# Engaging students in the community of practice in an online distance education course

# <sup>1</sup>Julia Indongo and <sup>2</sup>Elina Ithindi

<sup>1&2</sup>Namibia University of Science and Technology, Main Campus <sup>1</sup>jindongo@nust.na and <sup>2</sup>eithindi@nust.na

#### Abstract

The purpose of this study was to investigate how students can benefit from interaction and collaboration when learning in the community of other students online. Collaboration is vital for students' learning because they share ideas and learn from each other. It is crucial for online content to encourage interaction, which leads to collaboration among students. Although many academic institutions offer online education mostly to distance students, it is not known how different content is administered online, mainly on the Moodle platform. There seems to be no study that investigated the instructional designs, Moodle contents, and how the students' engagement can be enhanced in the online classroom of distance students by applying the Community of Enquiry model at the institution under study. Also, there seems to be no study that explains how students can benefit from engaging in a community of practice with other students during online distance learning in Namibian classrooms. This qualitative study was conducted at one of the public universities in Namibia. Purposive sampling was used to select 30 students who entirely study online with their lecturer. A detailed interview guide was sent to the students and the lecturer via Google Docs. The course content on the Moodle platform was also studied according to Moore's (1993) guide to effective student-content interaction. The study revealed that the students were not collaboratively engaged in the community of learning online, because the content dictates the students to work individually. Both students and the lecturer value lecturer-student and student-content interactions more than student-student interactions. Students understand the benefits they would gain from learning in the community of other students, such as the development of soft skills that they would require for employment after completing their studies.

**Keywords**: student interaction, student engagement, online teaching methods, community of inquiry model, Moodle

### **Background information**

The purpose of this study was to investigate how students can benefit from collaboration when interaction learning community of other students online. Many educational institutions in Namibia offer distance education online in various courses of study. Distance students study from home and do not have contact classes very often during the semester. Most teaching and learning take place on Moodle. However, it is not known how institutions administer online learning on Moodle platform. Generally, education has challenges, both academic and technical; both challenges can derail the students' attempts to complete their courses online (Shikulo, 2018; Kaisara & Bwalya, 2021). The mode of teaching and learning for distance learning at most institutions in Namibia has been online even before the outbreak of COVID-19. Online learning has been found to be both beneficial and detrimental to students in a variety of ways. For example, students have the flexibility to study at their own pace, but they also study in isolation without the help that a student would receive if they studied full-time on campus (Gillet-Swan, 2017; Kaisara & Bwalya, 2021). Students' experience in distance online classes can be improved if the content is designed to encourage collaboration and interaction among students.

Collaboration is vital for students' learning because they share ideas and learn from each other. It is crucial for online content encourage students' collaboration and interaction. Many studies have been conducted on distance education online. For example, Shikulo (2018) looked at the distance students' support at the Namibia University of Science and Technology, and Kaisara and Bwalya (2021) investigated the e-learning challenges faced by students during COVID-19. However, there seems to be no study in Namibia that investigated the instructional designs, Moodle contents, and how the students' engagement and interaction can be enhanced in an online classroom for distance students by applying the Community of Inquiry (COI) model. The COI model outlines three overlapping presencesteaching, cognitive, and social-that can overlap to achieve the desired emotions, instructional designs, and interaction necessary for teaching and learning in an online course. Also, there seems to be no study that explains how students can benefit from engaging with other students in a community during online distance learning in Namibian classrooms.

### **Research questions**

The study addressed the following three research questions:

- 1. How does the instructional design of the distance online course under study conform to the Community of Inquiry model?
- 2. What are the students' experiences of studying in the community of other students in a distance online course?
- 3. What are the tutor-marker's experiences of involving the distance education students in the community of practice?

