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The Effect of a Collaborative Learning Program Based on the Connectivism Theory on Developing EFL Prep Stage Students' Critical Literacy

A Dissertation Submitted in Partial Fulfillment of the Requirements for the PhD in Education (Curriculum & Instruction)

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Research title: The Effect of a Collaborative Learning Program Based on the Connectivism Theory on Developing EFL Prep Stage Students' Critical Literacy

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Abstract

The study aimed to examine the effect of using a program based on the Connectivism for developing EFL prep stage students' critical literacy. A one- group pre-posttest design along with a mixed research approach incorporating both quantitative and qualitative assessments were utilized in the study. A group of twenty-five second prep stage students (n= 25) in the Egyptian international school in El Maadi, Cairo was included in the study. They received a six-week critical literacy training, for about 48 hours, using Edmodo and Google Meet. The researcher designed the study program and the instruments for measuring the students' critical literacy. An online pre / post critical literacy test was administered. Then, the students' scores on the test were statistically analyzed both quantitatively and qualitatively. Results showed the positive effect of using collaborative e-learning for developing prep stage students' critical literacy.

Keywords: *Connectivism, Collaborative Learning, Critical Literacy, Prep Stage Students*

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Chapter One
Background and Problem
Introduction

New technologies that influence how information is shared and how people connect have greatly affected all our aspects of life. These technological innovations have brought influential advances and opportunities in all fields accompanied by abundant challenges at the same time. Education is not excluded from this effect. These tools have increased the students' interactivity and, most importantly, they have led to the existence of a digital generation who seeks knowledge beyond classroom walls.

Napal et al. (2020) explained this effect when referring to the increasing relevance of using technology in teaching and learning settings. They created new responsibilities for teachers such as designing new learning situations using digital resources appropriately. Grand-Clement (2017) added that such digital context has led to a changing of roles for both teachers and learners. Teachers are considered a guide for learners rather than to be the source of the knowledge. Learners, on the other hand, are required to develop a new mindset for a digital world acquiring a set of competencies such as collaboration and global citizenship.

According to Goldie (2016), though a number of learning theories have been introduced as explanatory frameworks for learning in the digital age, Connectivism is considered one of the most prominent of these theories. Siemens (2017) presented Connectivism as a model of learning that provides insight into learning competencies and tasks needed for learners to show in a digital era. In a similar vein, Corbett and Spinello (2020) emphasized that "from its early development,

Connectivism was positioned as an alternative learning theory more consistent with the changing environment and technological shifts affecting learning and the nature of knowledge and its sources" (p.2).

In such a connectivist learning model, Dunaway (2011) explained that learning takes place when learners make connections between ideas located throughout their personal learning networks. Martínez and De Frutos (2018) contended that Connectivism refers to "the knowledge that emerges in the interaction between nodes, and transcends its members in a collaborative knowledge building process" (p. 24). Being mainly based on the diversity of opinions, Banihashem and Aliabadi (2017) confirmed that e-learning is one of the main implications of using Connectivism in the educational field that " can access network nodes and learning through the interaction and flow of knowledge" (p. 6).

Generally speaking, Chitra and Raj (2018) defined e-learning as "the intentional use of networked information and communication technology in teaching and learning" (p.S.11). A number of other terms are also used to describe this mode of teaching and learning. They include; online learning, virtual learning, distributed learning, network and web based learning. In a similar vein, Stern (2016) pointed out that e-learning is catalyzing a pedagogical shift in teaching and learning. It presents a shift away from top-down lecturing to a more interactive, collaborative approach in which students and instructor co-create the learning process. It allows instructors to design their courses within a flexible framework.

There are diverse ways of classifying the types of e-learning. For example, Guragain (2016) argued that depending on the use of the delivery medium, e-learning can be: purely online as there is no face-to-face meetings; blended learning through a combination of online and

face-to-face; synchronous or instructor led online courses; asynchronous using self-placed learning methods and instructor-led group where students may be from different geographical locations. Dhull and Sakshi (2019) confirmed that e-learning courses can be partially online by integrating existing materials with online resources or fully online.

The use of e-learning in the educational field has become a necessity due to its benefits in transforming the way in which students learn. Babu and Sridevi (2018) confirmed that e-learning "provides virtual learning worlds where learners can take part in creative learning with others through simulations, role-play, and online master classes" (p. 87). Abed (2019) added that it allows easy access to the teacher and provides a sense of equality among students. More remarkably, Chitra and Raj (2018) contended that e-learning is a highly eco-friendly way of learning as being a paperless way of learning.

Considering collaborative e-learning as one of the most promising uses of e-learning for knowledge innovation, Badawy (2012) defined it as "a process where learners produce new perspectives, find new problem solutions, change the selections of existing knowledge structure and levels, and ultimately create new meaning via interaction" (p. 218). Doyle et al. (2015) suggested that it is characterized by being an active learning in which learners participate in a constructive process of negotiation in a problem-solving task through asking questions and justifying opinions to reach a consensual answer. It is a social process in which learners interact to generate, edit, and share content.

Research has shown the significance of incorporating collaborative e-learning tools in the English language classrooms to develop students' centered learning within an active zone of participation (Pervez et al., 2018; Wilkins, 2018). Moreover, other studies (e.g. Ayan & Seferoğlu,

2017; Caws, 2018) reported an increase in the student's motivation and engagement. The students enjoyed being involved in collaborative work through discussions and analysis. Moreover, they developed the agency of their own learning depending on each student's needs. Similarly, Waugh and Su (2016), the students reported a better learning experience while working collaboratively online feeling more relaxed.

Though this digital era is increasingly influencing the students' learning outcomes, it offers the educational systems a variety of challenges. According to Malik, (2018) to prepare learners in this digital age, a different approach to education is required. Education should integrate a number of competencies into its curricula such as problem solving and operating in a global context. However, Joynes et al. (2019) stated that this new culture has shown inequality of technology access at some schools, limited ability of teachers to use technology innovatively due to large class and lack of teacher development to acquire many of the 21st century competencies such as self-study and peer learning processes.

These challenges and possibilities create space for exciting opportunities for both teachers and learners. Catalano (2019) argued that this age encourages learners to make progress in self-learning, using different forms of understanding , knowledge, and expression. Its culture allows for social innovation and change. More specifically, according to the Primary English Teaching Association Australia (2015), it explores different types of literacies including media, digital and critical literacy. In this perspective, literacy in the 21st century has expanded to be used as a tool for reflecting the social issues.

According to Junks (2013), critical literacy is a way for "enabling young people to read both the word and the world in relation to power,

identity, difference and access to knowledge, skills, tools and resources"
(p. 227). Janks also confirmed that it is about writing and rewriting the
world. Freire (1993) confirmed this idea before when stating that students
should transform their personal   experiences into knowledge and to use
the already acquired knowledge as a means to unveil new knowledge. In
this process of problem-posing, people develop their power to distinguish
critically the way they exist in the world considering the world as a
process of transformation.

Research has shown the importance of integrating critical literacy as
an essential component of the English language classroom. According to
the National Literacy Trust (2018), the ease of access and shareability of
information have enabled fake news to spread unprecedentedly. Hence,
readers should be active participants by challenging what they read.
Holmes-Henderson (2014) highlighted the same idea stating that
"learners aged 5 to 19 need to become equipped with appropriate tools
and techniques to enable them to discern truth from rhetorical
manipulation since they are bombarded by abundant speeches" (p. 2).
Similarly, Comber (2015) considered critical literacy as a means to
achieve social justice by questioning the politics of poverty everywhere.

Different learning outcomes are expected when developing students'
critical literacy as active social citizens. Referring to Shor's work on
critical literacy, Leogrande (2014) pointed out that critical literary
empowers students to question the value and relevance of what is taught,
especially when it is supposedly politically neutral. Students are expected
to have the opportunity, and take the responsibility, to share their beliefs
and questions. Moreover, this would enable them to be active
constructors of knowledge through sharing their experiences and using
their knowledge in their battle for social change.

Similarly, Jiménez and Gutiérrez (2019) contended that "when students engage in critical literacy practices, they are prone to reflect on the power they have as agents of social change" (p. 91). Giraldo Mahecha (2018) found that having students read from a critical stance added the element of fun in a reading class through tackling issues in a different way. Equally, Liu (2017) added that critical literacy practice can contribute to the development of students' language proficiency in EFL classroom by critiquing taken-for-granted norms and interrupting hegemony in the society. It helps students to recognize their own power as independent individuals along with their collective power.

It becomes clear that the rapid development in advanced communication technology has a great impact on changing the views on literacy learning. According to Vasquez et al. (2019), "new technologies have further contributed to changing definitions of literacy. Young people are grappling with the traditional demands of academic literacies while simultaneously interrogating "fake news" and managing their everyday life worlds crowded with digital doings" (p.300). Similarly, Molin et al. (2018) emphasized that a deliberate integration of digital technologies onto critical literacy work creates opportunities for students to develop competencies that support them in becoming confident producers of contemporary texts.

To sum up, it has become imperative for students, to be well prepared for meaningful interactions in this digital age, to develop their critical literacy. More specifically, more practices for teaching critical literacy are needed to develop students' awareness to question and reflect upon different perspectives for promoting social justice within and beyond the classroom walls. Hence, the present study aims to develop EFL Prep students' critical literacy by utilizing a collaborative e- learning program,

definitely through the use of Edmodo and Google Meet as digital technological tools.

Context of the Problem

Several researchers and educators have tried to promote critical literacy practices within their language classrooms. Yet, most of these practices were carried at the university level (e.g. Jiménez1 & Gutiérrez, 2019 ; Laletina, 2015; Setyorini, 2017; Suh & Huh, 2017). Few challenged enacting the theory with school-age EFL students (e. g. Bobkina & Stefanova , 2017; McDonald & Thornley, 2009) and a few studies were conducted in Arab regions EFL Classrooms yielding great challenges (e.g. Hassan , 2015; Hayik, 2016). This could be due to, as Ko and Wang (2013) explained, the fact that the prevailing culture in the EFL contexts prevents students to challenge taken-for-granted beliefs or allow them to discuss complex social and moral issues.

Empirical studies showed that although students identified the benefits of practicing critical literacy, yet different challenges were acknowledged in both the ESL and EFL classroom contexts. Rahimi and Bigdeli (2015) indicated that the students' reflective notes showed that teachers did not encourage students to become involved in ideologies embedded in the texts. Pangrazio (2016) considered that this situation can due to classroom literacy practices which are dominated by a test-oriented ideology that prepares students just for exams by memorizing lengthy lists of vocabulary neglecting the students' own voices.

On the other hand, Fajardo (2016) noted other challenges identified by teachers in most classes of critical nature. Teachers have considered that a lack of extended time for professional learning, and the limited guidance on designing critical literacy modules restrict their

understandings of the concept of critical literacy. Moreover, Failasofah (2017) reflected that the lack of schools supports in promoting students' critical capacity hinders teachers to develop a proper form of critical literacy assessment. Hence, as stated by Curdt-Christiansen (2010), most teachers are strongly influenced by their examination-based educational system which does not consider critical literacy as a requirement at exams.

Likewise, developing critical literacy in the Egyptian context is in no way different. Ibrahim and Ibrahim (2017) identified similar challenges that hinder students' meaningful interaction needed for practicing critical literacy: high density of classes, lack of resources for providing technological devices and examination-oriented culture based on rote learning. Similarly, McIlwraith and Fortune (2016) wrote that Egyptian students are required to study by heart a great amount of information just to get the highest grades in the exams which they forget just after joining the next scholastic year.

Then, El Sebai (2018) added that the inappropriateness of textbooks and curricula in Egypt do not encourage students to read between the lines lacking the presence of some level of critical thinking as well. This problem justifies Ko's perspective (2010) that the existing banking pedagogy in the EFL classrooms prevents students to be active critical global citizens. Moreover, the ministry of education is working with a centralized system where it takes over all the educational responsibilities starting from the development of the curriculum ending with the evaluation process of students.

As an English instructor for more than twenty years, the researcher observed that most Egyptian students face the previously mentioned

challenges. Even, teachers are not aware of the concept of critical literacy due to cultural and political restrictions. Students are not given a chance to express their point of view being obliged to accept the societal beliefs. They have to study a set of information just for the exams. More specifically, they are not trained well on how to develop and respect different perspectives as a means for effective discussion. Most importantly, they are restricted to take an action, which is considered the core of the critical literacy training, for political reasons.

Moreover, students' lack of language proficiency in Egypt is considered a main problem that affects negatively practicing critical literacy. As this lack prevents the students to express themselves or challenge the ideas included in texts. This perspective is confirmed in Ko's study (2013) which investigated the relationship between EFL learners' critical literacy practices and language proficiency. Results showed that the advanced students found the reading materials exciting and preferred the critical discussion in English, while the less advanced students felt reading articles difficult being unable to express their ideas in English.

In addition, textbooks are designed in a way that emphasizes what Bourke (2008) termed as the "rule of text". Students are not allowed to challenge, deconstruct or rewrite the beliefs or concepts included in such authoritative texts. Another challenge is that these textbooks do not give voice to a marginalized sector in the society who lacks equality such as gender representations or suffers poverty. Thus, a great gap exists between how the students are actually prepared now and the way they should be taught by to meet the requirements of living in the digital age.

Thus, new approaches should be applied in the Egyptian educational system that aim at preparing the students to be active citizens. This can be done through the integration of technology in the EFL classes that has the potential of developing students' abilities to discuss social, economic and political issues in the society within a collaborative atmosphere. Time flexibility and money saving are considered main features in such virtual environments. These features make learning easier, faster and more connected through the collaboration among the students and the teacher.

Thus, the researcher suggested that collaborative e- learning can develop EFL Prep students' critical literacy as an approach where students are able to socially interact with other students on one part, and with their teachers on the other part tackling some global problems and suggesting alternatives using Edmodo and Google Meet as collaborative e- learning platforms.

Pilot Study

The researcher conducted formal interviews with a group of EFL teachers (n=15) to identify to what extent the activities for developing critical literacy are carried out in the prep stage. The teachers were asked to answer some questions such as the following (Appendix A):

- What are the main components of critical literacy?
- What are the critical literacy activities that you design in your class?
- Have you ever been involved in a professional training for developing critical literacy? If so, explain the nature of that training?

The results showed that most of the teachers thought that critical literacy is an alternative term for critical thinking, except for two teachers. Also, they confirmed that most of the learning activities are

content-based designed which neglect developing such essential critical abilities. As a result, they do not have adequate time to design critical thinking activities within the syllabus. Moreover, they even do not receive any professional training for developing their critical literacy to be reflected in their practices with their students.

Moreover, the researcher conducted an online questionnaire on a group of second year prep stage, students (n=25). It consisted of 10 items with the purpose of measuring the students' actual critical literacy competencies. Each item was rated on a five-point scale (5=always, 4= often, 3= sometimes, and 2= rarely and 1= never) regarding the frequency of the students' attitudes (Appendix A). The results showed a general lack in the students' critical literacy. More specifically, most of them showed a great lack in some essential critical literacy components using the choices of "rarely" and "never" as identified in the questionnaire. Their responses were as follows:

- 85 % of the students could not identify the bias of the author. They found it difficult to understand the message conveyed in a text.
- 93 % of the students found it difficult to challenge power structures that are represented in a text. They were not given a chance to express their viewpoints in most of the school situations.
- 88 % of the students could not think of the text from a different perspective. Even, they were not flexible in accepting or respecting the others point of view. Moreover, they were not trained to think out of the box.
- 95 % of the students could not critically reflect on a given text. They mostly read literally just as to find out a certain piece of information to answer a question without reading between the lines.
- 90 % of the students did not know which action they could do.

Based on the results of the previous pilot study, it is noticed that prep stage students lack essential critical literacy competencies. Because of the overwhelming effect of technology on all aspects of life, there should be a clear shift from rote learning to a critical approach to education by learning to take a social action collaboratively against the practices of inequalities.

Statement of the Problem

Most of EFL students have problems concerning their critical literacy competencies due to being affected by the dominant examination-oriented educational system and the existing curriculum. They are not given a chance to express their voices toward social issues or even develop their awareness of such problems. Therefore, the researcher suggests using a collaborative e- learning program based on enriching the students' learning experiences to negotiate meanings or solve problems through developing their critical literacy as one of the 21st century crucial educational requirements.

Study Questions

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

- How can the suggested collaborative learning program based on the Connectivism be used to develop EFL prep stage students' critical literacy?

In order to answer the previous question, the following sub-questions had to be answered:

1. What is the level of EFL prep stage students' critical literacy?
2. What are the critical literacy components required for EFL prep stage students?

3. What are the basic components of a collaborative e- learning program for developing EFL prep stage students' critical literacy within the Connectivism?

4. What is the effect of using a collaborative e- learning program on developing EFL prep stage students' critical literacy within the Connectivism?

Hypotheses of the Study

To investigate the research problem, the study tested the following hypotheses:

1. There is no statistically significant difference between the mean scores of the study group in the two administrations of the pre and post critical literacy test with regard to the development of their overall critical literacy.

2. There is no statistically significant difference between the mean scores of the study group in the two administrations of the pre and post critical literacy test with regard to the development of each component of critical literacy (problem posing, examining multiple perspectives, critical reflection and taking an action).

Aim of the Study

The present study aims to investigate the effectiveness of using a collaborative e- learning program on developing EFL prep stage students' critical literacy. The students are expected to achieve the following learning outcomes by the end of this program:

- Detecting bias and practices of inequalities in different modes of texts.

- Being active users of the information in texts by developing independent perspectives and not to be influenced by the author's viewpoint.
- Connecting classroom practices with their personal experiences, then with their society and finally having a global vision
- Critically reflecting and actively take an action for social justice.

Significance of the Study

This study is expected to be significant to:

- **EFL learners:** They will be able to read the word and the world as a skill needed to cope with the requirements of the 21st century.
- **EFL researchers:** The study will provide EFL researchers with a theoretical background on which they can build for further studies.
- **EFL instructors:** The study will signify the importance of collaborative e-learning on EFL learning as a means to prepare active learners.
- **Curriculum designers and policy makers:** Study results are expected to be taken into account when designing the educational curricula through integrating literacy teaching with digital tools.

Delimitations

The present study was delimited to:

1. A number of twenty five EFL, second stage, students enrolled in the Egyptian international school in El Marag generalized for all students and backgrounds at this grade and age level.
2. Using Edmodo and Google Meet as online learning contexts.
3. Some critical literacy components, namely: problem posing, examining multiple perspectives, critical reflection and taking an action.

Definition of terms

Connectivism

According to Duke et al. (2013), "Connectivism is social learning that is networked" (p.6). Dunaway (2011) emphasized that it "acknowledges the role of information technology in the process of accessing information from multiple resources and the development of skills for evaluating connections between different information resources in a dynamic information network" (p.675).

In the present study, Connectivism is defined as a knowledge learning theory for the digital age in which students learn collaboratively whether synchronous or asynchronous to reproduce, share within their social networks, and to evaluate and critique any piece of information in relation to life wide contexts.

Collaborative E-learning

According to Huang et al. (2020), collaborative e-learning is defined as a learning experience in which "learners can interact directly with the learning content that they find in multiple formats (e.g. video, audio, document, etc.) using a variety of internet-based synchronous and asynchronous activities (e.g., video, audio, computer conferencing, chats, or virtual world interaction). These synchronous and asynchronous online environments will promote the development of social and collaborative skills, as well as personal relationships among participants" (p.10). Metzner and Cattafi (2012) coined it as a "teaching/learning strategy with digital media collaborative tools used to generate evolving documents as a result of knowledge sharing and experience in a scholarly context" (p.33).

In the present study, collaborative learning refers to an e- learning approach in which the students interact and exchange their ideas about different critical global issues through the use of Edmodo and Google Meet as digital tools.

Critical Literacy

According to Vasquez et al. (2019), critical literacy is " a lens, frame, or perspective for teaching throughout the day, across the curriculum, and perhaps beyond, rather than as a topic to be covered or unit" (p.306). It involves a transformative practice of being and doing that contributes to changing inequitable ways of being. Comber (2013) described it as "an evolving repertoire of practices of analysis and interrogation which move between the micro features of texts and the macro conditions of institutions, focusing on how relations of power work through these practices" (p. 589).

In the present study, critical literacy refers to the students' ability to actively problematize the taken for granted beliefs, consider them from different perspectives and reflect upon such issues finding alternatives through action taking to achieve social justice. It is based on the analysis of digital multimodal texts to convey meaning through combinations of written and spoken language.

The remainder of this dissertation will be organized as follows:

Chapter Two: Review of Literature and Previous Studies

Chapter Three: Methodology

Chapter Four: Analysis and Discussion of Results

Chapter Five: Summary, Conclusions, and Recommendations

Chapter Two

Review of Literature and Previous Studies

This chapter presents a theoretical background for this study based on a review of literature and previous studies. It deals with Connectivism as a learning theory in the digital age utilizing collaborative e-learning, followed by a discussion of critical literacy as a crucial requirement in the 21st century.

Connectivism, Knowledge and Learning

Connectivism has become an educational theory that draws attention to the effects of technology on education in general and teaching EFL in particular. It presents itself as a pedagogical approach for connecting learners with each other via social networking tools. Siemens (2004) contended that learning today is too complex to be processed in inside the individual head. Technologies affect not only the methods of education, but what is more – the content of education.

Siemens (2006) concluded that a network of people is needed to store, access, retrieve knowledge and motivate its use. Learning is considered as multi-faceted that occurs when learners make connections between ideas located throughout their personal learning networks. The information system underlying network creation consists of data, information, knowledge and meaning. More specifically, Vesela (2013) pointed out that these networks are created through connections among people, groups and systems in integrative units.

Hence, as Siemens (2006) argued, Connectivism considerably puts emphasis on the process of learning, rather than the value of the content

admitting that "a real challenge for any learning theory is to actuate known knowledge at the point of application" (p. 3). Because there is so much information available in the connected network and the information is changing rapidly, it is very important at an individual level to be able to filter content to determine which information is more valuable. In other words, in the digital age, the ability to evaluate the information is extensively critical for the digital learners.

Siemens (2006) further added that this networked action happens in two levels. As shown in Figure 1, the first level activates internally as a neural network where knowledge is distributed in a pattern across the brain. The second level exists externally in a learning network that is actively formed through connections among groups or systems. The strength of the created connections is determined by different factors such as motivation, organization of types of information and experience.

Figure. 1

Diagram of Connectivism
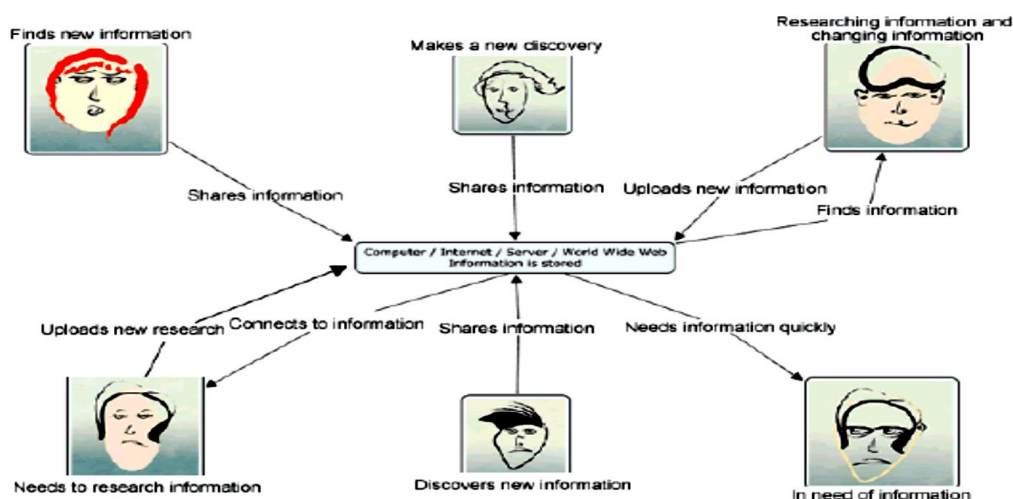
Note: The diagram shows that the starting point of learning is the individual who feeds information into the network, which feeds information back to individuals as part of a continuous learning cycle (*http://design.test.olt.ubc.ca/Connectivism*).

Yet, not just any kind of information exchange would lead to a valuable learning process. Kop (2011) identified four conditions for successful learning: aggregation, relation, creation, and sharing. During the aggregation stage, the learner looks for access to knowledge using various sources. Then, after reading or watching the content, the learner goes through a process of reflection relating the newly information to the previous one. During this stage, new information is being added to the existing knowledge sharing it with other people. In this way, Downes, (2006) considered learning as a knowledge creation process, not only a process of knowledge consumption.

Connectivism and Foreign Language Learning

The possibilities of applying the connectivist principles in foreign language education have been discussed mainly among researchers and practicing teachers. For instance, Vesela (2013) provided in her article "Connectivism in Foreign Language Education" a detailed discussion on how the connectivist principles can be applied in foreign language learning. Supporting Siemens' ideas, she pointed out that one of the main tasks of language pedagogy from the connectivist viewpoint is to help the learner to see a system in a seeming chaos. For example, the English tense system can serve as a model – the learners usually find it incomprehensible, despite its strict logic.

More specifically, language as a non-linear system is constantly developing. This can be demonstrated by vocabulary as being enriched by new words, created on the base of word-formation principles, while those words that are not used become extinct. Additionally in foreign language learning, it is important for learners to be able to perceive a language not as a structure, but as a network of networks (the network of morphology

connected with the networks of syntax, lexicology, and phonology together create a network connected with the network of semantics), and then to comprehend the connections among the linguistic elements within these networks.

Vesela (2013) made this discussion more obvious by applying the connectivist principles mentioned by Siemens (2006) in foreign language learning as follows:

- In foreign language learning, diversity can be seen in meanings of a words in various contexts and the existence of variants of a language (e.g. regional).
- Learning is a process of creating connections among the nodes by using a variety of information resources (books, Internet, mass media, ICT, etc.).
- E-learning uses a learning system that works without a human interference. It is necessary to make use of its potentials (e.g. hyperlinks).
- Foreign language learning is a life-long activity.
- Maintenance of connections is important for continuous learning. Without continual practice, the ability to communicate disappears. It is necessary not only to add new connections, but also to maintain and update the old ones.
- A foreign language cannot be learnt just as a set of words and phrases, it is important to see the connections among the language networks.
- Decision making process is a part of foreign language learning. The motivation increases when the learners decides to go further in their study such as the case of learning a foreign language for specific purposes.

Different empirical studies have been tried to explore the extent to which Connectivism can be effectively employed in enhancing foreign language learning. For example, Crawford (2017) examined how young leaners interact with digital environments for additional language learning purposes. The study revealed that such environments offer corrective feedback supporting additional language learners. Within a similar context, Poo and Funn (2017) used a connectivist learning strategy in vocabulary learning based on cloud-learning environment. The results revealed that the used strategy helped students to interact with learning content and engage with the vocabulary learning tasks.

Likewise, considering Connectivism as a new means for promoting mobile language learning, Al-Shehri (2011) exposed thirty three university students in studying an English language course using their mobile phone. Results showed that Connectivism provided a learning framework that formed meaningful sources of knowledge. Moreover, in Borna and Fouladchang' (2018) study, the implementation of Connectivism as an instructional method was found to influence EFL students' motivational outcomes such as academic self-efficacy and task value by increasing social interactions among the participants.

E-Learning as a Crisis Panacea in the Digital Age

The rapid growth of information has led to the alphabet "e" that is the symbol of this latest age of information technology which is used as an abbreviation for "electronic". According to Jethro et al. (2012) e-learning is viewed as a computer assisted learning, and as a pedagogy for student centered and collaborative learning. Agarwal and Pandey (2013) added that, due to globalization, networking and information technology has reached its peak. As a result, e-learning has played a vital role in the

field of education as offering low cost, flexibility of the environment and personal choice of material for the learners.

Extensive research work has been conducted to investigate the effect of using e-learning in teaching and learning, yielding positive results in different fields of knowledge. Shanthi snd Sasikaa (2020) explained that it provides available resources for research and learning for both teachers and students to acquire and share information resulting in increasing the learning quality. For instance, listening to the class either live or recorded helps to proceed according to their needs by accessing the texts from different resources. Similarly, the emergence of e-library has made students less dependent on their teachers and more comfortable with acquiring knowledge through research.

Most notably, a massive importance has been attached to the use of e-learning in education after the outbreak of covid-19 as a deadly pandemic disease. According to Dhawan (2020) over 1.2 billion children have suddenly stopped going to the classroom globally. As a result, many academic institutions across the world have shifted to an online mode of teaching. For example, according to the United Nations Educational, Scientific and Cultural organization (2020), after the school closures in Egypt, the students have the opportunity to interact daily with teachers through an e-learning platform called Edmodo.org. The national curriculum was provided through the knowledge bank online study platform (study.ekb.eg) that includes various materials for all stages.

Approaches to E-Learning

Currently, there is a trend to move towards blended learning services where computer based activities are integrated with practical or classroom-based situations. According to Kanev et al. (2009), different

forms of e-learning can be considered as a continuum ranging from no use of computers and/or the internet in learning tasks, through classroom aids, such as making PowerPoint slides, to laptop programs where students use their laptops as part of a face-to-face class interaction, to hybrid learning, where classroom time is reduced with more time devoted to on-line learning. Within this perspective, Badawy (2012) argues that e-learning describes a wide range of applications as follows:

Computer-Based Learning (CBL). It refers to the use of computers as a key component of the educational environment.

Computer-Based Training (CBT). It is a self-based learning activity via a computer presenting content in a linear fashion- like reading an online book.

Computer-supported collaborative learning (CSCL). It is one of the most promising innovations for improving teaching and learning using technology.

Technology-enhanced learning (TEL). It applies to the support of any learning activity utilizing technology.

Collaborative E- Learning (CEL)

As noted earlier, one of the valuable benefits of e-learning systems are that they provide new ways of collaborative learning which affect the students' performance greatly. According to Bates (2015), collaborative e-learning does not aim to replace the teacher, but to use technology primarily to improve communication between teacher and learners via a social approach. The utilization of such environment in e-learning can lead to, when applied properly, deep academic learning, or transformative learning, resulting in developing a range of high level intellectual

abilities, such as critical thinking, analytical thinking, and evaluation which are key requirements for learners in this digital age.

This e-learning system with its different interaction tools offers plentiful opportunities for learners to collaborate with all kinds of people: peers, experts, professionals, and parents. Kumi-Yeboah et al. (2017) stated that collaborative e-learning facilitates knowledge building through group discussion leading to positive interactions by exchanging ideas and criticizing others' work. It can provide opportunities to share and lead discussion in a cross-cultural e-environment when being involved in types of e-learning like MOOCs for instance. Moreover, it helps teachers to work with other students via learning activities of their choice, such as a group presentation and inquiry-based projects.

More specifically, research has identified numerous benefits for collaborative e-learning in general and in English learning in specific. García-Valcárcel et al. (2014) explored the practices of working teachers regarding collaborative learning methodologies mediated by information and communication technologies (ICT) in elementary and secondary schools in Spain. Results indicated that collaborative e-learning is an attribute for developing social abilities (such as respect), problem solving, work habits (such as responsibility), reflection, critical thinking, and initiative through interacting among students. They also increased student learning and motivation.

On the other hand, Alsamadani (2018) investigated the effect of online blogging for improving students' writing skills in Saudi Arabia. Results revealed that blogging has revolutionized EFL pedagogy and methodology. The learners dramatically improved their writing competencies in terms of content, word choice, style, and language

mechanics. Within a similar context, Mayorga (2017) explored the perceptions of university students about developing English writing using blogs in a collaborative e- learning context in Ecuador. Results showed that the students got social, psychological and academic benefits of being engaged in such a collaborative writing task by learning from their peers.

Collaborative E-Learning and Connectivism

According to Downes (2020), Connectivism is considered as one of the most prominent network learning theories that has been developed for e-learning contexts. It is viewed as a network theory of knowledge and learning that focuses on the use of digital technology for enhancing and extending interactive online learning. This idea was mentioned by Mallon (2013) stating that collaborative knowledge building goes hand-in-hand with the main features of Connectivism. Knowledge building process can be seen as a blend of individualized learning and collaboration through engaging students in different types of synchronous (chats) and asynchronous (forums) collaborative activities.

Numerous studies were conducted considering Connectivism as a theoretical lens to encourage self-directed and collaborative learning among students. Some studies (e.g. Mercado-Varela et al., 2017; Thota, 2015; Titova, 2017) examined how Massive Open Online Course (MOOC) can be integrated into a language learning course to engage learners in an authentic online collaborative community. Results showed learners' positive attitude to this intervention due to their desire to share experiences on MOOCs with the learners from all over the world, allowing them to be more autonomous while fulfilling their goals online. Moreover, MOOCs appear to have great potential for self-directed language learning using audiovisual materials

However, other studies (e.g. De Moura et al., 2018; Fondo & Konstantinidis, 2018; Motzo1 & Proudfoot, 2017; Panagiotidis, 2019) indicated that though language MOOCS provide free access to quality educational resources, students face many challenges, especially in the developing countries, due to language barriers, contextualization and the technological infrastructure. Moreover, course designers face challenges in managing the learning process mainly due to their massive scale which affects the interaction among learners. Moreno and Traxler (2016) confirmed that researchers have tried to identify the adequate level of digital literacy and language required to increase the effectiveness of using MOOCs in language learning.

