An Emotional Intelligence Program Via Ubiquitous Learning to Enhance EFL Critical Reading and Creative Writing Skills

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Abstract

This study investigated the effectiveness of using emotional intelligence via ubiquitous learning to enhance first year secondary stage students' EFL critical reading and creative writing skills. Participants of the study were two groups of first year secondary stage students (one experimental and one control). Instruments used in the study were an EFL critical reading test and an EFL creative writing test. The experimental group was taught based on the emotional intelligence program using U-learning and the control group received the regular instruction. Both tests were post - administered to both groups after the program had been applied. Results showed that the experimental group outperformed the control one on critical reading and creative writing tests. This indicated that the program was effective in enhancing EFL critical reading and creative writing skills of the participants. Therefore, it is concluded that using emotional intelligence via ubiquitous learning is effective in enhancing EFL critical reading skills and EFL creative writing skills for secondary stage students.

Key words: Emotional Intelligence- Ubiquitous learning - EFL Critical Reading Skills – EFL Creative Writing Skills

Introduction:

English language is considered the strongest medium of communication among all people all over the world. Educating learners of the ways to master English language is indispensable especially in the age of technology and artificial intelligence that we live in. To master the English language, attention must be paid to the four skills: listening, speaking, reading, and writing. Currently, focus should also be paid to other skills like critical reading and creative writing as they are considered very important in teaching English language.

Critical reading is highly associated with critical thinking which sees reading as a dialogue between the reader and the text. Critical reading is considered an activity of reading that applies the concept of critical thinking where readers read the texts using an analytical process, and hopefully respond to the writers' position depending on their previous knowledge of the issue of the text (Lestari, 2015; Rosenblatt, 2018).

Creative writing is another essential skill for students who learn English to cope up with the most updated strategies of learning and the 21st century skills. Creativity in writing is a manner through which individuals reflect their feelings, opinions, reactions, and notions to the reader in a distinct literary manner. Creative writing was defined as an attempt to put expressions and feelings into paper in a way that is enjoyable for others to read. Creative writing practice provides manifold opportunities for discovering the ontology of writing, its functions and value (Carrier, 2015; Mullineaux, 2017).

Emotional intelligence plays an important role in improving the learning experience for EFL learners. Woolery and Mayer (2001) defined emotional intelligence as the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. Moreover, Goleman (1995) claimed that emotional intelligence is as powerful or more powerful than IQ. EI also involves the ability to recognize, identify and empathize with other people's emotions in order to better perform daily common activities, as for example, learning a second language.

Being in a digital world where technology surrounds, it became necessary to cope up with technology in all aspects of life especially in education. The development of mobile learning and the gradual increase range of opportunities to develop educational processes anytime, anywhere, ultimately led to a new learning approach called ubiquitous learning. Garcia-Sanchez and Lujan-Garcia (2015), stated that U-learning leverages technology to empower EFL learners, allowing them to engage with language content seamlessly across different contexts and devices. U-learning also refers to the dynamic approach that combines mobile learning to the ubiquitous learning. It is any learning activity occurring through person-to-person communication using a mobile device which is supported by an appropriate mobile technology, user interface and a pedagogical approach (Vázquez-Cano et al., 2020).

Since critical reading and creative writing are crucial skills that need to be improved in EFL learning. U-learning and emotional- intelligence can be fruitful in enhancing these skills. In the present study, the researcher utilized an emotional intelligence via U-learning program to enhance critical reading and creative writing.

Review of Literature and Related Studies:
- Critical Reading Skill:
Nature and Importance of Critical Reading Skill:

Critical reading can be defined as the application of critical thinking in a reading activity. In this sense, critical reading can be defined as an active and purposeful process of comprehending, questioning, and evaluating printed material to react intelligently to the writer's ideas. Critical reading is a process of analyzing, interpreting and, sometimes, evaluating the larger meanings of a text and how those meanings are created by the text. In real life, critical reading, which is a dynamic interaction between the page and brain, is essential for reading diverse texts. It is a social activity in which readers engage in critiquing texts. It consciously questions and evaluates a text. In other words, it is an educated guess of what texts mean (Kennedy & Hadley, 2010).

Being a critical reader means responding to the text and the author, consciously accepting, or rejecting the author's assertions, asking questions, and applying what is read to what is known and believed in. Critical reading is an activity of reading that applies the concept of critical thinking where readers read the texts using an analytical process, and hopefully respond to the writers' position depending on their previous knowledge of the issue of the text (Lestari, 2015).

To be a critical reader means to read critically in order to synthesize, analyze, and evaluate what is read. In contrast to literal and mechanic reading whose aim is to obtain knowledge, critical reading is to develop an analytical neutral comprehension of the text. It involves distinguishing fact, opinion, and belief; questioning the author's intentions, argument, and word choice; and finding the conclusions based on the evidence the writer put forth. Therefore, it requires readers to comprehend not only the content of the text they are reading but also the context in which it was produced. In brief, critical readers read beyond what was written to how and why it was written (Ateş, 2013; Mayfield, 2014).

