The Implementation of Critical Pedagogy in Digital Second Language Acquisition in Higher Education: Age and Gender Differences

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Abstract

Due to the unprecedented spread of online education in higher education institutions due to the COVID-19 pandemic, the present study discloses the intentional implementation or unintentional presence of critical pedagogy aspects in the online English language teaching environment. It also aims to show if there is an age or gender difference regarding the use of critical pedagogy in online language teaching. The main instrument of the study was an online questionnaire designed based on Brown’s theory of critical pedagogy (2001). A sample that consisted of EFL college teachers from two educational institutions in Iraq and the Czech Republic was used. The sample consists of 57 female and 47 male participants. The data collected were analyzed using the SPSS technique. Findings showed a notable presence of critical pedagogy aspects in online English language teaching. In addition, the result revealed a prominent role for the female teachers over male teachers for using various aspects of critical pedagogy, and the age group between 31-40 is the most effective age for teachers in applying the aspects of critical pedagogy. The study further generated some practical implications that may help teach English online.

Keywords: critical pedagogy, second language acquisition, higher education, online education, eLearning

Introduction

Critical Pedagogy aims to authorize learning environments by allowing learners and educators to foster healthy and mutual chances for the development of attitudes, dialogue, consciousness, and ideas (Akdeniz et al., 2020; Forcelini, 2016). Reagan (2010) notes that critical pedagogy is a theoretical method, as well as an ideological and political endeavor, that seeks to understand current school perspectives and practices with a very practical aim of improving the current state of education. Critical pedagogy can be
reflected in the situation when the learners become social transformers of their community and world, and when they critically construct knowledge. It constructs tolerance towards different cultural views, helps to construct social and political awareness, and inserts moral customs that can reflect social and political honesty (Forcelini, 2016; Yıldız et al., 2022). It is a student-oriented approach as the primary focus is on the students and their interaction with the world around them. Moreover, it is a very challenging approach as the students should be able to acquire various cultural ideas and content during the educational process but also learn on their own, then apply what they've learned to a variety of circumstances they could come into in their daily lives (Hadley, 2001; Safarieh, 2020). Therefore, the pragmatic aspect of this approach is crucial and it makes this methodology useful and applicable in today’s world. Similarly, Giroux and Bosio (2021) mentioned that teachers must be considered a significant public resource, vital not only to the importance of providing students with an empowering educational experience but also to the development of a democratic society. As stated by Freire (1996) education is the process that does not simply include spreading information but is about providing the learners with different possibilities to increase their awareness and understanding. The class atmosphere of this kind can be achieved by applying student-centered education that is distinct from the traditional classrooms, which are centered on the teacher and guided by textbooks. Unfortunately, all these aspects, due to their challenging nature, are very difficult to be implemented and this paper aims to search for potential possibilities for the implementation of critical pedagogy in second language acquisition, i.e. foreign language learning in higher education institutions.

Critical pedagogy concerning language learning and teaching can be expressed broadly as having structural and functional qualities, socially implicated as speech, and hence involved in individual development as well as the preservation and change of societal structures. Second language acquisition based on the principles of critical pedagogy only highlights something that is always behind any foreign language learning, namely the focus on everyday practical use of the language in ordinary situations and under various conditions that life can bring. The classroom should be learner-centered, or more accurately, learning-centered, utilizing a critical pedagogical approach that allows learners to develop, re-construct, and deconstruct their own identities.

For the implementation of critical pedagogy in foreign language learning, it is crucial to think about how much of the critical pedagogy principles can be utilized as the current situation demands various forms of eLearning or at least some forms of hybrid or blended learning. According to Freire (2014, p. 75), “the use of technical aids and materials is indispensable” in the school context. The use of online education could potentially, by definition, represent an ideal learning environment that focuses mainly on the learners and learning process and it is most of the time learner- and learning-centered education, but it must be verified if this is true and feasible. So, a teacher should work hard “to create new channels of knowledge, new methodologies, new relationships between the subjects who seek knowledge and the most advanced technological innovations that we have at our disposal” (ibid). One of the aspects that make critical pedagogy suitable for online learning is the fact that online education represents one of the priorities that critical pedagogy requires, which is the use of visual images, including photos, realia (i.e. objects or activities that relate to the students to the real-life situations), and discussion-based online teaching (Awosusi et al., 2022; Palloff & Pratt, 2007). This comes in line with Freire’s ideas (1970) of criticizing traditional teaching in schools as
he called it “banking education”. In this concern, when Freire’s primary literacy programs in the late 1970s were applied with the help of students' home communities, the instructional team spent much time producing an ethnographic critical needs evaluation and they found that the use of visual imagery (pictures or photos) or realia, relating to parts of the students' lives, was and continues to be a distinguishing trait.

