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Through the Lens of Students: How Online Discussion Forums Affect Students' Learning

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Abstract

The current exploratory study investigated the perspectives of 13 students about the use of online discussion forums in a virtual English Language course at Sultan Qaboos University, Oman. A mixed methods approach utilizing self-report questionnaires, focus group interviews, and researcher observation was used to collect data. The study results showed that the majority of the participants viewed asynchronous discussion forums positively. Most importantly, the study revealed that participation in these forums enhanced various aspects of students' learning including critical reading, critical thinking and critical reflection skills, behavioral, emotional and cognitive engagement, as well as their social skills. On the other hand, the study results showed that online discussion forums were associated with several challenges. These findings have pedagogical implications on the design and implementation of these forums in the EFL field. The article calls for further research on online discussion forums in relation to students' level of study, academic achievement, and exam pass rates in various EFL courses.

Introduction

The spread of digital technologies in the last few decades, coupled with the proliferation of the Internet have influenced the way educators as well as learners conceptualize of and approach the teaching-learning process. Nowadays, educational institutions around the world encourage and support the integration of e-learning technologies in their educational systems (Al-Husban, 2020) in a learning age where web-based education has become ubiquitous (Dinc, 2017). Researchers believe that E-learning enhances students' overall learning experience. More specifically, Perdana, Jumadi, and Rosana (2019) argue that E-learning enhances students' higher order thinking skills such as analysis and argumentation. Furthermore, Lai (2016) posits that it impacts positively on students' academic performance through the flexibility it provides in terms of content and methodology as well as the personalized learning experience it offers (Al-Husban, 2020), as it makes catering for the individual students' needs and learning styles possible (Zanjani, 2015).

Online discussion forums (ODFs), accessible through a variety of Blackboard Learning Management Systems (LMS) such as Moodle, Edmodo, Educac and others, are considered one of the digital technologies that are used in virtual and blended learning environments and which could affect various aspects of students' learning. First, ODFs are considered an active learning-teaching approach; i.e., "an approach where learners participate in the

learning process by building knowledge and understanding” (Cambridge Assessment International Education, 2020, p. 1). In an active learning environment, students play an active role and take responsibility for their own learning. Thus, it is believed that the systematic integration of ODFs in online and blended learning environments in various fields of study brings about several learning gains. According to Lyu (2018), ODFs enhance the EFL learners’ learning experience considerably. In particular, Biriya and Thomas (2014) argue that increased student participation is one of the immediate benefits of participating in ODFs. First, when compared to a traditional classroom discussion which requires instant replies from the students, asynchronous online discussions are more flexible as the student is given ample time to reflect on his/her answers before posting them for others to read. The flexible nature of the ODFs ultimately affects the frequency as well as the quality of students’ responses positively. Moreover, an online discussion platform constitutes a valuable opportunity for the shy and reserved students to contribute their opinions about a variety of topics, which boosts their confidence and promotes their learning (Onyema, Deborah, AlSayed, Naveed, & Sanober, 2019).

In addition to increased student participation, it is argued that ODFs influence interaction and communication between students themselves and between students and the teacher significantly (Biriya & Thomas, 2014). According to Dang and Robertson (2010), these forums “shape students’ social relationships and identity” (p. 8). The ODF participants often negotiate friendship with other like-minded participants. They often read and comment on their discussion postings and seek to build friendship with them outside the teaching-learning context.

Furthermore, in ODFs learners become active participants and take ownership of their own learning as they make decisions about the postings to read, the questions to ask, and the comments to post, among other tasks a discussion requires (Harris & Sander, 2007). Added to that, researchers including Li and Liu (2018) and Lyu (2018) maintained that participation in ODFs facilitates English language acquisition, especially the development of reading and writing capacities. For instance, a study carried out by Miyazoe and Anderson (2012) showed a qualitative change in the participants’ writing styles. Another study conducted by Akmal (2017) revealed that the content, organization, lexis, syntax, and writing mechanics of students’ writing improved considerably as they took part in ODFs.

The reviewed literature above emphasizes the potential benefits of integrating ODFs as an active approach in the learning-teaching process. However, research in this area in the context of Oman is relatively scarce. Furthermore, EFL studies that explore the utilization of ODFs in learning are extremely limited. One possible reason for the reluctance of EFL teachers to adopt this approach in the current context of study is the challenges associated with designing, monitoring, and evaluating student participation in such forums (Murphy & Coleman, 2004). Another possible explanation is that asynchronous discussions, as an active learning technique, are more suitable and effective in Western educational settings where, unlike the Arab world, students are more accustomed to active learning methods. Thus, the aim of this exploratory study is to address the following research questions:

- What are the students’ overall perceptions of ODFs?
- How do students perceive the learning gains of participating in ODFs?
- What are the students’ perceptions of the challenges faced when participating in ODFs?

Method

Study Participants

The current study utilized purposive sampling to recruit the participants. This sampling technique is widely used in higher education research in general and EFL research in particular (Dörnyei, 2007; Gray, 2014). Only students who have experienced participating in an online discussion forum would be “information rich” and would, therefore, be able to “best provide insight into the research questions” (Emmel, 2013, p. 33). Thus, the participants were selected based on their accessibility. After explaining the study’s purpose to the potential participants and assuring them of the confidentiality of the data they would provide, 13 students agreed to take part in the study. Except for three, all the participants were Omanis with 39% males and 61% females. About 62% of the participants were aged 35 or above, 31% aged between 30 and 35, and 7% were aged below 30. About 54% of them were studying in full-time mode, while 46% were studying part-time. All the participants were enrolled in an English Language Skills course offered to prospective PhD students. The successful completion of the course is required to enroll in any doctorate courses offered by various colleges at Sultan Qaboos University. The participants belonged to six different pathways; namely, Art (4 students), Engineering (3 students), Agriculture (2 students), Medicine (2 students), Commerce (1 student), and Science (1 student).