The significance of critical reading skills is viewed by many researchers. For instance, (Camp & Camp, 2013; Pirozzi, Starks-Martin, & Dziewisz, 2014) illustrated that many employers require graduates entering the workplace to have a number of skills including critical reading skills. Also, critical reading helps readers evaluate arguments; consider commercials, products, and advertisements; and judge policies offered by the government. Moreover, learners might be confused by the huge quantity of information existing on the Internet. Therefore, they need to be taught

how to find the required information, how to connect information from different sources, and how to efficiently make use of this information to work out problems.

According to (Sultan, Rofiuddin, Nurhadi, &Prihatni, 2017; Alqatanani, 2017), critical reading skills are greatly effective as they help students to analyze what they are reading then synthesize it and finally evaluate what is read. Critical reading skills affect the critical thinking abilities which are required nowadays, and in turn, help them to be critical citizens and critical readers. Critical reading ability can foster the students' critical thinking habits. This is because reading is thinking, and one cannot read without thinking. It can help to uncover motivations and assess arguments, to consider options, products, advertisements, and commercials, and to judge policies.

Difficulties of Teaching Critical Reading Skill inside the Classrooms:

Although critical reading skills are necessary for all learners, literature has shown several studies that reflect some challenges that face those students. For example, EFL students encounter many challenges in their critical reading skills such as guessing the meaning of words in context, making comparisons, finding relationships, recognizing bias, recognizing contradictions in a text, evaluating the author's point of view --- etc. Learners lack the ability to use critical reading skills adequately. The reasons for such shortages might be related to the inadequate methods of teaching critical reading as well as neglecting the emotional variable of learning (Khodary & AbdAllah, 2014; Zing, Eng & Rafik-Galea, 2014; Zin & Eng, 2014).

Moreover, a study conducted by Zing, Eng, and Rafik-Galea (2014) found that the level of critical reading skills of the students as measured by their analytical and inference skills is poor, indicating that they have not acquired the desirable higher-order thinking skills required for the tertiary level. A survey of recent studies tackling the problem of critical reading skills for Egyptian EFL students showed that many of them suffer from weaknesses in critical reading (Zaki, 2014; Ismail, 2015; Dakhail, 2016; Abu Zeid, 2017; Amer, 2017; Bedeer, 2017; Badawy, 2018; Hanafy, 2018; El-Sayed, 2019).

- **Creative Writing Skill:**

Nature and Importance of Creative Writing Skill:

Creative writing is a major skill in EFL that should be promoted while teaching and learning EFL. In the context of education, English language skills have an essential role in helping learners develop their

thinking and creativity skills using several language processes such as, relating, commenting, connecting, predicting, recalling, comprehending, applying, associating, analyzing, synthesizing, evaluating, and solving problems. Researchers have defined creativity in writing as the manner through which individuals reflect their feelings, opinions, reactions, and notions to the reader in a distinct literary manner. Creative writing was defined as an attempt to put expressions and feelings into paper in a way that is enjoyable for others to read. Creative writing practice provides manifold opportunities for discovering the ontology of writing, its functions and value (Carrier, 2015; Mullineaux, 2017).

Similarly, creative writing can be defined as the writing that expresses the writer's thoughts and feelings in an imaginative, often unique, and poetic way. This type of writing is guided more by the writer's need to express feelings and ideas than by restrictive demands of factual and logical progression of expository writing. According to Mason (2015), creative writing was defined as an open and imaginative writing in which the authors freely express their unique thoughts and feelings. Creative writing also involves producing novel, unprecedented, unique ideas seen at the time they are produced as different from existing ideas known in a particular field (Peary and Hunley, 2015; Reilly and Langan, 2018; Fancourt et al, 2019).

Creative writing has an important role in individuals' literacy development, especially that it enables learners to express themselves freely, a fact that might contribute to increasing their self-confidence and facilitating the learning-teaching process. In teaching creative writing, teachers provide students with good opportunities to express their feelings, reactions, opinions, and thoughts, a fact that might be reflected on their personalities, self-confidence, and attitudes towards the learning process. Creative writing helps the students to master reading and writing skills, increase their self-confidence and promote communication between students and teachers (Rombough, 2016).

Creative writing enhances students' learning experiences by the encouragement of their creativity and imagination. When teachers provide students with opportunities to engage in writing exercises that enable them to express themselves, the results can be therapeutic, uplifting, and motivating. Creative writing has also helped students to learn about themselves and others. As students complete creative writing exercises, they can write out their thoughts, opinions, and feelings and thus develop a voice, a sense of self (Fields et al., 2014).

