PgCert Student-faculty Perspectives on Online Collaborative Projects: A case from Middle East College

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Abstract
Teacher online collaboration has recently attracted more and more attention and interest in many parts of the world. Unfortunately, very little research, if at all, has been conducted so far in the Sultanate of Oman. The present paper sought to fill this severe gap in research by asking and finding answers to this central question: What beliefs and opinions do faculties hold towards online collaborative projects (OCPs)? It used a quantitative method approach through a questionnaire administered to a group of PgCert student-faculty group (n=50) from Middle East College to get to know about their perspectives concerning the questions set above. The results obtained revealed (a) a high positive feedback on the part of the study participants as to their involvements in online collaborative projects, (b) very different reports on issues faced when working on online collaborative projects, and (c) varying degrees of impacts of OCPs on their teaching practices. The results of the study will have tremendous significance to teachers in all fields of specialization who are/will be engaged in OCPs. The potential implications of these and other results on teacher practices and involvement in such OCPs are discussed.
Keywords: Online Collaborative Projects (OCPs), PgCert student-faculty, teacher beliefs and practices, teacher professional development

Introduction

The concurrency of both constructivist principles to learning and the introduction of information and communication technologies (ICT) have led to what is now called online collaborative learning (OCL). OCL is *a model of education in which* students play an active role in learning and are *encouraged to work together as a team and create knowledge* (Harasim, 2012; Ha & Jeroen, 2018).

Within the literature in the OCL field, there seems to be a strong consensus whereby education has to shift away from the teacher-centered instructional practice to student-centered pedagogy. The ultimate objective is to place the focus on students and encourage collaboration among them (Barab, 2004; Graham, 2019).

Quite recently, there have been renewed debates about the rationale for including online collaborative projects and their reportedly resulting positive learning outcomes for teachers (Cockerill, Craig, & Thurston, 2018). The discussions also concern the potential effects on teacher participants' viewpoints and beliefs about pedagogy (Kalaian & Kasim, 2017). The issues raised in these debates are crucial since teachers engaged in online collaborative projects are often required to make learning student-centered in their classroom practice (Weinberger & Shonfeld, 2020).

As in many other nations, Oman has shifted teaching practices towards constructivist methods, including student-centered learning approaches. Unfortunately, despite the continuous efforts provided by the Ministry of Higher Education to foster more collaborative knowledge building practices, documented cases of computer-supported collaborative learning applications (CSCL) in Oman are rare. Many higher-education courses still employ traditional constructivist teaching methods with relatively limited use of collaboration work in class. Indeed, students are almost usually expected to acquire, rather than construct, knowledge together with their peers and instructor (Porcaro & Al Musawi, 2011). There is still a need to encourage the use of CSCL tools and enhance collaborative knowledge-building (Porcaro, 2011).

An exemption seems to be there with Middle East College (MEC), one of the top five HEIs in the Sultanate of Oman, where (OCPs) are practiced. In partnership with Coventry University, this institution offers a program to its staff called Post Graduate Certificate (PgCert) to foster this notion of learning collaboratively in a virtual environment. One of the PgCert modules concerns the conduct and realization of online collaborative projects in partial fulfillment for the requirements of this certificate' award.

There is no research that investigates explicitly work on (OCPs) from Middle East College (MEC) faculty opinions. This study, therefore, tried to address this gap by exploring the views of student-teachers in Middle East College, which is the only institution in the country where OCPs are conducted to the best of our knowledge. This study posed the following research questions:

RQ1. What do faculties involved in online collaborative projects (OCPs) think about this type of project?

RQ2. What issues, if any, do they report they have faced when working on OCPs?

RQ3. What impacts do they state OCPs have had on their teaching practices?

The objectives of the above-stated questions were
- To identify the conceptions of the research participants on OCPs,
- To get to know about the various issues they faced while being engaged in OCPs, and
- To propose a set of suggestions and recommendations that would help enhance further involvements in OCPs and solve any problems that would arise in the course.

