. (2013). *Reading and writing skills*. Dar Almasira for Publication and Distribution.
37. Bakhit, N. (2013). *Effectiveness of a proposed educational strategy based on language communication in developing the written expression skills of intermediate school students* [Master's Thesis]. Menoufia University
38. Barata, S., Jorge, J. & Goncalves, D. (2013). *Engaging engineering students with gamification* [Conference presentation]. The 5th International Conference on Games and Virtual Worlds for Serious Applications, Poole, United Kingdom. doi:10.1109/VSGAMES.2013.6624228
39. Bland, J. (2011). *Finding the words: Writers on inspiration, desire, war, celebrity, exile, and breaking the rules*. McClelland & Stewart.
40. Bohdanska, B. (2012). *The level of knowledge of the cultural background of English-speaking countries among students of English language at a secondary school*. Palacký University Olomouc.
41. Bunchball. Com. (2011). *Gamification 101: An introduction to the use of game dynamics to influence behavior*. <http://jndglobal.com/wp-content/uploads/2011/05/gamification1011.pdf>.
42. Carmichael, S. (September 7, 2016). *5 reason to use gamification in the classroom*. <http://www.classcraft.com/blog/features/5-reasonsgamification>.
43. Chou, Y. (2017). *Actionable gamification: Beyond points, badges, and leaderboards*. Yu-kai Chou Press.
44. Dashty, M. (2021). A proposed strategy based on the communicative approach to develop creative writing skills among high school students in Kuwait. *Journal of Reading and Literacy*, 232, 265-308.
45. Davies, G. (2015, March 16). *The writing paradox*. <http://oupeltglobalblog.com/2015/03/16/the-writing-paradox>.



46. Elsayed, M. (2019). *Effectiveness of a program based on the totalitarian approach in developing creative writing skills and functional writing among intermediate stage students* [Master's thesis]. National Center for Educational Research and Development.
47. Elsherif, F. (2020). Effectiveness of using the generative learning model in teaching English for developing creative writing skills among the third high school students. *Journal of the Faculty of Education- Port Said*, 30, 119-157.
48. Ejsing-Duun, S. & Karoff, H. (2014). *Gamification of a higher education course: What's the fun in that?* [conference presentation]. The 8<sup>th</sup> European Conference on Game-Based Learning, Academic Conferences and Publishing International Limited.
49. Glover, I. (2013). Play as you learn: Gamification as a technique for motivating learners. In J. Herrington, A. Couros, and V. Irvine (Eds.), *world conference on educational multimedia, hypermedia and telecommunications* (pp. 1999-2008). Chesapeake.
50. Goehle, G. (2013). Gamification and web-based homework. *PRIMUS*, 23(3), 234-246.
51. Gómez, S. (2020). Games and gamification in the classroom. *Radical Solutions and eLearning*, 101-115. DOI: 10.1007/978-981-15-4952-6\_7.
52. González, C. & Carreño, A. (2014). *Methodological proposal for gamification in the computer engineering teaching*. The International Symposium on Computers in Education, IEEE.
53. Gooch, D., Vasalou, A., Benton, L. & Khaled, R. (2016). *Using gamification to motivate students with dyslexia* [conference presentation]. CHI, San Jose.
54. Grant, E., Shankararaman, V., & Loong, J. (2014). *Experimenting with gamification in the classroom* [conference presentation]. IEEE 6<sup>th</sup> Annual Conference on Engineering Education, IEEE.
55. Hakak, S., Noor, N., Ayub, M., Affal, H., Hussin, N., Ahmed, E., & Imran, M. (2019). Cloud-assisted gamification for education and learning— Recent advances and challenges. *Computers and Electrical Engineering*, 74, 22–34. <https://doi.org/10.1016/j.compeleceng.2019.01.002>.
56. Hanus, M. & Fox, J. (2015). Assessing the effects of gamification in the classroom: A longitudinal study on intrinsic motivation, social comparison, satisfaction, effort, and academic performance. *Computers & Education*, 80, 152-161.
57. Hamari, J., Koivisto, J., & Sarsa, H. (2014). *Does gamification work?—a literature review of empirical studies on gamification* [conference presentation]. The 47th Hawaii International Conference on System Sciences, IEEE.
58. Han, H. (2015). Gamified pedagogy: From gaming theory to creating a self-motivated learning environment in studio art. *Studies in Art Education*, 56(3), 257–267.
59. Hanna, C. (2018). A proposed strategy based on information processing theory to develop creative writing skills among gifted high school students. *Reading and Literacy*, 1, 45-195.
60. Hayek, H. (2017). *Ten approaches to learning and educational performance in 2017*. <https://blog.naseej.com>