**Research aim**

Therefore, this study is an attempt to verify the availability and suitability of the application of the critical pedagogy approach in an online teaching environment for second language acquisition, which has not been covered by any previous research. This research should cover the gap and also provide new ideas related to digital language learning that could be implemented in second language acquisition in various learning contexts and environments. Thus, it should contribute to applied linguistics theory and practice.

**Literature review**

Paulo Freire (1958, 1967, 2004), a Brazilian literacy educator and curriculum specialist, coined the phrase "critical pedagogy" to describe a novel pedagogical approach in all his work. Freire's critical pedagogy was a method of teaching L1 and L2 literacy based on radical, Catholic, and progressive critiques of society, in which literacy was to be taught in such a way that the poor and working-class could interpret reality and act on it to better understand and influence their daily life. In Freire's work, the class was the essential unit of analysis, combined with the premise that one's willingness to help others and improve oneself constituted a human vocation (Taylor, 1993). He claims that students are capable of critically monitoring their surroundings to create their social reality. Freire referred educational process as a “tool for social and cultural emancipation”, something that could be accomplished by depicting and implementing education as a political and pedagogical endeavor that values discussion, the democratization of teacher-student interactions, curriculum co-construction, and making learning relevant to the learner (Schugurensky, 2014, p. 39).
From the late 1970s to the mid-1990s, L2 specialists worked towards taking up Freire's ideas, although only in a non-significant way. However, Crawford (1978, 1981, 1982) drew language critical pedagogy principles from Freire's work, see figure 1, and these show the impact of essential values of critical pedagogy while also alerting teachers to the implementation of the basic principles of critical pedagogy as follows:

1. Curriculum content should be derived from the learners' life situations as demonstrated in the themes of their reality.
2. The goal of education is to foster critical thinking by framing students' situations as problems for them to recognize, reflect on, and act upon.
3. The goal of planning is to organize generating concepts first, then topic content that relates to those ideas.
4. The students create their educational materials.
5. The teacher takes part in the learning process as one of the learners.
6. The role of the teacher is to provide problems to be discussed and solved.
7. In the course's dialogical process, the teacher offers his or her experiences, ideas, opinions, and perspectives.
8. Students have the right to make decisions and the power to do so.

A summarized and in-depth viewpoint was presented by Brown (2001) who stated that “our learners must be free to be themselves, to think for themselves, to behave intellectually without coercion from a powerful elite, to cherish their beliefs, traditions, and cultures without the thread of forced change” (p. 443). Brown suggested four principles that are supposed to be essential for engagement in critical pedagogy where full respect for students’ attitudes and beliefs are provided as in figure 2. These four principles as stated by Brown (2001, p. 444) are:
This study tries to verify the following three hypotheses related to critical pedagogy and its presence in digital language learning. The present study attempts to verify the feasibility and reliability of critical pedagogy principles as mentioned by Brown (2001) in the environment of online language education that was massively utilized during the period of the COVID-19 pandemic in the first half of the year 2021. It should be noted that the educational world generally agrees that the implementation of student-centered pedagogical techniques, which critical pedagogy represents, is critical to the success of online courses and curricula (Al-Bahadli, 2020; Duffy & Kirkley, 2004; Grabinger, 2004; Polin, 2004). Therefore, the first hypothesis was formulated as follows:

H1/ Current online learning environment does not involve the aspects of critical pedagogy.