Collaborative E-learning Platforms

Generally speaking, research studies have utilized a plentiful of social networks sites to engage learners in a collaborative e- learning intervention based on Connectivism. For example, Alzain (2019) identified the role of social networks using Google and Edmodo to support collaborative e-learning with University students. Results revealed that that both sites facilitated the students' e-interaction with local and international exerts through exchanging their viewpoints. Similarly, Ansari and Khan (2020) found that the use of online social media for collaborative learning enabled the students to be more creative and research-oriented. It encourages the interactivity with peers, teachers and online knowledge sharing interactivity with teachers and peers.

Research studies have examined the effectiveness of a plentiful of e-learning platforms in the field of language learning. Dodun et al. (2015) identified some of the most used e-learning platforms in academic activities as the following: Moodle, Blackboard, Kenexa, digital CHALK,

Sakai, Brightspace, Acatar, Canvas, +CMS, Atutor, Claroline, Ilias and social networking sites such as Facebook.com. Yet, the choice of the appropriate platform depends on various criteria, as Burns (2018) proposed, such as cost, ease of use, maturity and appearance (look and feel), ability to integrate with existing student information system and special features such as filtering systems.

Yet, one of the newest applications which are currently used in learning foreign languages is Edmodo. According to Hart (2019), it has been acknowledged as one of the top online educational learning tools that connects teachers and students fostering innovation, creativity and active collaboration. This website is a free and private learning network that allows teachers to manage accounts only for their students, who receive a group code and register in the group which is available at www.edmodo.com. Moreover, Kaba (2018) confirmed that Edmodo is supported in various languages, so users can select a preferred language sharing web sites links like forms and You Tube.

A number of empirical studies (e.g. Al-Kathiri, 2015; Alshawi1 & Alhomoud, 2016; Charoenwet & Christensen, 2016; Dayag, 2018; Mokhtar 2015) have been conducted to examine the effectiveness of using Edmodo as a collaborative e-learning platform beyond the classroom walls in second and foreign language learning as well. The findings indicated some advantages of using Edmodo in English language learning: a suitable context for English language learning, an interactive interface, a different learning experience, a highly motivating and user-friendly platform that enables students to enjoy working on an online class reducing test anxiety unlike pen-and paper tests.

More specifically, numerous studies (e.g. Al-noble et al., 2018; Alqahtani, 2019; Gay & Sofyan, 2017; Sumarno & Tatik, 2018;

Tsiakyroudi, 2018; Yusuf &Yusuf, 2018) have been conducted to investigate the effect of using Edmodo in English classes to develop students' academic achievement. Results revealed that the implementation of the Edmodo in English learning increased the students' engagement in the writing process through sharing in online discussions and tasks improving their writing fluency and increasing self-reflection as well. It showed how the students easily accessed their classroom learning materials, information, teacher's feedback easily wherever they are.

Though Edmodo is characterized by numerous features, one of its limitations, as identified by Mokhtar (2017), is that it lacks face-to-face interaction or audio facility through live streaming. This may affect audio-visual students negatively or cause a kind of boredom. More specifically, with the spread of the Covid-19 and school closure, teachers are teaching their students for days using digital video chat platforms such as Zoom. Thus, different digital platforms were suggested to support live streaming meeting with the students. Hence, some researchers such as Sampat (2020) suggested the use of YouTube Live video in Edmodo classes to support synchronous e-learning experiences.

Similarly, Basilaia et al. (2020) confirmed that, during this crisis, alternative online interactive teaching was proposed using Google products such as Google Meet (formerly Hangouts Meet). It is a free and enterprise edition for education in which more than 100 participants can meet live through a meeting link URL or code with the facility for recording the meeting. In such meetings, as Bolton (2014) stated, a number of collaborative tools can be used within the video chat conferencing. Al users can display a YouTube video on the main presentation screen, share a presenter's screen, and even edit a shared document. Consequently, this facility to share desktops makes Google

Meet a better practical video presentation tool and a free web conferencing software than other applications such as BlackBoard and Moodle.

Various researches have tested the impact of using Google Meet as a live conferencing software in improving the quality of e-learning. Kobayashi (2015) investigated the ease and usefulness of Google Meet as an e-learning tool. The study involved a group of university students participating in an online cross-cultural activity. Results indicated that Google Meet is a useful instructional tool suggesting how it can be integrated into online classrooms. Similarly, Lewandowski (2015) examined to what extent Google Meet can be successfully applied in adult ESOL learning contexts. Results were indicative of the applicability of this software in adult contexts.

More specifically, Sánchez. (2019) examined the possibility of implementing technology-based programs through Google Meet as a tool in the teaching-and learning of English. Twenty students were enrolled in an advanced EFL course in Mexico. The results indicated that (EFL) students showed their satisfaction with the program and the perceived benefits in improving their English competencies (speaking, listening, reading, and writing). Moreover, the virtual environment led to the collaboration between students, who demonstrated a high commitment during the sessions

Recent studies carried out more research to investigate its effectiveness to be used as one of the digital apps to continue the learning process during the outbreak of Covid 19. For example, Basilaia and Kvavadze (2020) explore the capacities to continue the education process at the schools in the online form of distance learning in Georgia. Google Meet software was implemented for online education in a private school

with 950 students. Results confirmed that the quick transition to the online form of education went successful and gained experience that can be used in the future.

Critical Literacy in the 21st Century

The advent of the internet and easy access to information on the web has changed dramatically the literacy abilities that learners need to acquire to be active citizens. Jank (2014) admitted that this resulted in developing new practices that changed the meaning of literacy. Walsh (2017) added that the traditional concept of literacy as reading and writing has changed as these rarely occur in isolation within digital communication. Many students are engaged in more sophisticated use of technologies outside school than they experience at school. While issues such a pedagogy and equity offer challenges, there are exciting ways forward for literacy education in an inclusive learning environment.

Consequently, according to Primary English Teaching Association Australia (2019), literacy in the 21st century demands the ability to move confidently, efficiently and ethically between a wide range of written and visual print, live, digital or electronic resources. Literacy in the 21st century has expanded to reflect social change, increasing specialization and digital technologies. Hence, to be literate in the digital age requires the comprehension, selection and use of multimodal codes and conventions to interpret, express ideas, feelings and information using language in creative and imaginative ways.

Similarly, Leu et al. (2011) pointed out that a digitally literate should be able to use digital tools like blogs, wikis, texting, search engines, Facebook, Skype, or many other relatively new technological applications. To be literate tomorrow will be defined by even newer

technologies that have yet to appear and even newer social practices that we will create to meet unexpected needs. Thus, the very nature of literacy continuously changes which requires continuously rethinking traditional notions of literacy.

Key Aspects of Critical Literacy

Research has shown that critical literacy is both an educational strategy and a cultural practice. According to Vasquez et al. (2019) though critical literacy does not have a set definition or a normative history, critical literacy is a perspective for teaching throughout the day, across the curriculum. There are key aspects that distinguish critical literacy as socially oriented-action. They include the following:

Critical Literacy as a Way of Being and Doing. It contributes to creating spaces to take on of issues equity, engaging learners in powerful and pleasurable ways and creating spaces to achieve a better life for all.

Making Use of Diverse Students' Cultural Knowledge. It should be used to build curriculum across the content areas through involving them in meaningful discussions about things related to different communities.

Connecting Learning with Students' Lives. This can be done by using the topics, issues, and questions that they raise as centre to creating an inclusive critical curriculum.

Questioning Texts from Critical Perspectives. Texts are not neutral they convey particular messages. The earlier students are introduced to this idea, the sooner they are able to decide the appropriate critical stance,

Making Sense of the Existing Sociopolitical Systems. This means critical literacy work needs to focus on social issues inequities such as

race and gender. The ways in which people use language shapes their understanding of these issues

Imagining Thoughtful Ways of Thinking about Redesigning Texts. This happens by involving students to detect different and more socially just and equitable messages and ways of being that have real-life effects.

Critical Literacy Development in the EFL Contexts

According to Abednia and Crookes (2019), research has shown that critical literacy has a long history in English-speaking countries like the US and Australia. In the context of teaching English as a second language, many empirical studies still come from these countries. An increasing number of reports have been emerging from EFL regions. These include different parts of Asia like Iran and South Korea. This spread shows that teaching critical literacy is being increasingly integrated into ESL/EFL education around the world.

Despite the fact that for the last decades a great emphasis was given for developing communicative competence, nowadays there is an emerging interest in encouraging students' critical language awareness in the foreign language contexts. Janks (2010) mentioned that texts are always informed by authorial bias. They contain beliefs and messages that reflect the author's opinions, attitudes, biases and interpretations of reality. Hence, Fajardo (2015) emphasized that more time may be needed for encouraging students to analyze the authors' choices of words and structures to reveal implied philosophies.

More specifically, Papadopoulos (2017) recommended that modern EFL practices should not be limited in enhancing students' four language abilities (reading, writing, listening and speaking), but they should aim at

developing a variety of critical and reasoning abilities such as examining authors' viewpoints, questioning, juxtaposing, exploring multiple perspectives. They could be enhanced within a multimodal learning environment and task based context, by engaging students in problem solving activities such as debates and role-plays.

Critical Literacy and Connectivism

The emergence of the new technological advances has brought new literacies that students should acquire in this connected world. According to Downes (2009), to make the most of a learning environment situated outside the formal education fostering active engagement in learning, students need different competencies to learn effectively. There is no central teacher present to guide students, to challenge their ideas or to help to understand the media and the way they represent information. The responsibility is on the students themselves to validate information.

Then, Downes (2010) explained that Connectivism is the thesis that knowledge is distributed across a network of connections among groups or systems, and therefore that learning consists of users' ability to construct and traverse those networks. To learn, therefore, is not to acquire a set of facts or information. It is, rather, developing the learner's abilities to grow, not some body of knowledge that has been learned. Thus, students need to be active by editing and producing information themselves collaboratively in a variety of formats.

Similarly, Siemens (2006) suggested that when students are engaged in creating and recreating their own learning networks, understanding arises through applying meta-cognitive abilities which enables them to be dynamic participants in the network by being active contributors not passive content consumers. Through this process of meaning making,

they can adjust, adapt, and respond to changes in the network by taking action and reformation of perspectives. They may try to reflect and transform the system beyond their own network by critically evaluating the tools and processes utilized. This requires the connectivist environment to be democratic and diverse.

Critical Literacy Components

Based on the theoretical ideologies of critical literacy, scholars offered different frameworks of practicing critical literacy and each one focused on certain components that can be practiced in a literacy training. Freire (1970) contrasted the banking of education, against problem-posing education, in which teachers choose and the students are just passive receivers. On the other hand, problem-posing education, which engages teachers and students in a critical dialogue about problems related to themselves in the world and with the world motivating them to challenge the world as a reality needs to be transformed.

On the other hand, Luke and Freebody (1999) argued for a framework called "four resources model" that assigns the readers four roles during critical literacy practice: code breaker (coding competence), meaning maker (semantic competence), text user (pragmatic competence) and text critic (critical competence). It enables learners to break the code of written texts, participate in understanding and composing meaningful written, visual, and spoken texts, use texts functionally by negotiating the social relations around them, and critically analyze and transform texts by acting on knowledge that texts are not ideologically neutral.

Blommaert (2005) and Fairclough (1995) explained that critical discourse analysis (CDA) considers political discourse, media, advertisement, ideology, racism, institutional discourse as its main areas

of inquiry. CDA focuses its critique on the connection of language and social structure. It is in uncovering ways in which social structure relates to discourse patterns (in the form of power relations), and in treating these relations as problematic. These dimensions should be evaluated morally and socially with the purpose of empowering the powerless people to express their voices.

On the other hand, Lewison et al. (2002) synthesized the four dimensions model for critical literacy practice synthesized from reviewing critical literacy definitions. The first dimension, disrupting the commonplace, requires learners to see the world through new lenses such as questioning texts, analyzing media to see how people are positioned developing the language of critique. The second dimension, considering multiple viewpoints, requires learners to understand experience and texts from their own perspectives and the viewpoints of others and to consider these various perspectives for identifying which people are marginalized and to make the difference visible.

The third dimension, focusing on the socio-political system, examines how sociopolitical systems, power relationships, and language are interconnected and can not be separated from literacy teaching. In this dimension, critical literacy is seen as a means to understand the sociopolitical systems to which a person belongs. The fourth dimension , taking action and promoting social justice, in which literacy is used to achieve equality through reflection and action upon the world in order to transform it.

Later, Janks (2010) focuses on the relationship between language and power. This model that synthesizes different notions including domination, access, diversity, and design/redesign into one integrated

framework of interdependent elements. It includes both cognitive skills and social practices. Though different interrelationships between the elements of this model help to highlight commonalities and contrasts, it offers ways of probing inequities associated with literacy policy, curriculum and pedagogy.

Critical Literacy Strategies

McLaughlin and DeVoogd (2004) mentioned that critical literacy strategies help readers to think about texts from a critical perspective. These strategies, which are dynamic and can be adjusted to the contexts in which they are used, promote critical discussions based on reflection and result in an action that leads to more reflection. They listed a number of strategies that help students to be engaged in critical analysis and examining social issues as follows:

Problem Posing. According to McLaughlin and DeVoogd (2004), the ability to be critically aware of social issues, concerns, and practical problems should be the first concern in the critical literacy process. Probing beneath the surface of texts or real-life situations for contextual factors, through questioning, helps students to analyze cues in a situation. Helping learners locate, evaluate, and use appropriate society resources to clarify the problem and use in the practical reasoning process is a lifelong learning practice. For example, readers can be engaged in critical analysis questions, such as who is in the text/picture/situation? , who is missing? whose voices are represented? , or whose voices are marginalized?

Switching is an effective technique to prompt students to use problem posing. In this technique, the reader responds to selected questions such as what gender is represented in the text? Then, s/he

imagines an alternative version of the message would change if the other gender was emphasized. Some examples of switching include:

Gender Switch. The reader thinks about how the story would change when s/he replaces key characters with people of the opposite gender.

Theme Switch. The reader makes up a different story with the opposite theme to think in a different way.

Body-Style Switch. It includes imaging the main characters in a different way concerning their physical appearance.

Ethnic/Race Switch. It implies imagining what would happen if the characters were given different ethnic or racial characteristics?

Posing questions has been used as a strategy for promoting critical literacy in many case studies (e.g. Asanti & Syamdianita, 2017; Hikmat, 2017). Extensive reading was used as a strategy in some of these studies in order to engage EFL students in reading a large number of materials on a wide range of topics and of their choice. The findings indicated that this strategy motivated the students to approach texts critically. They were motivated to question the intention of the texts from different viewpoints, address world issues, improve their awareness of human rights and discuss questions collaboratively.

On the other hand, Kim (2016)) questioned the possibility of early critical literacy as a way for young children to express their voices on subjects related to equality after reading multicultural picture books in South Korea. Results indicated that writing alternative texts followed by reading multicultural books enabled children to pose questions, share opinions, and develop critical perspectives on issues related to

racial/cultural diversity and equality. The children challenged taken-for-granted readings by restructuring the texts.

At the university level, Hassan (2015) involved 24 students in a literacy course to examine the effect of a suggested strategy in promoting critical literacy. The strategy was –read, note (bias, religion, gender) answer, ask, summarize and write. The finding showed that the strategy invited the students to question, debate, consider other perspectives, and take an action by writing critical essays. Similarly, Ko (2013) described a college teacher's experience in teaching critical literacy to English major students in Taiwan. By having a critical dialogue with the students, the teacher helped them to read beyond the text on its literal level.

Alternative Perspectives. McLaughlin and DeVoogd (2004) mentioned that students explore the viewpoints of different characters in a story or different people in a real-life situation. These people may be present in the situation, or they may be imagined by students. The class then discusses the perspectives in a critical conversation. Formats students can use to share perspectives include focus groups, dramatization, poetry, and song lyrics. They considered that this strategy includes alternative texts, juxtapositioning texts, mind and alternative portraits, and theme-based focus groups.

Alternative Texts. They represent a perspective that is different from the one students are reading. When creating an alternative text, students perceive the text in a different way and begin to understand the complexity of the issue examined. They can examine the message conveyed by a text, photo, or song and then create a counter text or find an alternative photo (McLaughlin & DeVoogd, 2004).

Juxtapositioning Texts. Students examine two texts that have been written about the same topic in order to analyze author bias. For example, two editorials—one supporting increased security in schools, one opposing it; one supporting gun control, one opposing it—would clearly show how two writers view a topic (McLaughlin & DeVoogd, 2004).

Mind and Alternative Mind Portraits. Students examine two points of view. Both may be represented in the story or one may appear in the text and the other missing from the text. Students begin by selecting the two perspectives they will analyze. Then, they sketch the two perspectives in outlines. The completed sketches are shared with peers and used as the starting point for critical discussion (McLaughlin & DeVoogd, 2004).

Theme-Based Focus Groups. They help students to critically analyze how authors view events from different viewpoints. Teachers can gather a variety of theme-related texts to engage students in a whole-group discussion (McLaughlin & DeVoogd, 2004).

Different research studies have been conducted to develop the students' critical perspective in different modes of texts. For example, Kim and Cho (2017) described ways in which a Korean preschool teacher interacted with her young learners to challenge dominant ideologies inherent in texts. Results revealed how young children interpreted texts from varied perspectives at an early age. Similarly, Labadie (2017) exposed kindergarten students through dramatizations around texts for discussing themes of power, and equity. The findings showed that students were able to question stereotypes, consider multiple perspectives, and engaged with sociopolitical issues.

On the other hand, Jones and Chapman (2017) engaged a group of English secondary school students in a critical literacy practice through urban legends to question their voices as being marginalized in the most recent English classrooms. Results showed that engagement with alternatives to a dominant view of text should remain a key objective in literacy education. Similarly, Papadopoulos and Griva (2017) engaged 20 Greek primary school students in a thematic project discussing the topic of sport. The findings showed a significant improvement in the students' critical thinking and ability to examine a text from different perspectives.

Correspondingly, integrating students' learning with their prior experience through reflection, Jun-min (2014) addressed the exploration of multiple perspectives through using a picture book. By posing critical questions and having a critical dialogue with students, the teacher helped students to read beyond the text and read between the lines. The findings indicated that this literacy practice led students to assume the role of social agents. They developed a critical stance, investigated multiple perspectives, and re-examined their world.

Critical Reflection. An essential aspect of critical literacy education is facilitating students' critical reflection on the word and the world. According to Rieger et al. (2013), reflection is a meaning-making process that requires interaction among students. It can lead to professional and intellectual development. It is an ongoing process of questioning one's own experiences, which can result in taking meaningful and relevant actions. Thus, as noted by Ash and Clayton (2009), lack of reflection causes students not to connect their experiences with their learning process, to reinforce stereotypes about change, to develop simplistic solutions to complex problems, and even to make decisions based on general inaccurate data.

Hence, Abebe and Bessell (2014) contended that teaching critical reflection can be a logical step towards to tackle and negotiate complex ethical issues. It can help in achieving social justice for children in communities in economically poor contexts. This significance was confirmed by Minott (2011). He investigated the connections between reflective teaching and critical literacy. Different learning tasks were suggested such as encouraging students to question the assigned texts and emphasizing reading texts from a variety of perspectives. Results indicated that it helped the students to question personal assumptions taking initiatives to take part in the process of change.

Hence, research studies highlighted the importance of utilizing critical reflection in promoting critical literacy learning. For example, Abedniaa and Izadiniab (2013) engaged twenty-seven English university students in a reading course in Tehran. Students were encouraged to analyze the passages, writing reflective journals to voice their opinions. Results indicated that students utilized problem posing and reflection strategies to examine the problems offering appropriate solutions. On the other hand, Darvin (2011) suggested using cultural and political vignettes as a strategy to engage secondary school students in a content-area literacy practice. It can be designed to ask students to reflect upon and question the values, biases, stereotypes and decision making processes.

Within a similar context, in order to facilitate perspective transformation in the secondary English classroom in Australia, Merga and Booth (2017) addressed the issue of racism in sport by holding debates in an online discourse community. Critical reflection was considered as central to critical literacy and it also acted as a way for transformative learning leading to take action. Likewise, Papadopoulos and Griva (2017) kept journals to record the students' different

perspectives. The findings showed a significant improvement of the students' language skills in EFL, and in examining different perspectives as well.

Taking Action for Social Justice. According to Abednia and Crookes (2018), an essential feature of critical literacy is its emphasis on relating critical reflection with transformative action, or, in Freire's (1970) terms, Praxis. However, Lee (2012) pointed out that taking an action does not only mean that learners should become social and political activists. But, when they are able to read texts critically by problematizing their basic assumptions and exploring them from multiple perspectives, they have already taken action – a change in their reading habit. The goal is to use literacy to transform the world and achieve social justice.

Consequently, as Behrman (2006) confirmed, the outcome of social action is to move students' real-life concerns beyond classroom walls by being involved as members of a larger community. Hence, in order for social change to occur, as Head (2014) mentioned, teachers must keep their students informed on current events and global issues. Not only does this improve critical literacy, but it also aids in affecting students' characters and their unique perspectives that may change the world. For example, a student's awareness of social injustices may inspire him/her to pursue a career with a humanitarian organization or by writing novels that help in solving many social issues.

Different research studies have reported that developing critical literacy can enhance students' understanding of critical social issues, such as racial discrimination. For example, for encouraging students to take an action through displaying a museum exhibit, Caffrey ad Rogers (2019)

involved sixth-grade students at Carter Elementary to confront issues of social justice. The findings revealed how student-created museum learning can serve as a powerful medium for youth activism through doing social action. The students were successful in showing a critical attitude in four social themes such as bullying and poverty in systems by participating in counter-protests holding panels.

Similarly, in order to deal with bullying as a behavioral issue, Pescatore (2015) involved a group of ten at-risk students in New York. Teachers and students collaborated in showing their critical awareness through journal writing based on fictional works. Results showed that creating a blog as an action to help parents and young people dealt with the problem. On the other hand, Jimenez1 and Gutierrez (2019) engaged a group of university students in Colombia in critical literacy practices discussing issues related to gender, violence and discrimination in all its forms. The findings suggest that students valued the importance of addressing issues that were socially and culturally relevant such as promoting for a campaign to stop gender violence.

To be more specific, research has shown writing to be a principal strategy for students to take part in a transformative action (e.g. Hayik, 2015; Hayik, 2016; Lee, 2017). For example, in her study, Hayik (2015) applied critical literacy practice with Arab ninth-grade English as a foreign language (EFL) students to address minority issues that they faced while being occupied in daily Israeli life. Using a book set of accessible picture books on minority issues, she attempted to raise students' awareness to issues of privilege and power motivating them for taking action to challenge injustice. The findings addressed the students' responses by writing a letter of critique to the American president.

Later, Hayik (2016) attempted to challenge the status quo through raising students' awareness about the problematic portrayal of females in literature and encouraging them to take action. She questioned how traditional female is seen in literature and media as mostly either submissive (e.g., Snow White, Cinderella) or evil and jealous creatures. Males, however, are the long-awaited, usually wealthy rescuers (e.g., the prince in Sleeping Beauty). Results showed that students identified gender bias taking action for change basically by writing two letters of critique to the author of a Disney simplified version of the story.

Critical Literacy Assessment

According to Kalantzis et al. (2003) and McClay and Mackey (2009), the concept of assessment is a central aspect that presents a number of challenges for educators when teaching critical literacy programs in the EFL contexts. Within the broader meaning of literacy, effective learners should be autonomous, collaborative and able to solve problems. However, the still prevalent standardized tests and a 'back to basics' approach to curriculum are unable to measure effectively these abilities or even assess the new ways of questioning texts and critiquing as vital requirements for success in this new knowledge economy. Instead, more creative approach to assessment is required through using techniques such as analysis of portfolios and group work projects.

Hence, Ontario Ministry of Education (2006) clarified that literacy assessment should aim at encouraging students to be strategic readers and to expand their metacognitive abilities. This can be done by utilizing a set of assessment instruments that teachers can use to gather, record, and organize information about the development of students' critical literacy. More specifically, Klenner and Sandretto (2011) discussed a number of

instruments that can be used for assessing critical literacy performance: interviews, rubrics, journals, e-portfolios and learning stories. They are as follows:

Interview. It is one of the data sources that is can be used as an assessment instrument. More specifically, stimulated recall interviews (SRIs), are focus group interviews that take place directly after a lesson. Teachers could use the SRI schedule developed during the project as a means to gather data by asking questions like "What does critical literacy mean to you?.

Rubric. It is an essential authentic assessment instrument that could be used to measure how students applied critical literacy strategies to a particular texts. It includes a cover sheet as an outline of the rubric; assessment design, purpose, task development and level of performance.

Journals. They can be used in a format of a dialogue to encourage students to write on any topic of their choice. Teachers can then respond to student writing through carefully organized comments and questions designed to further enable students to develop a personal voice. Moreover, journal writing can be provided in an electronic form called online journal or weblogs. According to Tan and Ho (2008), they enable students to write posts utilizing text, hyperlinks and graphics.

E-portfolios. Generally speaking, they include samples of student work that students, with teacher support, carefully select that help them to reflect on what they learn throughout the year. Since students are asked to actively reflect on their learning in order to choose the samples that will include in their portfolios, portfolios are an especially powerful self-assessment instrument in which a student assess his own work.

Yet, Goldsmith (2007) argued that with the urgent need of integrating technology in critical literacy teaching, e-portfolios provide major advantages in literacy assessment. Any type of digital material or material that can be digitized can be placed in an e-portfolio. The "e" makes portfolios available anytime and anywhere for both the learners and for those viewing and reviewing them. Their electronic nature also allows portfolios to be easily used for different purposes.

Van Roekel and National Education Association (2014) declared that e- portfolios are available in many free programs: Google docs, Weebly, Epsilen, FolioTek, Digication, TaskStream, Chalk & Wire, and Adobe. In this way, they promote the 21st century skills such as creativity, critical thinking, problem solving, collaboration. More specifically, they support the pedagogy of critical literacy through developing students' critical reflection. Students could be asked to provide evidence for and reflect on connections between the text and personal experience, multiple viewpoints, inclusion and exclusion or the effects of texts on thinking and actions.

Though this variety in the use of instruments for assessing critical literacy, as Klenner and Sandretto (2011) have noted, no one tool alone will be enough to assess students engagement in critical literacy practices. Thus, regular reflection, on the part of teachers and students, is always needed to continually revise using any of these instruments.

Collaborative E- Learning and Critical Literacy in EFL

Considering Connectivism as one of the most outstanding network theories that support e-learning contexts, Siemens (2005) stated that learning ecologies (communities and networks) facilitate important information sharing and co-construction of knowledge while encouraging

lifelong learning among groups. This idea was confirmed in Baraka's (2012) study in which she evaluated how a collaborative e-learning model, namely Share Space, can affect learners to acquire knowledge in an interactive, collaborative and social manner. Results indicated that the utilized model contributed to enhance learners' responsibility and self-reflection, prompt interactivity and support creativity as well.

Consequently, as Leu et al. (2004) argued, research has considered that engaging students in and producing texts within online networks is a prerequisite for preparing critically literate citizens in this global information age. This idea is confirmed the study conducted by Amgott (2018). It attempted to address, question and solve social problems by engaging students in a collaborative multimedia project of their choice with actionable hashtags for sharing online. The findings emphasized the importance of developing critical literacy and digital activism to help students to be well prepared for meaningful interactions in this digital world using multimedia projects to advocate for local and global action.

A number of research studies (e.g. Albers et al. , 2015; Brown , 2015; Forest & Kimmel, 2016; Mohammadkhani et al. , 2015 ; Wiemer, 2015; Yearta & Stover, 2015) have immersed EFL students in collaborative e-learning communities yielding significant results in developing critical literacy. Some of these communities are well shown in social networking websites, like blogs and Facebook that create mutual interaction among people. Resulted indicated that working collaboratively in online discussion helped participants to negotiate, discuss, engage in, and share global perspectives.

However, few research studies have examined the effect of Edmodo, as a collaborative e- learning platform, on developing critical literacy in the EFL contexts in specific (e.g. Chamberlain, 2017; Mills & Chandra,

2011; Ramirez-Nava, 2012) to the knowledge of the researcher. Results showed that Edmodo enhanced English learning through collaborative reflective responses to open-ended questions. Students learned from each other and became able to voice their opinions which is a critical literacy feature. A high percentage of participation was expressed in the students' reflective posts about the discussed topics.

Similarly, few studies have been conducted to investigate the possibility utilizing Google Meet definitely, as a collaborative live conferencing software, to develop students' critical literacy. Considering critical literacy instruction as one of the elements needed for developing Global Read Aloud (GRA), Carpenter and Justice (2017) examined how digital technology (e.g. Skype or Google Meet) can create new opportunities for learning with people of other cultures by discussing common texts with classrooms from more than 60 countries having participated. Results showed that by allowing partner class peers to see each other and interact more directly, video conferencing appeared to support overall engagement with the GRA.

Commentary

This chapter described a review of literature and previous studies concerned with connectivism as a learning theory that support the need for using collaborative e-learning in the educational field in this new knowledge economy. It showed how the connetivist principles can be applied to foreign language learning , in general, and to develop critical literacy in particular. Literature proved that critical literacy can be enhanced within a collaborative e-learning context. Moreover, different collaborative e-learning tools were discussed choosing Edmodo and

Google Meet to be the digital contexts through which critical literacy was developed in the present study.

This review was beneficial in finding a theoretical background to the present study. It helped the researcher to decide upon the appropriate strategies, activities and instruments to carry out this study. Moreover, it was helpful in identifying the main components needed to develop prep stage students' critical literacy. Although different critical literacy frameworks were discussed in this chapter such as that of Jank (2010), this study has been especially guided by the four-dimension framework of critical literacy suggested by Lewison et al. (2002) for different reasons as follows:

- It reflects simply the meaning of critical literacy as a means to question the taken for granted beliefs, discussing them from different perspectives, and critically reflecting upon them taking an action.
- The components included in this framework are well- related that each one leads to the other starting from taking a critical stance to taking an action.
- It greatly emphasizes the social context in which the issue is discussed. Thus, it introduces the concept of cultural diversity that should be respected to develop the students' international mindedness.

Different approaches were suggested in this chapter to develop the students' critical literacy such as the use of picture books. However, the rationale behind selecting collaborative e-learning for developing the students' critical literacy is that the students are surrounded with various forms of technology. They are tremendously motivated to finish the

assigned task when technology is provided. Thus, using collaborative e-learning helps the students to work in groups virtually, regardless of time or place. It helps them to discuss social issues and reflect upon them to identify inequality aspects in order to achieve social justice. Hence, some of the expected outcomes at the end of this program are:

- Detecting bias and practices of inequalities included in different modes of texts whether paper-based or digital.
- Identifying the credibility of a given information to be biased or a fact.
- Being active users of the information in texts by developing independent perspectives and not influenced by the author.
- Connecting classroom practices with their personal experiences, then with their society and finally having a global vision towards such issues.
- Critically reflecting and sharing their ideas about social issues.
- Actively working out their learning to take action for social justice through problem solving and creating alternatives.

In conclusion, this review highlights the crucial need for developing critical literacy integrated with using cutting-edge technology in learning that proved to be effective in different case studies for achieving a kind of change not only in students' reading habits but also in taking practical actions to affect and transform the society in which they live for having a more comfortable life. It promotes for developing critical literacy not as a learning strategy, but as a learning lifestyle, in which students question any practices of inequality that might lead to the destruction of the society.

Chapter Three

Methodology

This chapter deals with the procedures followed throughout the application part of the study. It describes research design, participants, in addition to the instruments of the study. It also provides a detailed description of the study proposed program.

Study Design

This study utilized a one- group pre-posttest design along with a mixed research approach incorporating both quantitative and qualitative assessment. A one-group pre posttest design was selected because the applied qualitative techniques aimed at investigating the development that occurred in the performance of the study group before and after implementing the collaborative e- learning program.

Study Group

An intact class of EFL second year prep stage students (N=25) was enrolled in the study. They are students in the Egyptian international school in El Marag that applies the program of the International Baccalaureate. Their age ranges from 14 to 15 years. They have been studying English for 10 years. They were also divided into five groups of students to work collaboratively. They were trained on how to join a live meeting conference.

Instruments of the Study

The following instruments were designed and used in the present study:

1. A pre/post critical literacy test

2. A critical literacy rubric

In addition, a collaborative e-learning program for developing critical literacy was carried out in the study.

A List of Critical Literacy Components (Appendix B)

Purpose of the list. The researcher identified a list of critical literacy components to be used as a guide for the pre/posttest and the rubric. The list of critical literacy components was prepared to determine the components that are appropriate, acceptable and needed for second year prep school students. After reviewing the previous studies and literature, the researcher developed a list of critical literacy components on which the instruments used in the study were designed including the rubric and critical literacy test. Based on this list, the program activities were prepared to develop the critical literacy components predetermined in the critical literacy list.