#### Literature review

# Students' collaboration in an online distance class

Student collaboration is crucial in an online learning classroom, because distance students have limited opportunities to engage with other students and the university (Martin & Bolliger, 2018). Roblyer and Ekham (2000) developed guidelines for developing instructional design in an online classroom where students can engage with each other. The guidelines aim to provide active learning for a positive learning which mainly focuses experience. collaborative tasks such as group work, peer sharing resources, facilitation, creating assignments, doing case studies, and reflecting.

After reviewing several pieces of literature on student engagement in an online classroom, Delahunty et al. (2014) conclude that more than traditional face-to-face students, online learners need more carefully designed instructional design and more opportunities to engage in order to develop tolerance and the ability to recognise diverse identities, which may make up for the void they feel for having no physical presence. According to Martin and Bolliger (2018), some of the benefits that online students can reap from working collaboratively in the community of other students include increased student satisfaction, motivation to learn, a reduction in the feeling of studying in isolation, and an increase in student performance. Students' sense of belonging can motivate them to complete their distance education courses online (Farrell & Seery, 2019; Stone & O'Shea, 2019). The experience of students in distance education online courses is improved when the students feel like they belong in a community of other students and lecturers (Buck. 2016: O' Shea et al., 2015). As discussed, by Farrell and Brunton (2020), the sense of belonging to a community is mostly developed by the social presence and high level of student interaction in a course, because the students feel connected to each other, the course, and the lecturer (Martin & Bolliger, 2018). Banna et al. (2015)recommend the videoconferencing or chatting in synchronous tasks and discussion boards in asynchronous tasks. Buck (2016) suggests that students can actively interact with each other through asynchronous discussion forums and breakout rooms. Kew and Tasir (2021) emphasise that student engagement in online learning leads to cognitive development as students are involved in knowledge creation, which leads to high success.

# Online learning interactions in distance learning

The importance of interaction in an online course is emphasised in research (Garrison, Anderson, & Archer, 1999). However. educators are reluctant to implement interactions in an online course similarly to how it is applied in face-to-face classes (Mehall, 2020). Aydin's (2021) study reveals how three key learning interactions were found to be on a par in terms of online education satisfaction, meaning students view them as of the same importance when it comes to acquisition of knowledge.

To make online learning a success, Amrullah et al. (2022) study demonstrates the need for the instructor to develop activities and materials and also facilitate support for student-student interaction. This explains why it is not sufficient to upload online learning materials or activities with the assumption that students will access them individually, work out the answers and post them to the instructor for feedback. This is student-teacher interaction that does not leave any room for student-student interaction where collaboration is the key to creation of new knowledge.

### Types of interaction in an online class

Student interaction and engagement are used

interchangeably in some cases because they are related (Martin & Bolliger, 2018). Student engagement is achieved through interaction. Moore (1993) outlines three types of interaction that make the students actively engaged in the course and make online learning a success. These types of interaction are: (1) student-to-student interaction: (2) student-to-instructor interaction; and student-to-content interaction. Student-tostudent interaction is when students interact student-to-instructor with their peers; interaction is when the student interacts with instructor: student-to-content and interaction is when students interact with the subject content.

Student - to - student interaction: It is important to create the content that allows the students to interact with other students to prevent boredom and isolation in the online learning environment (Martin & Bolliger, 2018). Banna et al. (2015) outline some of the activities that foster students to work in the community collaboratively with each other which are chat sessions, blogs, wikis, group tasks, peer assessment, Twitter feeds, Google applications, audio and video technology such as Wimba Collaboration Suite. Alalwan (2022) explains that students could also use social media to enhance student engagement in the online learning environment. Research in the field indicates that students felt more satisfied when the greater part of the assessment was based on discussion in which they engaged (Shea, Fredericksen, Pickett, Pelz, & Swan, 2001).