To indulge more in dealing with critical pedagogy in a language acquisition context, it is important to investigate teachers’ role in applying such kinds of environments. The role of the teacher is essential specifically in increasing EFL college
students’ willingness to attend classes (Pishghadam, et al. 2021). In the process of introducing learners to a new culture and creating opportunities to think critically, the teacher's role is particularly powerful. More specifically, this study tries to shed light on the role of gender in applying the aspects of critical pedagogy and whether there is any statistical difference between men and women college teachers in managing their online classes. The ramifications of how women and men interact in online learning environments have become a critical topic to investigate. McKnight-Tutein and Thackaberry (2011) mentioned that there was a substantial body of evidence suggesting that women and men learn in various ways making women intrinsically more successful in online learning environments. Women, they argued, were ideally positioned to be great learners because they used affective learning strategies that enabled them to learn in relational ways by relying on relationships. Generally, many studies show that gender has a direct impact on some variables that are related directly to teachers such as attitudes and behavior in online learning environments that use various types of technology in teaching (Hijazi-Omari and Ribak, 2008; Baron and Hård af Segerstad, 2010; Wang et al., 2009). Although some of these studies were unconcerned about the teacher's gender since they believe it is unworthy of discrimination, as others did (Bodhel et al., 2015). Therefore, the second hypothesis was created as follows:

H2/ There is not a statistical difference in the online learning environment between male and female college teachers in involving the aspects of critical pedagogy.

In an online environment, where the teacher should play more than one role, the need for a professional approach becomes clear. This comes by Al-Obaydi (2021: 6) who mentioned that a “blended learning environment needs a professional teacher that can be guider, helper, prompter, and facilitator”. Age variable seems essential in satisfying teachers’ roles and in determining whether online classes satisfy the aspects of critical pedagogy and whether teachers’ age plays a specific role in this context that requires much effort and power (Teo, 2008; Yaghi, 2001). This leads to the conclusion that understanding the age variations among teachers enables the promotion of new methods and strategies to assist and improve academic success and learning experiences (Macpherson, 2004). Therefore, the third hypothesis was formulated as follows:

H3/ There is not a statistical difference in the online learning environments between college teachers, related to age factor, in involving the aspects of critical pedagogy.

Method

To verify the hypothesis of the present study, the researchers included the setting and participants, instrument, and data collection procedures. The data analysis was calculated using the SPSS program that was used to evaluate the statistics, especially through the Mann-Whitney U test to assess if there is a difference between perception regarding age and gender used to verify the hypothesis. The details of each step of selecting, testing, and validating are explained in the next subsections.

Setting and participants

The sample used in this study is based on two main conditions; being a college teacher specializing in ELT, and using online education as the main teaching environment. So, it consisted of the university teachers from two countries, namely the Czech Republic
and Iraq to investigate the level of critical pedagogy involvement and to test the hypotheses. The questionnaire was sent to the participants via email.

**Instruments**

The instrument used to collect the data was the digital questionnaire that was designed and validated by the researchers based on the approach of the critical pedagogy proposed by Brown (2001, 444) (See appendix A).

The questionnaire, after a short introduction with the consent to take part in the survey, contained a few demographic questions related to gender and age. Afterward, the questionnaire contained 14 key statements to be evaluated on a 5-point Likert scale with these answers; strongly disagree, disagree, neutral, agree, and strongly agree.

Cornbrash’s Alpha factor was needed to test the reliability and performance of the study. Tawafak et al. (2019) mentioned that when testing the reliability factor, if the Cronbach's Alpha value of the tested sample is greater than 0.7, then the sample is OK and accepted to do further calculations to show the active results. Otherwise, the whole sample fails and needs to reconsider a new method or change the item of constructs. Thus, the reliability of the items was confirmed statistically as presented in Tables 1, 2, 3, 4, and 5. The results show that the sample can be accepted. The validity of the instrument was gained by exposing it to a group of specialists in linguistics and TEFL. All of them agreed on the suitability of the tool to the context of the study.