Literature Review
Online Collaborative Projects (OCPs)

Abundant literature is now available on face-to-face, non-Internet-mediated collaborative projects (CPs) (see, for example, Al-Balushi & Al-Aamri, 2014; Kokotsaki, Menzies, & Wiggins 2016; Tims, 2009). This type of CP refers to an instructional model that organizes learning around projects (Thomas, 2000). According to Bell (2010), it is "a student-driven, teacher-facilitated approach to learning" (p.39), whereby students drive their learning through inquiry and collaborative work to reflect their knowledge. In Tims's (2009) view, it is an instructional approach that explicitly allows the theory to be transformed into practice through meaningful hands-on activities or projects. In the same vein, Han, Yalvac, Capraro, and Capraro (2015) defined CPs as "an interdisciplinary, student-centered activity with a clearly defined project outcome" (p.64). For their part, Kokotsaki et al. (2016) consider students' autonomy, driving questions, constructive investigations, goal setting, and working together to reflect upon a purpose within real-world practices are the main characteristics of CPs.

Non-Internet-mediated projects are reportedly very beneficial in the sense that they allow students to play active roles as problem-solvers, decision-makers, and, or investigators (Patton, 2012). Additionally, many researchers have found that this type of project increases students' self-confidence. These views are very much consistent with those of Zheng (2017), who opines that "an instructional program that emphasizes project-based learning and 21st-century skills instills confidence and increases achievement in young learners" (p. 31). In this way, the students will actively control their education and learning processes.

Along with the use of technology tools to communicate, present, and publish students' projects, the integration of CPs enables the developing of critical thinking skills in learners (Cradler, McNabb, Freeman, & Burchett, 2002). According to Krauss and Boss (2013), technology—a tool for research and construction of new meanings and for reaching the learning communities out of the classes— is one of the conditions that ensures an exemplary implementation of project-based learning.

On the other hand, OCPs are relatively new. However, they are now witnessing increasing development thanks to computer-mediated communication (CMC) technologies (e.g., discussion boards, chat tools, etc.) and the use of social media platforms (e.g., Kahoot, Google Docs, etc.). Such technologies can provide online environments and play an essential role in supporting pedagogies focusing on students in OCPs environments. Moreover, students across the world are embracing learning through social media. A study conducted by Ansari and Khan (2020) revealed that 67% of Indian students accepted that mobile device and social media play a vital role in their academic performance and career enhancement.

In OCPs, students are required and expected to produce authentic language (Ellis & Hafner, 2008). They are equally assessed on how they approach the selected topics, write up their project, and present it orally in public in front of their peers and assessors. In this way, learners deepen and extend their academic vocabulary, speed up their language acquisition (Stripling, Lovett & Macko, 2009), raise their interest in learning the target language, and ideally enhance their attitudes and motivation. Besides, they develop both their critical thinking, problem-solving, and socialization skills (Xie, 2019).

According to Freedman (2009), creating collaborative knowledge is prone to trigger a recall. Learners can thus gain more profound comprehension of different topics (Yang & Wu, 2011) and live a successful educational experience (Garrison, Anderson & Archer, 2000). Teachers can enjoy at least three primary benefits while working on an online group project: the development of their metacognitive knowledge, the recognition of the value of a supportive learning community, and the new understanding of the constructive use of online communication tools (An & Kim 2007).

Many researchers agree that creating online learning environments is more than crucial for many a reason. To start with, it can provide learners with more privacy and additional time to prepare for class discussion. It additionally helps them to have the potential to produce more in-depth discussions. Besides, it gets them to improve the quality of learning, designing, and teaching the course—thus, having the practical benefits of encouraging broader student participation (Kemp & Grieve, 2014; Lundberg & Sheridan, 2015; Yamagata-Lynch, 2014; Zhang, 2013).