Description. Lewison et al. (2002) referred to a variety of subcomponents of critical literacy included under its main four components. Thus, the list consisted of the following four main components: problem posing, examining multiple perspectives, critical reflection and taking an action. Each component included its subcomponents: analyzing the author's message, interpreting different perspectives, critically reflecting upon the sociopolitical background inferred from the text and creating alternatives/solutions for promoting social justice.

The Pre/Post Critical Literacy Test (Appendix C)

Purpose of the test. The pre and posttest was prepared by the researcher to measure the students' critical literacy performance. The test

was administered to determine the students' level before applying the program and after experimentation.

Test Description. The test (appendix B) consists of four questions. As shown in Table 1, each question assesses one of the critical literacy components included in the list. The total score of the test is 100. The questions in each task are based on only two critical literacy topics discussed in the program: gender and education equality.

Table 1

Test specification

Item	The assessed components	Score for each question
1	Problem posing	25
2	Examining multiple perspectives	25
3	Critical reflection	25
4	Taking an action	25
	Total score	
		100

In the first question, the researcher asked the students to find out the author' bias included in the given text about Malala Yousafzai (Srodrigues, 2018), as an activist for girls' education, and to switch roles to figure out the less valued characters in that text. Then, in the second question, she asked them to compare two contradictory texts (Chaterjee, 2012; Srodrigues, 2018) to examine the topic of equality of education from different viewpoints asking them to express their own opinions.

In the third question, the researcher asked the students to write a critical reflection about a given text (Reilly, 2020) that shows the lack of equality on providing online learning for all students. The students were asked to write an introduction, summary, critical analysis and conclusion

for suggesting alternatives to solve to the problem. Since writing a critical reflection is a complex process, the students were trained on some guiding questions during carrying out the program to write the four parts for writing a critical reflection. Finally, the students were asked to take an action for achieving social justice about any of the two topics included in the test by choosing only one of the following formats: writing a story, drawing a poster, designing a cartoon or creating a campaign that shows an action against this inequality.

Content. The test was designed and edited taking into account the list of critical literacy components and previous studies and literature concerned with developing critical literacy.

Piloting the Test. The test was piloted on a group of EFL prep stage students. They were (25) students. It was administered prior to teaching the collaborative e-learning program. The piloting procedure aimed to:

- Establish the reliability of the test;
- Determine the appropriate time needed to answer the test;
- Ensure the validity of the test; and,
- Check the suitability of the test for the target students.

*Reliability of the Critical Literacy Test***.** Test reliability is a measure of how consistent the results of a test are over time. Thus, the test was applied again on the same students after two weeks. Calculating Pearson's correlation coefficient using SPSS (Kafle, 2019), the test reliability was 0.93. This indicated that the test had a high degree of reliability.

Calculating Time. The time of the test was calculated after piloting the test. This was done by calculating the time that each student took to answer

the test, and then calculating the average time for the whole group. Thus, the average time of the test was found to be three hours.

Validity of the Critical Literacy Test. Through the guidance provided from the supervisors and the thorough reading for the review of literature concerning developing critical literacy, it was determined how far the content of the questions included in the test is appropriately selected and phrased to measure the students' critical literacy.

The Critical Literacy Rubric (Appendix D)

Purpose. The critical literacy rubric is an analytic device designed to evaluate students' performance in the pre/postcritical literacy test. It is used to explain consistent criteria for grading with the purpose of conducting accurate and fair assessment.

Description. The researcher prepared the critical literacy rubric to include only four components: problem posing, examining multiple perspectives, critical reflection and taking an action. To determine the degree to which a student's performance meets the criteria of the task, four levels of descriptors which differentiate several levels of performance were identified. They were: beginning, developing, proficient and advanced.

These four levels of descriptors were specified and described in qualitative manners. At the beginning level, the student provides limited analysis of the author's influence on the reader and rarely justifies opinions, identifies some different views, critically reflects upon it lacking many details trying to suggest solutions. Then, at the developing level, s/he starts to adequately highlights the author's message giving some opinions with examples, identifies some different views adding

more details in the process of reflection suggesting some of their implications and solutions.

At the proficient level, the student sufficiently justifies opinions with examples, identifies the main points of an argument and gives substantial solutions. Furthermore, the student becomes more aware of the discussed critical issue that s/he gives detailed justification of opinions and ideas with a range of examples, consistently identifies different views and their implications investigating the applicability of the suggested solutions.

Validity. Content validity of the critical literacy rubric was established through ensuring that the rubric really measures and reflects the critical literacy components previously stated in the critical literacy list.

The Collaborative E- Learning Program (Appendix E)

Aim of the program. The proposed program was designed to develop prep stage students' critical literacy through using a suggested collaborative e-learning program.

Performance Objectives of the Program. By the end of the program, the learners were expected to:

1. Pose problem an issue by questioning the taken-for- granted practices of inequality in the society.

2.Examine the topic discussed from different perspectives.

3. Critically reflect upon the text for showing practices of injustice.

4. Create alternatives/ solutions through actions.

Context of the Program. Being based on the Connectivism, the collaborative learning program mostly was carried online during all sessions. During the online sessions, the students worked collaboratively

through an e-learning platform called Edmodo. It is a leading social learning platform that helped the students to be connected synchronously or asynchronously in a safe social environment. It enabled the students to collaborate and access class discussions, and notifications from any computer or I Pad. Moreover, the students met live at a meeting conference using Google Meet app to discuss their oral presentation.

Content of the Program. Throughout the program, the students were given several online sessions in order to develop their critical literacy. It consisted of fifteen sessions. Before starting the program, the students were involved in two offline orientation sessions (face to face) through which the researcher tried to introduce the whole program to the students; the objectives and the nature of these online collaborative sessions, the issues discussed, how to work collaboratively online in groups and the online assessment assigned. By the end of these two sessions, the students were supposed to have an overall idea about the program and the different roles that they were expected to play such as group leader of action doer.

The program focused on discussing crucial critical topics that aimed at preparing the students to be global active citizens by trying to create alternatives for solving such issues. They were involved in a meaningful vivid debate about global issues negotiated from a critical lens included in four modules: the idea of stereotypes and cultural diversity (gender, age, animals, race), achieving social justice (education and health equality), environmental problems (climate change, infectious diseases) and debatable ethical issues that affect the well-being of human being (genetic engineering, equality between the poor and the rich people).

The topics were carefully selected to cover various aspects of students' needs and interests. Though these topics were approached from a general

perspective at the beginning of the program, the outbreak of coronavirus as a pandemic disease with its world hazardous effects connected all the topics together with the purpose of achieving global justice for a global citizen. For example, when discussing the topic of race stereotypes, the students started to show their attitudes against the violent racist behaviours directed for the Asian people and the Chinese thinking that they were the cause beyond the spread of coronavirus. Moreover, the students discussed the ethics in distributing the vaccine for an infectious disease with the purpose of achieving social justice. So, the selection of such content aimed at developing the students' attributes to be:

- Communicators to understand and express ideas a variety of modes of communication collaborating effectively with others.
- Inquirers to point out the missing voices or marginalized characters in a text.
- Caring by showing empathy, compassion and respect towards them marginalized groups.
- Knowledgeable to understand in-depth local and global issues through continuous research and study.
- Open-minded by being open to the perspectives other people in different communities, seeking to valuate a range of points of view and expressing their viewpoints as well.
- Reflective by critically assessing problems trying to find solutions.
- Critical thinkers by taking creative initiative and making ethical decisions as an action to get rid of practices of inequality in a society.
- Risk-takers by defending their beliefs bravely.

Sources. In order to prepare the activities of the program, several sources were used such as the internet by searching for types of videos and pictures that would assist in holding discussions among the students.

Learning and Teaching Strategies and Techniques. Collaborative e-learning that was evident in the students' critical discussion was considered the main teaching and learning strategy that was used to achieve the target of the program. It emphasized the active and collective interaction between the research and the students on one hand and among the students on the other hand by communicating via the internet. Collaborative work was applied using various interactive techniques through dividing the students into several groups, mainly five, to finish specific tasks. Each group brainstormed the issue among the group members (small group discussions).

Then, they analyzed and compared the different ideas through discussion which is seen only for them only and blocked for any other group. At the end, after each group reached an agreement or even disagreement concerning that issue, they posted their opinion for the class discussion allowing their classmates to give feedback (class discussion, and debates). Some other techniques were used to develop the students' critical literacy:

- An online collaborative argument in which the student critically discusses a certain problem for examining different viewpoints and expressing their own opinions as well. The students were asked to debate two opposing viewpoints and may reach a kind of compromise at the end.
- Problem solving through involving the students in discussion of a

global critical problem such as climate change motivating them to find creative solutions for this problem.

On the other hand, some other teaching strategies were used to foster the students' constructive discussion during performing the learning tasks as follows:

- Using X mind mapping, digital and graphic organizer and KWL strategies as visual brainstorming tools to generate and organize the students' ideas, activate their prior knowledge linking it with new information.
- Using Vee counter- argument graphic organizers to write reflective opinion discussion.
- Being involved in critical reflective tasks about the discussed issue that was carried through an individual oral presentation as a strategy.

Duration of the program. The program lasted for six weeks. The researcher assigned the tasks online for each topic during the week to be carried out within a due time. The students were asked to work together at least two hours and thirty minutes in each session on Edmodo. On the other hand, the students had four live meetings on Google Meet with all the students for forty five minutes each session. Moreover, two hours were spent in each orientation session in which the students were exposed to the objectives, topics and assessment tasks to be carried in the program. The students nearly spent at least 48 hours to participate in this collaborative e- learning program. Yet, the exact total duration of the program cannot be calculated as the students sometimes worked asynchronously at their own pace.

Assessment. Generally speaking, open- ended questions were mainly used in the study to help the students to express their viewpoints freely

about a certain critical issue expressing their own knowledge or feelings regardless of the existence of a right or wrong answer. However, assessing the students' critical literacy was carried throughout the application of the program using different assessment instruments:

Online Reflective Journals or Double Entry Journals. The students were asked to write, nearly at the end of each session, a self or formative assessment as a means for reflection. In these reflective journals, the students reflected on what they learned in the session connecting it with their personal experiences and may reflect on their learning process itself. Then, they posted their reflections on Edmodo receiving a comment from their classmates or the researcher.

Using Exit Cards. These cards were used as an informal formative assessment to respond to prompts at the end of the session. They helped the researcher to assess the students' understanding of the topic in question through the students' feedback.

E-portfolios. They were found to be a highly effective assessment instrument that helped the students to critically reflect taking an action on the discussed issue in a digital form due to the nature of the online program used in the study. This was seen in different tasks. For example, some students created a website, YouTube video or designed a poster sharing all of this on the internet with their friends and other people.

Using a Pre/Posttest as a Summative Assessment. It was administered to assess the students' progress before and after carrying out the program. The test was administered to the students on the first and last session online. The researcher, then, compared the results of the pre- and post-critical literacy tests to measure the students' progress throughout the program.

Chapter Four

Analysis and Discussion of Results

This chapter tackles the study results, interpretations and discussions. It starts with the statistical treatments conducted on the pre/posttest results. This represents the quantitative analysis of such results. This is followed by discussion of results. Then, a qualitative analysis of the students' critical literacy competencies is presented. Finally, the study group' opinions and reflection about the study program is provided.

Results of the Study

Testing the Validity of H01

The first null hypothesis states that "there is no statistically significant difference between the mean scores of the study group in the two administrations of the pre- and post-critical literacy test with regard to the development of their overall critical literacy."

In order to verify this hypothesis, the paired-samples t-test was used to investigate the significance of differences between the students' overall critical literacy mean scores in the pre- and post-administrations of the critical literacy test, as shown in Table 2

Table 2

T-test Results for the Significance of Differences between the Mean Scores Obtained by the Group on the Pre and Post Critical Literacy Test Regarding their Overall Critical Literacy

	Pre		Post		t-test	*sig.*	Effect size (η^2)
	M	SD	M	SD			
Overall Critical Literacy	16.12	10.44	54.92	19.02	12.494	0.00	0.882

** P< 0.01

As shown in Table 2, the significance level (sig) of the obtained t-value in the critical literacy test is less than (0.01). This indicates that there is statistically significant difference at the level of 0.01 between the mean scores of the study group on the pre and posttest administrations regarding the development of their overall critical literacy in favour of the posttest administration. This means rejecting the null hypothesis and consequently accepting the alternative hypothesis. Therefore, it can be concluded that "there is a statistically significant difference between the mean scores of the study group on the pre and post critical literacy test with regard to the development their overall critical literacy in favour of the posttest administration."

To measure the effect of the collaborative e-learning program on developing EFL second year prep stage students' overall critical literacy, the effect size is calculated by using the following mathematical formula (McGrath and Meyer, 2006):

Effect size $(\eta2) = t2 / (t2 + df)$

df= degrees of freedom = (n-1)

t= t-calculated

η^2 is interpreted as follows:

If $(\eta2) < 0.010$, then the effect size or the relation is weak.

If $0.010 \leq (\eta2) < 0.059$, then the effect size is small.

If $0.059 \leq (\eta2) < 0.138$, then the effect size is medium.

If $0.138 \leq (\eta2) < 0.232$, then the effect size is large.

If $0.232 \leq (\eta2)$, then the effect size is very large.

As shown in Table 2, it is clear that the calculated effect size, expressed by the ETA squared, equals 0.88 which is a very large effect size. This. This indicates that using the collaborative e- learning program

is highly effective in developing EFL second year prep stage students' overall critical literacy.

Testing the Validity of H02

The second null hypothesis states that "There is no statistically significant difference between the mean scores of the study group in the two administrations of the pre and post critical literacy test with regard to the development of each component of critical literacy (problem posing, examining multiple perspectives, critical reflection and taking an action)."

In order to verify this hypothesis, the paired-samples t-test was used to investigate the significance of differences between the students' mean scores of each component of critical literacy in the pre and post-administrations of the critical literacy test, as shown in Table 3.

Table 3

T-test Results for the Significance of Differences between the Mean Scores Obtained

by the Study Group in the Pre and Posttest in each Component of Critical Literacy

Component	Pre		Post		t-test	*sig.*	Effect size (η^2)
	M	SD	M	SD			
Problem posing	4.80	2.53	13.16	3.50	11.635	0.00	0.849
Examining multiple Perspectives	5.32	3.27	12.04	5.44	8.411	0.00	0.746
Critical reflection	3.12	3.27	13.40	6.81	8.976	0.00	0.770
Taking action	3.80	3.37	16.16	5.31	11.989	0.00	0.856

** $P < 0.01$

As shown in table 3, the significance level (sig) of the obtained t-value in each component of critical literacy is less than (0.01). This indicates that there is statistically significant difference at the 0.01 level between the mean scores of the study participants on the pre and posttest regarding the development of each component of critical literacy in favour of the posttest administration. This means rejecting the second null hypothesis and consequently accepting the alternative hypothesis. Therefore, it can be concluded that "there is a statistically significant difference between the mean scores of the study group on the pre and post critical literacy test regarding the development of each component of critical literacy in favor of the posttest administration."

From table 3, it is clear that the calculated effect size, expressed by the ETA squared, is greater than (0.232) in the development of each component of critical literacy. This is a very large effect size. This indicates that using the collaborative e- learning program is highly effective in developing EFL prep stage students' critical literacy.

Discussion of Results

The present study attempted to investigate the effect of a collaborative e- learning program, using Edmodo and Google Meet, in developing EFL prep stage students' critical literacy. The results of the statistical analysis showed that there are statistically significant differences between the mean scores of the study group on the pre and posttest in developing each component of critical literacy in general in favor of the posttest scores.

A number of factors contributed to the development of the students' critical literacy which are related to the nature of the collaborative e-learning program used in the study. Firstly, the use of

Edmodo gave the students a flexible access to the learning material at any time or a place using a mobile phone or a website. Most of the sessions were delivered asynchronously for the assigned tasks to be completed at the students' own pace and schedule within the specific due date. As shown in Figure 2, this characteristic allowed the students to give their classmates constructive feedback while working in collaborative activities. Other sessions for assessments were provided synchronously to complete the tasks in a specific time such as having the posttest assessment.

The variety of modes of interaction among the groups through Edmodo added more engagement of the students. Research studies (e.g. Dhika et al., 2019; Mahande & Jasruddin, 2019) have shown the positive effect of such a variety of modes on students' active participation. They facilitated the process of obtaining learning materials, filling exams and having a firsthand value given by the teacher. Moreover, they could conduct discussions with other students, in discussion forums.

Figure 2

Asynchronous Collaborative Interaction on Edmodo

Note: Sarah's post showing her feedback to the group 4 students (*https://new.edmodo.com/home*)**.**

Secondly, Edmodo helped the researcher to send and share a range of resources with the students such as websites, YouTube clips, files, documents and images that they can view at home to complete the assigned activities. Moreover, the existence of a library allowed her to store unlimited content automatically for easy sharing and re-use or revising the students' work as well. As shown in Figures 3 and 4, the researcher used Edmodo to create polls, assignments, blogs, and award badges online and send notifications.

Different studies (e.g. Al- naibi et al., 2018; Alshawi & Alhomoud, 2016; Gay, 2017) have shown the effect of this distinctive feature to give the students immediate feedback for enhancing their motivation and self reflection. The quiz feature helped the students in applying the learned information. Moreover, it allowed them to access the materials when they didn't attend the class.

Figure 3

An Assignment on Edmodo

Note: A post in which the students write a counter argument the next day a due time
(https://new.edmodo.com/post/736481818).

Figure 4

An Assignment's Grading on Edmodo

Note: A marked quiz used as an exit pass and its mark was put into a personal grade book: https://www.edmodo.com/assignment/assignment:47419211:158908178

Thirdly, Edmodo provided opportunities for the students to express their ideas beyond the classroom walls through sharing in forum discussions. As shown in Figure 5, one of the groups interacted with the same group members at first, then sharing their ideas with other students as a class discussion. As a result, this helped in improving their interpersonal relationships and sustaining competitions among all the students.

Research studies (e.g. Coelho et al. , 2016; Widyahastuti et al. 2017) have proved that using Edmodo fostered a close relationships among teachers and students. The students were active in posting their assignments through Edmodo sharing information among them and their teacher related to the inside and outside classroom activities.

Figure 5

Group Discussion Post on Edmodo
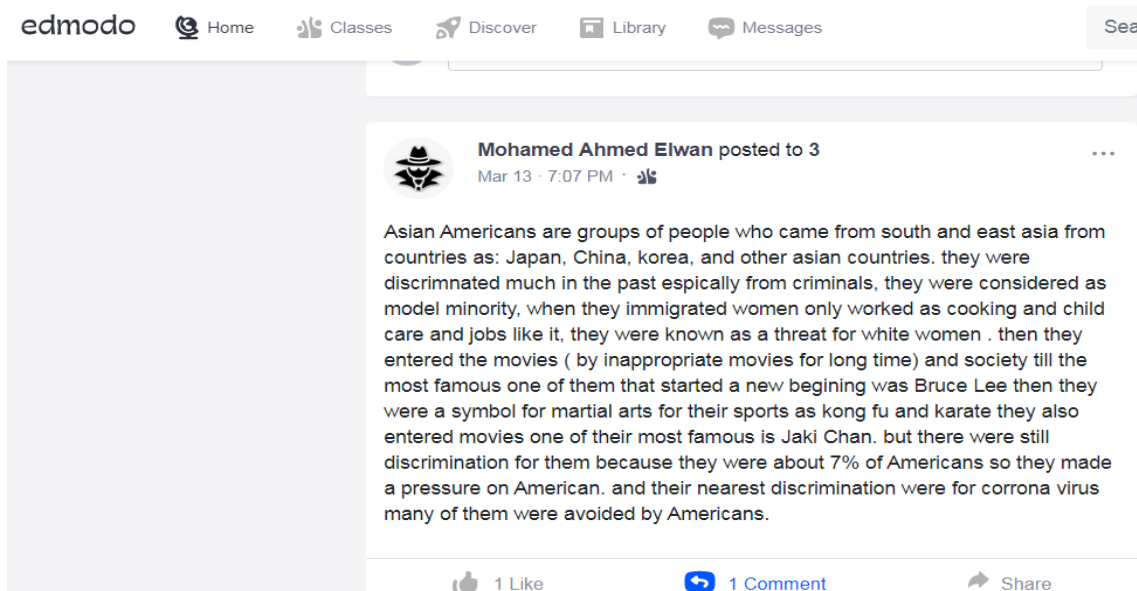
Note: This post includes a group discussion in which the participants discuss some of Asian American stereotypes (*https://new.edmodo.com/post/715873246).*

More specifically, the students' developed critical literacy performance could be due to the effective team support among group work members practiced while working collaboratively. At first, the students were divided into five groups. As shown in Figure 5, the researcher sent a code for each group to join the class. Then, a leader was chosen every week to guide the other members in the group to finish their targets within the due time. This gave a chance for shy and awkward students to reduce their anxiety when interacting in social situations.

Numerous studies (e.g. Miftah & Raya, 2018; Purnawarman et al., 2016) have shown that learning collaboratively on Edmodo, as compared to individual learning, results in students' commitment and experiencing the sense of community as it facilitates students' engagement cognitively during classroom sessions.

Figure 5

Group Code on Edmodo
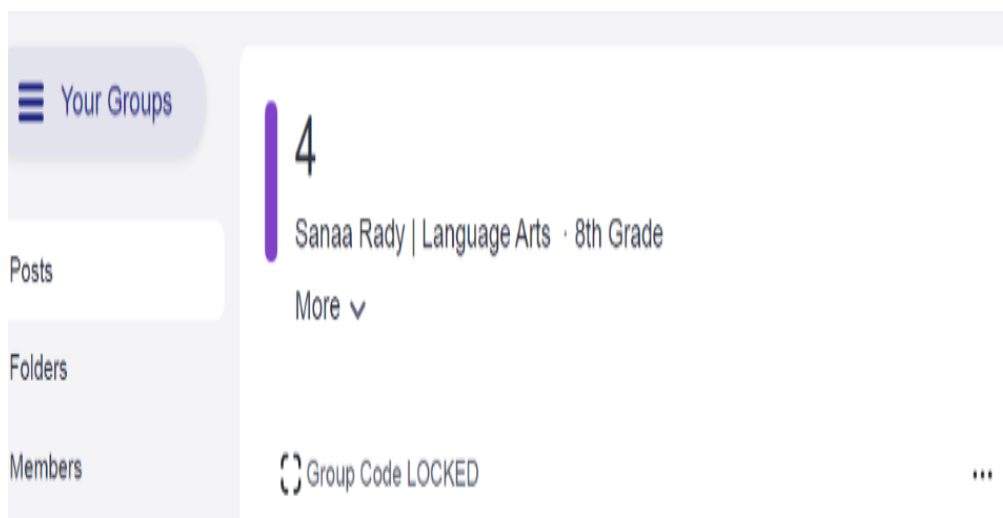
Note: This post shows that discussion was locked with other groups
(*https://new.edmodo.com/groups/4-31308841).*

On the other hand, since there is no face-to-face interaction on Edmodo the researcher used a live-video stream called Google Meet which made the learning experience more interactive and enjoyable. It helped the researcher to have a synchronous conversation with all the students at the same time to discuss the tasks assigned on Edmodo sharing each device's screen with each other. As shown in Figure 6, one of the participants gave an oral presentation in which he reflected critically on a coronavirus as an environmental problem. It enabled the researcher to record the students' discussion to be used later as a library resource at any time.

Research studies (e.g. Fakhruddin, 2018; Shanthi & Sasikla , 2020) have shown the positive effect of using Google Meet in delivering online learning. Students' self-confidence was increased. They were not afraid of making mistakes. This resulted in improving their productive competency.

Figure 6:

Oral Presentation on Google Meet
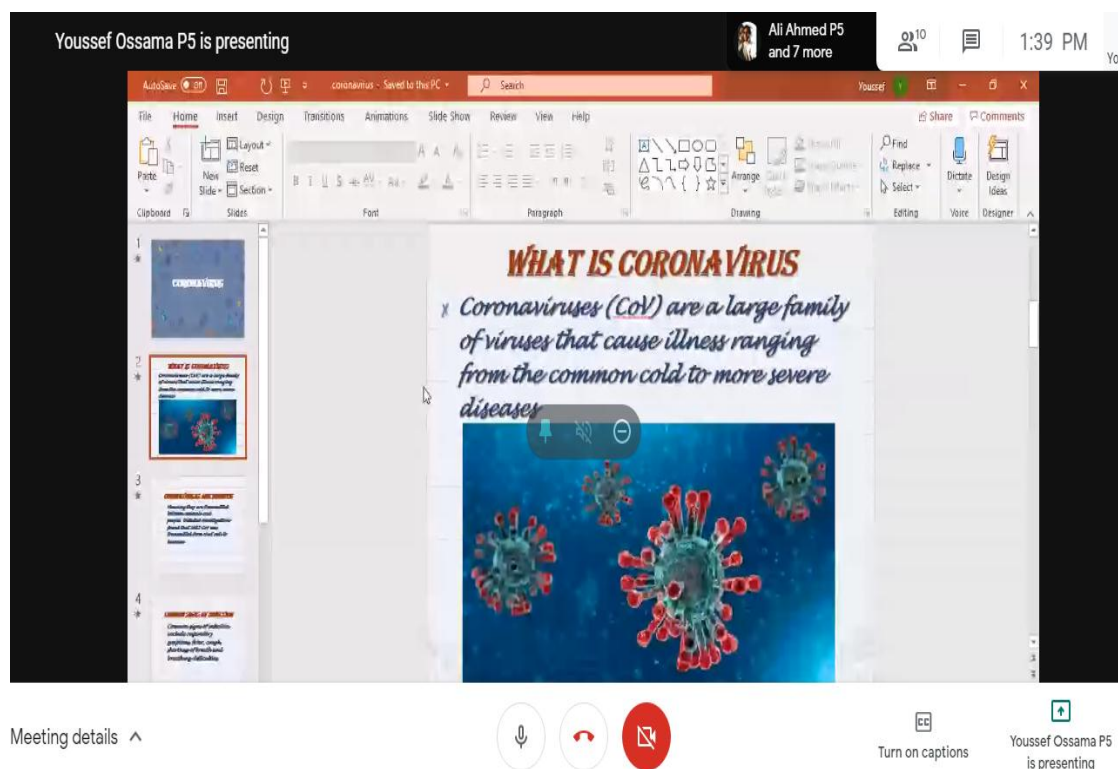
Note: An oral presentation session on Google Meet about coronavirus as a pandemic, causes, effects and protection against it *(https://meet.google.com/wmy-dekd-yxf).*

Moreover, the development of the students' critical literacy as a whole might be due to the teaching activities and strategies utilized in the program that enabled them to think more freely collaboratively, without fear of judgment, to solve problems and generate innovative ideas. Throughout the sessions, the students were trained to brainstorm ideas whether individually or in groups. They were asked to gather and record new ideas organizing them in a form of X mind mapping or through completing a graphic organizer. X mind activities helped group members to communicate their ideas and think out-of-the-box.

As shown in Figure 7, one of the group chose an X mind mapping tool from a free downloaded mind mapping software. It helped them to generate ideas connecting them with their prior knowledge which made

the learning experience more interesting and fun. This goes along with what Hsu (2019) found that using X mind to plan a project helped promote students' active participation.

Figure 7

Example of X Mind as a Way of Clarifying Thinking

Note: This map shows how one of the participates thinks about the idea of gender stereotypes and its effect on the society (*https://new.edmodo.com/groups/myp3-31251260*).

Similarly, using the strategy of the six thinking hats helped the participants to express their perspectives differently. As shown in Figure 8, the participants used this strategy to critically reflect upon a certain problem in a group work activity. Through wearing a certain color of hat, each participant represents a different way of thinking in a creative process. This goes along with what Chandra (2014) concluded this strategy promoted the students' collaborative learning opportunities resulting in developing their literacy competency across a variety of modes; oral communication with peers and in print presented in multimodal forms.

Figure 8

Example of a Six Thinking Hat Activity

Note: One of the groups thinks critically about the issue of genetically modified foods as an ethical issue tackling it from different perspectives through Google Meet *(https://meet.google.com/esj-xece-vty).*

Qualitative Analysis of the Students' Productions

This section is divided into two parts. The first part presents a qualitative discussion of data elicited from some samples of the participants' writing and the researcher's own observations during carrying out the collaborative e- learning program. The second part presents the participants' reflection after the implementation of the program.

Analysis of the Study Group Interaction and Discussions with Regard to the Components of Critical Literacy

The students' critical literacy performance has shown a remarkable development in the posttest of problem posing, examining multiple

perspectives, critical reflection and taking an action. Working collaboratively on Edmodo and meeting online live through Google Meet resulted in developing these components throughout the program. A comparison between the students' performance in the pre and posttest of each component shows how each one was developed as follows:

Problem Posing

During the pretest, the students showed that most of them lacked greatly practicing this component of critical literacy which is a prerequisite to start questioning the text from a critical lens. Most of them were unable to identify the message beyond the text, how the creator of such text tries to influence them or infer the intention beyond its message. They were unable to problematize the text or identify those whose voices are missed and need a change to achieve social justice.

Though some of them tried to read beyond the literal level, they wrote general ideas without supporting them with adequate details. Also, it was difficult for them to analyze and evaluate the information included in the text. Here is an example of a participant's answer to a question in the pretest that assess this component:

a. **Infer** the author's bias in the text.

the author's is hake an big imagination of this story

In the previous example, Abdel Rahman Saad was not able to identify the meaning of the word 'bias' that he thought he was reading an imaginative story about a girl called Malala not a narrative about a real person.

When answering the same question in the posttest, Abdel Rahman showed a different attitude. He started to feel that there is a kind of injustice directed toward gender representation answering that *"There was a girl called Malala wanted to learn but they prevented her from going to the school"*. Moreover, he succeeded in switching roles to show his response if he were in Malala's shoes. Though he did not give a lot *of* details, he felt that there is a problem that he should overcome. Here is his answer for the question about switching roles in the text:

> *d. If I were that character mentioned in the text, I would have more time*
>
> *to learn and have some activities for learning to be knowledgeable.*

Another participant, Rodayna Mostafa, was not able to problematize the text by feeling that there is gender inequality included in the text. She thought that there is lack in providing education for all learners in Pakistan. Here is her answer for such a question:

I don't think that because, the coutry didn't supports malala very much, to help her Country, so they will not supports the boy to help girls, but he should be coring and to help the girls, to receive a good educatvon from the goveroment, to learn and go to schools, and to worle, and to find jobs that they can gained money from, to support their family.

However, to answer the same question in the posttest she did differently. She started to practice gender switching as a strategy for problem posing a text in which she thought about how the story would change when the opposite gender is given more importance. Here is her answer to the same question:

in MY opinion, he would help him, because he is a man and they help, the biger Problem with taliban against Malala Was because she is a girl, so I think taliben would help this boy

The students' competency to problematize the text was significantly developed. Throughout the online sessions, the students practiced different activities to brainstorm the text using mapping and K-W-L as strategies to activate their prior knowledge. They showed their interest to discuss such critical global problems about stereotypes (gender, race, age and animals), human rights for achieving justice, environmental problems including the effects of infectious diseases and the ethical aspects related to these issues. This strategy guided their attention to have a kind of inquiry about different aspects of inequality existing in many social contexts.

As shown in Figure 9, group 3 questioned the bias shown in the racist and xenophobic violence against the Asian people in general and Chinese people in particular after the outbreak of coronavirus. It shows a discussion held by group 3 about the stereotypes that are related to Asian American, posted by the group leader Mohamed, to show how these stereotypes affected the society negatively in the past and are still well seen clearly after the outbreak of coronavirus.

Figure 9

A Post for Identifying Asian American Stereotypes
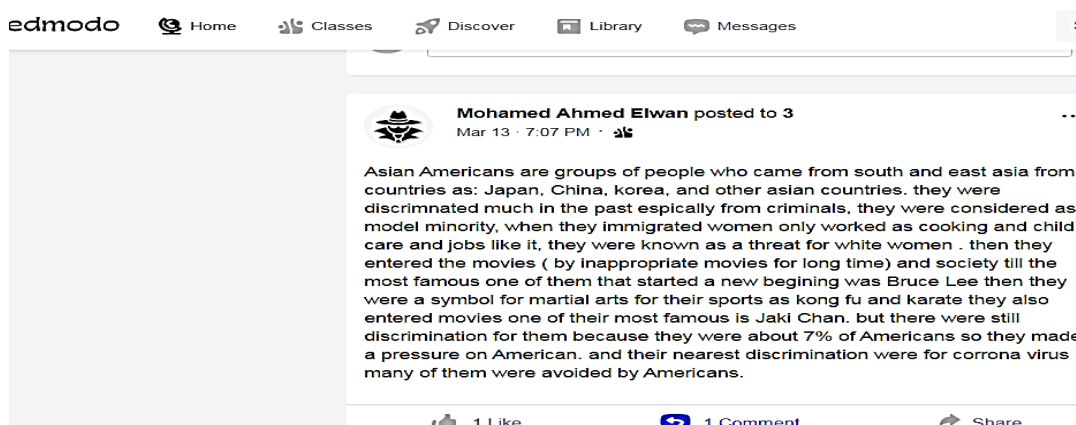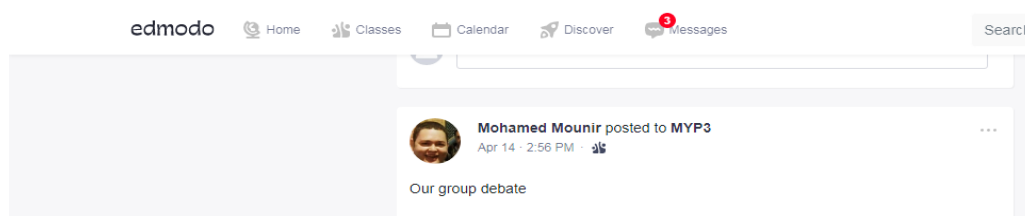
Note: The participant tries to highlight the negative effects of these stereotypes on the society (*https://new.edmodo.com/post/715873246).*

As shown in Figure 10, they discussed together the stereotypes that are related to such a group which are based on their race with the purpose of finding whether these stereotypes are based on truth or they are biased. They showed their awareness of the issue by looking at this issue from a critical perspective that questions such type of discrimination. Here is their discussion:

Figure 10

A Group Discussion on the Issue of Asian American Stereotypes

Note: The group members try to give voice for the Asian Americans (*https://new.edmodo.com/groups/myp3-31251260*).