**Table 1**

*The Description of Reliability Statistics*

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.870</td>
<td>0.850</td>
<td>16</td>
</tr>
</tbody>
</table>

According to Table 1, the Cronbach’s Alpha was 0.870 which is greater than 0.7. This means it is a very accepted sample and the test is valid (Tawafak, et al. 2021).

**Table 2**

*The Summary of Item Statistics*

<table>
<thead>
<tr>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Range</th>
<th>Maximum Variance</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Means</td>
<td>3.811</td>
<td>1.447</td>
<td>4.214</td>
<td>2.767</td>
<td>16</td>
</tr>
<tr>
<td>Item Variances</td>
<td>.723</td>
<td>.250</td>
<td>1.107</td>
<td>.857</td>
<td>16</td>
</tr>
<tr>
<td>Inter-Item Correlations</td>
<td>.071</td>
<td>-.284</td>
<td>.406</td>
<td>.690</td>
<td>16</td>
</tr>
</tbody>
</table>

According to Tawafak, et al. (2019), the survey needs to analyze the values of summary items given in the survey. Table 2 shows the values of the mean, which is (3.811) as score "Agree" range (2.767) as "Neutral", and variance (0.579) that is higher than 0.5 and be accepted of items used in the survey. According to the Likert score, the survey has a 5-point score and the distribution is given as 5 for strongly agree, to 1 for strongly disagree. In this consideration, the mean value will be well-designed and accepted if its value is more than 2.5; that means it’s in acceptance with agreeing or
strongly agree on results. For item variance, the mean value should be above 0.5 to be accepted and the results show an active value (0.723) which is accepted.

Tables 3, 4, and 5 show the Mann-Whitney values to need the calculations according to different sets. In Table 3, the Age factor shows there is a difference between age categories to be solved using the Mann-Whitney U test. Furthermore, Table 4 shows the difference in gender factors, while Table 5 discusses the difference between online classes and on-site classes.

According to Table 3, the valid age of students is not used in the normal distribution, therefore, the test will categorize them in ranking sum from the smallest to the highest percentage of users. Table 4, shows that students with age 31-40 have the highest number of participants (37.1%) and the lowest percentage aged above 60 (4.8%). For this reason, the Mann-Whitney U test is much-recommended use for this category.

**Table 3**

*The Description of Age Factor*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>21</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>31-40</td>
<td>39</td>
<td>37.1</td>
<td>57.1</td>
</tr>
<tr>
<td>41-50</td>
<td>32</td>
<td>30.5</td>
<td>87.6</td>
</tr>
<tr>
<td>51-60</td>
<td>8</td>
<td>7.6</td>
<td>95.2</td>
</tr>
<tr>
<td>60+</td>
<td>5</td>
<td>4.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Table 4**

*The Description of Gender Factor*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>57</td>
<td>54.3</td>
<td>54.8</td>
</tr>
<tr>
<td>Male</td>
<td>47</td>
<td>44.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>99.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 presents the gender factor. As it seems, female participants are slightly more frequent than males, with 54.3 and 44.8, respectively. Therefore, the Mann-Whitney U test can be used for this factor to show the valid and accepted result of the survey (Malik, et al. 2020).

**Table 5**

*The Description of Online Education Factor*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>105</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Tables 3, 4, and 5 show the frequency in the percentage of each category for age, gender, and online education. Table 5, shows that all the students are categorized in online
education only, therefore, this factor cannot be analyzed through the Mann Whitney U test because there are no categories for the two fields.

**Data Collection Procedures**

The data collection took place in September and October 2021, just at the beginning of the new semester. The previous three semesters had been conducted fully online due to the COVID-19 pandemic; therefore, the respondents could subjectively reflect on these previous three semesters. The methodology of the survey was connected to the subjective evaluation of the participants themselves. On one hand, it is very important to collect subjective data as they clearly show the level of awareness of the situation, on the other hand, these results will be biased by this subjectivity, which could be a limitation of this study that can be rectified by subsequent research into various objective and measurable parameters. However, the balanced analysis can provide a relatively reliable picture of the situation regarding critical pedagogy implementation even without this subsequent research.