Researchers have also found that students get more motivated in participating in online collaborative tasks provided they are more interested in group topics. According to Vygotsky, "[a]llowing students to control and direct their learning whenever possible will help them reach a particular purpose which is specific to their needs and challenges their zone of proximal development" (as cited in Brindly, Walti, & Blachke, 2009, p.13). This is consistent with Bolkan's (2015) view, who reports that students, while working on OCPs, have shown strong signals to "persist longer on tasks when they are intrinsically motivated." (p. 81). According to Baker and Moyer (2018), "students who were more conscientious and intrinsically motivated had more favorable impressions of online courses" (p. 16). In the same vein, Nayir (2017) stated that "Extrinsic motivation should in no case be ignored; the more students engage themselves in academic activities, the more they will increase their academic success" (p. 60).

However, though acknowledging most of the above-stated merits of OCPs, Dirkx and Smith (2004) believed that OCPs are not without a few inherent shortcomings. They drew attention because that learners often feel reluctant, frustrated, and dissatisfied with collaborative learning methods, especially when working within small online groups. According to them, learners struggle to develop a sense of interdependence and intersubjectivity within their online groups. Negative interdependence is when students in the group discourage each other 's efforts to reach their goals. No interdependency exists when there is a Lack of correlation among students to achieve their goals (Johnson & Johnson, 2009).

Finally, Hron and Friedrich (2003) recommend that online students need to have enough computer literacy to avoid any possible interference between the technology they use and their communication. Besides, they advance that students should be provided with a novel and creative experience to keep them engaged and interested; otherwise, they would become overwhelmed and frustrated.

Postgraduate Certificate in Academic Practice in Higher Education (PgCert.)
        The Postgraduate Certificate in Academic Practice in Higher Education (PGCAPHE) is a certificate awarded by Coventry University, the UK, in collaboration and partnership with Middle East College's Centre for Academic Practices. It runs for twelve months, starting at the beginning of November. It comprises three assignments to complete in one year. One of these assignments is about reflecting on online collaborative projects. It was initiated in 2012 and ended in 2020, in line with MEC's 2015-2020 vision and mission (Middle East College, 2015).

        The PgCert generally aims at enabling staff (a) to develop their professional academic skills and knowledge within the context of higher education, (b) to equip them with the necessary skills and practical experience to ensure that they stay abreast of the latest developments in their domain and innovation, and (c) to familiarise them with contemporary international practices in teaching, learning, and research.

        The PgCert aims explicitly at helping staff (a) to deal with different issues and challenges they might confront in their academic practice, (b) to develop professional knowledge and skills, and (c) to become reflective practitioners in a higher education context (Coventry University, 2020).

Methods
        This study examined 50 (fifty) student-faculty' perspectives on the use of OCPs. This research uses a quantitative approach. According to Cassell and Symon (1994), measurements collected by the quantitative model are reliable, valid, and generalizable. The researcher utilized a self-administrated questionnaire to collect data. According to Hennik, Hutter, and Bailey (2018), this approach allows to identify issues from the perspectives of the participants and to understand the meaning/s and interpretations that they give to behavior, events, or objects. Therefore, a quantitative approach was selected in the present research to probe the student-faculty perceptions and unveil the issues they faced while working on OCPs).

Participants
        The current study took place at Middle East College (MEC), one of the fast-growing higher education institutions in the sultanate of Oman, and in affiliation to Coventry University, the UK; Wolverhampton University, the UK; and Breda University of Applied Science, Netherlands. It offers undergraduate and postgraduate programs and courses in Engineering, Computing, and Business Management.

        A total of 50 (fifty) PgCert student-teachers (29 male and 21 female) partook in the study's survey. Most of them (76%) had more than five years of teaching experience. Out of 50 participants, 20% were Omanis, and the rest were from different nationalities that include, but are

not limited to, Jordan, India, Iran, and Tunisia. The student-faculty were between 25 to 60 years of age and were from different departments. 70% of them held a Master's degree (MAs) while the rest had a Bachelor's degree (BA) and a Ph.D. An online questionnaire revolving around the three questions guiding this research addressed the perspectives and opinions of teacher-participants.