Likewise, the participants succeeded in questioning the bias included the media that provides the public with fake news about certain issues such as coronavirus which may lead to a wrong decision making. For example, as shown in Figure 11, in one of the activities in which the students watched a video then they were asked to identify one misinformation, Haidy wrote that:

Figure 11

An Example of Identifying Fake news.

1. when the lawmaker is wearing a gas mask, but they use gas mask when they are dealing with someone who has coronavirus gas mask dont protect us from Covid -19.

As shown in Figure 12, Salma commented on the meaning and drastic effect of such misinformation on the society. She tried to evaluate the given information depending on accurate resources to check its credibility. This helped her to challenge such ideas showing a different perspective. She wrote as follows:

Figure 12

An Example of How to Identify the Credibility of Resources

1. look at the context of the article
2. Check the credibility of the source
3. analyze the construction of the article
4. Comparde the information with other credible new sources
5. Compare it to other news sources to get a diffrent prespecti e

In another activity, the students questioned the inequality for providing adequate educational chances for all the students after the outbreak of coronavirus even in developed countries. As shown in Figure

13, Khalid wrote about the message that he got after watching a video about such student as follows:

Figure 13

An Example of Using Setting Switching as a Problem Posing Strategy
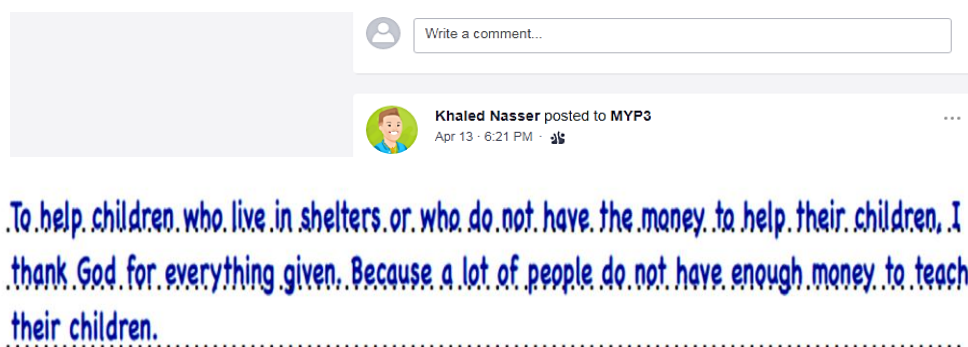
Though Khalid had some problems in meaning construction as he used the word children in the second time inappropriately, he sympathized with those marginalized students who can not receive e- learning sessions because of the limited access to the internet in their cities. He used an effective technique for problem posing which was setting switch as he thanked God for being an advantaged student to receive online learning easily. This feeling urged him later to take an action for supporting those students in other sessions.

Examining multiple perspectives

The students showed a great degree of development in their competency to explore a topic from different viewpoints. This was clear when comparing their responses in the pre and posttest of critical literacy.

During the pretest, most of the students were able to identify the author's viewpoint. Yet, when they found it challenging to tackle a certain topic from different viewpoints. More specifically, when they were asked to compare between two texts about the same topic, most of

them cannot differentiate between the authors' perspectives or even to take a critical position to support any of them. For example, when one of the participants, Joudy, was asked to find out the different perspectives discussed in the given texts trying to support one of them, she answered as follows:

> *"The same point is discussed in the two texts which is that girls shouldn't be educated and stay at home serving her husband and children. In my point of view , I see that girls should not marry at a young age."*

In the previous example, it was a difficult task for Joudy to find out whose voice was missed in either texts or which one was given more importance. Even, when she tried to express her viewpoint, she did not give enough evidence or details to support her position. But when answering the same question in the posttest, Joudy started to look at the issue from a closer critical lens saying that:

> *"In the first text, women are seen as a weak gender that cannot take their rights but Malala proved the opposite side by her bravery and being clever. In the second text, modern educated women are seen as being fashionable but this affects their social life badly. That is because most of the educated women do not care greatly about their husbands or kids, they just take care of themselves trying to be attractive. "*

She went further by taking a critical stance when she was asked to express her viewpoint. She showed her own reflection writing as follows:

> *"I think that the two perspectives are correct, but I support the second one because it actually happens nowadays that some mothers do not care about their husbands or kids. All what they care about is to be fashionable. I choose this problem because those kids will be the builders of the future and this lack from their mothers will affect them negatively. So, I hope that this problem could be solved.*

Another participant, Ahmed, succeeded in identifying the main point discussed in the two texts during the pretest. Yet, he could not recognize that the same point was tackled from two different perspectives. Furthermore, when he was asked about which one he supports more, he only chose one attitude but he was not able to argue for such perspective by providing enough reasons to justify his choice. Here is his answer in the pretest when he was asked, "What are the two perspectives expressed in the two texts?", he answered,

"The two texts tell about the same topic which is the education of women that she should not stay at home serving her husband and children. I support the first perspective in which Malala was not afraid and talked in public to express her rights."

Then, during the posttest, he looked at the issue from a close critical lens. He started to think of the other perspectives that are not expressed in the text by putting himself in the main character's shoes. He showed Malala's great interest to express his opposition to the inequality stated in the text due to social political reasons. He answered,

"In the first text, there is no equality between men and women as women are seen only as housewives that should stay at home to serve their husbands. But, Malala opposed this inequality because women are of great value and every great man has a strong. But, in the second text educated women are seen as smart but this care for education may harm them when they neglect their husbands. So, this perspective supports educating them at home only to be caring about their families."

Moreover, Ahmed reflected on both perspectives by connecting his choice for only one of them with his personal experience and the social context in which he lives. He felt pity for those voices who are not cared about. He wrote,

"In my point of view, in the first text, women deserve to be well educated because they do not care for having gold or dress. They are looking for a better life. But, in the second text, the author thought that when women are well educated they may neglect their husband and kids. So, I am for the first perspective because I want my wife to be a good person who takes care of her

Throughout practicing the activities designed for developing the component of examining multiple perspectives, the students showed a great deal of interest to discuss things from diverse viewpoints whether as an individual or group work. They started to discuss the different viewpoints concerning a certain issue. At the same time, they were given a chance to express their viewpoint by agreeing with or rejecting the author's viewpoint making a connection with their personal experiences. Moreover, few students succeeded in questioning the author's perspective by asking questions such as, "How is this text trying to position or influence the reader?"

For example, in an activity in which the participants were asked to express their perspective individually about age stereotypes and how they affect old people negatively. As shown in Figure 14, Salma refused the bad treatment to those people showing the necessity of appreciating their efforts.

Figure 14

One of the Participants' Perspective on the Issue of Age Stereotypes
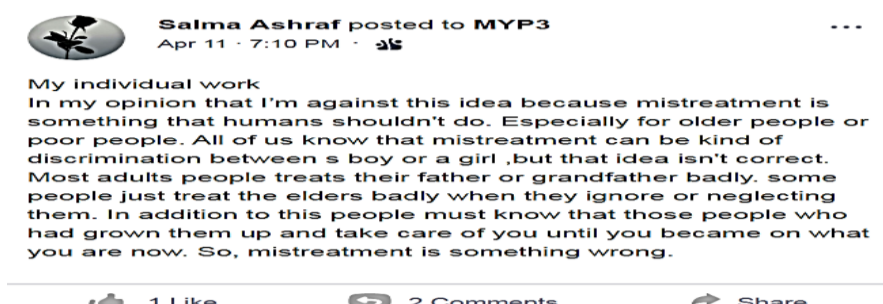
Similarly, the participants were involved in an activity called "Four corners". In such a collaborative activity, the students were engaged in a debate about to whom the vaccine for coronavirus, when it will be found, should be available; for all people or who can pay for it. They were given four choices (strongly agree /agree / disagree /strongly disagree) from which everyone chose only one that best reflected her or his opinion providing a reason for such a choice. As shown in Figure 15, three students exchanged their viewpoints about this issue. They posted:

Figure 15

An Example of a Debate for Expressing Multiple Perspectives
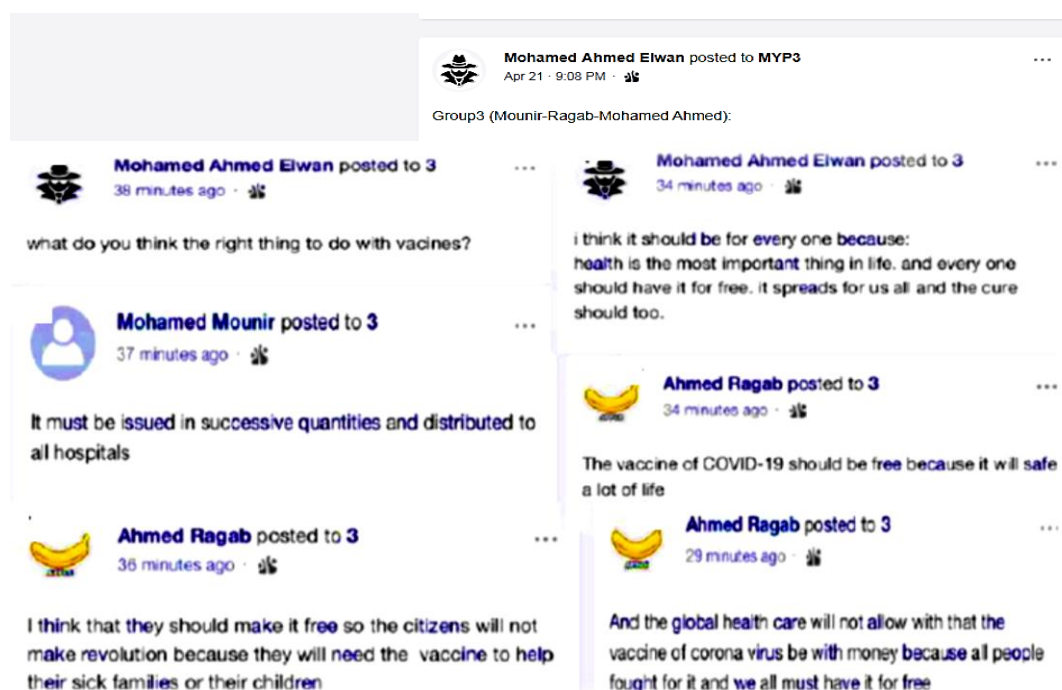
In another activity called " Stakeholders profile", the participants were asked to identify the viewpoints of the stakeholders who may affect decision making concerning a certain issue. Thus, firstly they brainstormed all the stakeholders (people or groups) who might have an interest in achieving equality in health issues. Then, they worked to find

out how each one might have a different perspective to consider vaccine as mandatory or obligatory for the citizens in a certain community as a way to provide equal health care. Finally, as shown in Figure 16, they expressed their viewpoint based on evidence from the text.

Figure 16

An Example of Identifying Stakeholders as a Multiple Perspective Strategy
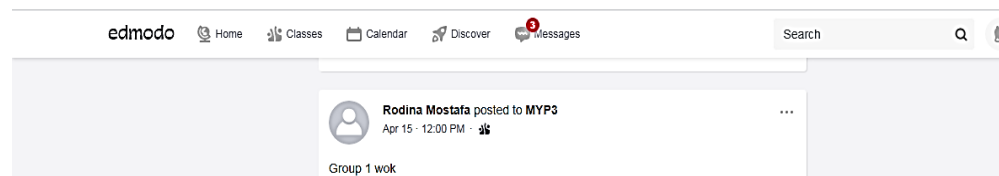
1. **Health care doctors are advised to give a vaccine to everyone ". But if any patient doesn't want to take it, his decision must be respected.**
2. **Concerned community members agreed on taking such of the vaccine as there is no other medicine for the virus.**
3. **Vaccine-hesitant parents feel that the vaccine is unsafe and refuse giving it for family members, particularly for children and older persons.**
4. **Most of public health principals believe that vaccination is the fastest way to stop the spread of such an epidemic disease but still fear the negative symptoms like shaking.**
5. **Other people want to make a campaign to make the vaccine available for all.**

In the previous example, group 1 negotiated how each stakeholder may tackle the issue of vaccine for an infectious disease differently. They tried to justify their answer by giving evidence from the text such as conducting a vaccine marketing campaign. At the end, they expressed their group decision about such issues. They posted,

> *"From what we read about the different stakeholders' perspectives, we prefer to stay at home and do what doctors say, and WHO. We should not touch our eyes, nose, ears, mouth and wash our hands. In this way, we can stay safe."*

Moreover, a few students were able to work on that component a step further to take action by suggesting a solution for challenging animal stereotypes. As shown in Figure 17, when discussing the idea of cats

stereotypes to be known as being evil and unhelpful, one of the participants, Yomna posted,

Figure 17

A Post Showing One of the Students' Perspective about Animals Stereotypes
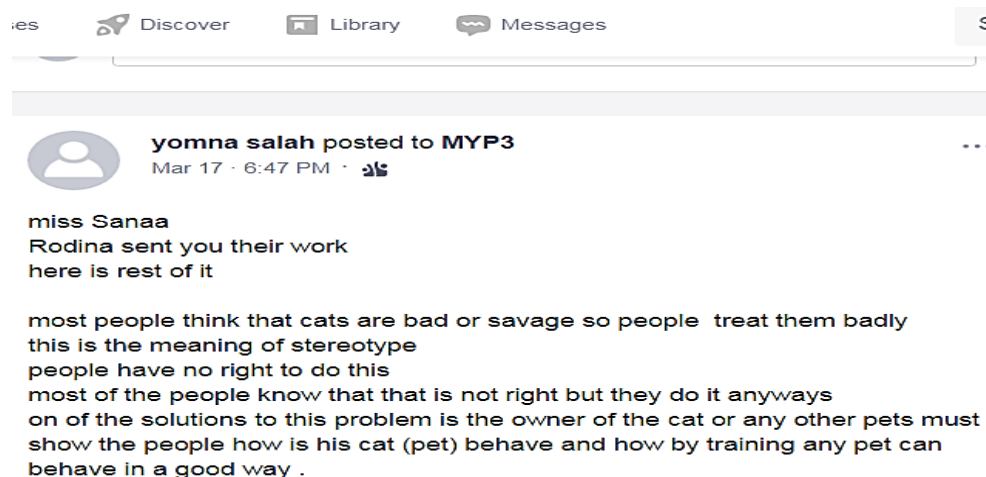
In the previous example, Yomna rejected the idea of treating cats badly as it has no logical reason. Then, she provided an example of an action that might be taken to promote pet justice by sending a message for anyone who owns a pet in general and a cat in particular to tell his good experience with such creatures.

Critical Reflection

The students' competency to critically reflect on taken for granted assumptions and beliefs was obviously developed. They were engaged in discussing many crucial topics in which they questioned, analyzed and evaluated actions from multiple perspectives and reflected on them by connecting these issues with their personal feelings and experiences. Finally, they tried to take   action, find alternatives or suggest a solution for such a problem.

At the beginning, since critical reflection is a complex process that needs deep analysis to understand an issue, it was not surprising to the researcher that nearly most of the students did not understand what is meant by the term "critical reflection" or what to do if they are involved in a critical reflective task. So, they left question No.3 in the pretest for writing such a reflection unanswered.

Though a few of them tried to answer it, they were unable to cover the main parts required for writing a critical reflection essay. In the following example, Nouran wrote her reflection after reading an article about the issue of inequality in educational chances among students to learn. She wrote:

> *"Female education is the most international problem in most countries, but few organizations support this problem. Yet, this problem does not exist in Egypt or Saudi Arabia. We have to support it in the other countries."*

In the previous example, Nouran mentioned the issue of inequality in education restricting it only to females. Yet, her answer to the same question during the posttest was to a great degree comprehensive. She answered,

> *"This article is titled "The achievement gap is 'more glaring than ever' for students dealing with school closures". Katie Reilly wrote it, on March 26, 2020. The writer tells about New York City when it closed its schools and students learned online.*
>
> *This article tells about inequality in education during the coronavirus outbreak and online learning. The main problem is social justice inequality for low-income students. They do not have high-speed internet access. Some people online learning helped to find equality in education   chances   for   the   students   who   live   in   village.*

Reading this article helped me to answer many questions such as how coronavirus shows discrimination in different things such as in education.

Finally, this article is about discrimination in education because of social class. Sending people who know how to deal with technology to teach poor people how to learn online. Also, we can make a campaign to collect money to help those students.''

In the previous example for critical reflection, Nouran started her writing by introducing the problem of inequality in online learning that many countries face. Then, she tried to write a simplified summary and a critical analysis. Though she did not build on the main ideas discussed providing a lot of details, her writing was very expressive. She tried to discuss the problem from another perspective. Then, she wrote what she benefited from reading such an article. At the end, she tried to suggest a solution for the problem to be an active reader.

Similarly, another participant was unable during the pretest to analyze the issue of inequality in online learning chances among all students or to examine the text from different perspectives. Though Rana felt that there is a problem, she wrote a very general comment about it even without adding her own reflection. She answered,

"There must be no difference between all students and to be well educated to be happy. All the world should help them to be doctors, teachers or any goal they want to achieve."

However, to answer the same question in the posttest, Rana analyzed the issue more deeply. She wrote like an initial draft for a reflective journal entry in which she reflected on the issue of inequality in education. She critically reflected:

> Students must get educated because they are the future and the corona virus will not stop them to learn. teachers started giving the students an online sessions, but the problem is that some people doesn't have any laptops or even internet connection. this is our main problem. in addition to that the poor people cannot pay any money for laptop or the internet connection. so, the solution is that the rich people can help the poor students by paying for them to have laptops or to get internet connection. if they do that students will get well educated.

In her journal, Rana identified the main problem in the text highlighting   such educational inequality as a global problem and referring to its negative effects as well. Then, she thought as an active global citizen to find a solution for helping a lot of students who learn online due to coronavirus. Most importantly, she tried to connect the issue with her prior knowledge identifying the social context in which the issue was discussed seeing it from different perspectives. She wrote

"Before reading this article, I was thinking that going to school is the best way for learning. But, now I learned that students can learn very well by working online. So, I liked in this article that the government thinks of different ways to help students to educate. The writer' point of view is that learning is good but it is not equal for all students. I agree with her because here in Egypt, there are many students do not have computers or do not know how to use them in the countryside"

Some people see the issue of inequality in education through learning online in a different way. They think that   online learning has a lot of problems like limited internet access or it does not help the students to communicate. So, it is not a good way for learning.

Finally, this text discusses the topic of online learning during the coronavirus outbreak. Many students do not have an internet connection in many countries. So, rich people can buy computers for the poor people. Schools should

From the given examples, it seems obvious that there were stages through which the study group progressed to critically reflect on a text. Firstly, it was important to be introduced to the concept of reflection and how to make meaning from a text. So, they were asked to write at the end of each session a reflective journal entry, as an individual work, in which each participant should connect the topic discussed with her/his personal experience writing a comment, a question or an analysis.

For example, as shown in Figure 18, Sarah critically reflected on an ethical problem related to Science which was the negative effects of eating genetically modified food on human health. Then, she expressed her feelings towards such unhealthy food.

Figure 18

A post Showing One of the Students' Reflection about Genetically Modified Food

Sarah Hassan posted to MYP3
Apr 21 · 10:23 PM ·

My Ind. work
Thanks⊏

Reflection (Individual work)

I learned from this lesson that .. genetically modified it's not good like people think because it hurt human's health
It remind me with …the weird food because it looks unormal

Then, since exploring an issue from alternative perspectives is an essential step in writing a critical analysis,   the participants were engaged in a prewriting activity using argumentation Vee diagrams, as a graphic organizer, to write a counter-argument. They were asked to compose arguments on both sides about a controversial issue. At the end of this argument, they should write a final conclusion or suggest a solution.

In the following example, as shown in Figure 19, group 5 discussed the issue of whether coronavirus is a bioweapon, due to its disastrous effects. Since they should be unbiased while discussing the two opposing viewpoints, they had to search on the internet to find information from reliable resources. Finally, they tried to write their opinion at the end of the argument.

Figure 19

An Example of a Counter-Argument as an Activity for Critical Reflection
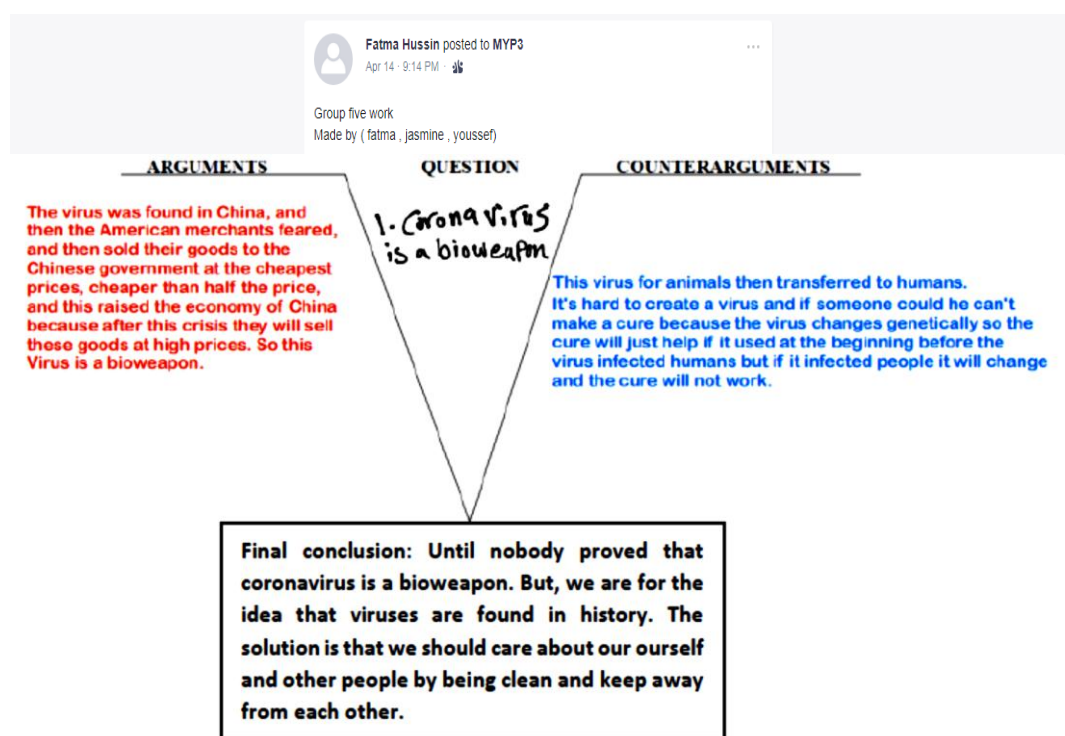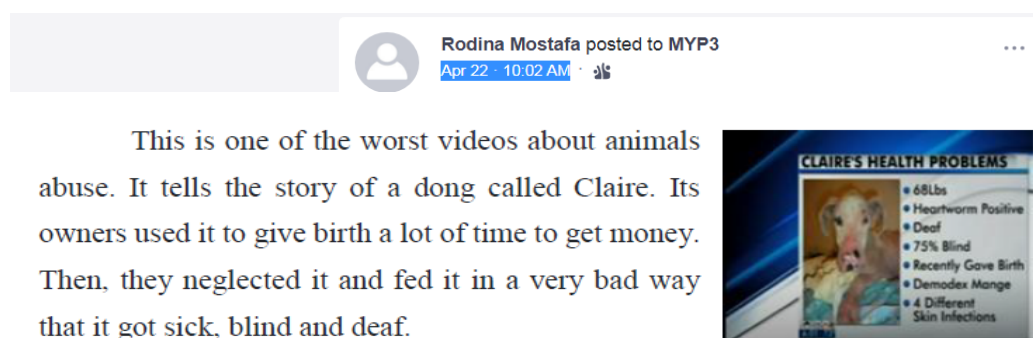
Later on when the students' competencies to infer a bias included in a text about a certain issue and to examine it from different perspectives, the researcher started to draw their attention to the importance of considering the social context of the issue to achieve social justice. So, they were trained on how to write the different points needed for writing a critical reflection; introduction, summary, critical analysis and conclusion.

In the following example, as shown in figure 20, group one challenged the idea of pet stereotypes or animal discrimination that determines certain characteristcs to each animal associating it with particular species or breed such as considering black cats as a symbol of evil. They wrote the following critical reflection after watching a video about a dog abuse that causes disastrous infectious diseases for this dog (https://www.youtube.com/watch?v=y9ot_EbQIVg):

Figure 20

An Example of Critical Reflection about Pet Stereotypes

This is one of the worst videos about animals abuse. It tells the story of a dong called Claire. Its owners used it to give birth a lot of time to get money. Then, they neglected it and fed it in a very bad way that it got sick, blind and deaf.

But this stereotype about using animals a lot because their kind may be expensive is so bad. Because they have feelings just like humans, some people treat animals in a bad way just for fun. But, this is a wrong belief that we should change it in the whole world. For example. America and Australia are from the most countries that take care of the pets just like humans by spending about 80 million dollars on the dogs.

Actually, humans abused many animals not only dogs. For example do you even know why white rhino became extinct just because of humans, they were cutting there horn just to sell them of the snakes that human took their leather to sell it by a very expensive price. But, humans need snakes to get from it's poison medicine so why people treat them badly?

In summary, this video is about animal abuse that does not achieve animal justice. To solve this problem, there should be a rule that if someone treat animals badly he should pay an amount of money so most of people will treat them well. Also, there should be many natural reservation animals to help them have a place that can protect them from danger.

In the previous critical reflection example, the students showed to a high degree how they can challenge the unfair social beliefs that may have dangerous effects not only on human beings but the natural world as well. They tried to imagine the world differently by thinking about solutions to live in a better world. Thus, the development of the students' competency to write a critical reflection was a prerequisite to take an action which is the main essence of developing critical literacy.

Taking an action

After inferring the bias and injustice practices related to the issues discussed in the program, the participants started to think as active global citizens about such important real-life issues around them beyond the classroom walls. Their efforts to achieve social justice issues were seen throughout the implementation of the program in order to make a difference in their lives and other people's lives.

The degree of the development in such essential component of critical literacy will be greatly obvious when comparing the students' responses in the pre and posttest for taking an action. In the pretest, nearly most of the students were unable to identify a suitable action concerning inequality in female education that they left the question unanswered. Yet, a few students limited their answer in just a form of suggesting some brief solutions. Their answers showed that they felt that there was a problem, but they could not build on their ideas in depth to solve it. Following is an example of action taking in such issue suggested by Salma:

> *"They should not differentiate between women and*
> *men. Give women their rights and let them go to school."*

However, Salma's attitude for taking an action towards education inequality went step further in the posttest by challenging some societies' biased attitudes towards females. She referred to the social context of gender discrimination in some communities where women are seen as housewives who only serve their families. Her attitude was seen by writing a story and to promote equality in female education. Most importantly, she gave voice for missed characters emphasizing the great effect that they may have if they are well valued. She responded,

"Sara was the only daughter in her family. Her mother was very kind. But, the father love his son more than his daughter. He sent him to school letting the girl just work at home. Adam was learning and got a lot of care that annoyed his sister. One day Sara was cooking and her father was getting something from the fridge, suddenly a fire broke and her father burnt. Sara tried to help him by putting gas on the fire as she could not read it. The fire became more and more and her father died but Sara was rescued. Five years later, Sara joined a school to learn how to be an educated nurse. She worked in a hospital and helped a lot of people who needed her care. She worked very hard until she became one of the famous characters in her village. At that time, she wanted to tell her father that girls can do more than just cleaning the house."

Then, as shown in Figure 21, she showed her love for drawing by designing a poster calling for female education equality sharing it with her friends on the Facebook after posting it Edmodo (https://new.edmodo.com/groups/myp3-31251260).

Figure 21

A Poster that Promotes the Need for Female Education Equality

Similarly, Mohamed tried to answer the same question in the pretest. His answer to take an action was very limited just to give a hint about women's rights in general like going to school and doing certain jobs. He answered:

> *"There are many rights that women and men should*
> *have like the same such as having jobs."*

Yet, as shown in Figure 22, his answer in the posttest was to a high degree different. He gave an example for a creative critical literate by designing a brochure in which he included all the four components included in the concept of critical literacy. He posted it on Edmodo (https://new.edmodo.com/groups/myp3-31251260).

Figure 22

A Brochure that Calls for Change in Attitude Towards Female Education
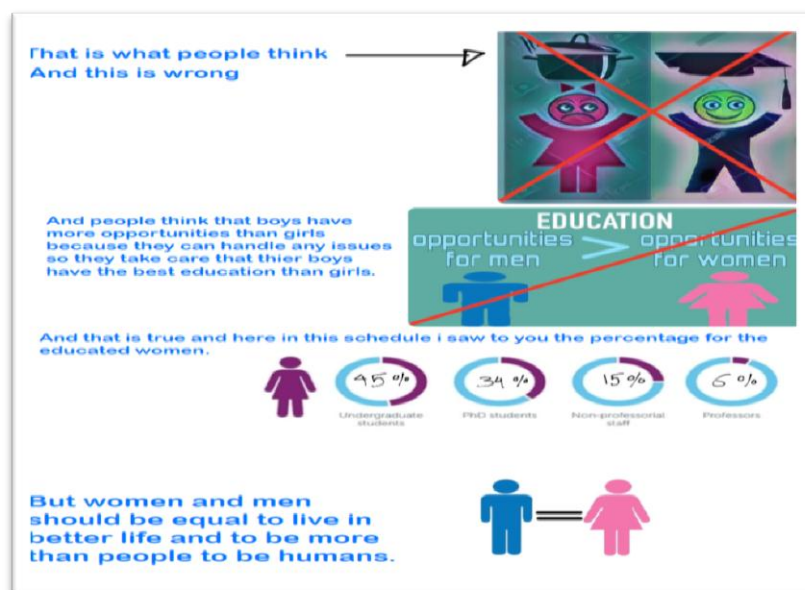
In the previous example, Mohamed questioned the taking for granted beliefs about women to be seen as housewives only. Men, on the other hand, are given a leading role in the society. He expressed the unfair viewpoints of some people about the role given to women in the society. Also, he showed the number of successful educated women and the roles that can play especially as being great mothers. Finally, he sent a message to the society calling for equality in female education.

The previously discussed examples showed that the students' competence to take social action took different directions during carrying out the program. Firstly, most of the students demonstrated changes in their way of thinking by considering issues from a resistant   stance. They said words and expressions like " it is unfair, injustice, equal treatment " to express the need for social justice in many aspects in our life. Then, through identifying the negative effects of the critical issues emphasized in the program on both the individual and the society, they showed their rejection of these injustice practices thinking for effective solutions.

It is worth noting that differentiation played an important role in helping the participants to express their attitude for achieving social change whether as an individual or group work. The signs of taking an action were seen in different ways making use of the students' different learning styles. More specifically, since the study program was carried online, most of their efforts to take an action were seen in digital formats such as creating a video on the YouTube, organizing for online campaign, preparing a PowerPoint presentation to be shared online with other classes.

For example, as shown in Figure 23, group 3 designed a digital brochure https://www.flipsnack.com/Group3brochure/coronavirus-covid-19.html) as an action about coronavirus as one of the environmental problems. They posted it on Flipsnack as a free site for making interactive flipbooks. It included important information about coronavirus as a pandemic (typical symptoms and safety procedures).

Figure 23

Group 3 Brochure about Coronavirus

Similarly, as shown in Figure 24, group 2 organized and promoted for a campaign against gender discrimination. They challenged the practices that are done against women in favor of men. They created a site on Google ([https://sites.google.com/m-eis.com/anti- discrimination-campaign/home](https://sites.google.com/m-eis.com/anti-discrimination-campaign/home)) called "Anti-Discrimination". They chose the words" Equal race, equal life" as a symbol to emphasize the need to eliminate gender stereotypes. They invited other people to join them in their efforts to achieve social justice concerning gender. Most surprisingly, though all the members in group 2 were boys, they sympathized with all women whom they felt are given a lot of duties enjoying less rights.