The respondents were not informed about the scope of the questionnaire but they were told that the questionnaire would be focused on digital foreign language learning improvement, not to create bias and we guessed the participants did not connect the questions of the questionnaire to the concept of a critical pedagogy of Brown. The statements were formulated strictly following Brown’s theory but a few more statements were working like filler questions so that the participants could have a feeling that the questionnaire was about the improvement of the quality of the educational process.

The research was approved by the University of Hradec Kralove Ethics Committee no. 2/2021. The respondents agreed with their participation in the study by starting the questionnaire after they consented to the study. No personal data, no addresses, and no names were collected. The only identification is the timestamp when the questionnaire was submitted. The General Data Protection Regulation of the European Union for data collection was strictly followed.

**Results**

The results of the questionnaire were not intended to be compared geographically, thus the results from both countries were put together and evaluated as one cluster. There was no intention of this research to create an intercultural comparison but it aimed at analyzing the current global situation by analyzing results from these very different countries, both culturally and geographically.

The results of each hypothesis were calculated as follows:

H1/ Current online learning environment does not involve the aspects of critical pedagogy.

The statistical results showed that all the items tested gained scores above the mean, and based on that some aspects of critical pedagogy proved to exist in all EFL online classes that were tested by the researchers. Table 6 showed the maximum, minimum, mean, standard deviation, skewness, and kurtosis for all items used in the survey. For skewness, all values showed a negative result to be accepted, besides kurtosis
gave results between <1.3 and <1.3 for all 14 questions of the survey. Thus, the first hypothesis was rejected.

Table 6

The Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>2.40</td>
<td>1.043</td>
<td>.582</td>
<td>.236</td>
</tr>
<tr>
<td>Gender</td>
<td>104</td>
<td>1</td>
<td>2</td>
<td>1.45</td>
<td>.500</td>
<td>.196</td>
<td>.237</td>
</tr>
<tr>
<td>Online</td>
<td>104</td>
<td>1</td>
<td>1</td>
<td>1.00</td>
<td>.000</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Q1</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>4.14</td>
<td>.848</td>
<td>-.953</td>
<td>.236</td>
</tr>
<tr>
<td>Q2</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>4.09</td>
<td>.889</td>
<td>-.839</td>
<td>.236</td>
</tr>
<tr>
<td>Q3</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>4.09</td>
<td>.845</td>
<td>-.848</td>
<td>.236</td>
</tr>
<tr>
<td>Q4</td>
<td>105</td>
<td>2</td>
<td>5</td>
<td>4.12</td>
<td>.768</td>
<td>-.476</td>
<td>.236</td>
</tr>
<tr>
<td>Q5</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>4.03</td>
<td>.882</td>
<td>-.999</td>
<td>.236</td>
</tr>
<tr>
<td>Q6</td>
<td>105</td>
<td>2</td>
<td>5</td>
<td>4.05</td>
<td>.870</td>
<td>-.629</td>
<td>.236</td>
</tr>
<tr>
<td>Q7</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>3.90</td>
<td>.950</td>
<td>-.679</td>
<td>.236</td>
</tr>
<tr>
<td>Q8</td>
<td>105</td>
<td>1</td>
<td>5</td>
<td>4.17</td>
<td>.849</td>
<td>-.915</td>
<td>.236</td>
</tr>
<tr>
<td>Q9</td>
<td>105</td>
<td>2</td>
<td>5</td>
<td>4.18</td>
<td>.731</td>
<td>-.446</td>
<td>.236</td>
</tr>
<tr>
<td>Q10</td>
<td>105</td>
<td>2</td>
<td>5</td>
<td>4.19</td>
<td>.833</td>
<td>-.678</td>
<td>.236</td>
</tr>
<tr>
<td>Q11</td>
<td>105</td>
<td>2</td>
<td>5</td>
<td>4.03</td>
<td>.765</td>
<td>-.442</td>
<td>.236</td>
</tr>
<tr>
<td>Q12</td>
<td>105</td>
<td>2</td>
<td>5</td>
<td>4.06</td>
<td>.908</td>
<td>-.586</td>
<td>.236</td>
</tr>
<tr>
<td>Q13</td>
<td>104</td>
<td>1</td>
<td>5</td>
<td>3.93</td>
<td>.958</td>
<td>-.674</td>
<td>.237</td>
</tr>
<tr>
<td>Q14</td>
<td>104</td>
<td>1</td>
<td>5</td>
<td>4.02</td>
<td>.924</td>
<td>-.866</td>
<td>.237</td>
</tr>
</tbody>
</table>

H2/ There is not a statistical difference in the online learning environment between male and female college teachers in involving the aspects of critical pedagogy.