Freiman, (2015) added some benefits of creative writing for students as helping them to master these skills in secondary level facilitates their learning in the university because it helps them to express their thoughts in a clear way. In addition, it stimulates their imagination, and encourages them to explore life beyond limitations and structure. It helps students to entertain, foster artistic expression, explore the functions and values of writing, stimulate imagination, think clearly, search for identity and learn to read and write. Creative writing stimulates students' imagination and originality helping them to feel the thrill of expressing their own ideas in forms which are different from the usual writing tasks.

Creative writing boosts learners' self-esteem, gives them permission to play with language, develops awareness, engages learners deeply in the process and it is enormously enjoyable and motivating (Babaee, 2015). Writing creatively contributes to the improvement of other language skills and becomes a means to express one's attitudes, feelings, and information to communicate well and reach multiple goals in language learning process (Khodashenas & Rakhshi, 2017).

Difficulties of Teaching Creative Writing Skill inside the Classrooms:

Despite the importance of creative writing skills, they are not given proper attention in English classes at the secondary stage. Teaching English is really done in schools as students do their best to get good marks and they do not care about writing creatively. Some challenges face students while learning creative writing skills. These challenges are like students' inability to write a comprehensive, acceptable English passage due to the methods used in EFL teaching in general and composition in particular. It is claimed that the over- emphasis on grammatical and lexical accuracy, correct spelling, and the use of mechanics at the expense of the macro level and organization skills is not accurate all the time.

According to Nowbakht (2019); Wu et al. (2019), the nature of writing itself is not interesting enough to motivate English learners to practice regularly. For EFL students, nothing is more disheartening than completing a writing assignment. As referred to by Billig (2013), time pressure hinders learners' writing effectiveness. In the EFL classroom, learners will in general be constrained to finish their writing in a specific length of time. Thus, numerous students occasionally cannot accomplish their tasks. An expected problem in the writing classroom is that some students take longer time than others to compose their required pieces of work. Many never finish their writing in class. Nowbakht (2019); Praminatih, Kwary, and Ardaniah (2019); and Ramlal and Augustin (2020)

maintained that producing expanded, rational, coherent, and fluent writing piece is likely the most difficult thing in language since the reader has to comprehend what has been composed without requesting illumination or depending on the writer's tone of voice or expression.

Students may face some barriers towards writing creatively. These barriers are perceptual, emotional, cultural, intellectual, environmental, or expressive. While writing, the challenge lies in creating and sorting out thoughts and in making an interpretation of these thoughts into comprehensible readable texts (Tsao, Tseng, and Wang, 2017; Thatcher, Waterson, Todd, & Moray, 2018; Su Ping et al., 2019). Many teachers have several problems during writing classes such as low motivation, high level of anxiety, less effort, low interest, procrastination, etc. However, the biggest problem is that students wait for inspiration to produce a written product, and this results in triggering negative factors towards writing. Usually, students do not want to write, because they have never been encouraged to do it or to enjoy it.

- **Emotional Intelligence:**
Nature and Importance of Emotional Intelligence:

A number of definitions were given to the concept of emotional intelligence (EI). For example, Salovey and Mayer (1990), Salovey, Woolery and Mayer (2001) defined emotional intelligence as the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. In other words, it is also a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one's life. Mayer and Salovey (1997) defined EI as the abilities to accurately perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions to promote emotional and intellectual growth.

Moreover, Goleman (1995) claimed that emotional intelligence is as powerful or more powerful than IQ. EI also involves the ability to recognize, identify and empathize with other people's emotions in order to better perform daily common activities, as for example, learning a second language. Similarly, Goleman (1998) added that EI is seen as the capacity for understanding our feelings and those of others, for motivating others and ourselves whilst using leadership, empathy, and integrity" (p. 82). Additionally, Bar-On's (1997) defined EI as an array of non-cognitive

capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures.

Emotional intelligence concerns the process of one's appraisal of his own and others' emotions, expressing feelings appropriately, processing emotional information and regulation of emotions to make life better. Therefore, EI is an umbrella term encompassing a wide collection of interpersonal and intrapersonal skills. The ability to comprehend the feelings of others, create and retain interpersonal relationships and, most importantly, our sense of social responsibility comprises interpersonal skills, and the ability to recognize and realize one's own motivations and emotions composes intrapersonal skills (Bown & White, 2010; Ghanadi & Ketabi, 2014).

Among the benefits of emotional intelligence is that applying emotional intelligence activities and tasks can build an environment to develop students' emotional intelligence. For example, Thapa, Cohen, Guffey, & Higgins-D'Alessandro, (2013) found that the development of an emotionally safe environment lowers both students' and teachers' levels of stress and contributes to their effective management of the learning environment.