Study Design

The study adopts a mixed methods design, which is considered the best design to adopt where time constraints might limit access to the participants, as is the case of the current study where access to the participants is limited to 15 weeks. Creswell (2009) argues that this particular design is the most suitable to adopt in order to obtain substantial data that results not only in well-validated but also substantiated findings. Therefore, the study utilizes a concurrent triangulation design which involves the collection and analysis of both quantitative and qualitative data simultaneously. The findings were mixed in the interpretation stage. This design particularly helped validate and corroborate the study’s findings (Creswell, Plano Clark, Gutmann, & Hanson, 2003).

First, data was collected through a self-report questionnaire that was administered in week 15. According to Fredricks and McColskey (2012) and Scott and Morrison (2007), self-reports are not only convenient and practical but also allow the collection of more inclusive data. The survey used in this study aimed to gather data about the participants’ overall impressions about their participation in ODFs in the course, and more specifically, about the potential benefits of such learning approach. The questionnaire comprised of 40 questions divided into four major parts, in addition to four demographic questions about nationality, gender, age group, and study mode. The four parts aimed to examine the students’ opinions about their overall learning experience, perceived learning gains, and potential challenges of participating in such ODFs. A 6-point Likert scale ranging from ‘Strongly Agree’ to ‘Strongly Disagree’ was used to measure the questionnaire items.

Along with the self-report questionnaire, data was collected through teacher observation of student participation in the forums. The observations were focused on the frequency and quality of the postings and were recorded biweekly. Data gathered through the questionnaires and observations were complementary (Renninger &

Bachrach, 2015).

Another data collection tool used in the study was semi-structured focus group interviews. The purpose of the discussions was to understand how the participants actually perceived the gains and challenges associated with ODFs' participation and the reasons behind those perceptions. Thus, addressing the 'how' and 'why' behind the participants' views was enabled through these discussions (Turner & Meyer, 2000). In week 15, an email was sent to all the potential participants inviting them to take part in the focus group interviews. Eight students volunteered to be interviewed and three discussion sessions were held on three different days for this purpose. Each discussion lasted about 60 minutes, and was audio-recorded and transcribed immediately after the interviews.

Data Analysis

Descriptive statistics were used to describe students' distribution across nationality, gender, age, and study mode by computing the frequencies and percentages. The mean scores were also calculated to decide the average score and the range of responses. The qualitative data collected through the focus group interviews was analyzed using an interactive model advocated by Miles and Humberman (1994), which consisted of three main processes; namely, data reduction, data display, and drawing and verifying conclusions. The first stage involved an initial coding activity, which allowed the development of a general sense of the data. An inferential coding scheme was employed in the second stage in order to identify patterns and recurrent themes. In the last stage, the connection between the various themes was established and comparisons were made in order to draw conclusions and answer the research questions.

The Online Discussion Forums Design

The English Language Skills course is offered to prospective PhD students who receive a band score six in the IELTS (International English Language Testing System) exam. The course intends to enhance students' reading, writing, research, and study skills. The online discussion is a non-graded course component and is a platform to discuss various topics related to the textbook themes. These discussions are well structured and held systematically every two weeks, which is the allotted time to cover each theme. Each discussion consists of several stages.

First, on the first day of the week, the teacher posts a discussion topic on the LMS Moodle. The following are examples of such questions: 'Do you think that Emotional Intelligence is the most important of the multiple intelligences of human beings?' and 'Do you agree that a socio-scientific issue-based research approach promotes critical thinking?' In the second stage, students write a 110-word long response to the discussion topic and post it on the forum. Limiting the length of students' writing to a 110 words was meant not only to reduce the stress that longer writings might cause to students, but also to help students remain focused on the arguments they use. Once students post their initial response on the forum, they read each other's contributions and select two postings to respond to them. Next, they write a reply to each of the selected posts. In their replies, students show their agreement or disagreement with the selected ideas, elaborate on and provide supporting ideas to a certain argument, and/or ask questions to their peers, etc. The last stage in the process involves responding to comments

from peers if a student receives any. This stage particularly aims to enhance the interactive nature of such discussions.

Results and Discussion

Students' Overall Perceptions of ODFs

The first question the study posed focused on the students' overall impression about participating in ODFs. The study showed that the large majority of the study participants (93%) viewed taking part in these discussions positively and considered it a new experience that introduced them to a novel teaching-learning technique and methodology, as at that time only one study participant had experienced taking part in similar discussions at an undergraduate study level. This finding emphasizes the fact that educators in the Omani context shy away from integrating this approach in teaching possibly due to the difficulties entailed in planning, monitoring, and assessing such forums (Murphy & Coleman, 2004; Seethamraju, 2014). The study participants described this technique as "interesting" (MAM8), "effective" (BGF2), "very useful" (MAM8), and "beneficial" (JAF5). Above all, one interviewee considered it as the "most comprehensive learning experience" and "the most interesting thing in the course" (JAF5). This finding contradicts with previous claims that, as an active teaching-learning approach, ODFs might not be effective in a non-Western educational setting like Oman (Nguyena, Terlouw, & Pilot, 2006). On the other hand, this finding aligns well with Hamann, Pollock, and Wilson's (2012) study results, which showed that students consider ODFs the best platform where they can express their thoughts, and consequently, consider it an invaluable learning experience. Although students' overall impressions about ODFs are positive, the way the discussion is structured might have an impact on students' perceptions. For instance, one of the interviewees expressed her dissatisfaction with the ODFs' structure saying, "I think the main idea is ok, but it is not the final way it could be used in the education field." (FSF6). Afify (2019), Hamann, Pollock and Wilson (2012), and Seethamraju (2014) pointed out that several factors contribute to the effectiveness of an ODF. Among such factors there is student preferences (e.g. face-to-face versus online), discussion design (e.g. group size, topics, discussion structure), delivery strategies (e.g. teacher involvement), purpose (e.g. graded versus non-graded), etc. Consequently, EFL teachers who are interested in this approach might negotiate these design features with their students to win their buy-in.