The current study used a purposive sampling strategy. Purposive sampling is an excellent way of seeking in-depth information from those experienced teachers who were in a strong position to divulge it (Cohen, Manion, & Morrison, 2007; Patton, 2002).

Research Design
The researcher posted an online questionnaire via Google docs and invited all current and alumni PgCert student-faculty to participate. The purpose was to gather student-faculty perceptions of the four research questions related to online collaborative projects (see the Introduction Section). The survey was divided into two sections. Section one was related to the participants' background (gender, nationality, teaching, and educational experience), and Section two consisted of three closed-ended questions and one open-ended question, to better understand student-faculty attitudes and opinions regarding OCPs (Ellis, 2004). The participants were asked to comment on the other impacts they thought OCPs would have on them and their students. The questionnaire was posted online on 1-15 August 2020.

The section to follow will deal with the data analysis and discuss the results of the research questions set.

Data Analysis
Here below are the findings regarding the research questions posed above, along with a brief discussion. They will be organized each in turn.

RQ1: What do faculties involved in online collaborative projects think about this type of project?
The table below represents the results given by faculties about their viewpoints about online collaborative projects (OCPs). Overall, a highly positive attitude among the participants can be noticed concerning these types of projects.

Table 1 *Respondents' feedback on the efficiency of online collaborative projects (%)*

On the efficiency of online collaborative projects (OCPs), I have:		SD	D	N	A	SA
1	an ample perception that the online collaborative projects are beneficial in developing my metacognitive knowledge.	02	06	06	40	46
2	enhanced my digital literacy skills	00	07	00	39	54
3	an enhanced impact on my learning	02	00	14	52	32
4	helped me accomplish the assignment with higher quality than if I were working alone.	04	04	00	50	42

5	a firm belief in the goals of OCPs as they foster a collaborative environment for the improvement of the ESL instruction in class.	00	08	10	36	46

Scale key: SD= Strongly Disagree; D= Disagree; N= Neutral; A= Agree; SA=Strongly Agree

As indicated, the respondents either agreed or strongly agreed that their digital skills developed thanks to the involvement in online collaborative projects (OCPs)—thus reaching 93%. A more or less percentage (92%) was also arrived at for Item four, where the students surveyed reported that the OCPs helped them accomplish their assignments with higher quality than if they were each working alone. A slightly less percentage can be seen for items one, three, and five, with a margin of just 2%. The results also show a significantly low rate for disagreement scales and neutrality—varying between the range of two and 14 for both types of ranking.

RQ2: What issues, if any, do the respondents report they have face when working on online collaborative projects?

The multiple bar charts below compare the results reported by the same study respondents regarding the issues they stated they faced while working on online collaborative projects.
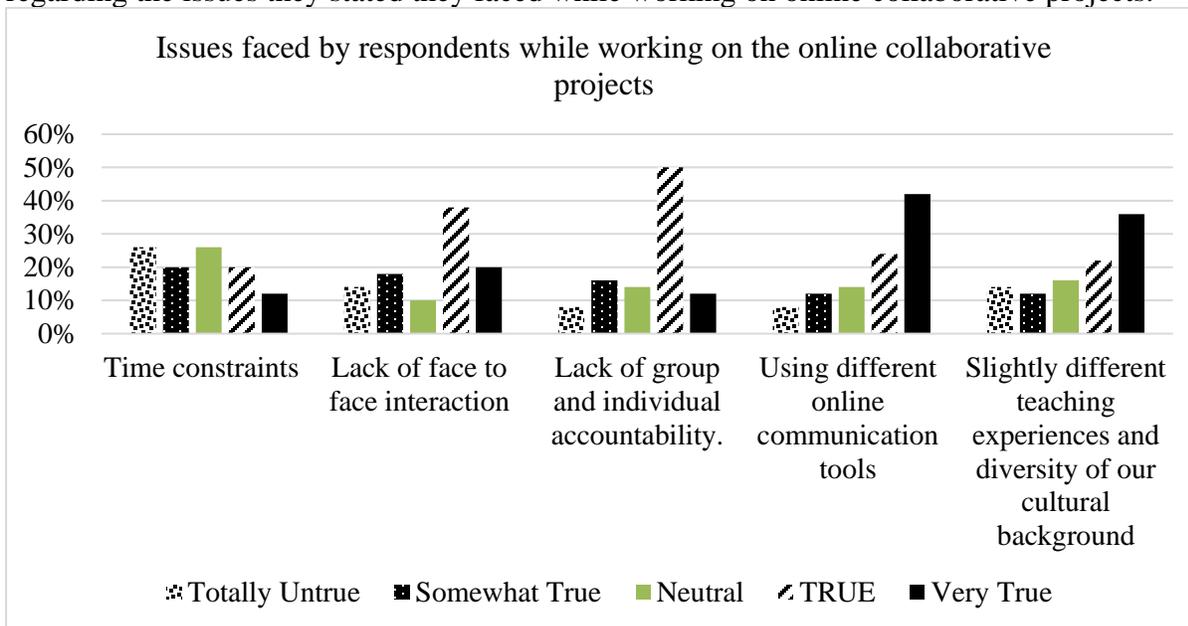

