Understanding the Development of Critical Thinking through Classroom Debates and Online Discussion Forums: A Case of Higher Education in the UAE

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Introduction

Critical thinking requires logicality, reason, and reflection (Ennis, 1985). Furthermore, critical thinking involves higher-order thinking skills (Bloom, 1956) and acts as a guide towards what to believe or do. Like other higher-order thinking skills, critical thinking requires appropriate instruction and fair practice to be developed (Snyder & Snyder, 2008) and attained throughout life. Cuban (1984) highlighted that “Defining thinking skills, reasoning, critical thought, and problem-solving is troublesome to both social scientists and practitioners. Troublesome is a polite word; the area is a conceptual swamp.” (p. 676). As most other learned skills, critical thinking differentiates us from others by the provision of understanding of the whole matter of something and by allowing us to look into the gaps and try to fill in the missing pieces (Hysaj & Hamam, 2020b). Critical thinking is required in academia as much as it is required in the business world, and it is a characteristic that facilitates people’s success in the midst of challenges and obstacles. The development of critical thinking is a result of a joint effort between social and educational factors. Critical thinking and the ability to display a global mindset go hand-in-hand with a successful career (Lovvorn & Chen, 2011) and a happy life.

Literature Review

The Relationship between Critical Thinking and Multicultural Dialogue of Languages and Cultures

Cultures and languages have long attracted the interest of researchers and educators as crucial components of our human existence (Barnett, 1997; Bobkina & Stefanova, 2016; Freire, 1970; Leistyna, Woodrum & Sherblom, 1996; Norris, 1995). As mentioned by Atkinson (1997) and Anderson (2005), cultures and languages are substantial in facilitating the development of critical thinking and equally challenging if not used appropriately by teachers. His viewpoint of comparing critical thinking with
cultural thinking is fascinating as it opens a platform of active and critical reflection for educators. Furthermore, this perspective treats similarly different cultures and languages without prioritizing any above the others. For instance, Bali (2015) pointed out that he contested any cultural bias that considered critical thinking as a property of any given culture. Furthermore, he dismissed any kind of cultural bias by highlighting the existence of critical and analytical ideas in his Egyptian Islamic culture.

Educators like Freire (1970), Leistyna, et al. (1996), and Anderson (2005) became advocates of critical pedagogy. They proposed a methodological approach based on problem-posing education that aims at making students critical thinkers. In the studies by Freire (1970), Breunig (2005), Dimova, and Kamarska (2015), students are presented with a set of issues, and they are encouraged to reflect on them and offer possible solutions. These studies involve the discovery of actuality by the employment of methodological approaches that support students’ active learning through a variety of sources of knowledge and ways of learning. This brings us to one of the most significant challenges experienced in multicultural classrooms, and that is the language barrier between students and their peers, and the one between students and their teachers.

### Utilization of Improved Instructional Strategies to Facilitate Students’ Development of Critical Thinking

According to Gagne and Briggs (1974), the instructional design is the origin and application of methods used to design topics, courses, and lessons of instruction in a variety of subjects, based on principles of human learning and performance analysis. Therefore, instructional design is a combination of procedures for defining outcomes and determining sequences of instruction, and methods of assessing students’ performance (Sweller, 1999). The development of critical thinking requires the practical application of skills, and this requires the activation of knowledge accumulated through lessons. Therefore, for us as educators, it is essential to utilize the tools we have at our disposition to facilitate the process of critical thinking development (Davies & Barnett, 2015), be it through the instructional design of our explanations for the tasks covered during sessions or through the appropriate design of assessment tasks.

Higher education is a good platform that offers the possibility of enhancing concepts of critical thinking by taking them to higher-order thinking skills that involve the understanding of problems that are more complex and offer appropriate solutions (Barrie, 2004). Other aspects of critical thinking, e.g., conceptual thinking, writing, and communication skills, are developed as generic skills during the ESL classes (Wingate, 2006). The development of active learning during ESL classes correlates with the creation of authentic tasks and the provision of formative feedback that is followed by reflection (Hysaj, Elkhouly, & Qureshi, 2019, 2020). Consequently, students should be able to develop concepts and strategies to deal with similar tasks in other subjects.