Learning Gains of Participating in ODFs

In addition to exploring the participants' overall perceptions of the utilization of ODFs as a teaching and learning tool in the course, the study sought to investigate how the participants perceived the learning gains of taking part in the ODFs.

Enhancement of the Participants' Critical Reading Skills

Primarily, the study revealed that ODFs enabled students to enhance their reading skills in general and critical reading skills in particular. Critical reading is defined as "the process of evaluating the authenticity and validity of material and of formulating an opinion about it." (Demiroz, 2007). All the respondents indicated that, before

they contributed their answers to the forum, they tried to define the discussion topics clearly to ensure they have understood the topic well. This was achieved through various means like conducting extensive and intensive internet research to learn more about the topic. For instance, one of the interviewees explained this saying “I really search for the information, well understand it, and when I have the idea built in my mind that is the time when I write...” (FSF6). Another interviewee emphasized this idea saying, “I should gather more information about the topic especially from scientific journals...I should include some scientific evidence to support my opinion” (MAM8). Although 54% of the respondents indicated that they did not directly ask for clarification from the teacher and other students when faced with difficulties, they explained that they enhanced their understanding of the topic by reading other students’ postings. One of the discussion participants explained this idea saying, “I used to post my work late. I read most of my colleagues’ posts, then I understand more details about my post” (MSM7). Along with developing a deep understanding of the topic through various means, the majority of the study participants (93%) claimed that they evaluated information in the forums and compared any concepts the participants discussed. One of the interviewees said, “Actually, I read these ideas more than one time to analyze what they mean and what their purpose is in order to argue and to understand how to reply” (MSM7). In fact, the study participants indicated that the forums engaged them in higher order thinking skills like analysis and evaluation. Upon asking them about the basis for selecting postings to comment on, one of the interviewees replied, “We need to critically analyze what our colleagues are saying. Sometimes, initially, they could be saying something similar to us, but some points they mention could be different from our views and sometimes could be the counter argument of our views” (JAF5). Another participant explained, “I evaluate other students’ beliefs, especially when I discuss topics important for human beings...I evaluate information as well and the proof or evidence they use to support their answer” (MSM7). Another interviewee emphasized the need to read the discussion posts critically before replying to any of them saying, “How I choose some of them and reply to them may be that requires analyzing the posts”. Another interviewee emphasized this idea saying, “This is like a practice for how to evaluate information from different sources...I have to read deeply and understand how the person thinks. This helps me a lot to evaluate information in the forum” (AHF1). Thus, analysis and evaluation formed the basis on which students selected postings to respond to by commenting, elaborating, and or critiquing them.

Enhancement of the Participants’ Critical Thinking Skills

In addition to critical reading, the respondents reported that the ODFs enhanced their critical thinking capacities considerably. This study considers critical thinking an extension of critical reading and conceptualizes it as a construct that consists of the “component skills of analyzing arguments, making inferences, using inductive or deductive reasoning, judging or evaluating, and making decisions or solving problems” (Lai, 2011, p. 2). The vast majority of the study participants (93%) claimed that the ODFs allowed them to think deeply about the topic and their ideas, and they ensured that they gathered sufficient and relevant information from multiple sources so that they could post effective and useful information in the forum and provide strong and relevant arguments when commenting on their peers’ postings. One interviewee highlighted this idea saying, “It encouraged me to think deeply because while discussing something with others, you have to give the best information you have.” (BGF2). About 93% of the participants claimed that in addition to searching for additional resources, they tried their best to combine various ideas in the forum in a logical order by relating new information to what they already know and 77% of them reported keeping track of their own understanding. One of the discussion participants described

this process saying, “I read these ideas more than one time to analyze what they mean, what their purpose is and to understand how to reply and how to argue for or against them” (MSM7). Engaging in deep thinking processes influenced the quality of the participants’ initial postings as well as their comments on their peers’ postings.

This study finding aligns with results from previous studies that investigated the impact of ODF participation on students’ critical thinking capacities. For instance, a study carried out by Fitriana and Anggial (2016), which involved 26 students enrolled in a Speaking II class at Bandar Lampung University, Indonesia, showed that participants in such forums were able to advance their thinking processes by researching information about the discussion topics, reading and evaluating postings from peers, and being critical when responding in the forum. Similarly, Jacob (2012) argued that ODFs enhance students’ critical thinking capacities in a slow, but steady manner, especially if the instructor efficiently supervises the forum. On the other hand, a study conducted by Al-Husban (2020) showed that ODFs might not enhance all aspects of students’ critical thinking skills in the same manner. For instance, using Newman’s indicators of critical thinking, her study showed that the relevance and importance of students’ postings were enhanced in ODFs; however, justification and critical assessment were not. Using Garrison’s critical thinking model, however, the study participants could recognize and explore problems, but their ability to evaluate the problem and integrate solutions into their existing knowledge was underdeveloped. Therefore, it is extremely important for teachers to design such ODFs carefully and to monitor them closely to maximize their benefit for the participants while focusing on the skills they would like these participants to develop.