Student-to-lecturer interaction: There should be multiple channels for student-tolecturer interaction. The instructor needs to be actively communicating with the students online about the course, but the instructor's contribution needs to be minimal in the discussion, because the more students engage in the online class, the more learning outcomes will be achieved (Gayton & McEwen, 2007). Students normally contact the lecturer about assessments, course materials, and grades, but online interaction should also include the students contacting other students and the lecturer about what makes learning meaningful to them (Martin & Bolliger, 2018). Kings (2014) found that students prefer detailed and timely feedback, because it helps them improve their work. Apart from written communications, videos and screencasts make the instructor visible to students, which improve pedagogy. According to Revere and Kovach (2011), Mozer (2013), and Reinhardt (2019), the instructor can make use of discussion boards, emails, chat sessions, blogs, Twitter, Skype, YouTube, and social media sites such as Facebook or Ning networks to communicate with students.

Student-to-content interaction: This type of interaction entails students engaging with the materials and all contents on the online platform. According to Klempka et al. (2018), this is an interactive activity that occurs when students watch videos, multimedia, read materials, view content slides, etc. The instructor should take sufficient time to find scholarly materials and create high-quality assessments that encourage high levels of engagement and critical thinking skills (Ertmer, Sadaf, & Ertmer, 2011).

The role of scaffolding and the zone of proximal development in the learning process Researchers in the field, such as Rezaee and Azizi (2012) and Thompson (2013), point out how scaffolding plays a key role in students' learning process as it enables them to reach the zone of proximal development (ZPD). The ZPD notion originates from the work of Vygotsky (1978) who argues that effective learning takes place when students are working within a ZPD that he defines as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). In simple terms. scaffolding refers to providing support to students to enhance their learning and mastery of subject content.

In a study that was conducted by Rezaee and Azizi (2012), it was established that learning is enhanced significantly when the learning environment is collaborative and supportive. This notion points to the significance of providing student-student interaction in the learning process, especially when students are learning on a distance mode where interaction with others is limited. It is thus of utmost importance that instructors opportunities for student-student interaction so that students who need more assistance are guided by others who are more capable, so that they reach the ZPD. Drawing on Thompson (2013), it is negotiation of meaning through collaborative learning within the ZPD that leads to cognitive development.

### Theoretical framework

The study adopted the community of inquiry model, which is a social constructivist model proposed by Garrison, Anderson and Archer (1999), and is concerned with the learning process in an online educational environment. The framework is suitable for this study, because, as explained by Anderson (2016), the model is simplified and is ideal to evaluate online courses and guide the research processes to improve the delivery and quality of online courses. The model studies the interaction of cognitive presence, teaching presence and social presence in an online course.

Cognitive presence is defined as the ability of participants in a critical community of inquiry to construct and confirm knowledge through reflection and discourse (Garrison et al., 1999). Social presence is the participants' ability to identify with other participants in the trusted environment and develop interpersonal relationships with participants with whom they can identify (Garrison et al., 1999). Social presence leads to the development of cognitive presence, because it is through interaction that students get to discuss ideas that will lead to the development of critical thinking, which is the focus of cognitive presence (Garrison & Arbaugh, 2007). When the teaching methods, instructions, and assessments are designed, the teaching presence will lead to the development of social presence, which is why the three presences overlap.

Teaching presence is the design process, implementation. teaching methods. approaches, and monitoring of social and cognitive processes for the participants to learn and the learning outcomes to be achieved (Garrison et al., 1999; Anderson et al., 2001). Teaching presence has a focus, and the main focus is to develop the course content, schedule, and assessments, followed by monitoring and managing interaction and reflection, and lastly, to determine the students' needs to provide appropriate information and guidance (Garrison et al., 2010). As the previous authors explain, the teaching presence influences students' cognitive and social presence. Consequently, this theory, COI, will be useful in evaluating the effectiveness of the online course when students are learning in a community of practice with other students through their experiences.

### Methodology

Participants, sampling procedures and

#### sample

This qualitative study was conducted at one of the public universities in Windhoek, Namibia. The population of the study was the distance students who are registered for the third-year English core module and the tutor-marker(s) for the course for Semester 2, 2022. Purposive sampling was used to select the participants. because only students who were registered for that English core course were selected to participate. Purposive sampling was also used to select the tutor-marker because she was the only instructor responsible for that specific course. All thirty students enrolled in the course during semester two were chosen to participate, and a Google Docs questionnaire was distributed to all students; however, twenty-seven responded to the interview questionnaire, while three did not.