Figure 24

Group 2 Campaign on Google Against Gender Stereotypes

On the other hand, being a talented artist, Salma took a social action by drawing a poster displaying it on her Facebook page for her friends. As shown in Figure 25, Salma supported WHO campaign on how people protect themselves from coronavirus. She considered coronavirus as an enemy that should be fought by eating healthy food and following good hygiene tips to strengthen our immune system as the only means for fighting coronavirus until finding out an effective vaccine.

Figure 25

Salma's Poster for How to Fight Infectious Diseases
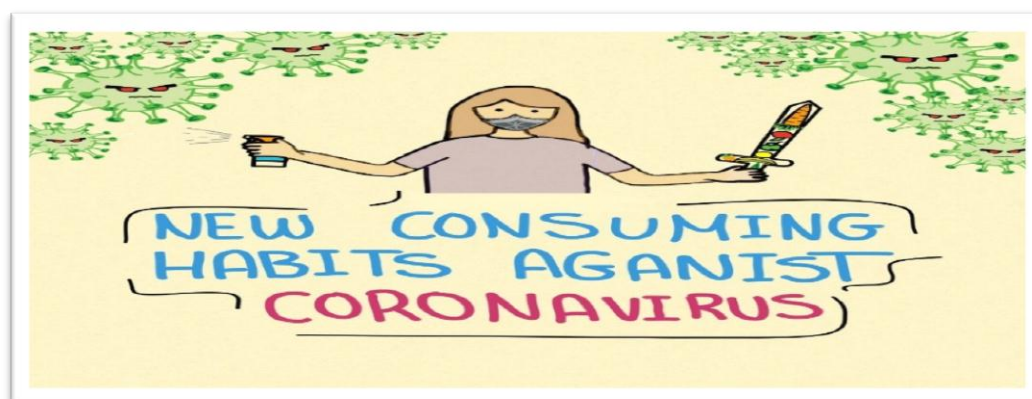
On the other hand, the students who are interested in directing films prepared a movie unloading it on the YouTube to discuss some of the critical topics discussed in the program. For example, Ahmed and his group uploaded a movie about gender discrimination https://www.youtube.com/watch?v=o4E95HCzHa4&feature=youtube.The story, entitled " A story that destroyed my life", tells about a sad girl who was given less importance from her family in favor of her brother. Being asked to do everything at home, she felt depressed that she committed suicide to end such unequal treatment. As shown in Figure 26, the following video clips tell this story.

Figure 26

Group 4 Movie Telling a Story as an Action Against Gender Discrimination
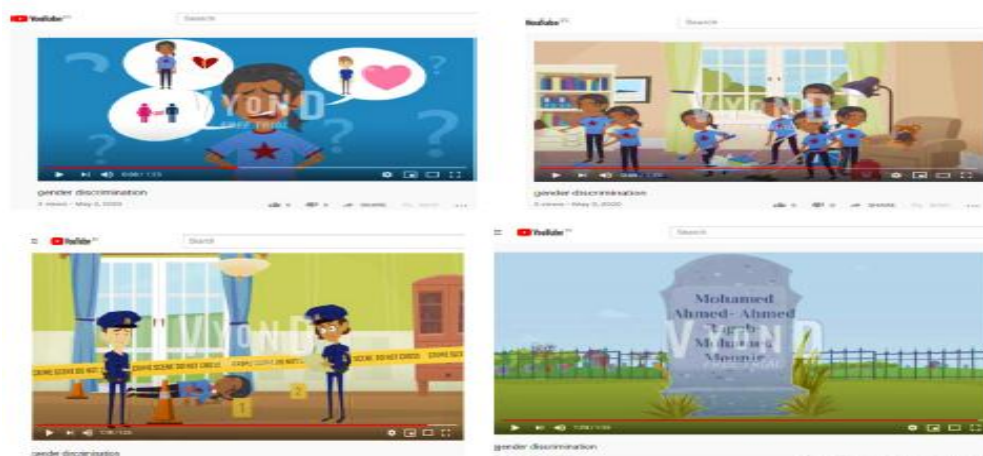
Similarly, group 1 posted a video on the Facebook https://www.youtube.com/watch?v=lWj4pzQBCmI in which they took an action against those careless people who may cause the spread of coronavirus drawing their attention to the harmful effects of such behavior on doctors in particular that caused the death of many doctors. As shown in Figure 27, they gave Dr. Gamal Abul Ela, the Egyptian consultant of internal medicine, as an example of doctors who passed away due to coronavirus complications.

Figure 27

Group 1 Video for Keeping Safe at Work and an Action for Saving doctors

Likewise, group 5 designed an online album https://myalbum.com/about ageism as a type of discrimination against people based on their age. They talked particularly about old age people who are associated with a decline in psychological capacities such as thinking power, as well as being less active, weak, and slow. In their album, group 5 drew other people's attention that many successful people started their actual life doing great things after the age of 40 and may be after the 50. For example, as shown in Figure 28, William Ivy Baldwin walked across a canyon, at age 82, Grandma Moses started painting at age 76 and Nelson

Mandela was elected as the president of South Africa at age 75. They wanted to tell all people that age is not an obstacle for achieving dreams.

Figure 28

Group 5 Digital album as an Action for Fighting Ageism
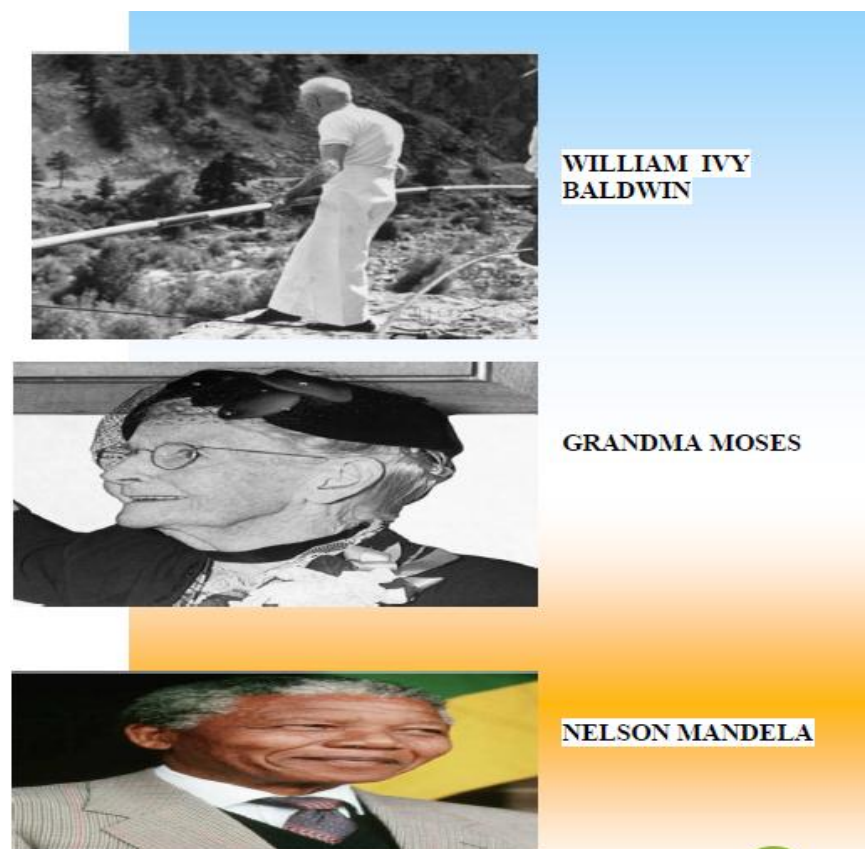
On the other hand, the verbally oriented participants utilized writing as a tool to take an action. For example, group 4 told a counter narrative called "Zootopia" as opposing to the cartoon called "Dumb bunnies". As shown in Figure 29, they challenged one of animals stereotypes known about foxes and bunnies like "sly fox" or "dumb bunny" to show them as good active characters. Though they have not created the narrative themselves, they succeeded to discuss these stereotypes from another perspective which draw the reader's attention not to pass judgments for people or animals based on stereotypes.

Figure 29

Group 4 Counter Narrative as an Action for Challenging Animal Stereotypes

Other students, group 5 preferred to give an oral PowerPoint presentation as an action to raise their classmates' awareness about the need for equality in health insurance as a social human right for every citizen in any country. As shown in Figure 29, they chose the topic of lack of safe water and sanitation as a global critical problem that affects everyone these days after coronavirus outbreak. They presented it for class MYP 2 through Google Meet app.

Figure 29

Group 5 Oral Presentation against Health Care Inequality

Some Samples of Study Group Opinions about the Collaborative E-Learning Program

As shown previously, the students were always asked to reflect to show their opinions throughout carrying out the program until the end. At the end of each lesson, they were asked to reflect individually on what they learned from the lesson,what they liked and disliked relating this to their personal experience.

Then at the end of the program, they were asked to express their opinions freely about the collaborative e- learning program that they were involved in through answering the following reflective question: What do you liked or disliked most in the program ? As shown in Figure 30, this is a session on Google Meet*: https://meet.google.com/wmy-dekd-yxf* in which the researcher asked the students to write their opinions about the program in the chat section. Then, while all of them were muted, the researcher listened to one of them, called Rodayna, giving her reflection recording her conversation at the bottom. She liked working in groups to discuss critical issues like the effects of stereotypes and how to protect ourselves from the infectious diseases.

Figure 30

The Students' Reflection on Google Meet
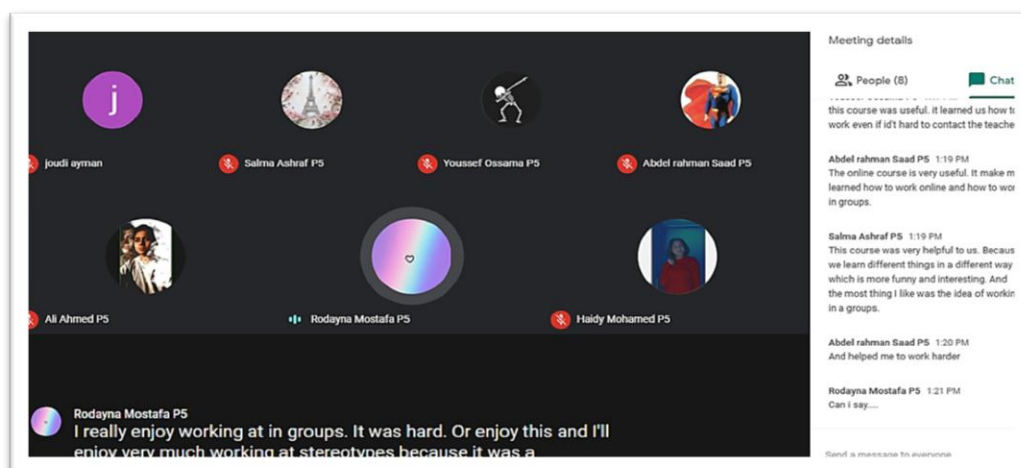
Other students posted their reflection on Edmodo
https://new.edmodo.com/groups/myp3-31251260. For example, as shown
in Figure 31, Salma commented during the same session that one of what
she liked is being involved in this program as she learned different things
in an interesting way and the best thing she enjoyed was working
collaboratively online as a group work. She expressed that she likes
working online as it excludes the distraction that trouble maker students
might cause in the class.

Figure 31

Salma's Reflection about the Topics Discussed in the Program
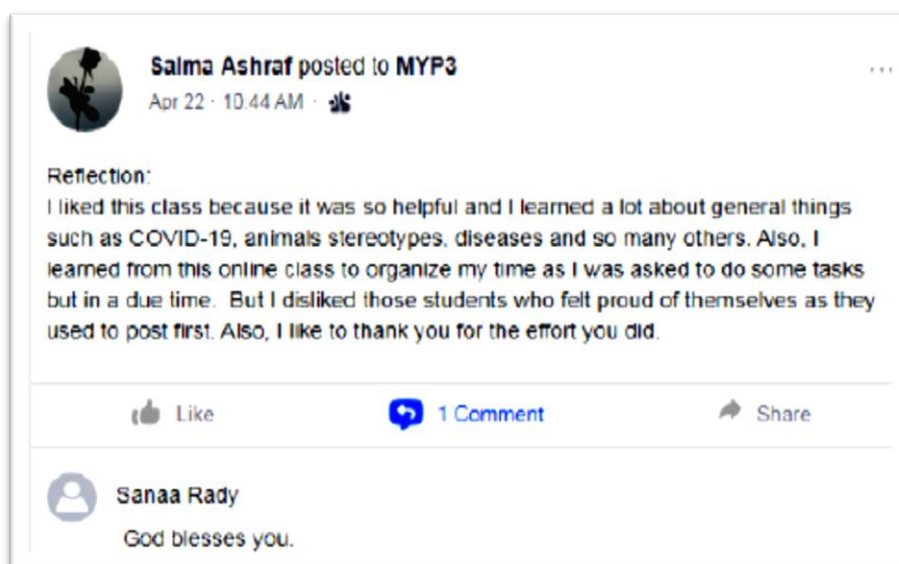
Another example was given by Khalid, as shown in Figure 32, in
which he showed his interest in animation which helped him to create
some movies or films to highlight the harmful effects of some injustice
practices exist in the society. His point of view reflected some of the
important components critical literacy starting with developing his ability to
question the given information and ending with taking an action as his favorite
activity. Moreover, it showed his desire to communicate with his classmate
collaboratively to think about many critical issues found in the society.

Figure 32

Khalid's Reflection about the Importance of Taking an Action

> **Khaled Nasser** posted to MYP3
> Apr 22 · 11:09 AM
>
> The program was very useful. I learned how to work even I can not communicate with my teacher face to face. I liked to work with my group to search about a topic. Moreover, I learned from this class no accept things as they are said. We should think about the beliefs around us and question the one that are unfair like biased informatio that are written in some newspapers or social media sites. What I lik most was when my teacher asked me to take an action. So, I started working on the YouTube on how to make an animated video and how edit some photos. This helped me to create a brochure as an action alarm people on how to be safe during coronavirus outbreak.

Similarly, as shown in Figure 33, Haidy expressed her enjoyment of being involved in this e-learning program. She felt that it helped her to search more on the internet then sharing her ideas with her classmates.

Figure 33

Haidy's Reflection about the Effect of the Program for Expressing Multiple Persectives

> **Haidy Mohamed** posted to MYP3
> Apr 22 · 2:12 AM
>
> What I like in this online class that all of us are communicating with each other and there isn't side talking or noise as exists in the classroom. Also I learned on Edmodo that I should collect all the information from many references (resources) conditioning to be reliable and to listen to the other members in the group as they maybe have another opinion. We should listen to each other and respect each other opinion. Moreover, I learned that there are many kinds of stereotypes such as gender, age and animals and the inequality in education, health care as well. What I liked most the action that my teacher urged my group to do. It was about age stereotypes.I prepared an album for old people who started their actual life after the fifties.

Conclusions

The study results indicated the effect of the suggested collaborative e-learning program in developing prep stage students' critical literacy. The quantitative and qualitative analyses of the pre/posttest results showed that the program was highly effective in developing their critical literacy. The participants exerted a good effort in discussing many critical issues regardless of including some grammatical, spelling mistakes and inadequate word choice in their language.

There is a general agreement among the students that they enjoyed being involved in online group work. Moreover, they showed their great interest and enthusiasm to share their ideas in these global issues. The development of their critical literacy was evident in designing a digital brochure, drawing a poster then sharing it on the Facebook, writing a counter text or giving an oral presentation.

The development in the students' critical literacy might due to using different strategies focused on questioning the taking for granted beliefs from multiple perspectives, critically reflecting and taking an action. Moreover, it could be attributed to the use of multimodal texts by presenting the information through a variety of photographs, diagrams, and websites which enhanced their motivation.

Though the students felt that practicing critical literacy in the English classroom very enjoyable and interesting, let me admit that most of them faced a lot of difficulties at the beginning. Some students thought it was better to communicate face to face with their teacher rather than virtually. Other students sometimes had limited internet access which hindered them to attend the live meeting with their classmates on Google Meet. Also, many of them felt shy to communicate online.

However, the researcher convinced them with the emergent need for e-learning especially after the outbreak of coronavirus to keep safe at home. Also, I gave them a suitable due time to finish their tasks. Most importantly, I drew their attention to the importance of developing critical literacy competencies for empowering them as active citizens in the 21st century.

Finally, this attempt to configure thoughts, pose problems, critique own and others' viewpoints with clarification of reasons and discuss possible solutions, reflects a rich virtual experience in which the students' could build up critical context for interaction and develop critical knowledge.

Chapter 5 will present the research summary, including statement of the problem, research questions, research hypotheses, research significance, research limitations, participants of the study, research design, research variables, instruments, piloting the instruments, research procedures, findings and discussion, recommendations, and suggestions for further research.

Chapter Five

Summary, Conclusions, and Recommendations

This chapter gives a summary of the present study. It provides a brief description of the study problem, aim, research questions, instruments, and participants. It also discusses the possible pedagogical implications of the study and the difficulties encountered by the researcher. The chapter also includes general conclusions, recommendations, and suggestions for further research.

Summary

The 21st century accompanied by the emergence of technology in the education confronts the citizens with challenging competencies required for lifelong learning such as collaboration and critical literacy as a means for social change. However, most of EFL students have great problems concerning developing their critical literacy competencies due to the dominant examination- oriented educational system and the nature of the curriculum that gives limited attention to developing higher thinking abilities. They are not given a chance to express their voices toward political or social issues or to develop their awareness of such problems.

Thus, the present study aimed to investigate the effect of using a collaborative e- learning program in developing EFL prep stage students' critical literacy.

Study Questions

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

- How can the suggested collaborative learning program based on the Connectivism be used to develop EFL prep stage students' critical literacy?

In order to answer the previous question, the following sub-questions had to be answered:

1. What is the level of EFL prep stage students' critical literacy?
2. What are the critical literacy components required for EFL prep stage students?
3. What are the basic components of a collaborative e- learning program for developing EFL prep stage students' critical literacy within the Connectivism?
4. What is the effect of using a collaborative e- learning program on developing EFL prep stage students' critical literacy within the Connectivism?

Hypotheses of the Study

To investigate the research problem, the study tested the following hypotheses:

1. There is no statistically significant difference between the mean scores of the study group in the two administrations of the pre and post critical literacy test with regard to the development of their overall critical literacy.
2. There is no statistically significant difference between the mean scores of the study group in the two administrations of the pre and post critical literacy test with regard to the development of each component of critical literacy (problem posing, examining multiple perspectives, critical reflection and taking an action).

Instruments

To achieve the aim of the study, the following instruments were designed by the researcher and used through the study:

1. A pre/post critical literacy test

2. A critical literacy rubric

The Study Group

A group of EFL second prep stage students (n=25) participated in the study. Before starting the experiment, the critical literacy test was applied to the group. The proposed program was then administered to the students. Finally, the critical literacy test was reapplied to the same group as a posttest.

Pedagogical Implications

The results obtained in this study have led to the conclusion that collaborative e learning supported by the theory of Connectivism had statistically significant effect on developing EFL prep stage students' critical literacy. These results have important implications for EFL teachers, curriculum designers ,and researchers as they give useful guides to a new effective and flexible method of learning through using Edmodo and Google Meet as interactive and motivating contexts for online learning. It gives more chances for learners to be involved in active learning circumstances for sharing knowledge and promoting social interaction in real-world situations.

Moreover, this study added to knowledge in the field of teaching critical literacy competencies. It provided a set of strategies and activities and suggestions for developing critical literacy as one of the main requirements needed to cope with the 21st century. They helped the

students to be aware of many global crucial problems motivating them to take an action towards practices of inequality and injustices.

Besides, this study highlights the great role that EFL teachers can play to improve their students' critical literacy competencies. S/he should give their students adequate chances to express their opinions about global problems integrating this within teaching English curriculum. This may result in encouraging the students to be agents of social change. These teachers should be given more flexibility in choosing suitable textbooks and resources that discuss such issues in an interesting and motivating way. Moreover, when designing the English curriculum, there should be a distinctive shift from the dominant examination- oriented educational system to a system that supports not only critical literacy but also the new literacies needed for the 21st century such as global, digital and environmental literacies.

Limitations

The researcher faced some difficulties through the experimentation. She tried to solve them.

- It was challenging to change the students' attitudes towards what Abednia and Izadinia (2013) termed as deep-seated beliefs. Most students relate the concept of critical literacy to politics which arose their anxiety in negotiating such issues. Thus, she was so careful in selecting topics of global appeal avoiding topics that may cause the students' confusion especially that they are still young like the topic of transgender.
- There was a kind of fear related to parental resistance when challenging the cultural beliefs existing in the society such as gender inequality or job stereotypes. Yet, it was found that the parents

supported their kids in their attitudes by sharing their ideas on social media.

- Some challenges were identified concerning the students' participation and internet connection. It was expected that the students, as connectivist learners, should be self- regulated in their learning. However, some students were irresponsible to do or to share the assigned work. This was solved by giving the students a chance to choose the members of their group assigning a group leader to motivate them.

- There were some problems covering the limited access to the internet essentially the study was carried out during the spread of the Covid 19 outbreak in which online learning was the only means for teaching and teaching. This challenge was solved by expanding the due time for answering the assigned task.

Results of the Study

The results of the present study were elicited from both quantitative and qualitative analyses. Scores of the study group in the pre and posttests were analyzed and compared using T-test and Eta-squared formula. The results revealed the following:

- There is a statistically significant difference at the 0.01 level between the mean scores of the study group on the pre and post critical literacy test with regard to the development their overall critical literacy in favour of the posttest administration.

- There is a statistically significant difference between the mean scores of the study group on the pre and post critical literacy test regarding the development of each component of critical literacy in favour of the posttest administration."

Conclusions

Based on the study results, it can be concluded that:

- Using the suggested collaborative e-learning program proved to be effective in developing EFL prep stage students' each component of critical literacy.

- Using online learning as a flexible method for connecting the students regardless of place or time helped them to be engaged in active learning especially when discussing real life problems.

- Diversity in preparing the activities, selecting appropriate teaching strategies and meaningful content for the students enhanced the students' motivation to be active learners.

- The suggested collaborative e-learning program proved its effectiveness in raising the students' awareness of many global problems that need to be solved.

- Developing critical literacy programs can be applied at any age even young learners. Once students are given a chance to feel the inequality among people in the society, they can support them trying to take an action to achieve social justice.

Recommendations

Based on the previously obtained results, this following recommendations are elicited:

- Teachers should make use of digital technology appropriately to increase the students' involvement in the learning process.

- Creating effective collaborative work group is a key feature for helping the students to construct meaning in a relaxing and enjoyable educational environment.

- More opportunities to negotiate other global critical issues should be practiced by the students to be active critical literate citizens such as the effect of cultural diversity on peoples' identity.

- Teachers should emphasize developing critical literacy as an essential language component to be integrated within the language teaching process.

- Students should be given more chances to express their viewpoints freely which will help them to be active doers in the future.

- Reflection is a key element to raise a critical literate citizen. Since it needs deep analysis on the part of the students, more practice should be given to enable them to summarize, critically analyze a text to be a long-life style.

Suggestions for Further Research

Based on the results of the study, the following future studies can be suggested:

- Investigating the effect of collaborative e-learning on developing digital and global literacy.

- Designing different forms of online learning at a large scale, MOOCS or SPOC definitely, to discuss global critical problems.

- Investigating the effect of the students' social background to take an action for achieving social change.

- Designing a training program to train EFL teachers on how to develop their students' critical literacy competencies.

- Examining the effect of using picture books on developing students' critical literacy in other stages.

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Appendix (A)

Critical literacy Formal Interview
Pilot Critical literacy Questionnaire

Appendix (A)

Critical literacy Formal Interview

Part 1: Personal Information

Name:_____

Qualification:_____

Number of years teaching English:_____

Instructions:

- The purpose of this interview to identify to what extend critical literacy is

  applied in the prep stage EFL classroom in the Egyptian schools.

- Please reflect on your personal experience in this area of teaching English.

- Carefully read each statement showing your opinion.

- Your sincere, personal responses will be of great benefit to the study.

Thank you

Kindly, answer the following questions:

1. **What are the main components of critical literacy?**

   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………

2. **What are the actual critical literacy competencies of your students?**

   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………

3. **What are the critical literacy activities that you design in your class?**

   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………

4. **Have you ever involved in a professional training to develop critical literacy? If so, explain the nature of that training?**

   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………

5. **What kind of problems do you face while trying to promote your students' critical literacy competencies?**

   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………
   …………………………………………………………………………………

Pilot Critical literacy Questionnaire

Personal Information

Name:_____

Class:_____

Instructions:

- This questionnaire aims to identify to what extend you can examine texts from a critical lens.

- Carefully read each statement and choose only one answer that shows how you approach texts describes your opinion.

- There are no right or wrong answers, just those that are right for you. The best

  answer is the one that most accurately describes your attitude.

Directions:

Read the following statements and rate them from 1 to 5 as each number means as follows:

1. Never	**2. Rarely**	**3. Sometimes**
4. Very often	**5. Always**	

* If you are not sure what the question means, just leave it blank.

(__) 1. I criticize the beliefs and values existing in the society.

(__) 2. I can connect the text to my personal experience.

(__) 3. It is easy to identify the bias of the author.

(__) 4. I am able to identify whose voices are missing in a text and whose voices are represented.

(__) 5. I can challenge power structures that are represented in a text.

(__) 6. I can read multiple texts on the same topic to identify difference in opinions.

(__) 7. I can think of the text from a different perspective.

(__) 8. I can read reflectively and critically by making connections to other texts.

(__) 9. I can use the information included in the text to promote equity.

(__) 10. I should challenge the cultural borders for achieving cultural understanding.

Appendix (B)

List of Critical Literacy Components

List of Critical Literacy Components

Critical literacy Item	Description	Is the component appropriate for EFL Prep stage students?		
		Very appropriate	**Somewhat appropriate**	**Not appropriate**
1. Problem posing	Refers to the student 's ability to analyze the text for questioning the taken- for- granted practices.			
2. Examining multiple perspectives	Refers to the student 's ability to explore the topic from different perspectives showing diversity in beliefs.			
3. Critical reflection	Refers to the student 's ability to critically reflect upon the sociopolitical aspects inferred from the text for showing practices of injustice.			
4. Taking action	Refers to the student 's ability to create alternatives/ solutions for promoting social justice			

Appendix C

The Pre/Post Critical Literacy Test

The Pre/Post Critical Literacy Test

Covering page:

Student's name: …………………………………….

Purpose of the test

This test is designed to assess prep stage critical literacy competencies.

Instructions

- The test is divided into four tasks.
- Read each task thoroughly to identify the purpose of the task.
- For task No.4, you can choose one or two alternatives to express your action.
- Your answer is going to be assessed using the criteria included in the given rubric of critical literacy components.
- The duration of the test is three hours.

Question 1(Problem posing)

Read the following passage, then answer the questions

Text 1

Malala Yousafzai was born on July 12, 1997, in Mingora, Pakistan. As a young child, Malala was exposed to the importance of education. Her father was in charge of running a local learning institution and instilled in Malala the value of attending school. Everything changed for Malala and her family when the Taliban began to have more authority in the Swat Valley region around 2007. The Taliban, a violent fundamental Islamist group, prohibited females from participating in many activities, including attending school. The Taliban were so committed to banning female access to education that they destroyed around 400 schools within two years of their control.

But Malala would not be deterred from her passion for learning. Not only did she continue to attend school, but she also spoke publicly about her dissent. On a Pakistani televised program, Malala was brave enough to express her disbelief; "How dare the Taliban take away my basic right to education?" Malala boldly proclaimed. Under the pseudonym 'Gul Makai,' she also began to blog about what it was like as a female under the Taliban's oppressive rule. Life became so dangerous for Malala and her family that they had to flee their home as a temporary safety measure. When they returned, Malala and her father started to become more vocal in opposition to the Taliban's sexist rules. Word started to spread about this father-daughter duo and Malala began to win awards for her bravery. The Taliban was extremely unhappy with Malala, and on October 9, 2012, a member of the Taliban shot Malala in the head.

Malala received immediate medical attention, and after multiple surgeries, she woke up from a coma. Miraculously, the trauma did not cause any permanent brain damage! As the story of her survival and bravery spread, Malala became an international icon and an education advocate. Since recovering from her wound,

Malala has written a best-selling book and started a foundation for female empowerment. In October 2014, Malala won a much-deserved Nobel Peace Prize.

a. What is the author's bias in the first text ?

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b. Explain which kind of inequality is discussed in the text?.

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c. Whose perspective is considered more important in the text in Taliban's point of view; men or women ? Why?

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d. If I were that character mentioned in the text, I would

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(Complete).

e. Imagine that Malala was a talented boy, to what extend do you think Taliban would support him to be a distinguished man who can help his country?

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Question 2 (Examining multiple perfectives)

Read the following extract about female education, then answer the question:

Text 2

> Though being an educated woman can make her fashionable and understand her duties well, this is only one side of the picture. A modern, educated wife, due to her love for fashion and expensive habits is often a financial burden for her poor husband. An educated girl is not always obedient and faithful. She does not like to observe family tradition and customs. She always tries to dominate her husband. Moreover, she does not care for likes and dislikes of her husband. She likes to live in her own independent way. She does not like any kind of interference in her affairs. She wants to have her own way in every matter. Often she looks down upon less educated and uneducated persons of society. We can safely conclude that female education is not always a blessing. Only if a girl has been educated properly at home, can she remain unaffected by the evil effects of modern education. She can be a great asset to her husband and her family, if she is good natured and respects the tradition of the company.

a. What are the two perspectives discussed in the two texts?

In the first text, women are seen as

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In the second text, women are seen as

……………………………………...…………………………………………………………………

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b. What do you think about each perspective? Which one do you support more?

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Question 3 (Critical reflection)

Read the following article that shows the inequality in education during the outbreak of coronavirus. Then, write a critical reflection (format) imagining yourself as a critic (role) writing to a human rights organization (audience) in which you criticize the inequality for providing all the students with adequate online learning chances (topic).

Your critical reflection should cover the following points:

- **Introduction**
- **Summary**
- **Critical analysis**
- **Conclusion**

The Achievement Gap Is 'More Glaring Than Ever' for Students Dealing With School Closures

BY KATIE REILLY **MARCH 26, 2020**

W hen New York City closed schools to combat the coronavirus outbreak and ordered remote learning for its more than 1 million students, English teacher Stephanie Paz wasn't worried about how she would virtually teach her ninth-graders to take notes in the margins of their books or how they would discuss each other's essays without being in the same room. Her biggest concern was whether they would have the basic technology needed to access their virtual lessons.

Paz teaches at a school in the Bronx, where she says more than half her students did not have a computer or Internet at home when the transition to online learning was announced in mid-March. The school handed out laptops to some students but did not have enough for everyone before remote learning began on March 23, so others got paper learning packets.

"I am concerned that, in 2020, all of our students don't have access to technology or Internet at home," Paz says. "I worry that, as a district, we haven't prioritized that. And as a nation, we haven't prioritized that."

She is right to be concerned. As the virus that causes COVID-19 spreads, the nation's K-12 schools and colleges have been forced to weigh health recommendations against the needs of students, many of whom are caught in the digital divide separating those who have Internet access and those who do not. About 15% of U.S. households with school-age children lack high-speed Internet access, according to a Pew Research Center analysis of 2015 Census

Bureau data. Rural communities lag behind urban areas, as do tribal lands, where about a third of people don't have high-speed Internet.But advocates have called on them and on the government to do more. "It still leaves millions of American children disconnected," Gigi Sohn, a distinguished fellow at the Georgetown Law Institute for Technology Law and Policy, says of the offer. "And by the way, what happens when the 60 days are over?"

Sohn, who worked for the FCC under the Obama Administration and who testified about digital inequality before Congress in January, says in the short term, the FCC and Congress should increase broadband subsidies and make more funds available for schools and libraries to provide Internet-enabled devices and hot spots to low-income students. She says more companies should lift data caps and provide low-cost broadband options.

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Question 4 (Taking action)

Based on topic of inequality in education as discussed in the first text, suggest some alternatives that can help in promoting social equality in education in general or between men and women in particular.

Choose only one of the following to answer this task :

1. Write a story of about 100 words that shows the importance of equality in education for all people.
2. Draw a poster in which you show the importance of equality in education
   You can search the internet to find out how to design a poster.
3. Design a cartoon showing your attitude against this problem.

4. Create a campaign, which takes an action against this inequality. You can present the task in any format. It can answer the following questions:

A. **Campaign Name: ………………………**

B. What is the slogan for the campaign? ……………………………

C. What does the slogan mean**?** …………………………………….. .

D. What kind of problem does it tell about?   ……………………….. .

    ………………………………………………………………………….. .