Figure1 Respondents' feedback on the issues faced while working on online collaborative projects (%).

Overall, the response frequencies yielded significant fluctuations from one question item to another. The student-faculty, as clearly shown in Figure one, encountered a considerably large number of issues—mainly, face-to-face interaction, lack of individual accountability, disparities in teaching experiences, diversity in cultural background, and differences in using online tools. Most noticeably, as many as 38 (or 76%) of them stressed that learning collaboratively online on projects was not enough and negated the integration of face to face interaction. This is aligned with the student-teachers sentiment, who opined that "during the OCP course, there was an absence or

lack of social interaction, and for students, there is a possible (dependency on external assistance)." Other participants (n= 39 or 78%) reported that the lack of group and individual accountability was not less critical factors that impeded their progress with OCPs. The total number of the respondents (n= 35 or 70%) agreed that having different teaching experiences and diversity has some negative impacts on their OCPs.

RQ3: What impacts do they state online collaborative projects have on their teaching practices?

Table two below shows the impact that OCPs have on faculty' teaching practices. All in all, it indicates highly positive influences as to their experience with OCPs. As shown, 86% of them reported that OCPs left a strong and lasting effect on their understanding of the purpose of these kinds of collaborative projects. As high as 98% stated, their self-awareness of the problems related to OCPs had increased remarkably.

Table 2 *Respondents' feedback on the impact of OCPs on their teaching practices (%).*

As a teacher, online collaborative projects have an impact on		SD	D	N	A	SA
1	my understanding of the purpose of collaborative OCPs	00	8	6	34	52
2	my self-awareness of the problems involved in OCPs	00	00	02	52	46
3	my strategies on how to motivate students	00	00	02	56	42
4	my tolerance for working with others from different linguistic and ethnic backgrounds.	00	02	12	50	36
5	my understanding of the instructions and course material.	00	10	06	36	48

Scale key: SD= Strongly Disagree; D= Disagree; N= Neutral; A= Agree; SA=Strongly Agree

The same highly positive satisfaction level, with a range of 86-98 percent, was also reported by the same faculty respondents concerning their tolerance with working with other peers from different ethnolinguistic backgrounds, their strategies on how to motivate students, and their understanding of the instructions and course material.

Discussion

Based on the results reported above, it can be affirmed that the teachers surveyed had significantly different opinions concerning the various items figuring in the questionnaire.

