

**Developing EFL adult learners' critical  
thinking through a program based on an  
e-community context**

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**Abstract**

The study aimed to design a program based on an e–community context to develop adult EFL learners’ critical thinking. The study started with a review of the literature and previous studies related to critical thinking, its components, and e–communities where the it took place. The researcher designed the study instruments, including a pre–post critical thinking test, and a rubric. Then, the researcher designed the proposed program for developing adult EFL learners’ critical thinking. A group of voluntary adult EFL learners (n=20) participated in the study. They studied eight online–based sessions, including the pre–post tests. Learners’ scores on the pre and post–tests were statistically analyzed using the T–test, and the effect size was also specified. Besides, a qualitative analysis of the students’ performance and satisfaction was conducted. Both quantitative and qualitative analyses revealed that the proposed program based on an e–community context was effective in developing adults’ EFL critical thinking.

**Keywords:** e–community, critical thinking.

**مستخلص البحث:**

تهدف الدراسة إلى تصميم برنامج يعتمد على سياق المجتمع الإلكتروني لتنمية التفكير الناقد لدى المتعلمين الكبار. بدأت الدراسة بمراجعة الأدبيات والدراسات السابقة المتعلقة بالتفكير الناقد ومكوناته والمجتمعات الإلكترونية - حيث أجريت الدراسة. صمم الباحث أدوات الدراسة بما في ذلك اختبار التفكير الناقد قبل الاستبيان ، واستبيان التفكير الناقد

، ونموذج تقييم الاستبيان. ثم ابتكر الباحث البرنامج المقترح للدراسة. شاركت مجموعة تطوعية من متعلمي اللغة الإنجليزية الكبار (ن = 20) في الدراسة. تمت الدراسة من خلال ثماني محاضرات على الإنترنت بما في ذلك اختبارات الدراسة. تم تحليل إحصائي لدرجات الطلاب في الاختبارين القبلي البعدي إحصائياً باستخدام اختبار T ، كما تم تحديد حجم التأثير. بالإضافة إلى ذلك ، تم إجراء تحليل نوعي لأداء ورضا الطلاب. كشفت كل من النتائج الكمية والنوعية أن البرنامج القائم على سياق المجتمع الإلكتروني كان فعالاً في تطوير التفكير الناقد للغة الإنجليزية كلغة أجنبية.

**الكلمات المفتاحية:** المجتمعات الإلكترونية ، التفكير الناقد

## Introduction

In a rapidly changing world, e-learning and critical thinking have been given a great interest in adult education. Traditional classes are no longer the only place for learning. Old teaching strategies that depend on recalling and memorization are no longer effective in the age of open space. Now learners can receive degrees without the need to visit a school or a college regularly. They can proceed in learning at home or in their workplace through virtual platforms such as educational websites and android applications. Many virtual platforms have proved their effectiveness in educating people, such as Khan Academy, Coursera, Udemy, and Cambly. Through these platforms, learners have the freedom to choose among thousands of topics and fields to read about and learn.

At the same time, critical thinking is an essential component of adult education; many scholars link critical thinking to adult education. Moore (2010) believes that adult learning is a unique phenomenon that requires supporting processes to make it successful. He also confirms that CT is one of the required outcomes that co-exist with adult learning to enhance the entire learning process.

The critical thinking gap is one of the most significant challenges in education in the 21<sup>st</sup> century. According to Seale (2020), CT is a set of skills including reasoning, analyzing, and displaying the healthy sense of skepticism needed to seek evidence. He also believes that there is a rising urge nowadays to fill the CT gap through unusual contexts such as e-communities. Therefore, CT should be prioritized by systems leaders and implemented in online learning, especially during natural disasters and pandemics. This implementation will help adult EFL learners develop professionally, socially, and culturally.