Additionally, emotional intelligence helps students to learn English, often interact with their classmates and instructors. Emotional intelligence improves learning potential of foreign language acquisition. It was asserted that cultivating emotions can assist in solving demotivation formed by anger or fear which can jeopardize language acquisition. It is evoked that emotions increase self-esteem and empathy which significantly contributes to learners' attitudes and motivation and facilitate language learning. It is stated that emotions might be the fundamental basis of motivation, one deserving far greater attention in the language learning domain (Dörnyei & Kubanyiova, 2014).

According to Salar and Oroji (2017), emotional intelligence has an important role to play in strengthening communication skills when certain emotional intelligence elements are enhanced in the student. If the students have been introduced to the power of emotional intelligence, they likely would be able to effectively handle anxieties, shyness, anger, fear, and the stresses of learning difficulties. Emotional intelligence empowers students with various activities to learn. According to Ensari (2017), the importance of emotional intelligence can be attributed to the following factors: emotional intelligence affects a person's attitude and outlook on life, helps in decreasing anxiety and depression, has a high effect on social

relationships, helps people to communicate with others more effectively and helps people to reduce procrastination and increase self-confidence.

- **Ubiquitous Learning:**

Nature and Importance of Ubiquitous Learning:

Being in a digital world where technology surrounds, it became indispensable to cope up with technology in all aspects of life especially in education. So, EFL learners should make use of technology in their teaching learning cycle. The utilization of mobile technology has redesigned the way courses today are delivered to students, with the result that time, and space are no longer a constraint for students and instructors. Ubiquitous learning (U- learning) is considered a rich digital environment where students can learn with an array of tools that vastly expands their content knowledge. In most ubiquitous learning approaches, the physical environment is directly associated with learning outcomes and activities (Lenci, 2020).

The development of mobile learning and the gradual increase range of opportunities to develop educational processes anytime, anywhere, ultimately led to a new learning approach called ubiquitous learning. Garcia-Sanchez and Lujan-Garcia (2015), stated that U-learning leverages technology to empower EFL learners, allowing them to engage with language content seamlessly across different contexts and devices. U-learning also refers to the dynamic approach that combines mobile learning to the ubiquitous learning. It is any learning activity occurring through person-to-person communication using a mobile device which is supported by an appropriate mobile technology, user interface and a pedagogical approach (Vázquez-Cano et al., 2020).

In a ubiquitous computing environment, users can learn to use available technology so well and so frequently that they are not even consciously mindful of its presence (Yahya, Ahmad, and Jalil, 2010; Lin et al, 2021). Ubiquitous learning, known as u-learning, is based on ubiquitous technology. The most significant role of ubiquitous computing technology in u-learning is to construct a ubiquitous learning environment, which enables anyone to learn at anyplace at any time. Ubiquitous computing environment is a well-defined area that incorporates a collection of embedded systems (computers, sensors, user interfaces, and infrastructure of services) which is enhanced by computing and communication technologies (Lin et al, 2021).

U-learning has a lot of benefits in the field of education. Integrating technology into the learning environment gives the opportunity to users to utilize it anytime and anywhere. It can offer

continuous access to a wide range of software, or the internet, to all students, as well as teachers. Some of these benefits are; teaching and learning efficiency, access to technology, easy usage, productivity and portability. Students who were learning in technology intensive environments tended to improve academically. Hence, technology intensive environments enable learners to create, share, and evaluate knowledge using ubiquitous technology (Spikol 2010).

In addition, (Huang & Chiu, 2015; Hsieh et al., 2016) mentioned other advantages of U-learning. As a natural complement to ubiquitous computing, ubiquitous learning (u-learning) systems offers considerable advantages for English as a foreign language (EFL) learning. EFL learners often confront difficulties and challenges when they need to use English in real life settings. Contextual learning environments have been proven to improve performance in EFL learning. This type of learning supports personalization and the situation of instructional activities. It also supports collaborative and interactive learning. Moreover, it can achieve constructive learning and self-regulated learning through learning activities.

Studies Related to Using Emotional Intelligence via U-learning in Enhancing Critical Reading and Creative Writing:

Many studies have investigated the impact of emotional intelligence via U- learning on critical reading and creative writing EFL skills.

For example, Liu and Chu (2010) investigated how ubiquitous games influence English learning achievement and motivation through a context-aware ubiquitous learning environment. An English curriculum was conducted on a school campus by using a context-aware ubiquitous learning environment called the Handheld English Language Learning Organization (HELLO). HELLO helped students to engage in learning activities based on the ARCS motivation theory, involving various educational strategies, including ubiquitous game-based learning, collaborative learning, and context aware learning. Two groups of students participated in the learning activities by separately using ubiquitous game-based learning and non-gaming learning. Participants included high school teachers and juniors. During the experiment, tests, a survey, and interviews were conducted for the students. Results of the study demonstrated that incorporating ubiquitous games into the English learning process achieved a better learning outcomes and motivation than using non-gaming method. They further revealed a positive relationship between learning outcomes and motivation.