#### Data collection and analysis

Document analysis was conducted by the researchers to get a better perspective on the design of the online distance course under study on the Moodle platform. The Google Docs questionnaire, which consisted of both closed and open-ended questions, was given to the students. This form of data collection was also more suitable during the time of data collection due to the unpredictable COVID-19 situation in the country, in terms of social distancing. Closed-ended questions solicited biographic information, while open-ended questions sought information for the research objectives. Semi-structured interviews were conducted with the tutor-marker. The data from the Moodle course content were analysed using a checklist that was informed by the student-content literature review on interaction. The data from the interviews were analysed using content analysis. The data were then presented under the emerging themes.

### Findings and discussion

This section presents the finding of the study per the study objectives. The data for objective one were presented first and discussed, followed by the findings for objectives two and three.

# The instructional design of the distance learning course under study

The eLearning platform studied encourages students learning, because the page appears attractive. It has different font sizes and colours as shown in extract 1 below. The instructional design for the course clearly

directs students' learning. There are weekly contents that are labelled according to the weeks they represent. The numbers from 0 to 7 in Figure 1 below represent the semester weeks, and under each week there is the content for that week. This helps the students to keep track of the content to be learned each week. The announcement section is clearly labelled, and students are reminded weekly to keep up with their content. There is a course

outline which is also given at the beginning of the course which gives a detailed description of the content. Thus, the course seems to be easy to navigate because of how it is structured. The latter is a positive direction to learning, because as Rezaee and Azizi (2012) explain how learning is enhanced when the learning environment is supportive, and this is one way of supporting students.



Figure 1: Semester weeks

Most of the content on the platform encourages and student-to-lecturer student-to-content interaction. There are many instructional contents; however, they do not require students to interact with other students. For example, there is a study guide and other reading materials that students read on their own to be able to complete graded assessments in the form of assignments, tests, or quizzes. The social presence is missing because students do not interact with other students and share views. The study revealed as found in Gayton and McEwen's (2007) study that the students only communicate to the lecturer about marks and study materials but not about new ideas about the content or how to improve the content for better learning.

The aim of the discussion forum is for the students to discuss and interact with other students over the given topic. As shown in Figure 2 below, when the responses of the students on the discussion forum are only visible to the lecturer or administrator, it jeopardizes the purpose of the forum and limits the students' chance to benefit from discussing in a community with other students. A class is a community where students see and learn from their peers' weaknesses and strengths. Therefore, when the discussion forum is graded as it was observed in the analysis of the online course content, it limits the students and dilutes the aim of being in the discussion, because students are commenting to impress the lecturer and score better grades. It was observed that the students do not comment or reply to other students' discussion forums because they are doing it for marks. As a result, the aim of the discussion forum is diluted. Therefore, contrary to Ertmer et al. (2011), high level student learning that leads to development of critical thinking skills is not taking place, because students are not sharing ideas either with the lecturer or other students through interaction.

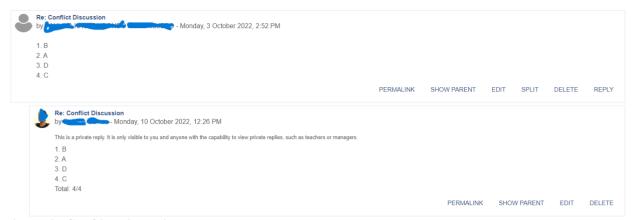


Figure 2: Conflict discussion

The discussion forum is a platform where students can be in the community and discuss comprehensively with each other. In this course, however, the discussion forum was used as a quiz. As shown in Figure 3 below, the instruction given in the discussion forum does not require the students to discuss in depth by giving their views. As a result, the purpose of a discussion form is somehow

jeopardized. The students may not enjoy the benefits that come with learning in the community as outlined by Martin and Bolliger (2018), because the discussion forum was not used for engagement. As a result students may feel unsatisfied with the course, unmotivated and isolated even when working on the discussion activity.