Wagner (2008) included CT as one of seven survivor skills required to be successful in the workplace in the 21<sup>st</sup> century. Besides, CT involves reasoning in a goal-oriented fashion Halpern, (2003); Moseley et al., (2005); Sternberg, Roediger, & Halpern, (2007). Similarly, Paul and Elder (2007) described CT as the art of analyzing and evaluating thinking to

improve it. In this regard, CT has become an essential component of adults' lives to reach their life goals and grow professionally. Also, Hendricson et al. (2006) state that adult EFL learners need to acquire higher CT abilities such as; pattern recognition, ability to think ahead, and anticipate outcomes and problems. Also, it is preferable to learn how to retrieve knowledge quickly, maintain personal composure so that emotions do not hinder decision making. Besides, CT is required to make confident decisions, even when conditions are unclear, and outcomes are uncertain. By learning these skills, adult learners will be able to develop from being novices to experts.

Furthermore, CT helps adult learners face modern challenges, support their families, shift their careers, and get developed professionally. Most working adult learners do not have enough time to enroll in regular educational courses. So, they resort to using accessible resources such as the internet. However, they lack further critical thinking development.

Due to technological development and social media use, the idea of forming online communities has emerged. Wenger (2010) states that e-communities can be viewed as social learning systems; therefore, they can be easily implemented in adult EFL learning. When a particular group is created on Facebook, for instance, it is obvio

us what domain it addresses (i.e. a group of English language adult learners), who the members are, and whether membership is obtained through applying or whether it is open to anyone to join, and finally, how the group will use the affordances of the platform to share materials, ideas, and generate knowledge within the e–community.

The present study aimed at measuring the effect of using a program based on an e–community context to develop EFL adult learners’ critical thinking. So strategies based on data analysis, decision–making, raising questions, and argumentations were implemented in the study to fill in this gap.

### **Context of the Problem**

Due to lack of programs focusing on critical thinking in Egypt, most learners lack the required critical thinking abilities for their study, work, and life. Consequently, this lack of thinking abilities will be reflected in EFL learners. Also, most programs do not use e–communities as they still depend on traditional classes and paper books, so most learners lack the skills of dealing with e–communities in learning. Several studies support this conclusion:

EISayed (2017) stated that the use of Facebook and new technologies allow better opportunities for learning. She also assured the importance of stimulating learners’ critical thinking as

teaching thinking is more important than the language itself. Therefore, it could be concluded that e-communities play an effective role in developing learners' CT.

Moustafa (2009) stated that critical thinking is not given enough attention in education in Egypt. As a result, teachers are not ready to practice new trends in teaching and teaching CT to their students as they are trained on this kind of thinking. Moreover, most students focus on recalling and memorizing information rather than processing and thinking critically.

At the same time, implementing e-communities and virtual platforms in the Egyptian education is still rare. The majority of schools and universities still rely on the traditional classroom as a medium of teaching and learning. In the past few years, some organizations tried to apply e-communities in education; however, this application was limited to specific purposes and on a narrow scale. Recently, due to the outbreak of the COVID-19 pandemic, learners started to rely on virtual platforms as alternatives to face-to-face contexts. This shift would help in saving lives and decreasing the numbers of covid-19 cases.

Due to the previous reasons, the researcher found an urge to design a program based on an e-community context to develop EFL learners' CT abilities. Thus, the researcher held

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some online discussions with a group of adult EFL learners and asked them what they knew about CT and e–communities. Most of them did not understand what CT is. Many of them have never been taught through an e–community context. They expressed their interest in learning online and participating in the experiment.

### **Statement of the problem:**

Most EFL adults do not practice CT, even though, it is necessary for their life and work. This lack of practice may be due to the regular teaching and learning methods in schools and universities. Adult EFL learners often fail to answer questions that require thinking abilities. This may be due to learning in usual contexts. Thus, the present study attempts to solve this problem by applying a program based on e–community contexts to develop adult EFL learners’ critical thinking.

### **Study Questions**

In order to investigate the problem, the present study tried to answer the following main question:

- What effect would a proposed program based on e–community contexts have on the development of EFL adult learners’ critical thinking?

To answer the previous main question, the following sub–questions had to be answered:

1. What is the current level of EFL adult learners’ critical thinking?

2. What are the components and activities of a program that aims at developing EFL learners' critical thinking abilities?
3. What are the proposed online strategies and activities that lead to developing EFL adult learners' critical thinking?
4. What is the effect of using a program based on e–communities for developing EFL adult learners' critical thinking?

**Hypothesis of the study**

“There is a significant statistical difference between the mean scores of the study participants on the pre and post administration of the test in overall critical thinking components in favor of the post–administration.”