Another interesting finding of the current study is that ODFs enhance the participants’ critical reflection skills. According to Hickson (2011), critical reflection involves analyzing and critiquing the assumptions on which our beliefs and values are based. The current study revealed that the ODFs provided many students with a valuable opportunity to reflect on and evaluate their writing skills as well as their thinking processes. For instance, one of the interviewees explained, “When I read my colleagues’ posts, I sometimes see opinions and ideas better than what I have. It helps me to define my weaknesses or which aspect of my writing I should focus on or work on in the future” (MNF4). Similarly, one interviewee explained, “Sometimes students write and elaborate more about the topic and critically think about the topic more than I do. So when I compare my writing with them, I can see where my weaknesses are and later I need to overcome them” (JAF5). Receiving comments from peers was also another interesting aspect of the discussion that led some students to reflect on their long-held beliefs and assumptions and at times to change their views because of the strong arguments their peers provided. One participant explained, “When we see others’ replies, we can grasp the deficiency in our understanding...I can compare how they understand and how I understand the same topic” (JAF5). In fact, one of the interviewees described how participating in ODFs influenced her attitude towards communication with others through reflection saying, “It opened my eyes to improve my discussion skills...I think I must research for ways to develop and find the best way to communicate with others and develop my skills” (FSF8). Another study participant confirmed that participating in these forums led her to reconsider her beliefs about making mistakes and language learning in general. She said, “The discussion forum gave me the chance to see others’ writings, ideas, and mistakes. It helped me to realize that mistakes are something usual and normal to learn. Even others who we think are perfect, they make mistakes”. She added, “Before, in English language courses, I feared to participate and to

make mistakes. I think this put me in a bad situation... When you accept that you make mistakes, I think that your learning chances will be better and faster.” (MNF4).

Although research that explores the impact of ODFs on students’ reflective thinking in the EFL field is scarce, results from studies conducted in other fields such as medicine, information technology, political science, and accounting, etc. confirm this study’s finding. For instance, a study conducted by Chadha (2017) which involved 87 students enrolled in several upper- and lower-division political science courses showed that involving the participants in interactive weekly discussions, especially in a collaborative online or blended learning environment, engaged them in academic reflective practice. Curtis (2006) also emphasized that ODFs constitute an excellent opportunity for participants to examine their assumptions and beliefs about various aspects of their lives, including academic and professional life. In fact, Seethamraju (2014) believes that ODFs foster “dialogue, reflection, knowledge construction, and self-assessment” (p. 2). Other researchers like Jabbari, Mohammadi, and Fazilatfar (2017) also pointed out that the participants’ involvement with learning tasks and contributions are enhanced in ODFs. However, it should be noted here that if the instructor does not encourage the participants to engage actively in the reflective process, to attach multiple meanings to various lived experiences, and to reflect on the origin of their own beliefs, this opportunity could be squandered. This emphasizes the crucial guiding role that instructors play in achieving the desired positive outcomes.

Another positive impact the current study showed is the enhancement of students’ engagement at the behavioral, emotional, and cognitive levels in ODFs. Behaviorally, the respondents claimed that their participation increased, as 85% of them reported taking part in all the discussion forums, reading almost all other students’ discussion posts, and replying to more than two posts in each discussion thread. This was confirmed by the researcher’s observation of the students’ contributions to the forum and was emphasized by many of the interviewees during the discussions. For example, one of the participants said, “When I receive the notification that someone posted on the forum, I immediately check what they wrote” (FSF6). Another interviewee explained her enthusiasm to read other students’ posts saying, “Because I don’t want to miss others’ opinion, I read all discussions before I start the new week and we start discussing a new topic” (AHF1). In fact, one of the discussion participants believed that reading these posts was an interesting aspect of the discussion. She said, “I think it is more interesting, and more useful than writing my posts...I already know my ideas and opinions, so what is really useful is to know what others’ opinions are, what they say, and their writing” (MNF4). The students’ increased participation could be attributed to the flexible nature of asynchronous online discussions and ample time given to them to post their ideas on the forum. In fact, Biriya and Thomas (2014) argue that their study showed that flexibility was a powerful motivator for their students to take part in the discussions. Thus, a two-week time period is the recommended time period allotted to discuss a specific topic to maximize students’ participation and enhance the quality of the postings.

Along with the improved participation, the current study revealed that the effort the participants put in the discussions increased considerably, which influenced the quality of their postings positively. About 93% of the respondents reported making an effort to write good-quality initial posts and replies by reading more and searching for new information. One possible explanation for the increased effort in the current study could be the