E. Does the campaign encourage people to take action? If so, what action?

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<u>Draw your poster, cartoon or write your story</u>

Appendix D

A Critical Literacy Rubric

A Rubric for Critical Literacy Test

Critical literacy item	Performance level			
	Beginning	**Developing**	**Proficient**	**Advanced**
1. Problem posing	The student: ▪ Analyzes the author's message to a **limited extend.** ▪ Critically questions the taken-for-granted practices in the text to a **limited extend.**	The student: ▪ **Adequate**ly analyzes the author's message. ▪ Critically questions the taken-for-granted practices in the text in an **adequate way**.	The student: ▪ **Competently** analyzes the author's message ▪ Critically questions the taken-for-granted practices in the text in a **valid discussion**.	The student: ▪ **Thoroughly** analyzes the author's message**.** ▪ Critically questions the taken-for-granted practices in the text in a **valid, well-supported discussion.**
2. Examining multiple perspectives	The student: ▪ Interprets different perspectives to a **limited way.**	The student: ▪ **Adequately** interprets different perspectives and **some** of their implications.	The student: ▪ **Competently** interprets different perspectives and their implications.	The student: ▪ **Thoroughly** interprets different perspectives expressing her/his viewpoint.
3. Critical reflection	The student: ▪ Critically reflects upon the sociopolitical background inferred from the text to a **limited extend.**	The student: ▪ Critically reflects upon the sociopolitical background inferred the text in an **adequate way**.	The student: ▪ Critically reflects upon the sociopolitical background of inferred from the text in a **valid** discussion.	The student: ▪ Critically refle sociopolitical inferred from **well discussion.**

4. Taking Action	The student: • Creates alternatives/ solutions for promoting social justice to a **limited extend.**	The student: • **Adequately** creates alternatives/solutions for promoting social justice.	The student: • **Considerably** creates alternatives/ solutions for promoting social justice.	The student: • **Thoroughly** creates and investigates alternatives/ solutions for promoting social justice.

Appendix E

The Collaborative E- Learning Program

The Collaborative E-learning Program

Table of Contents

Introductory Offline Sessions

Module 1: Stereotypes and Cultural Diversity

  Topics   1: Gender Stereotypes

            2: Racial and Ethnic Stereotypes

            3: Animals Stereotypes

            4: Breaking down Stereotypes

Module 2: Environmental Issues and Sustainability

  Topics   1: Pandemics

            2: Climate Change

            3: Towards Environmental Sustainability

Module 3: Social Justice Issues

  Topics   1: Inequality in Education

            2: Global Health Care inequality

            3: Achieving Equality in Education and Wellbeing

Module 4: Ethical Issues Related to Science and Wellbeing

  Topics   1: Is genetically modified food good or bad?

            2: Will coronavirus vaccine be free or paid?

            3: Towards achieving ethical vision among social classes

Session One

(Offline Orientation Session)

Duration of the session: Two hours

Objectives:

The first session was an introductory session that paved the way for all the coming sessions. The researcher drew the students' attention to the following points:

- The importance of questioning the problems included in a society to be positive critical literate citizens locally and globally.
- The objectives of the collaborative e-learning program.
- The nature of the discussed issues to include: stereotypes and cultural diversity; human rights and social justice; environmental and ethical issues.
- The importance of tackling such issues from a critical lens by analyzing different digital multimodal texts using websites, e-books, apps, images and YouTube videos.

The students were acknowledged with the critical literacy components that the program aimed to measure through a PowerPoint presentation followed by an entire group discussion to check their understanding. The selected components were:

1. Problem posing

2. Examining multiple perspectives

3. Critical reflection

4. Action taking by creating alternatives

Moreover, the researcher highlighted the roles played by both the researcher and the students, the researcher's role was a facilitator guiding the students to achieve the targets of the program. The students, on the other hand, were encouraged to work collaboratively to criticize , discuss and debate the social issues suggesting solutions or creating alternatives for such issues.

At the end of the session, the researcher encouraged the students to surf the internet and read more about the meaning of critical literacy, its importance to be an active citizen. They could search about such information from different internet sites and watching YouTube videos such as:

- https://wiobyrne.com/critical-literacy/
- https://medium.com/literate-schools/what-is-critical-literacy-and-why-the-need-9d2c07591f98
- https://www.youtube.com/watch?v=yuamzeQX6c4
- https://sites.google.com/site/languageliteracyandculture2012/home/spring-2012_ela/ela-spring-2012-introduction-draft

Session Two (Offline Orientation Session)

Duration of the session: Two hours

Objectives:

In this session, the students will be acknowledged with some main issues about the collaborative e- learning program such as:

- Introducing Edmodo as the online platform to be used in the program.
- Providing the students with the password that they should use to sign in the site as students.
- Training them on how to access the tasks and work collaboratively.
- Training them how to send their response on the due time and how to prepare for their e- portfolio as an evidence of their learning through constructive feedback as well.
- Working out how to download the x mapping software as a digital tool for X Mind for brainstorming and clarifying.
- Acknowledging the students with how to access the link for Google Meet to be involved in a live conference meeting with the researcher and their classmates.

The researcher encouraged the students to surf the internet and read more about how to use Edmodo and Google Meet as collaborative e-learning tools. They could watch YouTube videos such as:

- https://go.edmodo.com/about/
- https://www.youtube.com/watch?v=L46JudR9kdk
- https://www.xmind.net/

Session Three

Module 1: Stereotypes and Cultural Diversity

Topic 1: Gender Stereotypes

Duration of the session: Two hours and thirty minutes

Pedagogical Aims:

1. Problem posing a text for questioning the taken for granted beliefs
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session the learners will be able to:

1. analyze the author's bias between gender roles
2. critically question the taken-for- granted practices.
3. interpret a text from different perspectives.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Overview:

The students think about the idea of "stereotypes". They will consider whether gender stereotypes are fair or biased. They will also discuss how it feels to not conform to socially defined gender norms. Finally, they will work in groups to identify the perspective included in the text. Each student takes part in **a four corner debate** to show her/his position (strongly agree, agree, disagree, strongly disagree).

Brainstorming: The students will read the following sentence, then they choose any   x mapping form from the software tool they downloaded from the internet.

- AS I am a girl, people think that I am ……………………….. (for a girl).
- AS I am a boy, people think that I am ………………………. (for a boy).

Then, in a group discussion, discuss how do you feel when people say that:

1. **"When I was your age, we actually had to work hard. Teens these days are all lazy."**
2. **"You have no idea what ~real music~ is."**

<u>Assessment activities and tasks:</u>

<u>Activity (1)</u>

1. The students will be asked to watch the video, then write individually whatever belief was said about the boys or girls as a group.

https://www.youtube.com/watch?v=a-B5U4WjNZQ
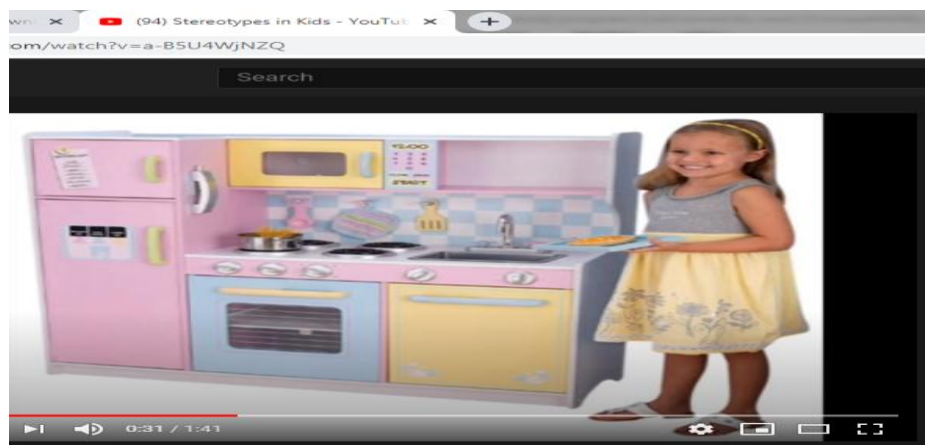
2. The class is going to be divided into five groups of five students for each.

3. They will be asked to share some examples of stereotypes that they know already about gender such as "Women are good at cleaning and cooking".

4. Each student will express his feeling towards these stereotypes whether s/he feels fair or unfair.

Activity (2): In groups, the students surf the internet to define the following words:

1. Stereotype_____

2. Prejudice _____

3. Bias   _____

4. Discrimination _____

5. Xenophobia _____

_____

_____

Then, each group starts to examine the picture to find out how it is trying to position men and women in a biased way answering the following questions:

- Who is in the picture? ………………………………………… .

- What does the author want the reader to think? …………………………… .

- Which role is given to the mother? Do you feel that it is fair to play only it? …………………………………………………………… .

Activity (3)

1. Students will be divided into five groups.

2. Each group discusses if they are for or against the following statements:

- *A woman should take care of her family while a man should earn money.*
- *If a woman/man is 30 and single, she is a failure.*

3. Each student chooses the corner that shows his or her perspective.

Strongly agree		Agree
	Women are only housewives	
Disagree		Strongly agree

Reflection

1. The students read the selected text making journal entries.

2. In the left hand column, they write the phrases that they find interesting. Then, they write their personal responses like a comment or a question.

Double-Entry Journal

From the text (picture)	My Reflection

Session Four

Topic 2: Racial and Ethnic Stereotypes

Duration of the session: Two hours and thirty minutes

Pedagogical Aims:
1. Problem posing a text for questioning the taken for granted beliefs
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session the learners will be able to:

1. Identify bias in a given text based by analyzing the creator's stylistic choices
2. Critically question the taken for granted beliefs.
3. Interpret a text from different viewpoints.
4. Reflect on the given text connecting it with their personal experience.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Overview: The students will go in questioning the bias impeded in racial stereotypes that are still found in different contexts. For example, whites have historically been privileged; non-whites have historically been associated with inferiority. Then, they will work in groups to explore some of the severe consequences of racial stereotypes. Finally, they are going to be involved in an activity called "Walking in another's shoes", to express multiple perspectives showing empathy towards the people from other culture.

Brainstorming: The students write as many words as they can that are related to the word "Racism'' in the attached graphic organizer.
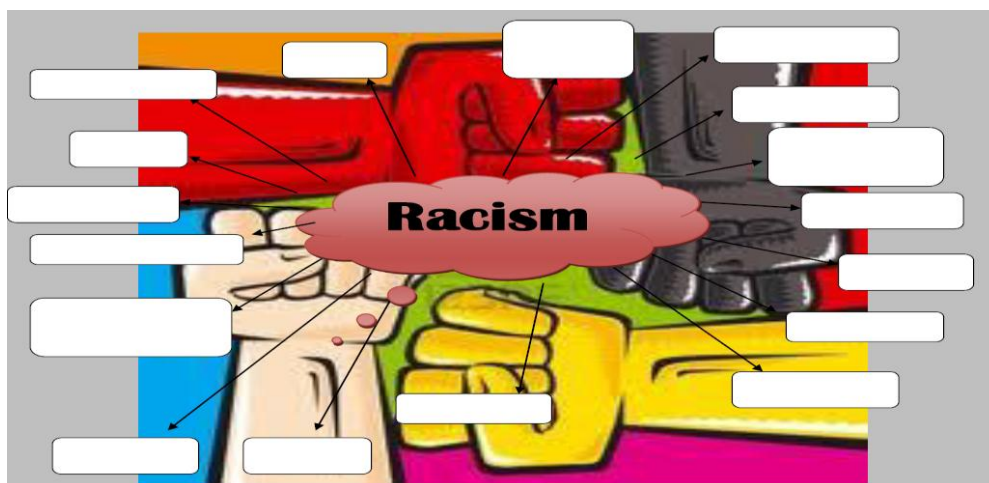
Assessment activities and tasks:

Activity (1)

1. The students will be divided into five groups.

2. Ask each group collects information on the particular stereotypes, struggles and violation related to a certain race as follows:

   o   African-Americans   Age bias

   o   Arab Muslims   Body Image bias

   o   Asian Americans

3. Each group reports the findings sharing them among the other groups.

Activity (2)

1. In a group discussion, students discuss the following questions:

   • What happens when people are judged by the way they look?

2. The students examine the following cartoon to identify which attitude the cartoonist wants to convey.

3. Each group discusses the issue presented in Peter Nicholson's cartoon about Aboriginal lifesaver students. They should answer the following questions: Do you think this cartoon is offensive? If so, who might it offend and why? How negative effects do racial stereotypes have on people's civil rights?

http://leisurefacilitiesaustralia.com/default.asp?

The students read the following reading passage, to identify the racial bias in the text.

11-04-2008   HOSTEL TURNS AWAY ABORIGINAL LIFESAVERS

An Alice Spring backpacker hostel in Australia has been accused of turning away a group of young Aboriginals.The group, attending a Royal Life Saving Society Australia (RLSSA) training course, were asked to leave the hostel they had booked, allegedly because of the colour of their skin and because foreign guests were 'scared'. The group of 16 women and children from the community of Yuendumu had travelled to Alice Springs to attend a RLSSA lifesaving course in preparation for a swimming pool being built in their community. However, shortly after arriving at their accommodation they were asked to leave.

Speaking of the ejection, RLSSA Chief Executive Rob Bradley stated, "Royal Life Saving supports the Yuendumu community and wishes to highlight that they have taken a long and proactive view to building their community's capacity in preparation for a swimming pool due to be completed in the coming months." Bradley also spoke of being "reassured by the support expressed by the Australian public for Royal Life Saving community."

Managers at the Alice Springs hostel have denied allegations of racism, issuing a statement saying the hostel caters for "international backpacking tourists" and was not suitable for the group of Aboriginal lifesavers.

Source: http://leisurefacilitiesaustralia.com/default.asp?

At the end, the five group share their point of view about to what extent they feel the treatment for this group fair or unfair.

Activity (3) As a class discussion, the students discuss how racism could affect other   people's feelings. Then each group reads the following story to answer the following question: what is the behavior displayed by the student in the following story?

About two months ago, I was walking to the BART station from school, sipping on soda and listening to a podcast when I noticed a blue uniform following me like a shadow. It was a white police officer. He scanned me as if he were the Terminator, trying to see if I posed a threat. I had never been stopped by a cop before. But I wasn't scared or even nervous. I was prepared.

My mother was always gearing me up for something: a good education, future job security and, most of all, institutionalized racism. Every time we passed a police car, she would drill my sister and me on what to do if and when a police officer stops us. We would begrudgingly repeat what our superior said: "Maintain eye contact, stand straight, speak when spoken to, no sudden movements."

As children, we never understood why she grilled us like that. Then, when I was 12, Trayvon Martin was killed. Even though it wasn't a cop who killed him, I started to comprehend what she was preparing us for. As a young black man, I know an officer of the law can shoot me no matter where I am — and maybe especially in the middle of Orinda, the mostly white city.

Source: A digital newspaper : The New York Times https://www.nytimes.com/2017/08/02/us/first-encounters-with-racism.html

1. The student start to use the **Y-chart** worksheet in each groups.
2. They fill in the 'Looks like', 'Sounds like' and 'Feels like' sections of the chart with the things they know about bullying if they were in the shoe of this person.
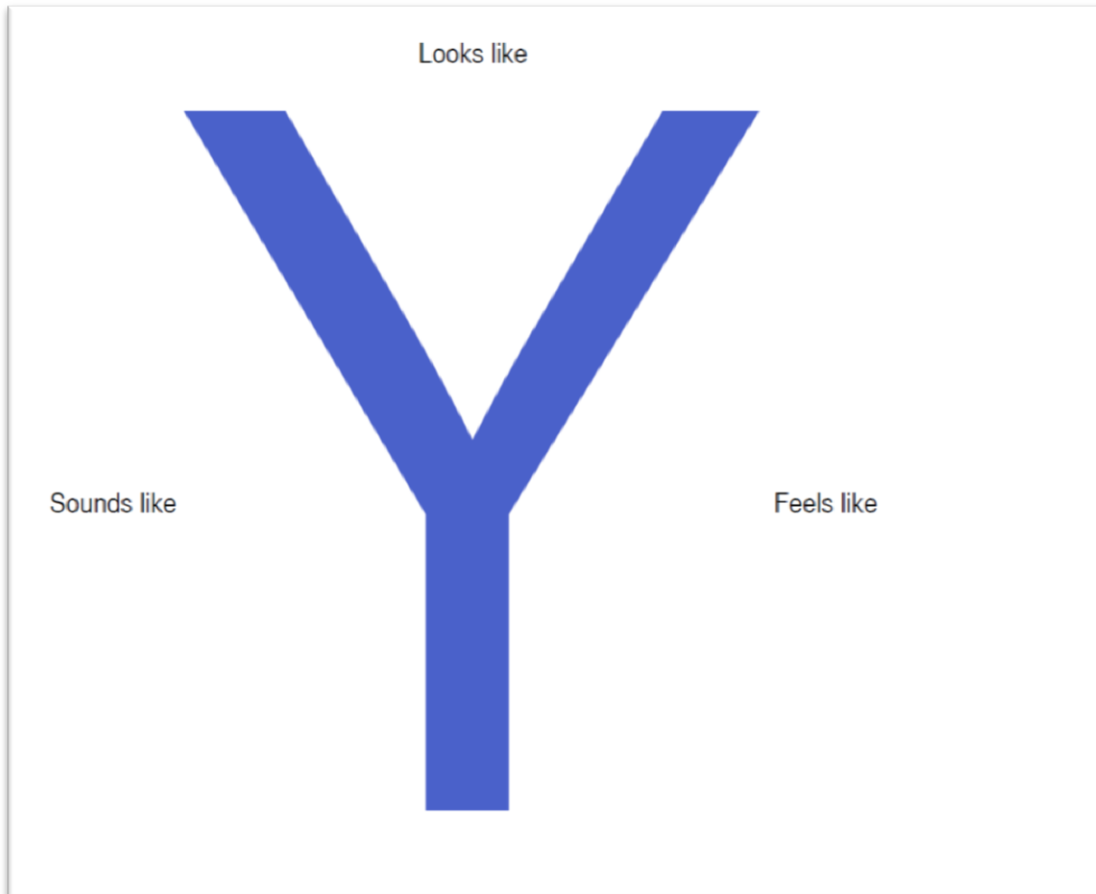
Looks like

Sounds like

Feels like

Reflection

1. The students read the selected text making journal entries.

2. In the left hand column, they write the phrases that they find interesting. Then, they write their personal responses like a comment or a question.

Double-Entry Journal

From the text (picture)	My Reflection

Session Five

Topic 3: Animals Stereotypes

Pedagogical Aims:

1. Problem posing a text for questioning the taken for granted beliefs
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session the learners will be able to:

1. Identify a fact from a bias by analyzing the creator's stylistic choices
2. Critically question the taken for granted beliefs.
3. Interpret a text from different viewpoints.
4. Analyze and evaluate information related to animal stereotypes.

Learning Devices

● A laptop, a mobile phone, laptop or an I Pad (connected to the internet).

Overview: Animal abuse is sometimes excused because of stereotypes taken against animals and ignorance about cruel practices. The students are going to express their attitudes whether they feel that these ideas are fair or unfair. Then, they are going to discuss the topic from different viewpoints through developing a stereotype debate.

Brainstorming: The students work individually to answer the following questions:

● What are the characteristics of each animal?

- Do certain types of animals seem to be shown in books or movie as good or bad?

…………..……   …………………..   ……………………

Then, they try to think of endings to the following sentences:

- All wolves are well- known as
………………………………………………… .

- All cats are well- known as
………………………………………………….. .

Assessment activities and tasks:

Activity (1)

1. The students work on groups. Each group collects information on the particular stereotypes, struggles and violation related to a certain type of animals as follows:

1. Cats   4. Cranes
2. Sharks   5. Bees
3. Crocodiles

2. Each group reports the findings sharing them among the other groups.

3. They express their attitudes to what extend these judgments are fair or unfair.

Activity (2)

1. Working in groups, the students watch how clips of videos *in Macbeth; the Smurfs*

   and Harry Potter in which cats were stereotyped as evil, magic or mean.

2. Then they read , as a group, a summary for a nonfiction book called "The everything about Cats and Kittens" in which they find out real facts about cats.

3. Each group writes the similarities and differences about the ideas presented about cats in the movies and the book in the attached graphic organizer.

4. Finally, they share their ideas with the other groups.

Similarities   **Differences**

Cats

in fiction and nonfiction books

http://specialed.about.com
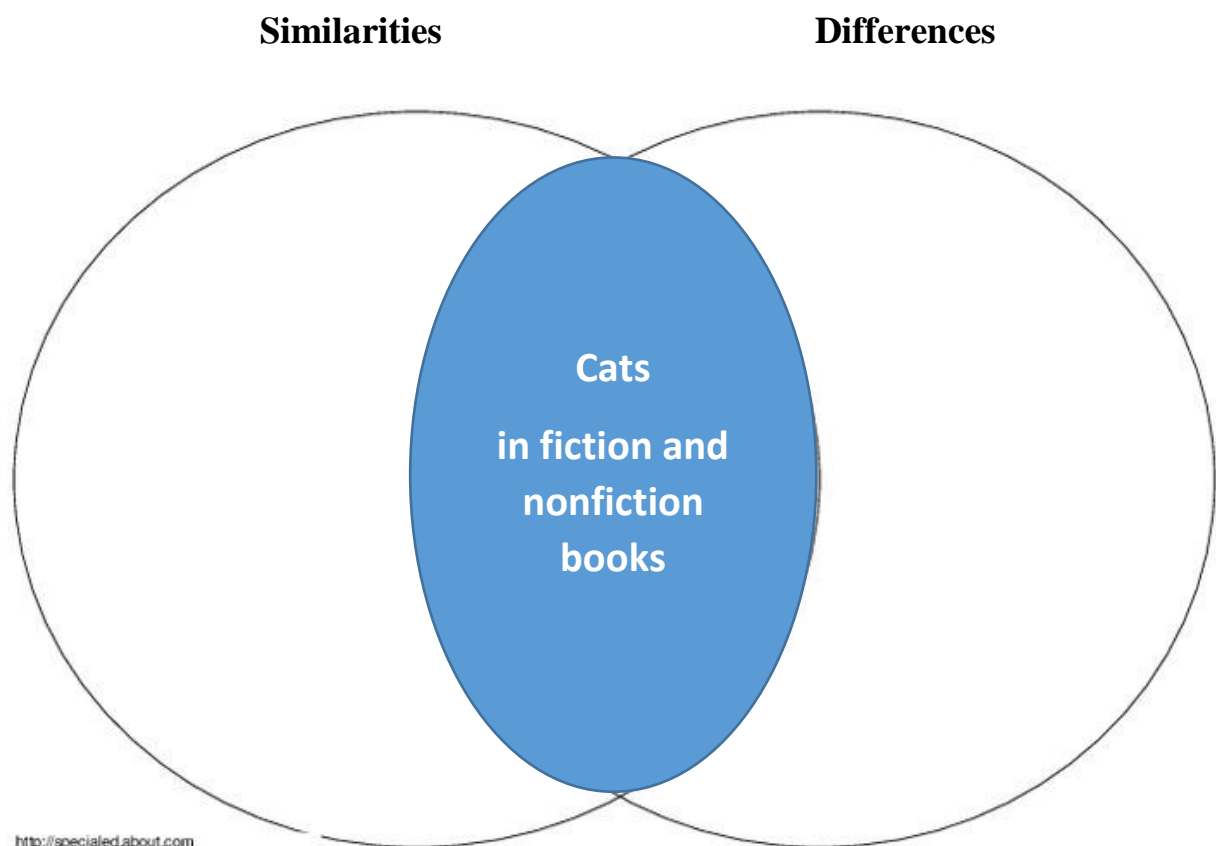
Activity (3)

1. Students work in groups to identify whether the following stereotype is a fact or a biased perspective about certain animal breeds.

- *American bulldog are ferocious*   *Tuxedo cats aren't very smart.*

2. A tug-of-war conversation template will be provided for the students in which two opposing sides are represented; a fact and a stereotype.

3. Every student in the group shows her/his perspective. Then, all the groups discuss the sentence providing reasons (or tugs) towards one side or the other.

4. The students record their answer on the side they choose.

5. They search the internet to investigate the facts related to the sentences written above the Tug of War.
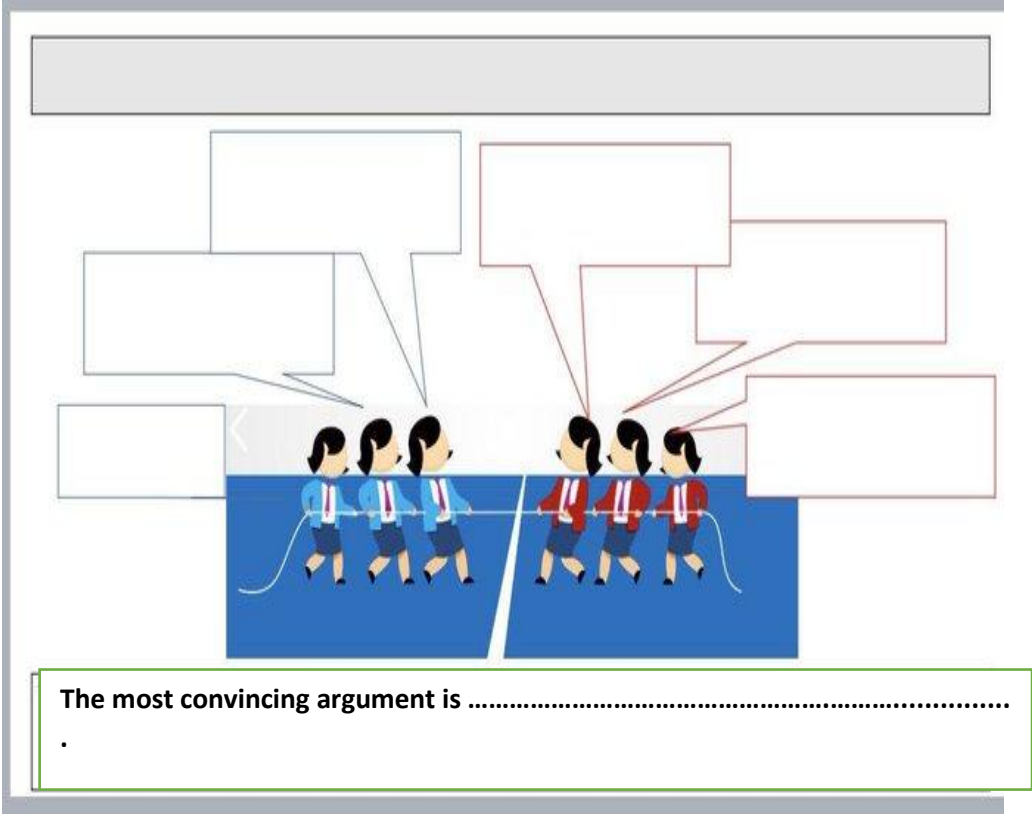
Tug-of-war template

6. Finally, they share their ideas with the other groups.

Reflection: The students write their answers in journal entries.

Diary Planning Sheet

Entry	1. In this lesson, there are………………… things
Lesson	I remember about infectious diseases.
	2. Yet, I disliked that
	………………………………………… .

Session Six

<u>Breaking down Stereotypes</u>

<u>Pedagogical Aims:</u>
1. Critically reflecting on a social issue
2. Taking an action for achieving equality

Performance Objectives

By the end of this session, the learners will be able to:
1. Create alternatives to promote social justice.
2. Critically reflect on the idea of stereotyping by suggesting appropriate solutions.
3. Take social action against such inequality practices.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Overview:

In this lesson, the students should feel like they were "outside the box" for their gender. They are involved in a dialogue about the ways these stereotypes might be unfair or limiting to children as they as they grow up and decide what they like to do, what careers they strive for. They are going to reflect critically on this issue taking an action against the idea of stereotypes.

Brainstorming: The students work individually selecting an X mapping chart from the downloaded software in their I pads. Then, they outline the main characteristics known about Cinderella and Moana:

Assessment activities and tasks:

Activity (1):

1. The students complete the following sheet titled " Because I am ……." as a way to express a contradictory viewpoint about a known stereotypes about them as a girl or a boy.

2. They write individually about how they see themselves though this seems different from the perspective of other people.

Activity (2):

1. The students watch a video on how to write a critical reflection on the following site https://www.youtube.com/watch?v=DY7cAeFKcAg

2. Then they use the given example of critical reflection template on the following

   site   http://collectioninitial.top/sle-critical-essay-how-to-write-a-critical-essay-sle.html writing a critical reflection after watching the following video: https://www.youtube.com/watch?v=y9ot_EbQIVg

1. Finally, they edit their critical reflection to include the following points: introduction for the issue and its context, summary, critical analysis and conclusion suggesting a solution or an action.

Activity 3: Taking an action

1. The students read these examples of campaigns for breaking down stereotypes on the following sites:

   - https://vimeo.com/124480999
   - https://www.thebetterindia.com/103703/shedding-old-stereotypes-age-just-number-ageism/

2. Then, each group chooses any type of stereotypes discussing together their ideas for the bad effects of this.

3. They think of an action against it. They can choose any of the following ideas or suggest any other action.

   → Design a cartoon showing your attitude against this stereotype. using Bitstrip https://sojo1049.com/how-to-create-your-own-bitstrip-cartoon-tutorial.

   → Writing the topic from a different perspective that shows social equality.

→ Creating a campaign, which takes an action against any type of stereotypes. answering the following questions:

Campaign Name: ……………………………………………… .

A. What is the slogan for the campaign?   What does the slogan mean?

B. Does the campaign encourage people to take action? If so, what action?

4. After finishing the activity, each group should be ready for a 5-minute oral power point presentation to the class on the campaign or any action that they have created in Google Meet video conference.

Session Seven

Module 2: Environmental Issues and Sustainability

Pandemics

Pedagogical Aims:
1. Questioning the idea of human impact on the environment
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session, the learners will be able to:

1. Analyze how pandemics can impact health conditions.
2. Analyze how biased information may influences peoples' behavior
3. Examine different perspectives about health problems

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson overview

The students are going to be introduced to how pandemics were treated in historical fiction. They answer a set of critical thinking questions as they read. They question the important role of the society to protect the citizens. Also, they identify the misinformation known as fake or biased news presented by some social media that have no ground in science and sometimes are full-on lying by examining this information from different perspectives showing their own attitudes.

Brainstorming:

The students work individually selecting an X mapping chart from the downloaded

software in their I pads. Then, they write as many infectious diseases as they can.

Assessment activities and tasks:

Activity (1):

1. The researcher asks the following questions:

  A. When was the last time you had the flu or a cold?

  B. Some examples of infectious diseases are ………………. .
  (complete)

2. She draws their attention that in history, disease has played a role in the lives and   deaths of people like a disease called cholera that killed 50% during the 1800s.

3. Then, they watch the video about the one of the worst pandemics in history on the following site: https://www.youtube.com/watch?v=-B5YCQamLes

4. Working in five groups, each group discusses the following questions:

  • What is the health problem and what are some of its causes?

  • Who is mostly affected by it? Why? (Consider people, location and conditions.)

  • Is the information about this disease presented accurately or is it biased?

5. Finally, each group is assigned one of the following infectious diseases searching about at least ten facts about only that disease sharing their findings among groups:

  Group 1: Diarrheal diseases
  Group 2: HIV/AIDS-Ryan White
  Group 3: Smallpox
  Group 4: Malaria

Group 5: COVID-19

→ Some useful sites for this topic include U.S. Department of Health & Human Services' Health finder, Diseases & Conditions A-Z Index.

Activity 2

1. The students watch the following videos, then answer the following questions:

https://www.youtube.com/watch?v=BIv9054dBBI

1.   What   is   fake   news?
…………………………………………………………………… .

1.   What   are   the   different   forms   of   fake   news?
……………………………………………………………….………
…………………………………………………………………………
…………………………………………………………………………

3. In your point of view, what are the negative effects for spreading fake news on peoples' way of thinking?

…………………………………………………………………………
…………………………………………………………………………
…………………………………………………………………………
…………………………………………………………………………

Activity 3

1. The students examine the two pictures carefully, then they compare between the peoples' behavior during the pandemic of coronavirus by completing the following table: They can collect information about them by returning their resources written under them.

Picture 1	**Picture 2**
The people are.. …………………………………………… …………………………………………… …………………………………………..……… From their perspective, they think that coronavirus is ……………… …………………………………………..…… …………………………………………… . So, what they did is that ……………………………………………..	The people are .... …………………………………………… …………………………………………… …………………………………………… ……… . From their perspective, they think that coronavirus is ……………… …………………………………………..… …………………………………………… . So, what they did is that …………………………………………… …
However, in my point of view I think coronavirus is …………………………………….. **We should** …..…………………………………………………………………….. …………………………………………………………………………………………………	

Reflection

1. Each student starts to connect the topic with her/his personal experiences, other text or the world, using connection stems such as:

   - This topic affects me greatly as
   ……………………………………………………………
   ……………………………………………………………
   ……………………………………………………………
   ……………………………………………………………… .

3. S/He reflects on the topic in a journal entry writing her/his personal responses like a comment, a question, a connection made, or an analysis.

Diary Planning Sheet

Entry Lesson	3. In this lesson, there are ………………… things I remember about infectious diseases.
	4. Yet, I disliked that
	……………………………………………………… …….
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	……………………………………………………… ….