For one thing, the study participants reported a considerably high positive attitude as to the items for the first research question. This attitude has been witnessed in previous studies. One of these is the study conducted by Yang and Wu (2011), which concludes that learners who work together in online discussions and reflections can profoundly understand different topics, and probably acquire a successful educational experience (Garrison, Anderson, & Archer, 2000). This is also in line with other investigations which concluded that, in an online collaborative project context, creating online environments have become essential and fundamental to the student

experience, curriculum design, and the changing landscape of HE in teaching and learning (Kemp & Grieve, 2014; Lundberg & Sheridan, 2015; Yamagata-Lynch, 2014; Zhang, 2013).

Besides, the student teachers' perspectives on whether the OCPs have enhanced their digital literacy skills and improved the impact on their learning were also positive. These perspectives go in line with many researchers who have found that the digital environment allows a group of students to work together to enhance learning. According to Thomas and Brown (2011), in A New Culture of Learning, learning communities facilitated by technology allow individual and group students to profoundly broaden their conceptual understanding of curriculum topics. There seems to be little or no doubt that online environments have an enhanced impact on student learning, reduce anxiety, and optimize meaningful interaction (Lundberg & Sheridan, 2015). Using appropriate online technologies and platforms allow greater flexibility in learning, exchanging ideas, and support (Kemp & Grieve, 2014; Lundberg & Sheridan, 2015; Yamagata-Lynch, 2014; Zhang, 2013), in particular when implicated in a group project with other students.

Furthermore, this study revealed that most surveyed student-teachers declared that they had started to feel unprecedented motivation for providing students with numerous opportunities and useful motivational tools to undertake and encourage collaborative projects online. To achieve this, teachers should design a learner support system for students and set clear instructions for them (Pollard, Blevins, Connor & McGovern, 2013). They stated that this would hopefully create a more prejudice-free atmosphere and a robust online community where individuals trust group members and feel a sense of belonging as they move to online teaching (Rourke, Andersons, Garrison & Archer, 2001). This is very critical if teachers wish to make online collaborative communication smooth for students. It is also very essential if teachers want to empower learner partners to become not only digital literate but also local and global citizens before they set on work together on a given online collaborative project (Kreijns, Kirschner & Jochems, 2003).

However, regardless of the positive perspectives reported above, many other factors were seen to hinder the progress of OCPs from the respondents. The results also show a few relatively negative opinions on the part of the study participants. A total percentage of 47% (20% somewhat true, 20% true, and 7% very true) indicated that using many platforms to communicate was one of the noticeable challenges they faced. The research revealed that this could drive a learner to feel isolated and anxious due to miscommunication and fragmentation of ideas. As a result, the flexibility in online contexts will be reduced. This was corroborated by Srichanyachon (2014), who states that the limitations of 'online flexibility' occur when there is a delayed interaction of users. It is crucial to ask what platforms work, discover the limits, and the reasons behind using them.

Besides, this study showed that individual accountability was yet another critical issue in the minds of the study participants. This standpoint very much calls to mind the concept of "social loafing," whereby individuals, working collaboratively on the same project, fail to provide a much-needed show of responsibility and efforts for completing the work of other group members (Latané, Williams & Harkins, 1979). According to the issue above, one of the best-founded theories explaining the quality of interaction in collaborative learning is the interdependence theory ((Johnson & Johnson, 2009). A sense of individual mutual accountability and promotive

interaction can be achieved through positive interdependence among group members (Johnson & Johnson, 2009).

Not less importantly, almost three-quarters of the participants (n=36, 72%) stated they encountered some difficulties with their colleagues. They traced back such challenges to the wide range of subjects they teach, their different personal teaching experiences, and the diversity of their respective cultural backgrounds, and their massive impact on the group's priorities of the group as a whole (Davies, 2009). A female participant commented: "Because of the diversity of our cultural backgrounds, we decided to put forward some plans to be followed as we were going through the project."

The present study has a lot of potential implications when considered from a broader perspective. It sheds light on essential practices for the exemplary implementations of online collaborative learning in the classroom. By involving students in online collaborative projects, they will share not only new information but also build new knowledge. Students will be provided with support, training, and constructive feedback and give them enough time in class to get positive outcomes. In some situations, there is a need to use both synchronous and asynchronous communication; this will not only provide more time but also give them a chance to reflect and provide constructive feedback.