The results in Table 7 and Table 8 report that the female teachers gained higher scores through the Mann-Whitney U test in Online (13339.5) and Age (1214.5) are both significant as z value of Online =0.000, while in Age, z value= 0.854 is also accepted regarding the age level categories in applying the aspects of critical pedagogy in online EFL classes than the male teachers. Table 8 shows the results of H2. Table 7 showed a significant result of testing the z value where it shows 0.000 value which is highly recommended.

Table 7

The Mann-Whitney U Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>Online</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mann-Whitney U</td>
<td>1339.500</td>
<td></td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>2467.500</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

a. Grouping Variable: Gender
Table 8

The Descriptive of Mann-Whitney U Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>1214.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>2867.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.854</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.393</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Gender

Figure 3 shows the results of the second hypothesis in a clearer picture of where the female teachers gained higher degrees. Thus, the second hypothesis is rejected.

Figure 3

Gender bar chart distribution

H3/ There is not a statistical difference in the online learning environments between college teachers, related to age factor, in involving the aspects of critical pedagogy.

Table 9 showed the results of H3. The results showed a negative value of the Z variable of the Mann-Whitney U test that indicated the very accepted results of a teacher difference in ages regarding the critical pedagogy learning.
Table 9  
*The Mann-Whitney U Test Statistics*

<table>
<thead>
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<th>Online</th>
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<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>399.000</td>
<td></td>
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<tr>
<td>Wilcoxon W</td>
<td>1140.000</td>
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<td>Z</td>
<td>.000</td>
<td>1.000</td>
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<tr>
<td>Asymp. Sig. (2-tailed)</td>
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a. Grouping Variable: Age

Figure 4 shows the results of the age difference among teachers. It demonstrates that the age between 31 and 40 is the most effective in applying the aspects of critical pedagogy. The next most frequent age is between 41 and 50. The very weak results are observed in the age group of 60+. Based on the above result, the third hypothesis is rejected.

Figure 4  
*Age bar chart distribution*

Discussion

In the present study, after assessing all the samples about the presence of critical pedagogy aspects that are supposed to exist in their EFL online classes, using Brown’s (2001) principles, the statistical analysis showed that there was a real existence of the main principles of critical pedagogy in their online classes, even if not intentional. It further showed that there is a difference between male and female college teachers concerning the application of critical pedagogy in their online classes in favor of female teachers. Moreover, the results clarified reported that youth teachers aged 31-40 are the
most probably to apply the principles of critical pedagogy in the English online teaching context, even if probably only unintentionally.

In the context of English language teaching, critical pedagogy is a theoretical and practical approach to language teaching and learning that promotes social justice, encourages democratic interaction, and appreciates social values. All these aspects are reflected in online English language teaching classes according to the results of the present study. The results may be due to the increased experience and professional development of the teachers on the one hand, and to the nature of the English language teaching environment on the other hand. In the second year of applying online education, which was the beginning of 2020 when the COVID-19 pandemic began to spread, the teachers showed a lot of professionalism in dealing with their students via digital means of communication. Their technical, scientific, and professional knowledge also increased notably and this was reflected in the quality of their teaching and students’ achievements. These results come in congruence with Sharif Uddin (2019) who focused on the essential role of teachers in inserting the aspects of critical pedagogy in class. Effective communication among speakers of the same language as well as speakers of various languages is required for social change and global awareness. As a result, L2 acquisition is compatible with critical pedagogical approaches, and critical pedagogy becomes a useful resource for L2 learners. This finding is in line with Forcelini (2016) who mentioned that critical pedagogy allows the use of spontaneously formed subjects from the native speaker community in the classroom. It enables life to function as a self-renewing textbook with no answer key. A problem-solving education and student-centered education, which can be represented and facilitated by online education, are integrated into a lifelong process that allows socio-cultural progress and then successful L2 acquisition.