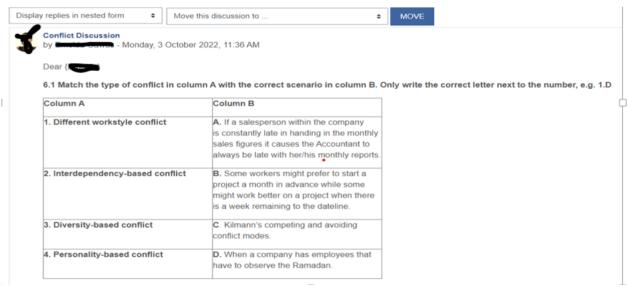


Figure 3: Matching the type of conflict discussion

All the activities in the course are graded. This could be an approach that forces the students to do their activities because some might be reluctant to do the work that is not for marks. However, when all the activities are for marks, the students may value the marks more than learning. The main aim is for students to learn in the course, and thus they should partake more in activities that will make them learn in the community of other students. The graded activity only encourages students to interact with the content and lecturer so that they can score marks, not to interact with other students, as the instruction does not require the students

to interact with other students. In this context, since all activities are graded, it will be imperative to allocate a mark for student-to-student interaction to encourage students' interaction. The environment does not support collaboration because everyone is doing their works to score individual marks, and students are not supporting each other. As a result, learning may not be taking place (Rezaee & Azizi, 2012).

There are a variety of activities that require different types of cognitive thinking. For example, there are videos, PowerPoint presentation slides, audios, and videos by students advertising their products. However, the content does not allow the students to interact with each other during these activities. There is standardized feedback that is given to all the students, and the feedback is not discussed for students to give their views as the feedback is only posted on the platform. All the feedback was written.

At the end of every week, the lecturer solicits the students' weekly experiences with the content. Most students do not give feedback, and there is no follow-up on individuals who do not provide their review. Online learning requires constant enforcer such as when the student complete the task, the box of the activity gets ticked. This will compel the students to partake in all the activities. The instructor must also follow up with those who do not do their review. Individual student experiences are only accessed by the lecturer; other students do not see what other students thought of the content. The feedback was given in writing all the time which contrasts what Kings (2014) suggests, that video and screen casting feedback make the lecturer visible to students and improve the pedagogy.

### The students' experiences regarding studying in the community of other students in a distance online course

The study solicited the students' experiences regarding studying in the community of other students in an online distance course. The students experiences were reported under the three main headings below. Among the students who participated in the study, the majority were female students, 51.9% while 48.1% were males. The difference between the two genders was little. The students' age group ranged mainly between 18 – 25 years. Some students were doing the course for the first time, 63%, while 37% were repeating the course.

#### Students' interaction in the online course

Most of the students (85.2%) indicated that they interact with other students online which is contrary to what was observed on the course platform, Moodle, and thus 14.8 percent admitted that they do not interact with other students online in this online course. In this course students may miss out on some of the benefits that Martin and Bolliger (2018) outlined as students gain as a result of engaging with other students in an online course, such as increased student satisfaction, motivation to learn, reduction of the feeling of

studying in isolation and increased student performance.

The students were asked to indicate the type of activities they prefer in their online course. The majority of the students (66.7%) indicated that they prefer both individual and collaborative work, followed by 29.6 per cent of the students who prefer individual work. which means they do not prefer to work in collaboration with other students. Only 3.7 per cent of the students indicated to prefer collaborative work only. As the majority of students (66.7%) prefer a combination of individual and collaborative learning, this points to the need to strengthen collaborative learning component of course, because the analysis of the online course content illustrates already how many of the learning tasks are individual. It is thus the collaborative learning component of the course that needs to be strengthened as per the guidelines of instructional design of an online course by Ekham (2000). As Garrison and Arbaugh (2007) explain, when the instructional design encourages student collaboration, social presence develops because the students are identifying with each other in a trusted environment which results in cognitive presence. Therefore, teaching and learning can take place in the online course when the three presences overlap in the instructional design. When there is no collaboration as observed in our data, social presence may not take place which affects both teaching and cognitive presence which means the lesson objectives may not be fully achieved, and as per Luo et al. (2017), lack of social presence leads to a feeling of isolation which is the main cause of high dropout rate in an online class.