Also, García-Sánchez (2012), aimed to analyze different ubiquitous learning (u-Learning) platforms used when learning English as a Foreign

Language (EFL). The combination of face-to-face lessons with multimedia content and digital mediated learning allowed students to enhance their independent learning abilities when it best suits them. Successful u-learning took place when students had access to different interactive activities, content videos, screencast presentations and automatic evaluation systems that contributed to improving learners' language learning skills. Results showed that the program allowed learners to access authentic cultural and language content not only by means of face-to-face classes but also through reinforcement activities via u-learning platforms.

In their study, Ebrahimi, Khoshsima and Zare-Behtash (2018) examined the influence of emotional intelligence on reading skill as affective factors play a role in learning in general and language learning in particular. Intermediate EFL learners in Iran were given an IELTS test for evaluating their reading proficiency. Next, the Emotional Quotient of the subjects were calculated and after that teaching Emotional Intelligence was started. The findings of the study showed a significant progress both in Emotional Intelligence and Reading Skill of the subjects in the experimental group, but no significance was observed in the control group. The results of the present research could help develop the knowledge on Emotional Intelligence enhancement and its possible effect(s) on language learning.

In another study, Lin et al (2021), presented the design of a multimodal ubiquitous learning application (MULA) with different augmenting effects for enhancing English as a Foreign Language (EFL) academic writing instruction. In a pilot project, 17 undergraduates engaged in ubiquitous learning and writing at a green building and provided survey responses and interview feedback about their ubiquitous writing experience. The survey results were categorized into perceptions about (a) the ubiquitous learning mode, (b) effective writing facilitation, (c) motivation, self-efficacy, and attitude, (d) self-regulation, and (e) system usability. Interview results further illustrated how using MULA led to positive and negative experiences during ubiquitous writing. A final synthesis on the findings led to the identification of seven affordances that made MULA a potential tool for enhancing writing instruction in EFL settings. The seven affordances were considered effective design elements for multimodal context-aware ubiquitous learning that served the purpose of enriching English academic writing instruction.

Jia et al (2022), aimed to present the developmental process and methods used to design, develop, evaluate, and validate the AIELL system and to distil key design features for English learning in authentic contexts. There were 20 participants in the tests, with three interviewees in the study. Mixed

research methods were employed to analyze the data, including a demonstration test, a usability test, and an interview. The quantitative and qualitative data collected and analyzed affirmed the validity and usability of the design and helped to identify areas for further improvements to the desired features. This study informed the integration of artificial intelligence into facilitating language teaching and learning guided by the mobile learning principle.

Pilot Study:

In order to determine the students' competence in critical reading and creative writing skills, the researcher administered an EFL pilot critical reading test and an EFL pilot creative writing test to (30) first-year secondary stage students. The following tables show the results.

Table 1:

Results of the Critical Reading Skills Test

Critical Reading Skills	Questions No.	Lowest Score	Max Score	Mean	%	SD
Vocabulary awareness	1	0	1	0.5	50 %	0.25
Distinguishing facts and Opinions	1	0	1	0.3	30%	0.49
Recognizing author's	1	0	1	0.4	40%	0.36
Analyzing the text	1	0	1	0.3	33.2%	0.49
Making evaluation	1	0	1	0.4	46.1%	0.36
Total	5	0	1	0.38	40 %	0.39

Results in table (1) showed that the students' mean score in each critical reading sub-skill is not at the desired level and needs to be enhanced as the total percentage of the skills is 40%.

Table 2:

Results of the Creative Writing Skills Test

Creative Writing Skills	Questions No.	Lowest Score	Max Score	Mean	%	SD
Originality	1	0	1	0.4	40%	0.36
Fluency	1	0	1	0.3	30%	0.49
Elaboration	1	0	1	0.4	43%	0.36
Content quality & Creativity	1	0	1	0.3	33.2%	0.49
Flexibility	1	0	1	0.2	26.1%	0.64
Total	5	0	1	0.3	34.4%	0.46

Results in table (2) showed that the students' mean score in each creative writing sub-skill is not at the desired level and needs to be enhanced as the total percentage of the skills is 34.4%.

Statement of the Problem:

Based on literature review and the results of the pilot study, it was concluded that:

" EFL first year secondary stage students have deficiencies in their critical reading and creative writing skills". Thus, it became necessary to find a solution to that problem, so an emotional intelligence program via ubiquitous learning was designed to enhance first year secondary stage students' critical reading and creative writing skills.

Research Questions:

This research attempted to answer the following questions:

To what extent can an emotional intelligence program via ubiquitous learning contribute to enhancing critical reading and creative writing skills of EFL first year secondary stage students?