The main idea that is inferred from Brown’s theory (2001), which was the main approach of critical pedagogy that was used in the current study, is the freedom for students to express themselves openly. Though it may be a subjective matter that teachers judge themselves on this point, it seems that most teachers allow their students to express themselves. One main encouraging point that supports this result is the English language teaching context where the present study was applied. In the EFL college context, students interact with their teachers most of the time as part of developing their fluency and communication skills, so this leads to more freedom in expressing their ideas and opinions, which is also a viewpoint supported by Shin and Crookes (2005). This result may be, to some extent, in line with Hadley (2001) who states that many educators also look to future, true cultural exposure abroad to suit the demands of students who want to improve their linguistic and cultural expertise. Another important point that can agree with the results of this study was presented by Ortega (2012) who mentioned that the use of visual imagery (pictures or photos) or realia, concerning parts of the students’ lives, was and continues to be a distinguishing trait specifically for English language students. Students discuss or communicate some aspects of the topics or linguistic content they daily dealt with by commenting on and discussing the visual pictures. This fact represents support for using online education as a way of developing critical pedagogy in classes. This idea comes in agreement with what was stated by Freire (2014) as he asked educators to consider the use of technology in the classroom critically and “to create new channels of knowledge, new methodologies, new relationships between the subjects who seek knowledge and the most advanced technological innovations that we have at our disposal”
Education can persuade students to accept reality, or even to critically consider and change it. Critical thinking, as established by Critical Pedagogy, has the potential to empower learners and society as a whole to progress from inertia to Freire's freedom and humanization practice.

The verification of the second hypothesis showed that there is a difference between male and female college teachers concerning the application of critical pedagogy in their online classes in favor of female teachers. The justification of such a result may be related to the nature of women generally who are by their nature talkative, kind, and have the potential to easily learn new things. Whether intentionally or unintentionally, teachers and students grow as partners when critical pedagogical techniques are implemented; learners are encouraged to share their thoughts, resulting in channels where teachers and students can learn from one another's ideas and experiences, and jointly reach conclusions. This fact shows the essential role of the teacher as part of inserting the critical pedagogy aspects in class. In relation to that, the online learning environment is naturally not an easy place for teaching. It requires multitalented teachers who can work on more than one pivot to prove their success. Though many researchers assert that there are not many differences in teacher gender, McKnight-Tutein and Thackaberry (2011) confirmed that there was a large amount of evidence demonstrating women and men work in different ways, making women intrinsically more successful in an online learning environment which is in a clear agreement with the present study.

On the other hand, the age variable in the third hypothesis appeared to be significant in fulfilling instructors' tasks and determining whether online classes meet critical pedagogy requirements, as well as whether teachers' age plays a specific function in this setting that necessitates a great deal of work and power. About professionally applied aspects of critical pedagogy, is concerned, it is clear that youth teachers aged 31-40 were the most probably to apply the principles of critical pedagogy in the English online teaching context, even if probably only unintentionally. This means that English teachers who are digital natives are the most experienced and professional teachers. They prove their skills in applying the aspects of critical pedagogy in their classes. This reason may also be related to their ability and vitality to apply various activities and to work on more than one pivot.

At the level of meaning and ethics, technological surroundings alter how human users view themselves and their communication with the world. The Internet is now seen as a public space to which everyone, regardless of status or position, should have access. A wise recommendation was stated by Loyce and Jennifer (2014) who focused on the role of educators and college teachers. They stated that teachers and educational leaders, as well as faculty members in programs that prepare these professionals, must be lifelong learners with the ability to incorporate critical pedagogy within online learning spaces to entice students to use their voices to challenge dominant discourses, given the rapid advancements in technology. This conclusion is also approved by Ivanova and Doncheva (2018) who recommend the use of information technology to train teachers and students to be more professional in class and to gain more positive knowledge in dealing with online education.