### Effects of Classroom Debates on the Development of Analytical and Critical Thinking

Bloom’s (1956) educational objectives are as follows: knowledge, comprehension, application, analysis, synthesis, and evaluation. Debating as an active form of discussing a particular topic should provide a platform for knowledge acquisition, knowledge application, and through negotiation, to name a few. Debates require an understanding of specific topics, empowerment with examples and details about them, the ability to put forward ones’ thoughts, opinions, and finally, tolerate the opposing ideas and agree to differ. Researchers and educators have been analyzing the possibility of developing critical and analytical thinking through debates (Cohen & Lotan, 1997; Kennedy, 2007; Tumposky, 2004). Needless to say that debates are essential to generate interest in a variety of topics, encourage research, analysis, and the evaluation of knowledge gaps of the participants. As classroom debates are usually constrained within an hour or two of classroom-time, the metacognitive awareness and critical thinking through peer
interaction processes do not necessarily occur, as participants might not be at ease psychologically to participate actively in classroom debates (Tumposky, 2004).

For learning to take place, genuine peer interaction and cooperative learning need to be encouraged by educators and employed by the participants in the debates (Cohen & Lotan, 1997; Johnson & Johnson, 1994) through the development of analytic skills while preparing the points and examples needed for the debate. At this point, persuasion techniques and fluency in speaking, if they come into effect, pave the way for the metacognitive and cognitive awareness. However, as most of us, educators are aware that the fluency and persuasion techniques are not enough and require self-esteem, self-confidence, and extensive vocabulary and grammar knowledge.

Effects of Online Discussion on Development of Analytical and Critical Thinking

As the number of universities offering online instruction is increasing exponentially every year, the need for exploring the online environment becomes imminent, useful, and logical (Chiao, Chen, & Huang, 2018). An interesting study carried out by Christopher et al. (2004) established that students tend to be more thorough when responding to online discussion forums, subsequently developing higher thinking levels (as per Bloom’s Taxonomy). Furthermore, the study concluded that online discussions’ rubrics could serve as an instructional guide for the educator and to evaluate the quality of online discussions.

Instructional techniques applied during online discussions require sufficient consideration aiming for the achievement of learning outcomes related to the written format and the development of critical thinking disposition in online discussions (Kalelioglu & Gülbahar, 2014). The academic written format developed during university years is displayed in an array of tasks, e.g., essays, reports, case studies, or reflective tasks. As higher education is moving towards distance or blended learning platforms due to unexpected circumstances like the COVID-19 pandemic or because of the flexibility offered by these platforms for students, educators, and policymakers alike, it is worth considering the alteration of face-to-face tasks to suit the online platform. A logical alteration of face-to-face debates is presented in the online discussions. Therefore, to explore the student’s perceived usefulness of debates and online discussions, we designed our study based on Bloom’s taxonomy.

Method

This study used quantitative methods to collect data. The researchers designed a survey based on Bloom’s taxonomy to explore the students’ perceived usefulness towards the use of debates and online discussions in the classroom. The setting was an international university in the UAE. The sample consisted of 40 students who were enrolled in the undergraduate program in several majors. The instruments used in this study was a survey that included a set of 18 questions, created to analyze aspects of the development of critical thinking and cognitive skill sets of undergraduate students. Bloom’s taxonomy (1956) was used as a guide to developing a blueprint for the survey. Each part of the survey contained nine questions, and the themes were related to the development of critical thinking and cognitive skill sets through debates and online discussion forums. The questions were categorized based on comprehension, application, and knowledge classifications. Moreover, they were analyzed for the development of synthesis, evaluation, and analysis, which are equally related to cognitive skills development and application of critical thinking.
Results

The results of the first part of the survey, which is about the concept of debates, indicated that most students had a positive experience with doing debates in the classroom. The survey items’ results reveal that most students were able to research to find more information about the debate’s topic, and they were able to express themselves well when they talked about their beliefs and findings. Students also reported that they found it easy to identify their position and others' position in a debate. Most students believe that debates led to improvements in their skills, and they enjoyed debates more than the other class activities. Most students also mentioned that having an online debate was a positive experience and that they enjoyed their time and interactions with their colleagues. Some reported that it was a completely new experience for them and expressed a wish to participate in more debates in the future.