Timid students with low participation tend to participate more in an online cooperative environment instead of a traditional one. Instructors would consider computer meetings for discussion and net test as additions to create a learning community. Student-student interaction must be structured using appropriate strategies to be highly motivated, have high self-confidence, and acquire interpersonal abilities. (Johnson & Johnson, 1989).

The collaborative online project will facilitate group work and provide scaffolding to acquire both confidence and skills. This is supported by Curtis and Lawson (2001): "Providing students with new skills that are essential to effective online collaboration will assist them in succeeding in a group environment." Throughout the collaborative process, teachers need to be close to students by building strong rapport and monitor their group activities by being available for feedback.

Insofar as promoting students' motivation in OCPs is concerned, research has repeatedly shown that both intrinsic and extrinsic motivation can help students to perform better, demonstrate more remarkable persistence, and lead them to achieve more tremendous academic success (Bolkan, 2015; Nayir, 2017). In this regard, the role of the teacher in promoting student motivation cannot be more emphasized. When students involve themselves in OCPs, teachers should be more than aware of their students' motivation and self-engagement. They should also proceed by planning teaching activities that promote students' active engagement in class, call for challenge and stimulation, and enjoy the course work.

Learning through collaboration, as compared to individual learning, usually leads to better psychological connections (caring, support, and commitment), higher achievement, social competence, more excellent psychological health, and self-esteem (Johnson, Johnson, & Smith,

1998). In a review study on collaborative projects, Thomas (2000) found strong evidence that students who use CPs have an equal or better academic achievement than those who use other learning methods.

Although there are benefits to online collaboration projects, there are also possible challenges to consider (Bovill, Felten & Cook-Sather, 2014). Simply placing students in small groups and asking them to work together will not guarantee that they will work collaboratively (Johnson & Johnson, 2004). It is undoubtedly essential for teachers, to consider students' diverse views regarding learning as they have diverse cultural backgrounds and possess different levels of motivation.

As for individual accountability, this could be addressed through effective scaffolding, better design, and clear instructions. When designing online collaborative projects, teachers should assess and provide both formative and summative feedback on the performance of each student in terms of his/her level of commitment, anticipation, and responsibility. Students involved in OCPs need to not only learn how to collaborate and to learn how to collaborate, but also be highly trained and equipped with social skills for trust building within the team.

While working on OCPs, there is always a possible dependency on external assistance, as noted by one of the surveyed faculty teachers. It is crucial for teachers to raise the students awareness about the consequences of an academic integrity violation (plagiarism, ghost-writing, and collusion). It is also crucial to instill in the students' mind that originality and integrity of ideas and work are always emphasized and upheld in competitive professional environments.

Conclusion

The present research concerned itself with online collaborative projects, with a particular focus on the views and attitudes of PgCert student teachers in a private higher-education institution in Sultanate of Oman.

The questionnaire-driven results showed a highly positive attitude towards involvements in online collaborative projects, considerable differences about the processes of/while working on online collaborative projects, and discrepancies in influences of OCPs on their teaching practices.

This study concludes with the firm belief that implementing the online collaborative projects as an instructional model in higher education contexts would most evidently lead to more engaged learners and more positive learning outcomes. It also concludes with the not less firm belief that OCPs develop twenty-first-century students' and teachers 'skills and employability skills.

As is the case with small-scale investigations, the present study had a few limitations. These mainly concern the relatively limited number of participants and the reliance on one data collection instrument. As a result, it would not be very reasonable to claim the generalizability of the conclusions the study has reached. Despite these limitations, this research is believed to have the merit to draw the attention of practitioners in higher-education institutions as to the urgent need to encourage work experience for students in a global environment by providing international

programs and opportunities for extra-curricular pursuits. To this end, it is strongly recommended to continue with further studies in the same avenue with university students at all levels and in all disciplines.

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