This main question led to the following sub- questions:

1- What are the features of the emotional intelligence program via ubiquitous learning for enhancing EFL first year secondary stage students' critical reading and creative writing skills?

2- What is the effectiveness of the emotional intelligence program via ubiquitous learning on enhancing EFL first year secondary stage students' critical reading skills?

3- What is the effectiveness of the emotional intelligence program via ubiquitous learning on enhancing EFL first year secondary stage students' creative writing skills?

Research Hypotheses:

This research attempted to verify the following hypotheses:

1- There is a statistically significant difference ≤ 0.05 level between the mean score of the control group and that of the experimental one on the post administration of critical reading skills test favoring the experimental group.

2- There is a statistically significant difference ≤ 0.05 level between the mean score of the control group and that of the experimental one on the post administration of creative writing skills test favoring experimental group.

3- There is a statistically significant difference ≤ 0.05 level between the mean score of the experimental group pre-critical reading skills test and that of the post critical reading skills test favoring the post-test.

4- There is a statistically significant difference ≤ 0.05 level between the mean score of the experimental group pre-creative writing skills test and that of the post creative writing skills test favoring the post-test.

Research Purpose:

The present research aimed at enhancing EFL critical reading and creative writing skills of first year secondary stage students using an emotional intelligence via ubiquitous learning.

Research Significance:

The present research was hoped to be significant for the following reasons:

1- It dealt with two important skills in EFL area which are critical reading and creative writing.
2- It integrated technology to teaching critical reading and creative writing.
3- The study provided an emotional intelligence program via ubiquitous learning that can be utilized in teaching English as a foreign language and as a guide for teaching other subjects.
4- The study can direct the attention of curriculum designers, researchers, teachers, and supervisors to integrate emotional intelligence program via ubiquitous learning into classroom activities.

Research Delimitations:

This research was delimited to:

1- Some critical reading skills like (vocabulary awareness - distinguishing facts and opinions - recognizing author's purpose - analyzing the text - making evaluation) and some creative writing skills like (originality - fluency - elaboration - content quality and creativity - flexibility) suitable for the participants of the study.
2- A selected sample of (50) EFL first year secondary stage students from Hesham Barakat Secondary School for Girls, Kafr El-Sheikh Governorate.

Methodology:

Participants:

The participants were 50 first year secondary stage EFL students. Two intact classes were randomly selected from Hesham Barakat Secondary School for Girls, Kafr El-Sheikh governorate in the first term of the academic year 2019-2020. The participants were assigned into two groups: one is experimental which was taught through emotional intelligence program and the other one is control which was taught using traditional teaching methods. Each group consisted of 25 first year secondary stage students. Students' age in each group ranged from 16-17 years old. They have the same level in English and almost the same socio -economic background. Students were observed during the study to record their trails, engagement, and changes.

Design:

Quasi experimental design was adopted in the current study. Two EFL first year secondary stage students' intact classes participated in the study. They were divided into a control group and an experimental group. On one hand, the experimental group was taught through the training program based on emotional intelligence via U-learning to enhance EFL critical reading and creative writing skills. On the other hand, the control group received traditional instruction of teaching these skills.

Instruments:

The present research used the following instruments:

1- An EFL critical reading skills test (Pre-Post).   (Appendix D)
2- An EFL creative writing skills Test (Pre-Post) with an Accompanying Rubric for Scoring it.   (Appendix E)

Operational Definitions of Terms:

Emotional Intelligence:

For the purpose of the current research, emotional intelligence was operationally defined as a kind of intelligence that aims to integrate both mind and emotions in education through a range of activities based on self-awareness, self-organization, social skills, empathy, and motivation to help high school students develop critical reading skills and writing Creative.

Ubiquitous Learning:

Ubiquitous learning was operationally defined as the mean by which students can integrate portable learning devices with various portable computers to share various educational materials in an easy and fast way between themselves and their teachers. It is the ability of the learner to translate their emotional intelligence around different subjects to develop critical reading skills and creative writing skills.

Critical Reading:

Critical Reading was operationally defined as the ability of the student to read and analyze the text in an active process and a meaningful understanding aiming at questioning and evaluating the printed material through the intelligent interaction with the ideas of the writer.

Creative Writing:

For the purpose of the current research, creative writing was operationally defined as the ability of the student to think creatively and to translate these ideas through writing. Learners will use their imaginations based on their emotional intelligence on various topics to write an essay on the topic in an innovative way.

Results and Discussion:

The results of the research are statistically analyzed in terms of its hypotheses and they are discussed in the light of the theoretical background and related studies. Research results were reported as follows:

Testing the first hypothesis:

The first hypothesis stated that "There is a statistically significant difference ≤ (0.05) level between the mean score of the control group and that of the experimental one on the post administration of the critical reading skills test favoring the experimental group."