Session Eight

Climate Change

Pedagogical Aims:
1. Questioning the idea of human impact on the environment
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session, the learners will be able to:

1. Explore and analyze issues related climate change.
2. Question the bias and the reliability of the scientific texts.
3. Analyze and compare multiple perspectives related to climate change.

Learning Devices and Material

- A laptop, a mobile phone or an I Pad (connected to the internet).
- Variety of media (e.g., articles, magazine covers) related to climate change from a various media sources
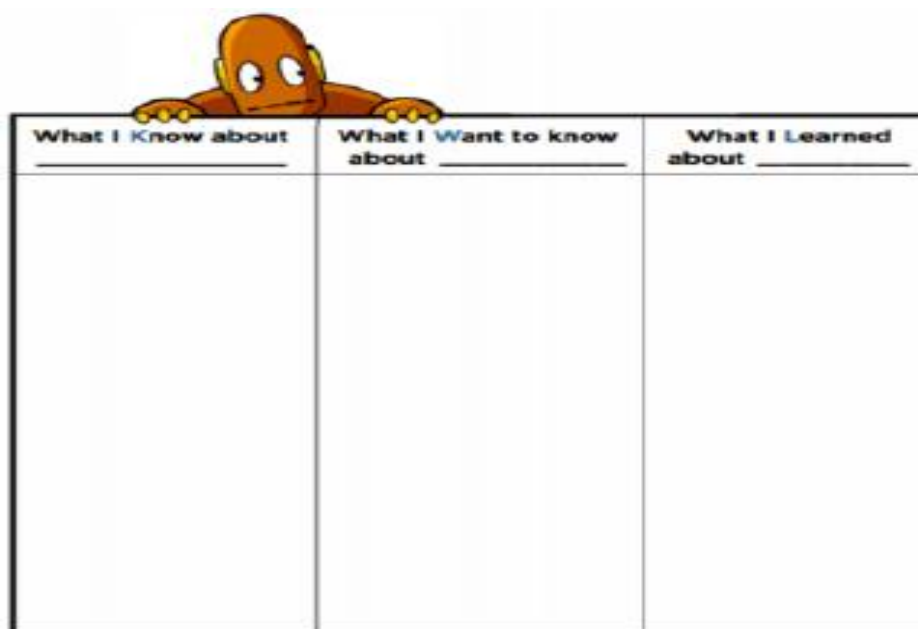
Lesson overview:

The students are going to explore the topic of climate change through a variety of photographs, diagrams, websites and written texts (Multimodal texts). Also, the students are going to develop their awareness on how to identify and evaluate the different scientific perspectives on the issue of climate change by surfing the internet.

Brainstorming

1. The students activate their prior knowledge of the "Climate Change " topic writing any thing they know in the K column of the K-W-L

charts. Then, they pose some questions about what they want to know about the topic. These questions are listed in the W column of the chart. Finally, they write what they learned in the L column of the K-W-L chart at the end of the session as a reflection.

What I Know about _____	What I Want to know about _____	What I Learned about _____

Assessment activities and tasks:

Activity (1)

1. The students watch this video https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/basics-of-climate-change/ to answer the following questions:
   - What is meant by climate change?   What Causes Climate Change?
   - Does human activity cause climate change?

2. They examine the first two pictures of the South Glacier, taken in 1928 and 1979.

3. As a whole –class discussion, the students use connections, predictions, and background knowledge about the photographs to answer the following questions:

Snow and ice is melting

1928   1979   2003
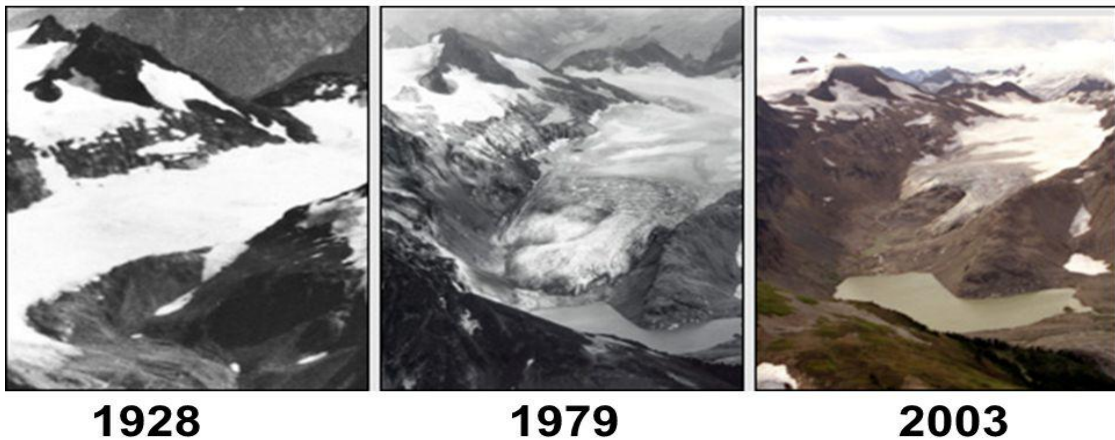
South Cascade Glacier, WA

http://www.koshland-science-museum.org/exhibitgcc/intro01.jsp

- What are the similarities and differences between the three pictures?
- Pretend you were a scientist studying this glacier in 1979, the year the second photo was taken. What can you infer is happening?

4. The students work in five groups. Each group is going to investigate the causes and effects of this phenomenon recording their answers in the sheet on the following site: http://www.readwritethink.org/files/resources/lesson_images/lesson1139/scientific_investigations.pd. Finally, the students share their ideas among all the groups.

Activity 2:

1. The students suggest some ways on how to evaluate the credibility of the scientific perspectives such as Seeing which perspective has the majority of scientists agreeing with it.
2. The students get into a debate as in the following table:

The Great Debate	
Humans cause global warming by increasing the amount of greenhouse gases in the atmosphere.	Even though the earth is becoming warmer, this climate change is not primarily caused by human activity.
Websites that support this point of view: The Greenhouse Effect http://epa.gov/climatechange/kids/greenhouse.html Joint science academies' statement http://www.nationalacademies.org/onpi/06072005.pdf Global Warming Fast Facts http://news.nationalgeographic.com/news/2004/12/1206_041206_global_warming.html Some Basic Global Warming Facts http://www.environmentaldefense.org/article.cfm?contentid=3767	Websites that support this point of view: U.S. Senate Report http://epw.senate.gov/public/index.cfm?FuseAction=Minority.SenateReport Heartland Institute: Computer Models Fail to Predict Climate http://www.heartland.org/Article.cfm?artId=22604 A Mini-Interview With Dennis Avery http://www.rightwingnews.com/mt331/2007/02/a_miniinterview_with_dennis_av.php Top 10 Climate Myth-Busters for 2007 http://www.junkscience.com/ByTheJunkman/20071227.html

3. The researcher models for the students how to read and evaluate a website (e.g., where to find the credentials of the author; how to use headings and links to different places on the webpage for locating reliable information).

4. Finally, each group shares their findings discussing.

Reflection: The students reflect on their learning one last time with the KWL chart.

What I Know about _____	What I Want to know about _____	What I Learned about _____

Session Nine

Towards environmental sustainability

Pedagogical Aims:
1. Critically reflecting on some environmental issues
2. Taking an action for a social change

Performance Objectives

By the end of this session, the learners will be able to:

1. Analyze bias related to resources by examining the reliability of the texts.
2. Critically reflect on problems related to the discussed environmental issues.
3. Take a social action during environmental crises.

Lesson overview:

The students surf the internet to find d out different ways on how to check the reliability of a piece of information to take the wrong decision. They discuss two opposing viewpoints by being involved in an argument counter argument. One of them may be not real or biased taking an action at the end to eliminate such bias.

Brainstorming

The students search on the following site to detect the truth of the following fake news:

- This fake news from a YouTube video with nearly half a million views falsely and dangerously said that inhaling hot air ……….……………… coronavirus.

- The truth is that ……………………………………….……… .

Assessment activities and tasks:

Activity 1 (individual work)

1. The students watch the following video
https://www.youtube.com/watch?v=Ryjpu-NWYm8, then answer the following question: How can you find out the fake news? ………..
……………

2. Then, the researcher draws the students' attention that they can make use of the following ways to spot fake news:

HOW TO RECOGNIZE A FAKE NEWS STORY	1 READ PAST THE HEADLINE
	2 CHECK WHAT NEWS OUTLET PUBLISHED IT
	3 CHECK THE PUBLISH DATE AND TIME
	4 WHO IS THE AUTHOR?
	5 LOOK AT WHAT LINKS AND SOURCES ARE USED
	6 LOOK OUT FOR QUESTIONABLE QUOTES AND PHOTOS
	7 BEWARE CONFIRMATION BIAS
	8 SEARCH IF OTHER NEWS OUTLETS ARE REPORTING IT
	9 THINK BEFORE YOU SHARE

https://www.pinterest.com/pin/47111881004249001/

3. Also, she tells them that they can use any of fact checking sites ☐

to make sure of the given information such as:

PolitiFact: politifact.com or Fact Check: factcheck.org/, or

CDC, WHO, National Institutes of Health for checking coronavirus news.

4. Then, each group searches about other five ways to be a critical consumer of   news by checking its credibility (being unbiased or trustworthy):

    ✓ …………………………………………………………………

    …………………………………………………………………

    …………………………………………………………………

    ✓ …………………………………………………………………

    …………………………………………………………………

    …………………………………………………………………

    ✓ …………………………………………………………………

    …………………………………………………………………

    …………………………………………………………………

    ✓ …………………………………………………………………

    …………………………………………………………………

    …………………………………………………………………

Activity 2 (Group work)

1. The students watch this video about how to write a counter argument: https://www.youtube.com/watch?v=IzyLYIeqLo8

2. The students work in groups to write an argument and a counter argument
about only one of the following claims, and then write their final viewpoint.

1. Is Coronavirus a bioweapon?

2. Are we heading into an ice age?
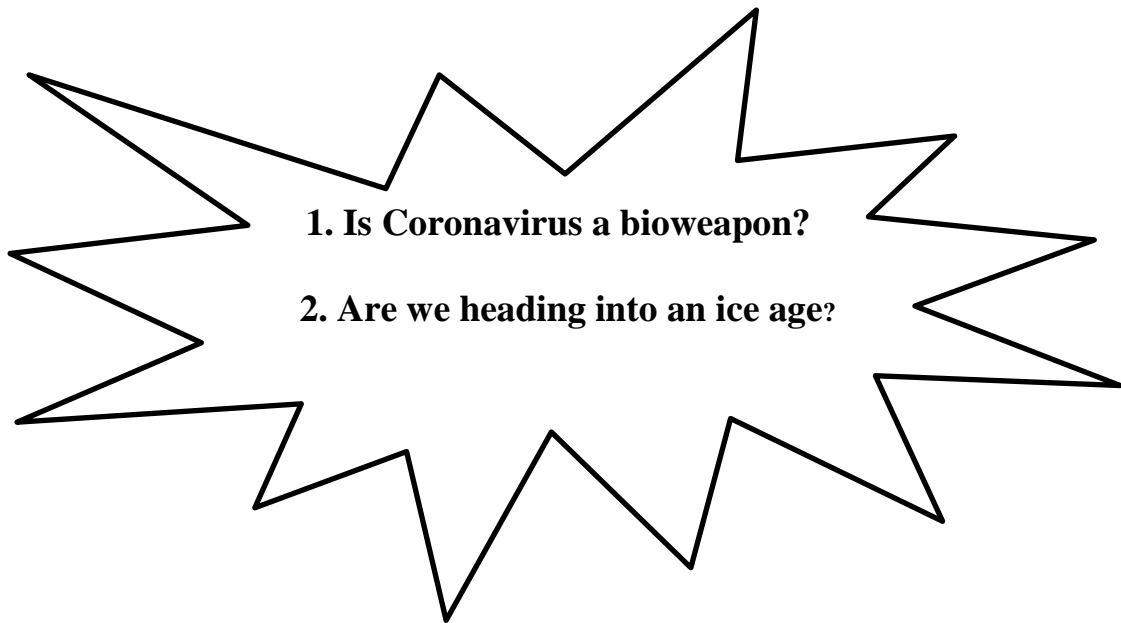
3. At the end of their discussion, they complete the following graphic organizer,

ARGUMENTS   QUESTION   COUNTERARGUMENTS

INTEGRATE
Which side is stronger and why?
Is there a compromise or creative solution?

Final Conclusion
Rationale
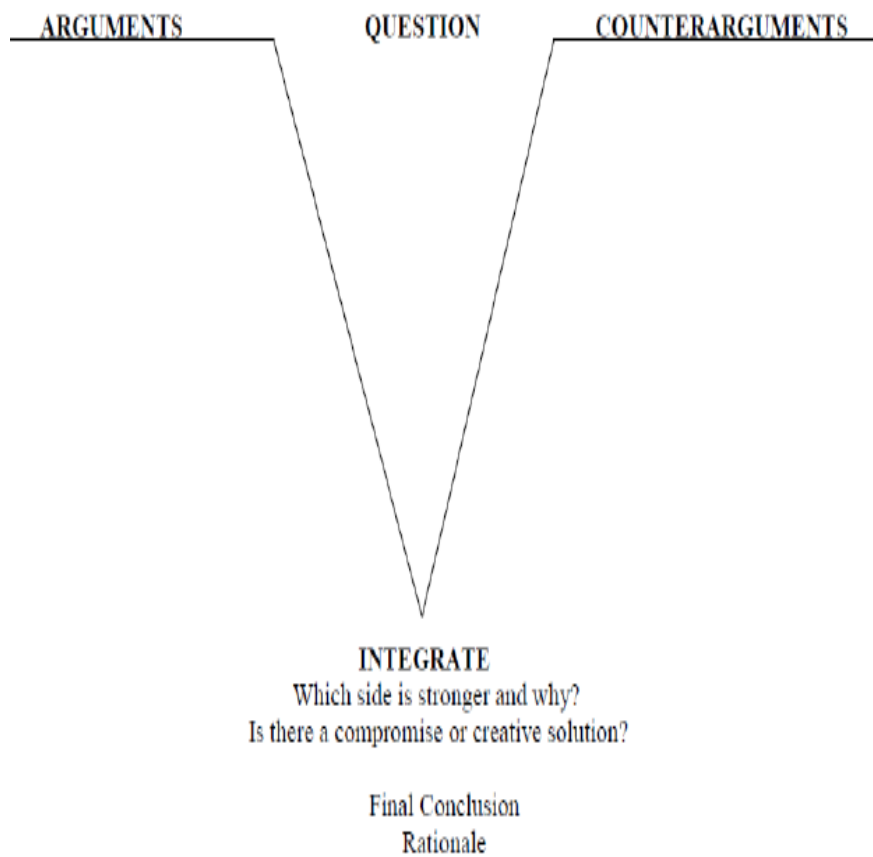
Activity 3: Taking an action

The students think in groups of an action concerning the environmental issues discussed in this module. They choose any of the following ideas or create another one.

Suggested ideas:

- Creating a website or children's book that informs people about the causes of climate change and steps they can take to prevent it.

- Creating a disease prevention poster that includes a tip on how to avoid getting or spreading coronavirus publishing it on any site.

Reflection: The students reflect on their learning one last time with the KWL chart.

What I Know about _____	What I Want to know about _____	What I Learned about _____

Session Ten
Module 3: Social Justice Issues
<u>**Topic 1: Inequality in Education**</u>

<u>**Pedagogical Aims:**</u>

1. Problem posing a text for questioning social inequalities practices
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session the learners will be able to:

1. Question the educational biases as a global issue.
2. Analyze the reasons beyond these biases
3. Interpret the text from different perspectives.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson overview:

The students are going to be exposed to more issues related to the idea of inequality. It is concerned with the inaccessibility of education for more than 72 million children of primary education and 759 million adults are illiterate and do not have the awareness necessary to improve their living conditions. The students are going to juxtaposition texts by examining two texts that have been written about the same topic in order to analyze how authors view a topic differently.

Brainstorming:

1. The students are going to answer the following questions:

- Which job do you like to join after graduation?

- Do you feel that your school prepares you well for such task?

2. Then, they match the gender to the subject they are likely to be called as into higher- level classes and then to the career:

Boys	Science and math	Lower-paid career
Girls	Arts and humanities	Higher-paid career

Assessment activities and tasks:

Activity 1

1. The students watch the video about a real story called "The Boy Who Harnessed the Wind", by William Kamkwamba , to answer the following question:

The main reasons for William to drop out of school

…………….......………………………….. because of

………………………………………………………

…..……………………………………………….. .

2. The students are expected to find out that poverty and racial discrimination were the main reasons. Then they work in five groups to read a summary of a story about inequality in education such as:

- "I Learned to Love My Safety High School," by Gabby Felitto
- "Smart AND Black—My Teachers' Worst Nightmare," by Angie Carty
- "Navigating Life in a White School," by Christina Oxley*

1. They look for causes and effects for school inequalities in the stories.
2. Finally, they are asked to investigate on the internet the causes and effects of education inequality as a critical global problem by completing an X mapping chart of their choice from the downloaded software.
3. After finishing filling out such digital organizer, each group shares their results among other groups.

Activity 2

1. The students work in five groups.
2. Each group reads the two texts written about education as a human right:

- **Unequal Opportunity: Race and Education**
- How Educational Inequality Affects Us All –

3. They compare and contrast the juxtaposed texts to identify which author is for or against education as a tool of empowerment to be effective citizens.

4. Each group writes their comparison in in a comparative X mapping chart of their choice, then sharing their response among the other groups.

Reflection

1. Each student starts to connect the topic with her/his personal experiences, other text or the world, using connection stems such as that text reminds me of……………….
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………….………. .

2. S/He reflects on the topic in a journal entry writing.

<div align="center">

Diary Planning Sheet

</div>

Entry Lesson	5. In this lesson, there are ………………… things I remember about infectious diseases.
	6. Yet, I disliked that
	………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	………………………………………………………………
	……………………………………………………..………… …. .

Session Eleven

Module 3: Social Justice Issues

<u>**Topic 2: Global health care inequality**</u>

<u>**Pedagogical Aims:**</u>

1. Problem posing a text for questioning social inequalities practices
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session, the students will be able to:

1. Question the unfair practices related to global health care
2. Analyze the reasons beyond this bias.
3. Interpret the text from different perspectives.

Learning Devices: A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson Overview: The students are going to identify some aspects of inequality in health care in different countries and the causes and effect beyond this issue. Then, they are going to tackle this problem from different perspectives. They also, they express their own viewpoint based on textual evidence.

Brainstorming:

- The students work individually.
- They examine the following picture carefully to answer the question:
  - What is the critical problem shown in the pictures?
- Then, they choose any of the X mapping charts to write as many as critical issues related to health care whether locally or globally.
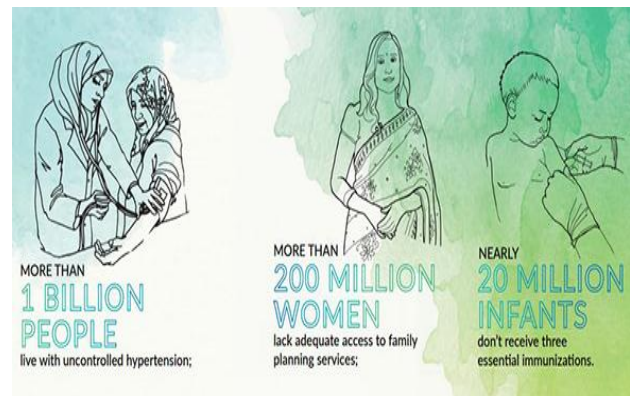
Assessment activities and tasks:

Activity 1

1. The students read some facts on the following site to about global health inequality to nearly half of the world countries as it is admitted by WHO: https://www.who.int/features/factfiles/health_inequities/en/

2. Then, they work in five groups to look for causes and effects for health inequalities as a global crisis completing the following graphic organizer.
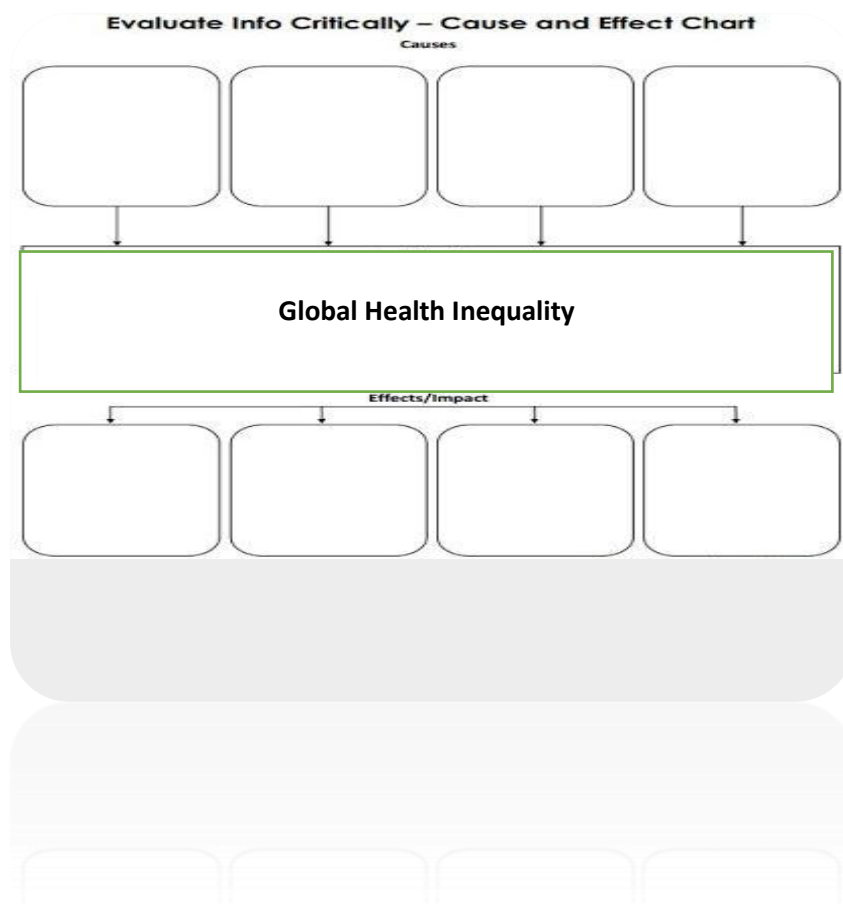
3. After finishing the task, each group shares their results among other groups.

Activity 2 (Group work)

1. The students work in five groups.

2. Each group analyzes the perspectives of the people (participants) that are concerned with the use of a vaccine to solve a critical health problem.

3. Then, they describe how the other people in the community might have different viewpoints by completing the following table.

4. At the end, they should take a fact-based decision on whether the vaccine should be mandatory finding out evidence from this text.

Imagine that a vaccine is found and works well and might be a good tool to prevent transmission for a critical health problem. However, the vaccine is not 100% effective and it was approved without completing all the clinical trials that normally are performed. You and a group of stakeholders are asked to recommend who should be vaccinated and whether it should be mandatory.

The Stakeholders

1. **Public health principal** have been conducting a vaccine or injection marketing campaign. They believe vaccination is the quickest way to stop the spread of such an pandemic disease. Serious concerns exist regarding the adverse events for children and older persons. During the course of this marketing campaign, public health officials have been emphasizing herd immunity. Herd immunity occurs when a sufficient proportion of a population is immune to an infectious disease (through vaccination or prior illness) to make its spread from person to person unlikely. Even unvaccinated persons are offered certain protection, because the disease has little opportunity to spread within the community. Certain public health professionals believe that mandatory vaccination of the entire population is the safest course of action. Others are more wary about the public reaction to a mandatory vaccination campaign, especially for children and older persons. Either way, all agree that vaccination is crucial to stopping the infectious disease outbreak. Opinions are more split over how to handle isolated virus infected persons.

2. **Healthcare doctors** are being advised to administer the vaccine to all of their patients. The majority are in agreement, although somewhat apprehensive to administer the vaccine to children and older persons. The majority of healthcare professionals have reported that if a patient does not want to receive the vaccine, they have not pressured them to receive it. Although they are supposed to report these persons to the local public health officials, the majority of healthcare professional have chosen to respect their privacy. Certain healthcare professionals have stated that they are concerned about their virus infected patients who are currently isolated and not receiving care.

3. **Concerned community members** are rushing to their doctors to receive their vaccinations. Certain persons are lobbying public officials to make the vaccine mandatory. These citizens are also worried that the virus infected persons will never recover and that long-term isolation is a

poor option.

4. **Vaccine-hesitant parents** are concerned that the vaccine was rushed to market with incomplete research. They feel that the vaccine is unsafe and are refusing it for family members, particularly for children and older persons. In certain small communities that have not yet had a case of infection, hesitation toward vaccination has been exacerbated by the lack of people infected. Public health officials are concerned that if too much hesitation among parents is present, vaccination levels will fall below the levels required to achieve herd immunity.

Stakeholder 1: Public health officials	
Decision (to take the vaccine or no):	**Evidence from the text:**
Stakeholder 2: Healthcare professionals	
Decision (to take the vaccine or no)	**Evidence from the text:**
Stakeholder 3: Concerned Citizen	
Decision (to take the vaccine or no)	**Evidence from the text:**
Stakeholder 4: Vaccine-hesitant	
Decision (to take the vaccine or no):	**Evidence from the text:**

Overall Recommendation Select a decision from your point of view	

Decision :	**Reasons for our decision are:**
	
	   1. ……………………………………………………… .
	   2. …………………………………………………… .

Moral implications for my decision:	………………………………………………………………… ………………………………………………………………… ………………………………………………………………… ………………………………………………………………… ………………………………………………………………… ………………………………………………………………… ………………………………………………………………… ………………………………………………………………… ………………………………………………………………… …………………………………………………………………

Reflection

1. S/He reflects on the topic in a journal entry writing her/his personal responses.

Diary Planning Sheet

Entry Lesson	1. In this lesson, there are ………………… things I remember about infectious diseases. 2. Yet, I disliked that ………………………………………………………… ………………………………………………………… ………………………………………………………… ………………………………………………………… ………………………………………………………… ………………………………………………………… …………………………………………………………

Session Twelve

Module 3: Social Justice Issues

<u>Achieving Equality in Education and Wellbeing</u>

<u>Pedagogical Aims:</u>

1. Problem posing a text for questioning social inequalities practices

2. Critically reflecting on a social issue

3. Taking an action for achieving equality

Performance Objectives

By the end of this session, the learners will be able to:

1. Critically reflect on the issue of health inequality as a global crisis.

2. Create alternatives to promote social justice.

3. Take social action

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson Overview: The students critically reflect on a video about educational inequality showing their empathy with homeless children during the outbreak of coronavirus. They are going to discuss together the inequality in education or health care through writing their critical reflection articles.

Brainstorming:

• The students examine the following cartoons to answer the following questions:

→ What is the critical issue expressed in the first cartoon?

………………………………………………………………………

………………………………………………………………….. .

→ What is the critical issue expressed in the second cartoon?

…………………………………………………………………………………

→ How is it related to the outbreak of coronavirus?

…………………………………………………………………………………

Assessment activities and tasks:

Activity 1

1. The students watch the following video, then answer the questions.

"She's an Honors Student. And Homeless. Will the Virtual Classroom Reach Her?" is a four-minute film that touches on themes of education, technology and inequity. Across the country, schools are closing because of the coronavirus. This week New York City's public schools began remote learning. But for Allia Phillips, 10, and the more than 100,000 students who are homeless, virtual education may be out of reach.

This week New York City's public schools began remote learning. But for the more than 100,000 students who are homeless, virtual education may be out of reach.
Gabriela Bhaskar for The New York Times

- What moments in this film stood out for you? Why?

………………………………………………………………………………

………………………………………………………………………………

- Were there any surprises? Anything that challenged what you know — or thought you knew?

………………………………………………………………………………

………………………………………………………………………………

- What connections can you make between this film and your own life or experience? Does this film remind you of anything else you've read or seen?

………………………………………………………………………………

………………………………………………………………………………

Activity (2):

1. The students revise how write a critical reflection by watching the following video https://www.youtube.com/watch?v=DY7cAeFKcAg

2. They read only one of the following articles that show social injustice in education and health: https://undark.org/2020/03/24/coronavirus-clean-water https://www.nytimes.com/2020/03/17/technology/china-schools-coronavirus.html

3. Then, they write their critical reflection to include the following points: introduction to the issue and its context, summary, critical analysis and conclusion suggesting a solution or an action.

<u>Activity 3: Taking an action</u>

1. Each group thinks of an action that promotes social justice concerning this issue. They can choose any of the following ideas or suggest any other action:

→ Design a cartoon showing how to solve this crisis, using Bitstrip https://sojo1049.com/how-to-create-your-own-bitstrip-cartoon-tutorial.

→ Preparing PowerPoint presentation that introduces some facts about this issue, causes, effects and how to solve it that can be used to raise other peoples' awareness of such problem.

→ Creating a campaign, which takes an action that support the people who suffers such inequality whether in education or health.

2. At the end, each group should be ready for a 5- minute oral PowerPoint presentation for the action that they have created in Google Meet video conference.

Reflection

2. S/He reflects on the topic in a journal entry writing her/his personal responses.

Diary Planning Sheet

Entry **Lesson**	3. In this lesson, there are ………………… things I remember about infectious diseases.
	4. Yet, I disliked that ………………………………………………………… ………………………………………………………… ………………………………………………………… ………………………………………………………… ………………………………………………………… ………………………………………………………… …………………………………………………………

Session Thirteen

Module 4: Ethical Issues Related to Science and Wellbeing

Is genetically modified food good or bad?

Pedagogical Aims:
1. Problem posing a text for identifying facts from biased information.
2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session, the learners will be able to:

1. Explore some critical ethical issues related to science and health care.

2. Question the bias beyond such issues.

3. Analyze and compare multiple perspectives related such issues.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson overview:

The students discuss whether the information given in the following video is biased as it is a myth or a fact about genetically modified food which makes it unsafe for human beings tackling it from different viewpoints.

Brainstorming:

3. The students examine the following picture carefully, then they try to guess the topic of the session completing the following sentence:

This lesson tells about …………………………….................... .
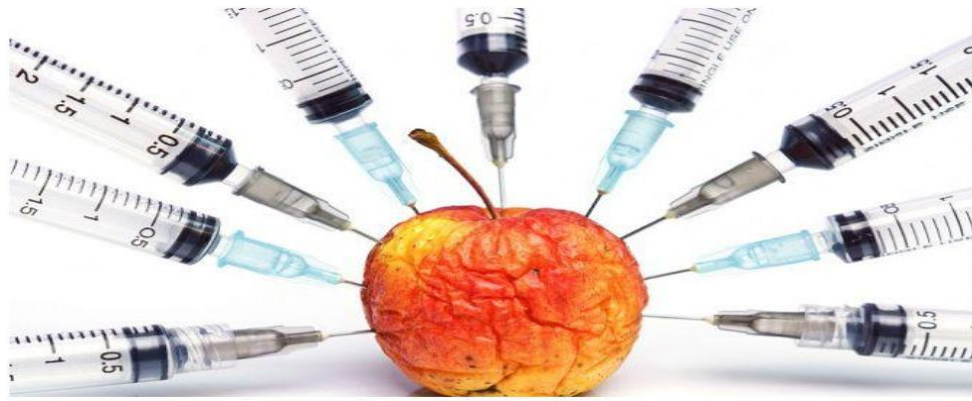
4. Then, they watch the following video: https://www.you`tube.com/watch?v=3mz1YGaNrJ0.

5. Then, they choose any X mapping chart to compare between genetically modified (GMF) and organic food.

Assessment activities and tasks:

Activity 1

1. The students watch the following video: https://www.youtube.com/watch?v=5_H45HKUrJI about GMF.

2. They identify the mentioned myths about GMF in the video.

3. Using fact checking sites for checking fake news, they question these myths to answer the following question: Are GMFs safe?

4. They share their ideas among the other groups.

Activity 2

1. The students examine this cartoon to answer the following question about GMFs:

- What is the perspective that is expressed in this cartoon? Is GMFs safe or harmful?

2. As a group work, the students get into an argument in which each student takes a certain stance by being involved in a " Six thinking hats" activity about genetically modified food. They watch this video: https://youtu.be/UZ8vF8HRWE4 to decide which position everyone likes more.

3. They write their answers next to each hat expressing their viewpoint.

4. Finally, they share their ideas among all groups.

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Session Fourteen

<u>Will coronavirus vaccine be free or paid?</u>

<u>Pedagogical Aims:</u>
    1. Problem posing a text for identifying biased in social contexts.
    2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session, the learners will be able to:

    1. Explore some critical ethical issues related to social class equality.

    2. Question the bias beyond such issue.

    3. Analyze and compare multiple perspectives related such issue.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson Overview: The students infer and question the inequality between the poor and rich people during crises which causes a gap between the social classes. Then, they are going to be involved in an argument to show their perspectives.