The second part of the survey, which was about the online discussion forums, indicated that most students had a positive experience when they participated in the online discussions. The survey items revealed that most students felt it was easy to join the online discussions using their LMS, as they were familiar with it, and that they were able to discuss several topics with their colleagues. They also mentioned that online discussions helped in developing their skills. A small group of students stated that they were bored because of their peers’ slow response at times. However, most students found it easy to participate in online discussions, and they were able to evaluate the answers and the opinions of their peers. In general, most students reported that online discussions were more enjoyable than other types of online activities because they could interact with actual classmates instead of just dealing with the computer or the device they were using.

Discussion

Preparation for a classroom debate or the provision of responses in the online discussions involves sketching of points and the sequence of presenting these points. Our findings indicate that students had a very positive experience in classroom debates, and they were able to perform different processes. These processes require adequate skills, preparation, note-taking, and reorganization of data aiming for the logicality of arguments and offering an appropriate environment for the development of critical thinking (Hysaj & Hamam, 2020b; Oros, 2007). Individuals or teams are assigned to rebut their opposition, and this necessitates considerable writing, although not necessarily guided by the teacher or the academic format. The aim of this kind of writing is persuasion; hence, it requires the organization of arguments and mobilizing of evidence for best effect (Bognar et al., 2019; Han & Ellis, 2019; Hysaj & Hamam, 2020a; Stephenson, 2018). Hence, the focus of language teachers in these circumstances shifts from the development of stylistically correct formal writing to the development of critical thinking skills.

Our findings also stress that Bloom’s taxonomy of educational objectives should be the driving force behind the re-examination of the educational tools utilized in higher education. As classroom debate formats do not consist of the six concepts of knowledge, comprehension, application, analysis, synthesis, and evaluation, they do not do justice to equity and fairness amongst students (Scott, 2008). Therefore, despite being involved in researching to demonstrate their point or to rebut the opposing views, not all the students get to evaluate, synthesize and apply the points mentioned in the debate (Akili, 2018; Anne Ratna, 2020; Khaled, et al. 2020; Scott, 2008). One way of making classroom debates more inclusive could be including a reflective task straight after the debate or after the debates are over. In that way, the level of interest amongst students will be higher, encouraging even the least equipped with appropriate oral ability to participate actively (Hysaj & Hamam, 2020b; Zare & Othman, 2013). Our findings also indicate that online discussions were advantageous to enhance students’ learning. These findings concur with the findings of Bognar et al. (2019) and Han and Ellis (2019, p. 12), who stated that “cohesive conceptions of learning through discussions were positively linked with deep approaches that students
adopted towards discussions in class and online, which also related positively to better academic achievement.”

**Implications**

We believe that online discussions and debates may serve actively as tools for promoting higher-order thinking. Nevertheless, several barriers can impede the development of critical thinking skills from educators and students’ perspective. For instance, not all teachers are equipped with adequate training to deal with online tools, according to Hamam (2020), or have an appropriate amount of teaching resources, non-bias preconceptions, and are not constrained by time to use learning environments that promote critical thinking. It is the teachers’ responsibility to model critical thinking development by using a variety of techniques and tools such as effective questioning techniques. These techniques can trigger an understanding of complex concepts and promote higher-order thinking (Hysaj & Hamam, 2020b; Snyder & Snyder, 2008).

**Conclusion**

The study concludes that debates and online discussions had a positive impact on the students’ critical thinking abilities. Most students reported that they enjoyed debates and online discussions, and they preferred them as an alternative form of assessment. Besides, debates and online discussions also made students interact with each other and know the way of thinking of each other. Therefore, based on empirical evidence from the existing literature and based on our findings, the study recommends incorporating debates and online discussions into the ESL curriculum to ensure the development of the students’ critical thinking skills and to enhance their participation in classes and interaction with their peers.

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(Received January 06, 2021; Revised February 20, 2021; Accepted March 10, 2021)