- 61.Hong, G. & Masood, M. (2014). Effects of gamification on lower secondary school students' motivation and engagement. *Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 8(12), 3765 – 3772.
- 62.Hsin, W., Huang, Y., & Soman, D. (2013). *A practitioner's guide to gamification of education*. Rotman.
- 63.Hunicke, R., Leblance, M. & Robert, Z. (2004). *MDA: A formal approach to game design and game research* [conference presentation]. Nineteenth National Conference of Artificial Intelligence, AAAI Press.
- 64.Hunter, J. & Fitzgerald, T. (2020). STEAM games are good for learning in elementary schools: A study of teacher professional development in the Philippines. In D. Schmidt-Crawford (Ed.), *Society for Information Technology & Teacher Education International Conference* (pp. 520-514). Association for the Advancement of Computing in Education.
- 65.Jaafara, A. (2018). *Functional writing*. Dar Alkhalij.
- 66.Jalhoum, A. (2010). Effectiveness of active learning in teaching literature on developing creative writing skills among secondary school students. *Journal of the Faculty of Education- Mansoura*, 67(11), 95-167.
- 67.Jared, R. & Peter, J. (2018) Does educational gamification improve students' motivation? If so, which game elements work best?, *Journal of Education for Business*, 93 (7), 315-322. DOI: 10.1080/08832323.2018.1490687.
- 68.Jones, R. (2014). Writerly dynamics and culturally situated authentic human existence in Amalia Kahana-Carmon's theory of creative writing. *Culture & Psychology*, 20(1), 118–144. <https://doi.org/10.1177/1354067X13515935>.
- 69.Jordaan, P. (2015). *Finding creativity: Integrating drama teaching techniques in creative writing lessons* [Master's thesis]. Stellenbosch University.
- 70.Jovanovic, J., & Devedzic, V. (2015). Open badges: Novel means to motivate, scaffold and recognize learning. *Technology, Knowledge and Learning*, 20(1), 115–122. doi:10.1007/s10758-014-9232-6.
- 71.Kapp, K., Blair, L., & Mesch, R. (2014). *The gamification of learning and instruction fieldbook: Ideas into practice*. Wiley.
- 72.Khader, R. & Morisat, A. (2019). The effect of using caricatures on improving creative writing skills. *Jordan Journal of Educational Sciences*, 15(1), 1-16.
- 73.Khasawneh, R. (2008). *Basics of teaching creative writing* (1<sup>st</sup> ed.). Modern Book World.
- 74.Kickmeier-Rust, M., Hillemann, E., & Albert, D. (2014). Gamification and smart, competence-centered feedback: Promising experiences in the classroom. *International Journal of Serious Games*, 1(1). doi:10.17083/ijsg.v1i1.7.
- 75.Kim, E., Rothrock, L., & Freivalds, A. (2016). *The effects of gamification on engineering lab activities* [conference presentation]. Frontiers in Education Conference, IEEE.
- 76.Kim, J. & Lee, W. (2015). Dynamical model for gamification of learning. *Multimedia Tools and Applications*, 74(19), 8483-8493.

77. Kim, S. (2019). Role-playing game for training a design process of startup company compensation plan. *International Journal of Game-Based Learning*, 9(2), 40-54.
78. Kingsley, T. & Grabner-Hagen, M. (2015). Gamification questing to integrate content knowledge, literacy, and 21st-century learning. *Journal of Adolescent & Adult Literacy*, 59(1), 51-61. doi:10.1002/jaal.426.
79. Kollogg, R. (2008). Training writing skills: A cognitive developmental perspective. *Journal of Writing Research*, 1(1), 1-26.
80. Llorens-Largo, F., Gallego-Durán, F., Villagrà-Arnedo, C., Compañ-Rosique, P., Satorre-Cuerda, R., & Molina-Carmona, R. (2016). Gamification of the learning process: Lessons learned. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, 11(4), 227-234.
81. Madkour, A., Saber, A. & Mubarak, A. (2016). Oral linguistic performance skills suitable for sixth graders in the light of the two approaches to linguistic analysis and linguistic communication and their availability. *Journal of Educational Sciences*, 24(4), 2-30.
82. Marisat, O. (2015). *Impact of using cartoons on improving the creative writing of tenth grade students in Jordan* [Master's thesis]. Yarmouk University.
83. Mirza, H. (2018). Evaluating the extensive English courses at the Arab Open University in Saudi Arabia from the students' perspective. *Arab Journal of Educational and Psychological Sciences*, 4, 241-279.
84. Mohamed, A. (2012). *Functional and creative editing*. Dar Almasira for Publication and Distribution.
85. Mohammadi, Z. & Izadpanah, S. (2018). The effect of emotional intelligence and gender on writing proficiency of Iranian EFL learners. *Journal of Language Teaching and Research*, 9(1), 164-174.
86. Motawe, D. & Alkhalifa, H. (2014). *Principles of research in educational, psychological, and social sciences* (1<sup>st</sup> ed.). AlMotanabi Bookshop.
87. Petrovich, M., Fornaro, C., Barany, A., & Foster, A. (2020). Game design features for facilitating identity exploration: An exploration of Minecraft EE chemistry lab. In D. Schmidt-Crawford (Ed.), *Society for Information Technology Teacher Education International Conference* (pp. 1857-1849). Association for the Advancement of Computing in Education.
88. Rahili, T. (2018). Effectiveness of a gamification-based multimedia collaborative learning environment in the development of achievement and motivation of Taibah University students. *IUG Journal of Educational and Psychological Sciences*, 26(6), 53-83.
89. Rasool, Z., Noor, N., Ayub, M., & Affal, H. (2014). *Gamification of web-based learning environment for physics problem solving* [Conference presentation]. ACSET2014, The Asian Conference on Society, Education and Technology.
90. Raymer, R. (2011). Gamification: Using game mechanics to enhance e-learning. *eLearn Magazine*, 9(3). <http://elearnmag.acm.org/archive.cfm?aid=2031772>.