controversial nature of the discussion questions, as before forming an opinion the participants should understand the topic thoroughly and consider different arguments they would use to support their viewpoint carefully. Afify (2019) argued that the discussion topic is one of the factors that might influence students' performance in a forum and the effectiveness of the discussion positively or negatively. He emphasized that a key feature is to base a discussion question on higher rather than lower order of thinking to encourage deep rather than superficial discussions. Another possible reason for the increased effort could be the fear of losing face. One interviewee said, "When you know that others will see your work, it should be good, it should be perfect" (AZ73). Another interviewee added, "I should provide evidence, not just agree or disagree based on my experience. My experience is important, but it might not be correct" (MAM8). Similarly, another participant highlighted the need to post good quality discussion contributions saying, "When discussing something with others, you have to give the best information you have. You should have enough information and read more about the topic, not just have basic information" (BGF2). In fact, many of the study participants believed that those postings contributed greatly to the image that other participants would have about them. One of the interviewees stressed this idea saying, "As a PhD student, from a psychological point of view, I think I should be perfect. Everything should be perfect in reading and writing" (MAM8). This finding indicates that social embarrassment and losing face are still considered major concerns for many students in the Arab Gulf states like Oman despite the claims of researchers like Al-Harhi (2005) who contended that the 'shame culture' is reduced in online learning environments in these countries. In fact, Li and Liu (2018) warned that the discussion forum could be viewed as a burden for some students due to the fear of appearing silly when making errors. Since this feeling could have debilitating effects on students' performance, instructors should help students overcome this fear by ensuring that the discussion environment is encouraging and non-threatening for all the participants through positive feedback and engagement with students in the forum.

Emotionally, the study revealed that ODFs triggered both positive and negative feelings in the study participants depending on the task performed. On the one hand, the majority of the participants (85%) reported enjoying the discussions; more specifically, most of them (93%) enjoyed writing their initial posts. The feeling of interest and enjoyment could be attributed to the participants' desire to share ideas with peers, to contribute knowledge to the forum, and to interact with others. For instance, one of the interviewees considered the first task of posting responses to a discussion topic a valuable opportunity to expand her knowledge about the topic, exchange ideas with other participants, and to learn from others (AZF3). Another interviewee described his opinion saying, "I want to express my opinion because I have already read about the topic and I have evidence. I like to provide my own perceptions. This is interesting for me because I want to know what other students think of my opinion" (MSM7). Another participant, however, considered it a challenge that she had to face bravely. She said, "I like the idea of challenge and those were critical thinking not normal questions. You have to give evidence to defend your argument. I love that" (FSF6). Furthermore, 83% of the respondents reported their interest in reading other participants' posts more. One of the interviewees considered it the best aspect of the discussion since it helped her learn about her peers' ideas and writing style (MNF4).

On the other hand, 23% of the study participants reported feeling unhappy and scared to participate in the forum, more specifically to comment on peers' postings. These negative feelings were triggered by the discomfort the

participants felt providing negative comments about their peers' posts. For instance, one of the interviewees explained, "Some students felt fear, not fear but embarrassed to say 'I don't agree with you' because all other students will see my comment against him. So may be that student will not participate again" and added, "I don't like to reply against them and say to them this is not correct or wrong... May be he/she will be embarrassed. Also because you know, people don't like it when somebody says you are wrong to them or disagrees with them" (MAM8). Another student further explained, "I don't like the idea. I feel I am afraid to hurt them or say something they might get angry or disappointed. It's better for me not to say" (FSF6). Thus, when asked about the basis on which they selected posts to respond to, one of the interviewees explained, "I choose someone who agrees with me. I mostly replied to people who agreed with me because we have the same beliefs and mind sets" (MSM7). In fact, only 69% of the survey respondents reported that they tried to include information that opposes the argued position when replying to others' posts, compared with 93% who claimed they included information that supported the argued position. The reluctance to criticize others' postings was also observed by the researcher in the participants' replies which were dominated by phrases that express agreement (85%) like 'I agree with you', 'You are right', 'I am interested in your post', and 'I totally agree with you' compared with phrases showing disagreement. Receiving comments that contradicted with their own beliefs and assumptions as well as criticism about various aspects of their postings also caused negative feelings in some participants. One of the interviewees described this saying, "We need to reply to each other. This reply may sometimes cause anxiety, a feeling of anger because they reply to your post in a negative way" (JAF5).

This study result aligns with findings from previous research which showed that students' participation in ODFs is largely influenced by several cultural dimensions (Onyema et al., 2019). For example, collectivist cultures, which generally pertain to the Arab society, value homogeneity among various groups. This is why people in these societies are often integrated into strong and cohesive groups that view criticism negatively. Consequently, discussion participants belonging to these cultures tend to avoid criticizing others' posts and feel embarrassed and even offended if they receive criticism from peers (Lyu, 2018). Therefore, ODFs in these educational settings might encourage harmony instead of debate, thus resulting in poor quality discussions (Lyu, 2018). Educators operating in these educational settings should consider this critical factor and encourage the discussion participants to overcome this obstacle by highlighting the positive impact of deep discussions and constructive criticism on their learning as well as academic and professional growth.

The current study also revealed that cognitive engagement is enhanced in ODFs. According to Rotgans and Schmidt (2011), cognitive engagement is "the extent to which students' are willing and able to take on the learning task at hand. This includes the amount of effort students are willing to invest in working on the task and how long they persist" (p. 467). Most of the participants in the current study (93%) reported that they persevered and invested a lot of effort in the various stages of the discussion. Prior to the discussion, almost all the participants (93%) emphasized that they searched the Internet for additional sources of information not only to understand the topic better, but also to select the best arguments they would use to support their point of view. While writing, their initial posts, all the participants stressed the amount of effort that they put in order to produce a good quality writing. One of the interviewees described this process saying, "I write a draft first, and then I go through the text or writing twice. Then, to be honest, I compare it with others and what they wrote, may be I missed something...I

check if I satisfied all the requirements of the question in my answer. Then I proofread it. After that, I post it” (JAF5). After they have posted their initial posts, the participants also reported putting effort in reading other participants’ postings, analyzing and evaluating them, selecting posts to respond to, and writing their comments and replies. These tasks engaged the participants in higher order thinking skills and enhanced their cognitive engagement considerably. Simultaneously, various decisions that the participants had to make throughout the discussion stages also encouraged them to take ownership of their own learning and enhanced their autonomy.