The study found that students were satisfied with discussion forum activities; they found discussion forum as the most engaging component in the course, which concurs with Shea et al.'s (2001) study findings where students were more satisfied, and they felt as they learned more when a large part of the activity was based on discussion. The study also revealed how the students found the discussion forum most interactive, followed by individual student guizzes, content slides, and individual student videos were found least interactive. The students were referring to the student-content and student-lecturer interaction, because as it was observed on the online platform, there was no student-tostudent interaction in these tasks.

The students were asked to rate how

they perceive the following interactions as Student-to-student important: student-content interaction and student-lecturer interaction. One (1) was the lowest and five (5) the highest. The results were as follows: In student-to-student interaction, one student rated it one (1), seven students rated it 2, 3 and 4 for each. Only one student rated it 5. That means the importance of student-to-student interaction in an online course seems not obvious to the students because their ratings differ a lot. When it comes to student-content interaction, one student rated it one, two students rated it three, six students rated it three and four for each and eleven students rated it five. Although the rating differs, most students' ratings fall between three and five which means they view student-content as important. About student-lecturer interaction, two students rated it one, none of the students rated it two, seven students rated it three, eight students rated it four and ten students rated it five. Our study revealed that students do not value all the three types of interaction as important, while Moore (1993) perceived all the interactions as important in online learning. Most students seem to understand the importance of student-lecturer interaction, because most of their ratings fall between three and five, with most of the students who rated it five, which is not surprising because on the platform there is mostly student-lecturer interaction which in a way makes the students think it is more important.

Students were also asked their views on whether it is necessary for students who study remotely to be given work that will require them to interact and engage with other students. Among twenty-six responses, eight students gave straight no answers of which some students supported it with these reasons: it gets stressful as people end up not contributing by giving excuses; online learning is about students doing work on their own; online learning is an individual course and group work is not always the best. The following extract presents the student's view: "No, because it gets very stressful. People usually give excuses and end up not contributing anything 'because they were unreachable.'

The majority of the students, eighteen students, felt that it is a good idea, and they gave the following reasons: Students learn different views through interacting with other students; students deserve group activities; collaborative work makes the work a lot easier;

as long as students have internet, they will know the good work and how to collaborate with other students; group activities help the students to share the work and students participation in the learning process and thus MS Teams platform can be used for student collaborative work and for students to learn to work in the team because after graduation they will work in teams. The following extract presents the student's view: "You learn a lot from other students as every student has a different opinion."

Students' experience of learning in a community of other students

Similar to Martin and Bolliger's (2018) findings, this study also revealed that the students understand the benefits that they get collaboratively learning in community of other students in an online course. The following are some of the benefits that emerged from the findings: very intellectual and educative; students learn from each other; students share ideas and learn different ideas; they get peer assistance and gain more knowledge. One of the students explains as quoted in the following extract 3: "This enables me to share my problems online with others, this help me by finding solutions on how the other students solved the same problem".

There are, however, students who felt that learning collaboratively in a community with other students has some hindrances which were summarized as follow: some students are not serious, is time consuming and leads to miscommunications, not all the students put more efforts to complete the task and some students do not turn up. One student indicated that she has no experience in working collaboratively online with the peers, while another student said s/he has had bad experience. These findings are illustrated by the following student quotes: "Not all students are willing to put in the work." "Some students are not serious."