**Aim of the Study**

The present study aims to develop adult EFL learners' critical thinking by apply a program based on e–communities.

**Significance of the Study**

This study was expected to be significant to:

- **EFL adult learners:** This study aimed at developing adult EFL learners' CT and finding possible alternatives to regular classroom–based learning through using e–community contexts. The research also suggested solutions to EFL adult learners who have responsibilities and problems related to family, work, or distance of residence, to learn through simple, cheaper, and effective ways. Most adult learners spend long

hours on the internet during work or at home, so the researcher aimed at encouraging EFL adult learners utilize this time and helping those who need to learn and develop CT abilities.

- **EFL instructors:** The study is a guide for EFL instructors who are interested in teaching CT via e–community contexts. They are provided with a variety of CT activities that would help them improve the quality of their teaching.
- **EFL researchers and curriculum designers:** The findings and results of the study represent an insightful guide to EFL researchers who could investigate related topics. The implementation of e–communities in the present study is also a reference to curriculum designers who work on educational e–community contexts.

### **Delimitations**

This study was delimited to:

1. A group of voluntary EFL adult learners (n=20).
2. Their ages range from (20 to 30) years old.
3. Six critical thinking components necessary for the study participants, which are: identifying elements of a problem or topic, data analysis, gathering data, identifying central arguments, providing evidence, and providing alternatives.

4. An e–community context; as all of the sessions were done online.

### **Definitions of Terms**

- **Critical Thinking**

According to Doyle (2019), CT refers to the ability to analyze information justly and make reasoned judgments. Erstad (2018) defines critical thinking as the analysis of an issue or situation and the data, facts, or evidence related to it.

In the current study, CT is referred to as the process of using a set of thinking components to solve problems and produce genuine alternatives. Some of these components included data analysis, gathering data, identifying elements of a problem or situation, identifying the central argument of a context, providing evidence, and considering alternative viewpoints. CT abilities are essential for EFL adult learners to solve their problems and to make judgments rationally without personal biases. These components had to be learned and practiced in e–community contexts.

- **E–communities**

According to Montgomery (2019), an e–community is a group of people with a shared purpose or interest who use the internet to interact and communicate with each other. Organizations often create online communities to bring people

together around a purpose for expansive online collaboration and growth. Donovan (2015) assumes that e–communities can be educationally and personally fulfilling when learners approach their courses with a commitment to initiate, respect, value, and fully engage in the material, dialogues, and group work.

In the current study, e–communities are referred to as online–based platforms that could be used for educational purposes. These e–communities included social media platforms, websites, and applications. As the demand of the 21<sup>st</sup> century, EFL adult learners are encouraged to rely on e–communities as possible alternatives to real classrooms.

### **Method Study Design**

The researcher adopted a quasi–experimental design as it included a pre–post test to examine the effect of using e–communities as learning contexts through which EFL adult learners’ CT can be developed. The researcher used the one–group pretest–posttest design and adopted a mixed–methods model. Participants’ performance was analyzed using quantitative and qualitative analysis of the results. The purpose of using one group was to accurately observe the effect of the proposed program on the available number of participants.

**Participants**

The researcher set some criteria for selecting the participants of the present study; Participants were 20 adult learners (N=20), their ages ranged from 20 to 30 years old. Most of them were university graduates, teachers, and employees who were willing to develop their English level. They also showed their interest in learning and developing their CT abilities. Besides, they welcome the idea of learning online through e-communities, as it was a new learning experiment for them. Facebook advertisements were used to invite candidates to participate in the program. The shortlisted participants were informed of the details of the experiment.

**Instruments of the Study**

The following instruments were used in the present study:

1. The pre–post critical thinking Test
2. Critical Thinking Rubric

**The Critical Thinking Program**

The program was designed to develop EFL adult learners' critical thinking through an e-community context. Throughout the program, they were given several topics and problems to analyze and raise arguments to come up with genuine solutions and alternatives. Six critical thinking components were emphasized in the program:

- identifying elements of a problem,
- data analysis,
- gathering data,
- identifying the central argument,
- providing evidence,
- Considering alternative viewpoints.