This study finding aligns with those highlighted by Cothran and Ennis (2000) and Sherab (2013) who believe that the participants’ engagement in active learning scenarios has a positive impact on their cognitive engagement. According to Dang and Robertson (2010) and Harris and Sander (2007), being an active learning approach, ODFs promote confidence and consequently increase learner autonomy and engagement in learning.

In addition, the current study revealed that the students’ participation in ODFs enhanced their social skills. According to the participants, taking part in these discussions particularly boosted their written communication skills. Most of them claimed that they learned how to respond to others in a direct and focused way, and most importantly, in a polite and non-offensive manner. One of the interviewees explained, “If you don’t agree with someone, how you write it? I have to use the right words. Even if I disagree, I have to put it in a polite way” (BGF2). Another interviewee commented, “Because we are replying to others, we have to write in a polite way because we don’t want to write ‘No, I don’t agree’ or express the counterargument in a way that makes the other person nervous or he/she does not like what we said. So we have to be polite” (JAF5). This can be explained by the high-context, collectivist culture of the Omani society which cherishes unity and harmony and values politeness considerably (Mujtaba, Khanfar, & Khanfar, 2009).

The participants also claimed that the ODFs developed their argumentation skills, which are crucial for their personal and academic success. One of the interviewees explained, “You need to answer and convince others because this is a real-life task. We have this kind of discussion in our life, at home, at work... It happens. Different people have different perspectives” (MSM7). Another interviewee added, “We improved one skill, how we convince others with our point of view in a scientific way because as researchers all our future is about discussions, debate and sharing information” (MAM8).

The ODFs also constituted an excellent opportunity for the participants to build relationships with others in the group, especially that the course was offered online and the students had never had the chance to meet each other face-to-face. For instance, one of the interviewees expressed this idea saying, “When I reply to X, I know what she is thinking...when she replies, I feel we are like friends” (JAF5). According to some of the participants, this led to further collaboration between them. For instance, one interviewee explained the reason he would comment on posts that align with his own opinion saying, “You need to have a link with your colleagues. We agree about the same point, so it will be more helpful. Actually, we can increase our knowledge. That happened with one of my colleagues X. He gave me more information, evidence, proofs from scientific research related to my major” (MSM7). In fact, this finding is in agreement with Dang and Robertson’s (2010) finding which showed that online communication shapes both students’ social relationships and identity, as they negotiate friendship with like-minded participants by reading and commenting on their postings. It also aligns with Onyema et al. (2019) whose

research showed that improved communication and relationship between the discussion participants is one of the immediate positive impacts of ODFs, which ultimately helps them develop a sense of a learning community outside the classroom (Li & Liu, 2018).

Challenges and Pedagogical Implications

The third question the current study posed was how the participants perceived the challenges accompanying participation in ODFs. The study revealed that participants in the current study faced three main challenges. According to 62% of the respondents, time was considered the major challenge associated with ODFs. The respondents reported the difficulty they faced writing effective posts and reading others' postings on the forum thoroughly due to time constraints, especially during the exam period and towards the end of the semester. For instance, one of the interviewees described the way her participation was affected saying, "Once we came to the end of the semester, we had many assignments to submit and, actually, I delayed posting my discussion and delayed reading others' postings" (AZF3). Another interviewee expressed the same concern saying, "We are in the end of the semester and we have a lot of assignments to do. That is what makes me sometimes want to finish it as soon as possible to get started with other assignments" and she added, "This makes it less effective" (MNF4). This finding has a major implication for the design and application of this learning approach in the EFL field, especially if ODFs are a graded course component. To avoid this issue, the discussion could be put on hold during busy times like the mid-term exam period. Moreover, the discussion could be ended one or two weeks before the academic semester ends in order to avoid low student participation, bad quality posts, and to relieve the stress that these discussions could cause in some students during those stressful times.

One unanticipated finding was that some of the participants considered dealing with others' writings a major challenge. About 38% of the respondents reported that their only concern when reading others' post was to finish reading them rather than thoroughly understand them. Moreover, 54% reported that they did not ask for clarification when faced with difficulties to understand information written by other participants. There are many possible explanations for this, including the time constraints and shyness of some of the participants. However, many interviewees highlighted the quality of the students' writing as a major cause for this behavior. Describing this challenge, one interviewee said, "When I try to read my colleagues' writing, I face some challenges understanding the language, the way they write and express ideas. It was not that clear. So, it bothers me and annoys me and I sometimes don't continue reading because the ideas aren't well prepared or not well presented" (FSF6). Another interviewee stressed another aspect of this challenge saying, "Some people share their opinion in a difficult way. So I find it difficult and I need more time to understand their opinion" (AHF1). This particular finding is inconsistent with results from other studies which advocate ODFs as a learning approach that improves students' writing considerably (Akmal, 2017; Miyazoe & Anderson, 2012), and it suggests that ODFs might not have a similar impact on various aspects of students' writing. For instance, this finding suggests that ODFs might enhance students' writing in terms of content and organization of ideas but not in terms of syntax and grammar, which vary according to the students' linguistic proficiency. One major implication of this finding is to choose the student population to participate in ODFs carefully, as participating in these forums could disadvantage students with low linguistic proficiency. Moreover, the instructor should identify a suitable way to monitor the

quality of students' postings to enhance their readability. One possible way is to provide feedback to students before they post their writings on the forum.