- 91.Sætre, A. (2013). *Mathematics on the tablet: Using mobile technology and gamification to support student learning in junior high* [Master's Thesis]. University of Oslo.
- 92.Şahin, M. & Namli, N. (2016). Gamification and effects on students' science lesson achievement. *International Journal on New Trends in Education and Their Implications*, 7(1), 1309-1350.
- 93.Salim, S., Badawy, M., & Abdulfattah, F. (2020). Impact of literature cycles on developing EFL creative writing skills among high school students. *Educational and Social Studies*, 26(2), 1-35.
- 94.Saputra, M. (2015). LexiPal: Design, implementation and evaluation of gamification on learning application for dyslexia. *International Journal of Computer Applications*, 131 (7), 37-39.
- 95.Saudi, A. (2017). A generative learning-based strategy for developing creative writing skills and self-regulation among high school students. *Curriculum & Instruction*, 218, 91-127.
- 96.Schöbel, S., Janson, A., Jahn, K., Kordyaka, B., Turetken, O., Djafarova, N., & Leimeister, J. (2020). *A research agenda for the why, what, and how of gamification designs results on an ECIS 2019 panel*. Communications of the Association for Information Systems.
- 97.Scrivener, J. (2011). *Teaching the writing process to high school-juniors through cooper air learning strategies* [Doctoral dissertation]. Walden University.
- 98.Shehata, H. & Najjar, Z. (2003). *Lexicon of educational and psychological terms*. Egyptian-Lebanese Press.
- 99.Simoes, J., Redondo, R., & Vilas, A. (2011). Schoooooools.com: A social gamification framework for K-6 learning platform. *Computers in Human Behavior*, 29(2), 345-353. <http://dx.doi.org/10.1016/j.chb.2012.06.007>.
- 100.Terrell, J. (2016). *Instructional methods and engagement: The impact of gamification on student learning of APA style* [Doctoral dissertation]. University of Arkansas.
- 101.Todor, V. & Pitică, D. (2013). *The gamification of the study of electronics in dedicated e learning platforms* [Conference presentation]. The 36th International Spring Seminar on Electronics Technology, IEEE.

- 
102. Turan, Z., Avinc, Z., Kara, K., & Goktas, Y. (2016). Gamification and education: achievements, cognitive loads, and views of students. *International Journal of Emerging Technologies in Learning*, 11 (7), 64-69.
103. Virtual International Conference on the Future of Digital Education in the Arab World. (٢٠٢٠). *Virtual International Conference on the Future of Digital Education in the Arab World*. Saudi Arabia.
104. Williams, M. & Farber, M. (2020). Gaming pedagogy and connected learning: Perspectives from the global Minecraft mentoring program. In D. Schmidt-Crawford (Ed.), *Society for Information Technology & Teacher Education International Conference* (pp. 1926-1921). Association for the Advancement of Computing in Education.
105. Wilson, D., Calongne, C., & Henderson, S. (2016). Gamification challenges and a case study in online learning. *Internet Learning*, 4(2), 84-102.
106. Wolf, D. (2020). Employing gamification and adaptive learning to improve Title IX training. In T. Bastiaens & G. Marks (Eds.), *innovate learning summit* (pp. 653-648). Association for the Advancement of Computing in Education.
107. Yildirim, I. (2017). The effects of gamification-based teaching practices on student achievement and students' attitudes toward lessons. *The Internet and Higher Education*, 33, 86-92.
108. Zayer, S. & Dakhil, S. (2015). *Modern trends in teaching Arabic*. Almanhajia Press.
109. Zichermann, G. & Linder, J. (2011). *Game-based marketing*. John Wiley & Sons.