**Conclusions and Implications**
The main conclusion of the present study is the proof of the existence (unintentional), or implementation (intentional), of critical pedagogy aspects, as stated by Brown (2001), in the current EFL online teaching context in the two areas researched. The results also showed that women's role is more prominent in comparison with men teachers and that the most effective age for college teachers to use at least some aspects of critical pedagogy is between 31-40 years. The limited number of participants and the specific area of interest in Brown’s approach to critical pedagogy call for more research in the area of critical pedagogy in online education. The essential role of critical pedagogy in building college students’ personalities socially and scientifically led to consider it as one of the main constituents in the online teaching process that needs real attention from teachers and curriculum designers.

Several practical implications could be utilized in any foreign language learning, but this research focused on those implications that could be utilized in digital learning in the context of critical pedagogy. Any foreign language acquisition is rather a specific process due to its cognitively related parameters and critical pedagogy can play a crucial, and positive, role in this acquisition.

Critical pedagogical approaches foster tolerance for diverse cultural viewpoints, increase social and political awareness, and cultivate moral behaviour that is linked with social and political integrity and can be used to safeguard the construction of the student within or against conventional conceptual views. Due to the existence of many approaches to critical pedagogy, and the variations in teaching foreign language contexts all over the world, this calls for more efforts to be focused on this area. Other research articles need to be written to support the existence of critical pedagogy in online English language classes specifically what is related to students’ viewpoints and suggestions in this domain.

Though the results of the present study were positive concerning the existence of critical pedagogy principles in the online English language teaching context, still some aspects of critical pedagogy are not fully implemented specifically in an intentional way. Therefore, the study generated some practical implications that could be applied in the foreign language acquisition context in the digital learning environment:

- Encouraging communication and self-expression. Paolo Freire's writings suggest that learners are completely capable of critically evaluating their world to form their social reality, as one of the key contributors to critical pedagogy core notions. This procedure, however, is only achievable with the help of others.
- Promoting more student-centered and problem-solving education where the students can interact and communicate freely.
- Teaching smaller classes to intentionally implement some of the aspects of critical pedagogy.
- Giving the students the research opportunity not just presenting mere lectures by the tutoring.
- Encouraging students’ access to information on the Internet rather than receiving the information only from the tutor.
- Working on developing students’ discourse and spoken language as much as possible by cultivating their communication skills.
- A concentration must also be on the new knowledge that can be achieved from the online environment.
These are just several basic concepts and ideas that could be implemented in any digitally guided virtual learning environment and by applying them we could reach better results both in the satisfaction of the students and the teachers but also in their active involvement in the teaching process.

Acknowledgement

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References


Appendix 1

Critical pedagogy questionnaire

This study enquires about the possibility of an online learning environment to involve the elements of critical pedagogy. So, if you used any type of online education in your lectures, you are kindly requested to answer the following observation checklist that is based on Brown’s approach (2001) of critical pedagogy.

Age:
- a) 20-30
- b) 31-40
- c) 41-50
- d) 51-60
- e) More than 60

Gender:
- a) Female
- b) Male

Do you use online education? Yes …….  No……….

Complete please
In my online class, I usually …………………

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>The Observations</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Allow students to express themselves openly.</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Be sensitive to power relations.</td>
<td>Disagree</td>
</tr>
<tr>
<td>3</td>
<td>Encourage candid, honest, and unbiased expressions.</td>
<td>Neutral Agree</td>
</tr>
<tr>
<td>4</td>
<td>Genuinely respect students’ points of view.</td>
<td>Agree</td>
</tr>
<tr>
<td>5</td>
<td>Seek to understand the students’ cherished and important believes.</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>6</td>
<td>Seek to understand the traditions that are essential to students’ life.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Encourage both/many sides of the issue.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Welcome all seriously offered statements by accepting different viewpoints.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Welcome all students’ seriously offered opinions and believes.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Don’t force the students to think just like me.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Encourage students to be autonomous learners in opinion and study.</td>
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Delay my opinion in class to give a chance to students to express themselves.

Try to withhold my opinion in class if necessary.

Work with my students to reach understandable subject matter.