Researchers like Al-Husban (2020) and Lai (2016) argued that the flexible nature of the ODFs facilitates interaction between the participants. However, contrary to this expectation, the current study showed that this aspect of ODFs could be counterproductive and could have negative effects on students' participation. Many of the discussion participants emphasized that the time delay between uploading the initial posts on the LMS and receiving comments about them constituted a challenge for them. One of the interviewees commented, "The challenge was waiting for a reply from others because they don't write at the same time. I write something, and at that time I am free and waiting for others to write and share ideas, but no one is there at that time". She added, "Sometimes you might miss the response of others and their opinions if they respond after a long time" (BGF2). This particular issue could influence the interactive nature of the discussions negatively by demotivating enthusiastic and fast students. To overcome this issue, synchronous online discussions could be used instead of asynchronous discussions, although this might compromise on the depth and breadth of the discussions since students will not have sufficient time to search for information and elaborate on their ideas. Instructors, however, could set deadlines for each of the discussion tasks in the instructions in order to avoid last minute contributions that the majority of the discussion participants could miss.

Conclusion

The current study explored the students' perspectives about the use of ODFs as a teaching-learning approach in an online English language course. The study revealed that this approach brings about several learning gains although there could be several challenges associated with it. On the one hand, this approach to learning enhances students' ability to read and think critically about various aspects of the discussion such as the information presented and writing style. This study also showed that critical reflection is also enhanced as students reflect on their long-held beliefs and assumptions about different topics as well as their learning experience. Furthermore, the ODFs contributed to students' engagement positively leading to increased behavioral, emotional and cognitive engagement in the learning process. Another positive impact of ODFs the study showed is the enhancement of students' social skills. Conversely, several challenges could be associated with ODFs like time constraints, which could influence the students' participation negatively, the participants' poor linguistic proficiency, which could disadvantage both the good and the low-level students, and the flexible nature of the discussion, which could be counterproductive if not controlled.

The study findings have pedagogical implications and implications for future research in the field of English as foreign language teaching. Most importantly, ODFs emerge as an effective instructional tool that is worthy of exploration in the context of Oman. Thus, research studies that investigate the way different EFL student groups interact in these forums are vital. The exploration of other aspects of students' learning such as exam pass rates and academic achievement in relation to participation in ODFs is equally important.

References

- Afify, M. K. (2019). The Influence of group size in the asynchronous online discussions on the development of critical thinking skills, and on improving students' performance in online discussion forum. *International Journal of Emerging Technologies in Learning (iJET)*, 14(5), 132-152. doi: 10.3991/ijet.v14i05.9351
- Akmal, A. (2017). Impact of web based learning on EFL: Using on-line discussion forum (ODF) to enhance students' writing skills. *Universal Journal of Educational Research* 5(8), 1345-1348. doi: 10.13189/ujer.2017.050807
- Al Harthi, A. S. (2005). Distance higher education experiences of Arab Gulf students in the United States: A cultural perspective. *International Review of Research in Open and Distance Learning*, 6(3), 1-14. doi:10.19173/irrodl.v6i3.263
- Al-Husban, N. A. (2020). Critical thinking skills in asynchronous discussion forums: A case study. *International Journal of Technology in Education (IJTE)*, 3(2), 82-91. doi: 10.46328/ijte.v3i2.22
- Biriyai, A. H., & Thomas, E. V. (2014). Online discussion forum: A tool for effective student-teacher interaction. *International Journal of Applied Science-Research and Review*, 1(3), 111-116. doi: 10.2139/ssrn.2525047
- Cambridge Assessment International Education. (April 2020). *Active learning*. Retrieved from <https://www.cambridgeinternational.org/Images/271174-active-learning.pdf>
- Chadha, A. (2017). Comparing student reflectiveness in online discussion forums across modes of instruction and levels of courses. *Journal of Educators Online*, 14(2). Retrieved from https://www.thejeo.com/archive/2017_14_2/chadha
- Cothran, D. J., & Ennis, C. D. (2000). Building bridges to student engagement: Communicating respect and care for students in urban high schools. *Journal of Research and Development in Education*, 33(2), 106-117.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). California: SAGE Publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. L. (2003). Advanced mixed methods research designs. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioural research* (pp. 209-240). Thousand Oaks: SAGE Publications.
- Curtis, J. N. (2006). Using online discussion forums to promote critical reflection among pre and in-service HIV/AIDS educators and service providers. *International Electronic Journal of Health Education*, 9(1), 166-179. Retrieved from <https://files.eric.ed.gov/fulltext/EJ794135.pdf>
- Dang, T. T., & Robertson, M. (2010). Impacts of learning management system on learner autonomy in EFL learning. *International Education Studies*, 3(3), 3-11. doi:10.5539/ies.v3n3p3
- Demiroz, H. (2007). *Critical reading its key concepts and importance in foreign language teaching*. Retrieved from https://www.academia.edu/4885401/Critical_reading_its_key_concepts_and_importance_in_foreign_language_teaching
- Dinc, E. (2017). Web-based education and accessibility. *International Journal of Technology in Education and Science (IJES)*, 1(1), 29-35.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Emmel, N. (2013). *Sampling and choosing cases in research: A realist approach*. Los Angeles: SAGE


Publications.