According to Shikulo (2018) and Kaisara and Bwalya (2021), students face several challenges on eLearning. However, when the students were asked to give some of the challenges that they face when working collaboratively in groups with other students, the majority of the students indicated that they did not face any challenges, and only three students indicated their challenges. The majority of these students assumed not to have experienced challenges because they do not

partake in collaborative tasks with other students online as it was observed on the Moodle platform. We assume that the responses could be different had the students been exposed to collaborative online tasks. The following challenges emerged from the data of the three students who indicated to have experienced challenges: it is hard to provide answers on a discussion forum of which after writing one still gets low marks; there is mostly miscommunication; students do the puzzles by themselves; some students hardly participate; network problems; too many courses to attend to and conflicts between the students; some students' lack of participation and different opinions that delay the work. Clearly, most of these challenges are those that experience when working individuals not in the community with other students, because on the platform there was no activity where students worked collaboratively in a community with other students. Therefore, as Coomey and Stephenson (2018) explain, online learning is all about student support, involvement and control to minimize the challenges that come with it. Student interaction can be an opportunity to minimize some of the challenges, because the students assist each other through interactions.

# Methods to make online content more interactive for the students

The students suggested different methods, which they thought might make the online content more interactive. There were students who admitted that the way their course was administered was the best, and there was no need to change it. However, some students felt that the following methods would make the online content more interactive. The students suggested that the online course needed to have a component of online classes either via MS Teams where the lecturer and the students met to interact by looking at the topic together rather than the lecturer uploading the materials only. The students should be encouraged to participate more in the discussion forum; universities should provide the students with sufficient data and gadgets; the students need to be taught how to find their ways on the platform and their computer user skills needed to be enhanced; more interactive work for students in the form of quizzes and activities was required; students must be active on the online platform; and more interactive methods of lecturer and students communication needed to be created. The following quotes are in support of some of the sentiments that were expressed: "By encouraging the students to discuss more in the discussion forum." "By creating more interactive methods of students and lecturers communicating."

It is evident from these findings that the students seemed to understand what was needed in their online course to make it more interactive as proposed by Moore (2003), for the online course to be engaging for students.

# Lecturer's experiences regarding involving students in the community of other students in a distance online course

The third objective of this study was to establish the lecturer's experiences involving the distance students in community of practice. Analysis of lecturer data revealed that the lecturer who was presenting the course under study was highly experienced, with more than five years of experience teaching the same course. According to the lecturer, all types of teaching and learning interactions as indicated by Anderson (2003) are catered for in the course: student-content. student-student. teacher, teacher-content and teacher-teacher interactions. However, the results of this study were slightly different with respect to studentstudent interaction as detailed in the following sub-section below. Analysis of the lecturer's online interview data resulted in two key subheadings: Lecturer's experience of collaborative teaching and learning and benefits of collaborative learning.

# Lecturer's experience of collaborative teaching and learning

The lecturer online interview data illustrated how the lecturer considered student-teacher, teacher-content and content-content interactions to be more important (rated 5) than student-student and teacher-teacher interactions (rated 3). This finding concurs with findings from the analysis of online content where student-student interaction seemed to be minimal, especially in the discussion forum, due to the design of the activities. Likewise, Hampels and Pleines's (2013) research findings illustrate that there is limited understanding on how learning tasks should be designed to foster student-student interaction in distance language courses, to knowledge contribute to construction. regarding how student-student Responses interaction was created or facilitated in the course under discussion illustrate minimal opportunities for student-student interaction during the teaching and learning process as demonstrated in the following lecturer excerpts: "Students engage on the discussion forum or WhatsApp when they prepare for their paired presentations." "There is no formal strategy in place, (to ensure that students interact with others), but students are encouraged to engage with others during orientation." Both excerpts above illustrate limited or minimal learning opportunities that are created at course level to facilitate student-student interaction.