The program was conducted entirely online. The learners had to attend all the classes on ZOOM Cloud Meetings. Other applications and features of Facebook and Google were also utilized to communicate and deliver the sessions of the suggested program. Besides, the program adopted an interactive approach using multiple resources such as images, videos, e–stories, e–books, articles, online games and PowerPoint presentations.

### **Pedagogical Implications**

- The study revealed the importance of CT for adult EFL learners. It showed how CT is essential in solving social problems that adult learners might encounter in their lives.
- E–community contexts were proved to be effective in developing adult EFL learners’ CT. Besides, e–communities could be successful alternatives to traditional classrooms.

- All stages of teaching could be done through e-communities. Warming up, teaching lessons, and evaluation and assessment could be provided through e-communities.
- The proposed program proved its validity in developing adult EFL learners' CT abilities.
- Active learning activities and group discussions helped the learners to establish a strong bond with their classmates as well as the researcher. They were encouraged to participate and help each other. This atmosphere played a vital role in developing the learners' collaborative work.
- Using visual aids, such as graphic designers, illustrations, videos, and PowerPoint presentations, has a significant effect on adult EFL learners.
- Sharing the predetermined objectives of the program with the participants helped in facilitating the researcher's mission.
- Freedom of learning makes the learners more responsible and positive for their learning.

## **Results**

The results of the statistical analysis show that there is a statistically significant difference between the mean scores of the study participants on the pre and posttest in terms of the development of the learners' critical thinking in general in favor of the scores of the posttest. This is presented through the

hypothesis of the study. This difference shows the effect of using e–community contexts on developing EFL adults’ critical thinking.

### **Conclusions**

The present study aimed to investigate the effect of a program based on e–community contexts to develop EFL adult learners’ CT. To examine the effectiveness of the program, the researcher implemented several instruments. Based on the qualitative and quantitative results, it can be concluded that the proposed program was effective in developing EFL adult learners’ CT. Moreover, the participants showed improvement and a positive attitude towards the proposed training program and expressed their intention to apply critical thinking strategies in the future. Based on the previously mentioned findings, it can also be concluded that e–communities were proved to be effective in developing EFL adult learners’ critical thinking abilities. It is worth mentioning that the program can be more effective if applied for a more extended period.

### **Recommendations**

Based on the results of the present study, the researcher suggests the following recommendations:

- Activities based on CT components such as data analysis, providing evidence, and gathering data should be implemented in EFL adults’ curriculum. This implementation

would help adult EFL learners think creatively and produce genuine solutions rather than just consuming knowledge.

- E–communities are proved to be economical and safe contexts for learning, especially during natural disasters, social disorders, or epidemics, such as the COVID–19 pandemic that the world experienced in 2020.
- Universities, schools, and educational institutions should develop their e–communities and create a massive amount of educational tools to help learners learn better and think critically. For that, more funds should be allocated to designing integrated educational e–communities.
- E–communities could be an effective alternative to traditional classrooms for adult learners, especially those who do not have time or ability to attend classroom–based courses.
- English language teachers need adequate training before conducting an e–community course to get familiarized with the required technical tools.
- Student teachers should be trained on teaching CT activities in class.
- Global issues such as social, economic, political, and environmental issues should be implemented in English

language programs to encourage EFL adult learners to think critically and produce effective solutions.

- Adult learners should participate in choosing topics that match their needs and preferences.
- Designing educational programs should be based on the learners' needs.
- Learning CT helps adult learners acquire the English language easier. For that, CT should be given more attention along with the other four skills of the language.

### **Suggestions for Future Research**

Based on the results of the present study, the following research issues are suggested for further research:

- Replication of the study with young EFL learners at different grade levels in schools.
- Investigating the effect of using other language skills in programs based on e–community contexts. For example, investigating the effect of using e–communities in developing learners' language use.
- Conducting strategy training programs using e–communities to develop other CT components for adult or young learners.

- Investigating the effect of using e–communities in faculties of Education on improving EFL student teachers' teaching skills.
- Investigating the effect of using “e–communities” as a possible assessment instrument instead of traditional contexts.
- More studies could be conducted to investigate the effectiveness of the different features and tools of e–communities in developing EFL learners' language acquisition. For example, “investigating the effect of social media or video conferences in developing EFL language acquisition.”

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