- Fitriana, S., & Anggia1, A. (2016). *Students' critical thinking in online discussion forum*. The Fourth International Conference on Education and Language (4th ICEL). Retrieved from <http://artikel.ubl.ac.id/index.php/icel/article/view/513>
- Fredricks, J. A., & McColskey, W. (2012). The measurement of student engagement: A comparative analysis of various methods and student self-report instruments. In S. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 763-781). New York: Springer.
- Gray, D. E. (2014). *Doing research in the real world* (3rd ed.). London: SAGE Publications.
- Hamann, K., Pollock, P. H., & Wilson, B. M. (2012). Assessing student perceptions of the benefits of discussions in small group, large-class, and online learning contexts. *College Teaching*, 60(2), 65-75. doi: 10.1080/87567555.2011.633407
- Harris, N., & Sander, M. (2007). *Developing online discussion forums as student centered peer e-learning environments*. Retrieved from <https://ascilite.org/conferences/singapore07/procs/harris.pdf>
- Hickson, H. (2011) Critical reflection: Reflecting on learning to be reflective. *Reflective Practice: International and Multidisciplinary Perspectives*, 12(6), 829-839. doi:10.1080/14623943.2011.616687
- Jabbari, A. A., Mohammadi, M. O., & Fazilatfar, A. M. (2017). Asynchronous online discussion forum: A key to enhance students' writing ability and attitudes in Iran. *Iranian Journal of Applied Linguistics (IJAL)*, 20(2), 35-79.
- Jacob, S. M. (2012). Analyzing critical thinking skills using online discussion forums and CCTST. *Procedia-Social and Behavioral Sciences*, 31(2012), 805-809. doi:10.1016/j.sbspro.2011.12.145
- Lai, C. (2016). Third graders' understanding of air concepts facilitated by the iPod inquiry teaching method. *International Journal of Research in Education and Science (IJRES)*, 2(1), 1-9.
- Lai, E. R. (2011). *Critical thinking: A literature review* (Research report: Always learning). Pearson. Retrieved from <http://images.pearsonassessments.com/images/tmrs/CriticalThinkingReviewFINAL.pdf>
- Li, F., & Liu, Y. (2018). Can using a discussion board enhance writing practice for EAP/ESL students? *Theory and Practice in Language Studies*, 8(5), 467-474. doi:10.17507/tpls.0805.02
- Lyu, X. (2018). *The effectiveness of online discussion forums and recommendations for Chinese higher education* (Unpublished master's thesis). University of Victoria, British Columbia, Canada. Retrieved from https://dspace.library.uvic.ca/bitstream/handle/1828/9335/Lyu_Xiaoling_MEd_2018.pdf?sequence=5&isAllowed=y
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks: SAGE Publications.
- Miyazoe, T., & Anderson, T. (2012). Discuss, reflect, and collaborate: A qualitative analysis of forum, blog, and wiki use in an EFL blended learning course. *Procedia - Social and Behavioral Sciences*, 4 (2012), 146-152. doi: 10.1016/j.sbspro.2012.02.030
- Mujtaba, B. G., & Khanfar, N. M., & Khanfar, S. M. (2009). Leadership tendencies of government employees in Oman: A study of task and relationship based on age and gender. *Public Organization Review*, 10(2), 173-190. doi: 10.1007/s11115-009-0103-x
- Murphy, E. & Coleman, E. (2004). Graduate students' experiences of challenges in online asynchronous discussions. *Canadian Journal of Learning and Technology*, 30(2). Retrieved from <https://cjlt.ca/index.php/cjlt/article/view/26522/19704>

- Nguyena, P., Terlouw, C., & Pilot, A. (2006, March). Culturally appropriate pedagogy: The case of group learning in Confucian heritage culture context. *Intercultural Education*, 17(1), 1-19. doi:10.1080/14675980500502172
- Onyema, E. M., Deborah, E. C., AlSayed, A. O., Naveed, Q. N., & Sanober, S. (2019). Online discussion forum as a tool for interactive learning and communication. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 4852- 4859. doi:10.35940/ijrte.D8062.118419
- Perdana, R., Jumadi, J., & Rosana, D. (2019). Relationship between analytical thinking skill and scientific argumentation using PBL with interactive CK 12 simulation. *International Journal on Social and Education Sciences*, 1(1), 16-23.
- Renninger, K. A., & Bachrach, J. E. (2015). Studying triggers for interest and engagement using observational methods. *Educational Psychologist*, 50(1), 56-69. doi:10.1080/00461520.2014.999920
- Rotgans, J. I., & Schmidt, H. (2011). Cognitive engagement in the problem-based learning classroom. *Advances in Health Sciences Education*, 16(4), 465-479. doi:10.1007/s10459-011-9272-9
- Scott, D., & Morrison, M. (2007). *Key ideas in educational research*. London: Continuum International Publishing.
- Seethamraju, R. (2014). Effectiveness of using online discussion forum for case study analysis. *Education Research International*, 2014. doi: 10.1155/2014/589860
- Sherab, K. (2013). Strategies for encouraging behavioural and cognitive engagement of pre-service student-teachers in Bhutan: An action research case study. *Educational Action Research*, 21(2), 164-184. doi:10.1080/09650792.2013.789710
- Turner, J. C., & Meyer, D. K. (2000). Studying and understanding the instructional contexts of classrooms: Using our past to forge our future. *Educational Psychologist*, 35(2), 69-85.
- Zanjani, N. (2015). *Success factors of engaging higher education students and staff with e-learning tools within Learning Management Systems* (Unpublished Doctoral dissertation) Queensland University of Technology, Brisbane, Australia. Retrieved from <https://eprints.qut.edu.au/83940/>

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