To verify this hypothesis, a t-test was used. Table (3) illustrates the results.

Table 3

Comparing the Control and the Experimental Group Performance on the Post Administration of the Critical Reading Skills Test

Skills	The group	N.of cases	Means	S.D	df	T.Value	Sig.
Analyzing the test	Control	25	2.16	0.80	48	-5.74	0.01 Sig.
	Experimental	25	3.52	0.87			
Distinguishing facts from opinions	Control	25	1.84	0.98		-5.17	0.01 Sig.
	Experimental	25	3.28	0.98			
Making evaluation	Control	25	1.76	0.87		-4.75	0.01 Sig.
	Experimental	25	3.04	1.02			
Vocabulary awareness	Control	25	2.00	1.29		-4.87	0.01 Sig.
	Experimental	25	3.52	0.87			
Recognizing author's purpose	Control	25	2.16	1.14		-3.72	0.01 Sig.
	Experimental	25	3.28	0.98			
Total degree of Test	Control	25	11.04	3.422		-5.682	0.01 Sig.
	Experimental	25	16.64	3.546			

Table (3) shows that the t-values were statistically significant at the 0.01 level. This means that there were significant differences between the experimental and the control groups in the post- administration of the EFL critical reading skills test. These differences could be ascribed to the implementation of the emotional intelligence via U-learning program. Therefore, the First hypothesis of the research was verified and accepted.

Testing the second hypothesis:

The second hypothesis stated that "There is a statistically significant difference ≤ (0.05) level between the mean scores of the experimental group pre-critical reading skills test and that of the post administration of the critical reading skills test favoring the post-test".

To test this hypothesis, a t-test was used.

Table 4
Comparing the Performance of the Experimental Group on the Pre and Post Administrations of Critical Reading Skills Test

Skills	Application	N.of cases	Means	S.D	df	T.Value	Sig.
Analyzing the test	pre – test	25	1.76	0.66	24	-8.36	0.01 Sig.
	post – test	25	3.52	0.87			
Distinguishing facts from opinions	pre – test	25	1.76	0.66		-6.36	0.01 Sig.
	post – test	25	3.28	0.98			
Making evaluation	pre – test	25	1.60	0.81		-6.64	0.01 Sig.
	post – test	25	3.04	1.02			
Vocabulary awareness	pre – test	25	1.60	0.81		-10.55	0.01 Sig.
	post – test	25	3.52	0.87			
Recognizing author's purpose	pre – test	25	1.52	0.87		-10.00	0.01 Sig.
	post – test	25	3.28	0.98			
Total degree of Test	pre – test	25	8.24	1.94		-14.84	0.01 Sig.
	post – test	25	16.64	3.54			

The results in table (4) indicated that there are statistically significant differences between the mean score of the experimental group in the pre-post administration of the critical reading test in all its sub-skills and the total score of the test favoring the post administration. All t- values were significant at (0.01) and degree of freedom was 24. These results confirmed the validity of the second hypothesis and the hypothesis was accepted. The researcher attributes these results to the effect of the emotional intelligence program.

Testing the third hypothesis:

The third hypothesis stated that "There is a statistically significant difference ≤ (0.05) level between the mean scores of the control group and that of the experimental one on the post administration of the creative writing skills test favoring the experimental group".

To test this hypothesis, a t- test was used as shown in Table (5).

Table 5
Comparing the Control and the Experimental Group Performance on the Post Administration of the Creative Writing Skills Test

Skills	The group	N.of cases	Means	S.D	df	T.Value	Sig.
Originality	Control	25	1.76	0.43	48	-6.62	0.01 Sig.
	Experimental	25	2.92	0.75			
Fluency	Control	25	1.76	0.43		-8.54	0.01 Sig.
	Experimental	25	3.12	0.66			
Elaboration	Control	25	1.80	0.40		-8.44	0.01 Sig.
	Experimental	25	3.32	0.80			
Content Quality & Creativity	Control	25	1.80	0.40		-7.66	0.01 Sig.
	Experimental	25	3.20	0.81			
Flexibility	Control	25	1.64	0.56		-6.72	0.01 Sig.
	Experimental	25	2.88	0.72			
Total degree of Test	Control	25	8.76	1.53		-9.63	0.01 Sig.
	Experimental	25	15.44	3.11			

Table (5) shows that the t-values were statistically significant at the 0.01 level. This means that there were significant differences between the experimental and the control groups in the post- administration of the EFL creative writing skills test. These differences could be ascribed to the implementation of the emotional intelligence via U-learning program. Therefore, the third hypothesis of the research was verified and accepted.

Testing the fourth hypothesis:

The fourth hypothesis stated that "There is a statistically significant difference ≤ (0.05) level between the mean scores of the experimental group pre-creative writing skills test and that of the post administration of the creative writing skills test favoring the post-test".