Brainstorming:

    1. The students watch the following video: https://www.dw.com/en/global-race-to-find-a-coronavirus-vaccine/av-53188493
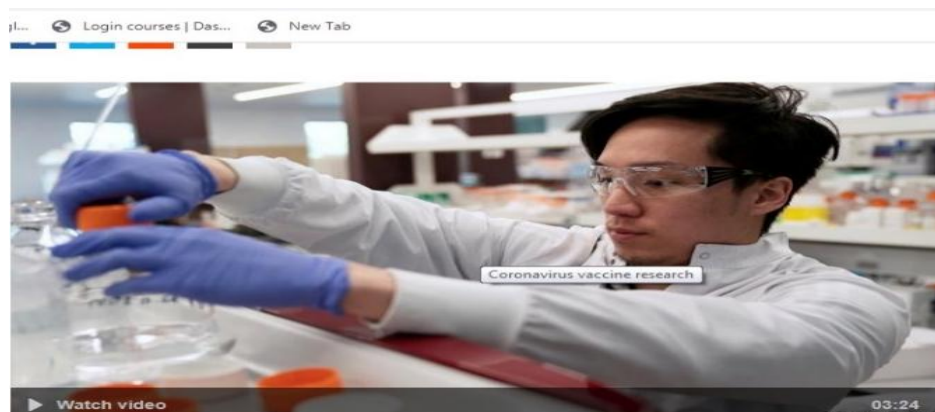
2. Then in the following table, they mention as many countries as they can who are engaged in the race to find an effective vaccine for coronavirus.

Country	Its effort in finding the vaccine
....…………	………………………………………………….
…………….	………………………………………………….
....…………	………………………………………………….
………….....	…………………………………………………
…………..	………………………………………………..

Activity 1

1. The students examine the following cartoons to answer the questions:

• What is the perspective that is expressed in the first cartoon?

………………………………………………………….……………….
……………………………………………………………………………
……………………………………………………………………………
………………………………………………………………….…… .

What is the perspective that is expressed in the second cartoon?

………………………………………………………….……………….
……………………………………………………………………………
……………………………………………………………………………
………………………………………………………………….…… .

What do you think about the reason that stand beyond this inequality?

………………………………………………………….……………….
……………………………………………………………………………
……………………………………………………………………………
………………………………………………………………….…… .

2. The students use the strategy of switching roles. They imagine what will happen for the poor man in the second cartoon if he has money.

Activity 2

1. The students watch the following two videos:

https://www.modbee.com/news/coronavirus/article241341961.html

https://www.irishtimes.com/opinion/we-have-a-vaccine-for-the-coronavirus-being rich1.4195275

3. Then they get into an argument to complete the following table after reading researches written on the internet about coronavirus vaccine. writing their own viewpoint sharing their ideas among groups.

A coronavirus vaccine should be for those who can buy (for the rich only)	A coronavirus vaccine should be free for everyone (for the poor)
The people who see this, think that 1. …………………………… …………………………… …………………………… 2. …………………………… …………………………… 3. …………………………… ……………………………	The people who see this, think that 1……………………………… ………………………….……… ………………………….……… 2. ……………………………. ………………………….……… ………………………….……… 3. ……………………………
After this discussion, we think the strong point of view is	
…………………………………………………………………………………… ……………………………………………………………………………	

<div align="center">

Session Fifteen

<u>Towards achieving Ethical vision among social classes</u>

</div>

<u>Pedagogical Aims:</u>

1. Problem posing a text for identifying social inequality.

2. Examining the text from multiple perspectives

Performance Objectives

By the end of this session, the learners will be able to:

1. Critically reflect on the issue of equality between the rich and the poor.

2. Create alternatives to promote social justice amog social classes.

3. Take a social action.

Learning Devices

● A laptop, a mobile phone or an I Pad (connected to the internet).

Lesson Overview: The students critically reflect on a 3 minute listening text to identify how bias is found in health care services when it comes in coronavirus testing. Moreover, they are going to discuss together the inequality between social classes during the outbreak of coronavirus. They write their critical reflection articles.

Brainstorming:

As an individual work, each student chooses an X mapping chart to show the differences between foods available in the past and those available now.

Activity 1

1. The students listen to the following text, then they answer the questions:

The Coronavirus Doesn't Discriminate, But U.S. Health Care Showing Familiar Biases

April 2, 2020 · 12:37 PM ET

BLAKE FARMER

FROM NASHVILLE

3-Minute Listen

While more affluent parts of Nashville have had testing sites for weeks, this drive-through testing site at Meharry Medical College, in a historically African American neighborhood, experienced weeks of delays because staff couldn't acquire the needed testing supplies and gear like masks and gloves. It finally opened March 30.

Ken Mickleberry/Meharry Medical College

https://www.npr.org/sections/health-shots/2020/04/02/825730141/the-coronavirus-doesnt- discriminate-but-u-s-health-care-showingfamiliar-biases

- What is the bias expressed in this text?

………………………………………………………………………………

………………………………………………………………………………

……………………………………………………………………………… .

- Were there any surprises? Anything that challenged what you know —
  or thought you knew?

………………………………………………………………………………

………………………………………………………………………………

……………………………………………………………………………… .

- What connections can you make between this text and your own life
  or experience? Does this text remind you of anything else you've read
  or seen?

………………………………………………………………………………

………………………………………………………………………………

……………………………………………………………………………… .

Activity 2:

1. They read only one of the following articles that discuses a health issue from an ethical perspective:

- https://www.bloomberg.com/news/articles/2020-08-02/when-it-comes-to-covid-vaccines-rich-nations-are-first-in-line

- https://geneticliteracyproject.org/2020/03/18/viewpoint-gmos-responsible-for-the-coronavirus-outbreak-thats-scientifically-absurd/

2. Then, they write their critical reflection to include the following points: introduction to the issue, summary, critical analysis and conclusion suggesting a solution or an action.

Activity 3: Taking an action

1. Each group thinks of an action that promotes social equality between the rich and the poor concerning the discussed issue. They can choose any of the following ideas or suggest any other action such as:

   → Sharing an album on the internet that introduces some facts about GMFs; that can be used to raise other peoples' awareness about it.
   → Creating a campaign, which takes an action that support the people who suffer such inequality.

2. After finishing the activity, each group should be ready for present their action in Google Meet video conference.

فاعليه برنامج للتعلم التشاركى قائم على النظرية الاتصالية فى تنمية المعرفة الناقدة لمتعلمى اللغة الانجليزية بالمرحلة الاعدادية

بحث مقدم للحصول على درجة دكتوراة الفلسفة فى التربية

قسم مناهج وطرق تدريس ـ اللغة الإنجليزية

اعداد

سناء راضى محمود حسين

معلم أول لغة إنجليزية بالمدرسة المصرية الدولية بالمعراج

إشراف

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٢٠٢١

كلية التربية

قسم المناهج وطرق التدريس

صفحة العنوان

عنوان الرسالة : **فاعليه برنامج للتعلم التشاركي قائم على النظرية الاتصالية فى تنمية المعرفة الناقدة لمتعلمي اللغة الانجليزية بالمرحلة الاعدادية**

The Effect of a Collaborative Learning Program Based on the Connectivism Theory on Developing EFL Prep Stage Students' Critical Literacy

اسم الباحثة/ سناء راضي محمود حسين

الدرجة العلمية / دكتوراه الفلسفة في التربية

القسم التابع له / قسم مناهج و طرق تدريس اللغة الانجليزية

الكلية / كلية التربية

الجامعة /عين شمس

سنة المنح / ٢٠٢١

كلية التربية

قسم المناهج وطرق التدريس

رسالة دكتوراه

عنوان الرسالة : **"فاعليه برنامج للتعلم التشاركي قائم على النظرية الاتصالية فى تنمية المعرفة الناقدة لمتعلمي اللغة الانجليزية بالمرحلة الاعدادية"**

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لجنة الإشراف

أ. د/ اسماء غانم غيث

الوظيفة/ أستاذ المناهج وطرق تدريس اللغة الإنجليزية ـ كلية التربية ـ جامعة عين شمس

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تقييم اللجنة :

تاريخ البحث: /   /

الدراسات العليا :

ختم الإجازة :	أجيزت الرسالة بتاريخ
	٢٠٢١ / /
موافقة مجلس الكلية	موافقة مجلس الجامعة
٢٠٢١ / /	٢٠٢١ / /

المستخلص

عنوان البحث: فاعلية برنامج التعلم التشاركى قائم على النظرية الاتصالية فى تنمية المعرفة الناقدة لمتعلمي اللغة الانجليزية بالمرحلة الاعدادية

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د. محمود مصطفى عطية ، مدرس المناهج وطرق التدريس- تكنولوجيا التعليم، كلية التربية، جامعة عين شمس.

مستخلص البحث:

هدفت هذه الدراسة إلى التعرف على تأثير استخدام برنامج للتعلم التشاركى قائم على النظرية الاتصالية فى تنمية المعرفة الناقدة لمتعلمى اللغة الانجليزية بالمرحلة الاعدادية كلغة أجنبية. تبدأ الدراسة بمراجعة الأدبيات والدراسات السابقة التي تتناول التعلم الالكترونى التشاركى و المعرفة الناقدة. قامت الباحثة بتصميم برنامج البحث ، وأدوات قياس المعرفة الناقدة لدى الطلاب بما في ذلك قائمة مكونات المعرفة الناقدة ، والاختبار القبلي / البعدي، بالاضافة لقائمة تتضمن معايير التقييم . وشملت عينة الدراسة مجموعة من طلاب الصف الثانى بالمرحلة الإعدادية (ن = ٢٥) بالمدرسة المصرية الدولية بالمعراج، بالمعادي. ولقد تلقى الطلاب تدريبًا لتنمية المعرفة الناقدة لمدة ستة أسابيع باستخدام Edmodo و Google Meet كوسائط للتعلم الإلكتروني التشاركي. ثم قام الطلاب بتادية الاختبار قبلي وبعدي للمعرفة الناقدة عبر الإنترنت. وتم تحليل النتائج في الاختبار القبلي / البعدي إحصائيًا كميا وكيفيا. وأظهرت النتائج فاعلية استخدام التعلم الإلكتروني التشاركى في تنمية المعرفة الناقدة لمتعلمى اللغة الانجليزية بالمرحلة الاعدادية.

الكلمات المفتاحية: النظرية الاتصالية ، التعلم التشاركى ،المعرفة الناقدة ، طلاب الصف الثانى الاعدادى.

ملخص الدراسة باللغة العربية

مقدمة

لقد أصبح مع التطور السريع للعلوم و التكنولوجيا و ظهور العديد من الوسائط التعليمية وتطبيقاتها فى التدريس دور كبير فى تدريس اللغة الإنجليزية ، تلك النماذج التى تهدف الى الاصلاح فى عصر العولمه، والتى ارتبطت بالعديد من التداعيات والمتطلبات التي تؤثر على النواحي التعليمية والعملية للأفراد. فلقد أصبح من الضرورى إستخدام طرق تعليمية فعالة تتناسب مع عالم المعرفة اليوم، والتى تدعم التطوير المهنى، وتنمية الابتكار ، وترويج المعرفة الرقمية، والسعي للتعلم مدى الحياة. بل أوضح Prensky (٢٠٠٤) أن هذه التقنيات توفر فرص جديدة لتعليم اللغة الأجنبية عن طريق Facebook و MUVE، وغيرها من التطبيقات. وقد ادى هذا الاستخدام إلى تغيير ليس فى الانماط اللغوية للطلاب وأساليبها فقط ، ولكن أيضًا أصبحوا متحدثين أصليين للغة الإنترنت ويتواصلون بشكل مختلف من خلال البريد الإلكتروني وإنشاء مواقع الدردشة .

وقد صرح Wiske (٢٠١١) أنه نتيجة ذلك التغير ، فإن التعليم يواجه اليوم العديد من التحديات المختلفة، فى نواح كثيرة، عما كان عليه من قبل الإنترنت والتى تجعل التفاعلات باستخدام الكمبيوتر هي ضرورة بالنسبة للمتعلمين فى هذا العصر . كما اضاف كلا Chelliah و Clarke (٢٠١٢) ان هذه التحديات تجعل المؤسسات التعليمية ليست مجرد وسيلة لنقل مجموعة محددة من المعلومات من المعلم إلى الطال، بل يجب أن تعزز الكفاءات اللازمة للتعلم مدى الحياة مثل التعاون والكفاءة في استخدام التكنولوجيا.

هذه التحديات والإمكانيات تخلق مساحات لفرص جديدة لضرورة استخدام أنواع مختلفة من المعرفة بما في ذلك المعرفة الإعلامية والرقمية والناقدة. من هذا المنظور، يرى Norris et. Al (٢٠١٢) أن المعرفة الناقدة تنظر إلى النص باعتباره عملية بناء اجتماعي مع التركيز على السياقات التاريخية والاجتماعية والسياسية القائمة في المجتمع. وقد أوضح Lonsdale و McCurry (٢٠٠٤) إنها وسيلة لتمكين المواطنين من التفكير النقدي لتحدي والتساؤل حول المعتقدات الموجودة فى المجتمع، وهذا يتطلب وفقا ل Kincheloe (٢٠٠٨) أن تتجاوز المعرفة الناقدة المادة المطبوعة لتشمل مجموعة واسعة من النصوص المكتوبة والمرئية

والمطبوعة والرقمية أو الإلكترونية، والتي يمكن استخدامها كوسيلة لمقاومة أشكال السلطة السياسية مثل قضايا مثل التمييز العنصرية .

وقد أكد كلا من Stevens و Bean (٢٠٠٤)على أهمية تنمية المعرفة الناقدة حيث انها تساعد الطلاب على المناقشة والفحص الناقد لأشكال متعددة من النصوص من خلال قراءة النصوص وتصفيتها بناءً على أهدافهم ، وهذا يفسر مشاكل المجتمع بشكل مختلف. علاوة على ذلك ، أشار Bishop (٢٠١٤) انها تمكّن الطلاب من فحص قضايا الحياة اليومية وتناولها من وجهات نظر متناقضة. وبالمثل ، يعتبر كومبر (٢٠١٥) تنمية المعرفة الناقدة يعد وسيلة لتحقيق العدالة الاجتماعية من خلال مناقشة والتساؤل حول قضايا الفقر في كل مكان بهدف إيجاد حلول.

وعلى الرغم من هذه الحاجة الملحة لتنمية المعرفة الناقدة باعتبارها وسيلة للتغيير الاجتماعي ، فهناك العديد من التحديات التي تعيق تطبيقها في تدريس اللغة الانجليزية كلغة ثانية أو أجنبية. فقد ذكر Banks (٢٠٠٣) ان الأساليب التقليدية للقراءة والكتابة لا تساعد الطلاب على الربط بين المواقف التعليمية وتجاربهم الخاصة، بل انها تركز على اكساب المهارات الأساسية وتتجاهل المشاركة الفعالة للطلاب فى القضايا الوطنية والعالمية. ايضا اضاف Pangrazio (٢٠١٦) أن تلك الأساليب تجعل المتعلمين مستقبلين فقط للمادة التعليمية ولا تمكنهم من التساؤل حول مدى موضوعيتها أو تحيزها. وقد ذكر كلا من Izadinia و Abednia (٢٠١٠) سبب اخر وهو ان هذه الاساليب التعليمية هدفها الاول اعداد الطلاب للامتحانات فقط من خلال حفظ قوائم مطولة من مفردات اللغوية ، وبالتالي ، يميل الكثير من الطلاب إلى الاعتماد على المعلمين لتزويدهم بالمعلومات ولا يعبرون عن هويتهم.

ونظرا للأسباب السابق ذكرها فمن الضروري استخدام بدائل جديدة تهدف إلى إعداد متعلمين قادرون على القيام بدور فعال من أجل تحقيق التغيير الاجتماعي ، تلك البدائل التي لابد من أن تتفق مع متطلبات القرن الواحد والعشرين مثل الاستخدام الفعال تطبيقات التعلم الالكتروني التشاركي واستراتيجياته والذي سيمكن الطلاب من التفاعل المتبادل وجمع المعلومات حول قضايا المجتمع وتفسيرها بهدف إيجاد بدائل تساعد على تحقيق العدالة الاجتماعية. وتعد النظرية الاتصالية من أبرز النظريات التى تدعم بيئات التعلم الالكترونى التشاركى ، وذلك بما قدمه Siemens (٢٠٠٦) من أفكار تربوية تمكن المتعلمين من الاتصال ببعضهم البعض عبر الشبكات الاجتماعية.

و بشكل عام ، يعرف Palloff et. al (٢٠١٠) التعلم الإلكترونى التشاركى على أنه تلك البيئة التعليمية عبر الإنترنت والتي تساعد الطلاب على تعميق تجربة التعلم الخاصة بهم ، واختبار الأفكار الجديدة من خلال مشاركتها بين المجموعات مع تبادل الآراء والمقترحات بشكل بناء. ولقد أشارت الدراسات السابقة إلى التأثير الإيجابي لهذا النوع من التعلم فى زيادة دافعية الطلاب ومشاركتهم فى مناقشة القضايا المطروحة والتعاون في البحث عن المعلومات والمشاركة من قبل الطلاب الانطوائيين على وجه الخصوص. فهو يوفر سياقًا تعليميًا مرنًا لتنظيم وقت الدراسة وفقًا احتياجات الطلاب (Ayan و ,Seferoğlu ، ٢٠١٧؛ Azelain و Monje ،٢٠١٦).

مشكلة الدراسة

على الرغم من اهمية ضرورة اكساب الطلاب القدرة على المعرفة الناقدة على اعتبارها احدى متطلبات القرن الحادى والعشرين والتي تمكنهم من أن يقوم بدور فعال فى مجتمعم، الا ان هذا لا يحظى بدور كبير فى تدريس اللغة الانجليزية فى كثير من البلدان. فمعظم تلك الممارسات تمت على مستوى الجامعات مع محاولات قليلة اهتمت بتنمية تلك القدرة على مستوى المراحل التعليمية المختلفة. هذا يرجع إلى طبيعة الثقافة السائدة في المجتمعات التي تدرس اللغة الإنجليزية كلغة أجنبية. فقد أوضح Wang و Ko (٢٠١٣).انها تمنع الطلاب من تحدي المعتقدات المتعارف عليها أو السماح لهم بالمشاركة في مناقشة القضايا الاجتماعية والأخلاقية . ولا يختلف هذا الموقف الكثير فى مناهج التعليم المصرية . ويرجع ذلك الى تصميم المناهج والذى يقوم على الحفظ ولا يراعى الفروق الفردية بين الطلاب فلا يعطى فرصة للطالب على الاكتشاف والقيام بدور فعال فى البيئة المحيطة.

ومن خلال عمل الباحثة كمدرسة لغة انجليزية لعشرين عاما، لاحظت ان معظم طلاب المرحلة الاعدادية يفتقرون إلى كثير من كفاءات المعرفة الناقدة، فهم غالبا لا يجيدون تناول النصوص من وجهات نظر ناقدة للتعرف على نواحي عدم المساواة التى قد يعانى منها بعض الأفراد مجتمعات معينة. وعلاوة على ذلك، بل إنهم لم يتعلموا كيفية التساؤل عن المعتقدات الموجودة بالمجتمع مما قد يؤدي إلى تغيير تلك الممارسات إذا لم تتسم بالإنصاف. بل ان هناك عدد محدود من المتعلمين يستطيعون القيام بعملية نقد تأملية حول نص مكتوب أو كتابة موضوع تعبير يعرض نوع من المجادلة.

وقد اجرى كلا من Ibrahim و Ibrahim (٢٠١٧) دراسة للتعرف على التحديات التى تعوق التفاعل الهادف المصاحب لممارسة المعرفة الناقدة . فوجد أن أهمها الكثافة العالية للفصول ونقص الموارد في المدارس المصرية لتوفير الأجهزة التكنولوجية وطبيعة الاختبارات القائمة على سرد المعلومات وعدم اهتمامها بتنمية التفكير التحليلى. كما أضاف السباعي (٢٠١٨) أن عدم ملاءمة الكتب والمناهج الدراسية في مصر لا يشجع الطلاب على القراءة المتعمقة والتي تفتقر إلى وجود أي مستوى من التفكير النقدي أيضًا. ومن هنا ، تقترح الباحثة استخدام التعلم الإلكتروني التشاركي فى تنمية القدرة على المعرفة الناقدة لطلاب اللغة الإنجليزية كلغة أجنبية فى المرحلة الإعدادية ، والتى يمكن من إيجاد التفاعل الفعال بين الطلاب من جهة ، وبينهم والمعلم من جهة أخرى لمعالجة مشاكل المجتمع.

بل أن من أهم أسبابلملحة لاستخدام التعلم الإلكترونى التشاركى هو ما تمر به بعض المجتمعات أحيانا من ظروف سياسية أو اجتماعية تؤثر بالسلب على انتظام الطلاب فى المدارس . وهذا ما حدث أثناء ثورة الخامس والعشرين من يناير عام ٢٠١١، حينما حدث عدم انتظام الطلاب فى اغلب المدارس نتيجة وجود شغب فى أغلب الشوارع . وهنا كان من الممكن ان يتفاعل الطلاب والمعلمين معا عبر الإنترنت من أجل تحقيق الأهداف التعليمية المرجوة. ولعل هذا الحل استخدم لمواجهة أزمة كورونا على مستوى العالم. فمنذ تعليق الدراسة فى معظم بلدان العالم تم عدم حضورالطلاب إلى المدارس أو الجامعات والاكتفاء بالتعليم الإلكتروني. مما جعل هذا النوع من التعليم ضرورة لتمكين ملايين الطلاب من التعلم مع الحفاظ على سلامتهم فى ذات الوقت.

الدراسة الاستطلاعية

عقدت الباحثة مقابلات رسمية مع بعض معلمى اللغة الانجليزية كلغة اجنبية (١٥) للتعرف على مدى إدراكهم لمفهوم المعرفة الناقدة ، بالاضافة إلى طبيعة الأنشطة التي تدعم تنمية المعرفة الناقدة فى مناهج تدريس اللغة الانجليزية. كما استخدمت الباحثة استبيان للتعرف على القدرات الفعلية للطلاب على المعرفة الناقدة . وقد أظهرت النتائج ان المعلمين يدركون معنى المعرفة الناقدة على انها التفكير الناقد الذى يقوم على التحليل و التقييم ويهملون البعد الاجتماعي الذي هو جوهر المعرفة الناقدة. ومن ناحية اخرى، اظهرت نتائج الاستبيان افتقار الطلاب الى الكثير من قدرات المعرفة الناقدة أهمها إدراك المعنى المتضمن فى النص، وتفسير القضية المطروحة من وجهات نظر متعددة والتأمل فيها من أجل القيام بفعل يحقق العدالة الاجتماعية.

تحديد المشكلة

يعاني طلاب اللغة الانجليزية كلغة اجنبية بالمرحلة الإعدادية من ضعف فى القدرة على المعرفة الناقدة. وقد يرجع ذلك لتصميم المناهج المصرية التى تقوم على الحفظ ولا تعطى للطلاب الفرصة على التحليل وتناول القضية من أكثر من وجهة نظر. لذلك تقترح الباحثة إستخدام برنامج التعلم الإلكترونى التشاركى والذى يقوم على التفاعل المتبادل بين الطلاب والمناقشة وابداء الرأي مما سيسهم فى تنمية القدرة على المعرفة الناقدة وذلك فى إطار المتطلبات اللغوية الخاصة بهم.

أسئلة الدراسة

من أجل التحقق من هذه المشكلة ، حاولت الدراسة الإجابة عن السؤال الرئيسى التالى:

كيف يمكن استخدام التعلم التشاركي القائم على النظرية الاتصالية فى تنمية المعرفة الناقدة لمتعلمي اللغة الانجليزية كلغة اجنبية بالمرحلة الاعدادية؟

ومن أجل الإجابة على السؤال الرئيسى للدراسة، سوف يتم الاجابة على الاسئلة التالية؟

١. ما مكونات المعرفة الناقدة المطلوبة من قبل الطلاب المستهدفين؟

٢. ما هي قدرات المعرفة الناقدة الفعلية لهؤلاء الطلاب ؟

٣. ما أسس برنامج للتعلم الإلكترونى التشاركى فى تنمية المعرفة الناقدة لمتعلمي اللغة الانجليزية بالمرحلة الاعدادية؟

٤. ما تأثير استخدام برنامج للتعلم التشاركي القائم على النظرية الاتصالية فى تنمية المعرفة الناقدة مكوناتها الفرعية لمتعلمى اللغة الانجليزية بالمرحلة الاعدادية؟

فروض البحث

من أجل التحقيق من مشكلة البحث ، ستختبر الدراسة الفرض التالى:

. يوجد فرق دال إحصائيا بين متوسطى درجات مجموعة طلاب الدراسة في الاختبار القبلي والبعدي فيما يتعلق بكل قدرة للمعرفة الناقدة لصالح درجات الاختبار البعدي.

منهج الدراسة

سوف تستخدم هذه الدراسة تصميم شبه تجريبي حيث سيتم إجراء اختبار قبلي وبعدي على مجموعة واحدة. ويتم اختبار القدرة على المعرفة الناقدة للطلاب قبل وبعد إجراء الاختبار، مع تقييم الاختلافات بين درجات الاختبارين.

أدوات الدراسة

١. اختبار قبلي وبعدي لقياس مكونات القدرة على المعرفة الناقدة لدى مجموعة الطلاب المشاركين فى الدراسة.

٢. مقياس لتحديد معايير تقييم المعرفة الناقدة

حدود الدراسة

ستقتصر هذه الدراسة على التالي:

• مجموعة من دارسي اللغة الانجليزية كلغة اجنبية بالصف الثانى الاعدادى.

• طبقت الدراسة فى المدرسة المصرية الدولية بالمعراج بالقاهرة .

• سيتم استخدامُ Google Meet و Edmodo كسياقات للتعلم الإلكترونى التشاركى.

• كما اقتصرت الدراسة على تنمية بعض مكونات المعرفة الناقدة للطلاب عن طريق استخدام برنامج للتعلم الإلكترونى التشاركى. وسيشمل هذا البرنامج المكونات الآتية: طرح المشكلة، ومناقشة وجهات النظر المتعددة حول القضية المطروحة، والتأمل الناقد لهذه القضية، والقيام بفعل لتحقيق العدالة الاجتماعية.

أهمية الدراسة

من المتوقع أن تفيد هذه الدراسة كلا مما يلى:

• **متعلمي اللغة الإنجليزية كلغة أجنبية**: سيكونون قادرين على قراءة الكلمة والعالم كمهارة لازمة للتعامل مع متطلبات القرن الحادي والعشرين من خلال ممارسة أنشطة التعلم الإلكترونى التشاركى.

• **باحثي اللغة الإنجليزية كلغة أجنبية**: ستزود الدراسة باحثي اللغة الإنجليزية كلغة أجنبية بخلفية نظرية يمكنهم البناء عليها لمزيد من الدراسات التالية.

• **معلمى اللغة الإنجليزية كلغة أجنبية**: تشير الدراسة إلى أهمية استخدام التعلم الإلكتروني

التشاركي في تعليم اللغة الإنجليزية كلغة أجنبية وتعلمها كوسيلة لإعداد متعلمين قادرين على القيام بدورفعال فى المجتمع.

• **مصممي المناهج الدراسية وواضعي السياسات**: من المتوقع أن تؤخذ نتائج الدراسة في الاعتبار عند تصميم المناهج التعليمية. علاوة على ذلك ، فإنه يسلط الضوء على أهمية استخدام منصات التكنولوجيا المتطورة كوسائط لاكتساب الكفاءات اللازمة للتعامل مع القرن الحادي والعشرين.

إجراءات الدراسة

اتبعت الباحثة الإجراءات التالية.

أولا: تحديد القدرة على المعرفة الناقدة للطلاب بالمرحلة الإعدادية وهذا من خلال:

١. مراجعة الأدبيات السابقة ذات الصلة بمكونات المعرفة الناقدة .

٢. تحديد المستوى قدرات القدرة المعرفية التي تتناسب مع مستوى الطلاب واحتياجاتهم.

ثانيا: تقييم الوضع الحالى لقدرة الطلاب فى المعرفة الناقدة وذلك من خلال ما يلى:

١. استبيان للمعلمين القائمين على تدريس الطلاب فى المرحلة الإعدادية للوقوف على مدى ممارسة القدرة على المعرفة الناقدة وتضمينها فى مناهج تدريس اللغة الانجليزية كلغة اجنبية.

٢. استبيان للطلاب للتعرف على اى مدى يمارس الطلاب القدرة على المعرفة الناقدة فعليا.

ثالثا:تحديد كيفية بناء برنامج للتعلم الإلكترونى التشاركى لتنمية القدرة على المعرفة الناقدة والتي تتناسب مع مستوى الطلاب المشاركين بالبرنامج كالتالى:

١ . مراجعة الأدبيات والدراسات السابقة ذات الصلة باستخدام التعلم الالكترونى التشاركى وكذلك المعرفة الناقدة.

٢. تحديد أنشطة التعلم الإلكتروني التشاركي التى تساعد على تنمية القدرة على المعرفة الناقدة لدى الطلاب.

رابعا : تحديد مدى فاعلية البرنامج المقترح لتنمية القدرة على المعرفة الناقدة لدى متعلمي اللغة الانجليزية بالمرحلة الاعدادية وذلك من خلال:

١. تصميم قائمة بمكونات القدرة على المعرفة الناقدة الخاصة بنواتج التعلم.٣. تصميم البرنامج التدريبي في القدرة على المعرفة الناقدة .

٢ . بناء اختبار قبلي خاص بالقدرة على المعرفة الناقدة والتأكد من صدق وثبات الاختبار.

٣. تطبيق الاختبار القبلي للتعرف على قدرات الطلاب فى القدرة على المعرفة الناقدة قبل تطبيق البرنامج.

٤. تطبيق البرنامج الخاص بتنمية القدرة على المعرفة الناقد بإستخدام اساليب التعلم الالكترونى التشاركى (من تصميم الباحثة).

٥. تطبيق الاختبار البعدي للتعرف على أداء الطلاب بعد التطبيق.

٦. تحليل النتائج كميا و كيفيا ومناقشة وتفسيرها وكتابة التوصيات لإجراء المزيد من البحوث.

نتائج الدراسة

١. يوجد فرق دال إحصائيا عند مستوى ٠،٠١ بين متوسطى درجات مجموعة طلاب الدراسة في الاختبار القبلي والبعدي فيما يتعلق بالقدرة على "المعرفة الناقدة بوجه عام لصالح درجات الاختبار البعدي.

٢. يوجد فرق دال إحصائيا عند مستوى ٠،٠١ بين متوسطى درجات مجموعة طلاب الدراسة في الاختبار القبلي والبعدي فيما يتعلق بالقدرة على "المعرفة الناقدة كلا على حدا (طرح المشكلة، ومناقشة وجهات النظر المتعددة حول القضية المطروحة، والتأمل الناقد لهذه القضية، والقيام بفعل لتحقيق العدالة الاجتماعية)   لصالح درجات الاختبار البعدي.

توصيات الدراسة

توصى الدراسة بالآتي:

يجب على المعلمين الاستفادة من وسائط التعلم الالكتروني بشكل مناسب لزيادة مشاركة الطلاب في عملية التعلم.

• ضرورة تهيئة بيئة تعليمية تشاركية لمساعدة الطلاب على التعلم الفعال في جو مريح وممتع.

• يجب أن يمارس الطلاب المزيد من الفرص للتفاوض حول القضايا العالمية الأخرى ليكونوا مواطنين نشطين مثل قضايا التنوع الثقافى وأثرها على الهوية .

• يجب أن يركز المعلمون على تنمية المعرفة الناقدة كمكون أساسي فى تدريس اللغة .

• يجب إعطاء الطلاب المزيد من الفرص للتعبير عن وجهات نظرهم بحرية مما يساعدهم على أن يكونوا مواطنين فاعلين في المستقبل.

• يجب إعطاء الطلاب مزيد من الممارسة لتمكينهم من تلخيص النص وتحليله بشكل ناقد، وذلك بجعل مبدأ التأمل الناقد أسلوب حياة.

• يحتاج مناقشة قضايا المجتمع الى تحليل عميق من جانب الطلاب. وبالتالي ، يمكن تخصيص المزيد من الوقت للدراسات المستقبلية ، ،مما يمكن أن يساعد الطلاب على القيام بمزيد من الدور الفعال تجاه هذه القضايا.

مقترحات الدراسة

• دراسة تأثير منصات للتعلم الالكتروني التشاركي فى تنمية المعرفة الرقمية والعالمية. • تصميم أشكال أخرى من التعلم عبر الإنترنت على نطاق واسع ، لمناقشة المشكلات العالمية الأخرى بشكل ناقد بغرض تضمين عدد أكبر من الطلاب من ثقافات مثل SPOCs او MOOCs مختلفة .

• دراسة تأثير الخلفية الاجتماعية للطلاب على القيام بفعل لتحقيق التغيير الاجتماعي.

• تصميم برنامج تدريبي لتدريب معلمي اللغة الإنجليزية كلغة أجنبية على كيفية تطوير القدرة على المعرفة الناقدة لدى طلابهم.

• دراسة تأثير استخدام الكتب المصورة على تنمية القدرة على المعرفة الناقدة في مراحل أخرى.

• دراسة تأثير الاستراتيجيات الأخرى على تنمية القدرة على المعرفة الناقدة لدى الطلاب.