To test this hypothesis, a *t*-test was used. Table (6) indicates the results.

Table 6

Comparing the Experimental Group Performance on the Pre and Post Administrations of Creative Writing Skills Test

Skills	Application	N.of cases	Means	S.D	df	T.Value	Sig.
Originality	pre – test	25	1.88	0.33	24	-7.69	0.01 Sig.
	post – test	25	2.92	0.75			
Fluency	pre – test	25	1.72	0.54		-9.89	0.01 Sig.
	post – test	25	3.12	0.66			
Elaboration	pre – test	25	1.84	0.37		-10.36	0.01 Sig.
	post – test	25	3.32	0.80			
Content Quality & Creativity	pre – test	25	1.76	0.43		-12.34	0.01 Sig.
	post – test	25	3.20	0.81			
Flexibility	pre – test	25	1.64	0.56		-9.34	0.01 Sig.
	post – test	25	2.88	0.72			
Total degree of Test	pre – test	25	8.84	1.84		-15.85	0.01 Sig.
	post – test	25	15.44	3.11			

The results in Table (6) illustrated that there are statistically significant differences between the mean scores of the experimental group in the pre-post administration of the creative writing test in its sub-skills and the total score of the test favoring the post administration. All t- values were significant at the (0.01) level and degree of freedom = 24. These results confirmed the validity of the fourth hypothesis and the hypothesis was accepted. The researcher attributed these results to the effect of the emotional intelligence program.

Conclusion:

Critical reading and creative writing are considered two crucial skills which are effective for all English language learners. Therefore, the present study was conducted to deal with improving these two vital skills with the

care given to the necessity of emotional intelligence as one of the basic types of multiple intelligences with the help of technology via U-learning. This study could be regarded as a guide for educators to help learners investigate the world around them critically and strengthen their creativity and imagination. In addition, the current research can provide more and more prospects into the realm of using critical thinking while reading and creative writing and the coming technology to help education.

Based on data analysis, discussion, and results, it could be concluded that using emotional intelligence via U-learning program resulted in developing English critical reading and creative writing skills of first year secondary stage students. These encouraging results were not attributed only to the designed program but also to the positive impact of the learning environment, the autonomous learning strategy and most importantly; the learning-centered approach. Moreover, the varieties of exercises, quizzes were so helpful and provided learners with enough practice to improve the targeted skills significantly. Additionally, collaborative activities and communicative pair and group work were so effective in the students' success. To sum up, the experiment was proved to be effective and supportive.

Recommendations of the Research:

Some recommendations for teachers, students, course designers and EFL researchers were suggested based on the results and the conclusion of the current study as follows:

For EFL Teachers:
- EFL teachers should be trained in including emotional intelligence activities in their methods of teaching, especially with the help of technology.
- EFL teachers should train their students to practice emotional intelligence activities inside classrooms to practice English language and create an enjoyable environment for learning.
- New technology in teaching EFL skills such as U-learning should be taken into consideration by teachers paying attention to the necessity of having positive attitudes towards learning.
- EFL teachers should encourage learners to effectively participate in interactive tasks and activities.
- Teachers should consider using technology inside classrooms a top priority to improve EFL skills.

For EFL Students:
- Students should practice critical reading and creative writing more.

- Learner centered approach and autonomous learning should be adopted in the learning process. Therefore, teaching materials, tasks, and activities should be developed in terms of learners' needs.
- Students should increase their level of autonomy and increase their thinking abilities and creativity.
- School stakeholders should equip their schools with the latest technological facilities to facilitate the teaching-learning cycle for students.

For EFL Course Designers:
- Course designers should include emotional intelligence activities in developing EFL courses particularly at secondary school level.
- Course designers should explore and exploit new techniques, methods, and strategies for improving critical reading and creative writing skills.
- Course designers should consider using technology, especially U-learning as it proved its significance in enhancing EFL.

For EFL Researchers:
- EFL researchers should use the insights of the current study to use emotional intelligence via U-learning in other areas of teaching English language and in improving different attitudes of students.
- EFL researchers should search different trends using technology and other innovative ways of teaching English language to improve critical reading and creative writing skills for students.

Suggestions of the Research:
The following points are recommended to be considered for further research:
- Similar research can be conducted for a longer period, at different educational levels and with a larger sample for more genuine results that confirm the results of the present study.
- Further research can be conducted to measure the effect of emotional intelligence via U-learning on developing EFL critical listening, speaking and other creativity skills.
- Further research can be conducted on the development of critical reading and creative writing skills as two important skills in EFL education.
- Further researcher can be conducted to measure the effect of emotional intelligence via U-learning in EFL contexts on self-efficacy, foreign language anxiety, language aptitude, motivation etc....

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