## Benefits of collaborative learning

With respect to the benefits of learning in a community of other students, the lecturer was of the opinion that engaging in collaborative learning has some benefits to students, such as by asking for clarification when they did not understand some issues or concepts, or by exchanging knowledge and understanding or what interests them. This is illustrated by the following quote: "(Students) asking for the clarification ofconcepts, sharing understanding of work done or what intrigued them in a Unit." However, in accordance with findings from student interviews, the lecturer was also of the opinion that while some students enjoyed engaging with others, others preferred to work individually and never participated in collaborative learning, such as by asking questions or raising any concerns regarding the course. The following excerpts are proof to this finding: "I have noticed that some students are forthcoming and enjoy engaging with others whilst others prefer to work alone - never asking questions or raising concerns with other students."

#### **Limitations of the study**

One shortcoming of this study is its scope; because only one course was studied. A study conducted on a larger scale might reveal better results on the issue under investigation as it warrants many voices to be heard. Another constraint that has potential to affect the reliability of the study results was the duration of data collection. Data collected over a longer period might have revealed more reliable results.

#### Conclusion

The study revealed that the instructional design in this course did not conform to the COI model. The instruction was more designed to fulfil teaching and cognitive presence and excluded social presence. Social presence is vital for teaching and cognitive presence. In this course, the students were not learning fully as they were not learning from and with each other through student-to-student interaction. The course has a high failure rate as 37% of the students were repeating the course. This is an indication that teaching and learning were not successful which could be because students were not learning with each other and from each other in a community where critical thinking skills take place.

The study highlighted the dilemma that instructors face regarding facilitating online learning for students. Most instructors begin teaching online without understanding the pedagogical aspects of an online class. The instructors were not introduced to how to carry out the three types of interactions in the online class that lead to social, cognitive and teaching presence.

The students had contrasting experiences regarding learning in the community with other students. There were some students who did not prefer this type of learning for various personal reasons, which is similar to Martin & Bolliger's (2018) observations. However, most of the students preferred learning in the community of other students, because of the advantages they reaped in the process. One student explained that they were gaining soft skills such as teamwork, which were necessary for employment after the completion of their course.

The instructor is experienced in teaching online and provided the students with all the content and information they needed to succeed in the course. However, the social aspect was missing as the students were not learning in the community where they could be exposed to different perspectives of other students but were learning as individuals. This could limit the students' scope of thinking which might affect the overall learning in the course.

#### Recommendations

Based on the findings of this research, the following recommendations are made:

• It is recommended that instructors be trained on how to facilitate an online class which includes all the types of interactions as outlined by Moore (1993), to achieve all the three presences which according to Garrison, Anderson and Archer (1999),

- improve the quality and delivery of an online course.
- Furthermore, there is need for future researchers in the field to conduct a comparative study that investigates the performance of distance students in assessment tasks when engaged in all three types of learning interactions discussed in this study, as opposed to students who study in isolation.

### References

- Alecia, W. (2018). Academic support for online students in the English-speaking Caribbean at the University of the West Indies Open Campus. *Journal of Further and Higher Education*, 42(6), 868-878.
- Amrullah, A., Sahuddin, S., Nurtaat, L., Sribagus, S., Fadjri, M., & Nanzah, Z. (2022). Student-student interaction in online learning during the Covid-19 pandemic: A case study. *Education Quarterly Reviews*, 5(2), 180-191.
- Anderson, T. (2016). A fourth presence for the Community of Inquiry model. Retrieved January 23, 2022, from https://virtualcanuck.ca/2016/01/04/a-fourth-presence-for-the-community-of inquiry-model/.
- Anderson, T., Rourke, L., Garrison, R. D., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1-17.
- Aydin, B. (2021). Determining the effect of student-content interaction, instructor-student interaction and student-student interaction on online education satisfaction level. In W. B. James, C. Cobanoglu, & M. Cavusoglu (Eds.), *Advances in global education and research* 4, (pp. 1–9). USF M3 Publishing.
- Bouchamma, Y., April, D., & Basque, M. (2018). How to establish and develop communities of practice to better collaborate. *Canadian Journal of Educational Administration and Policy*, 187, 91-105.
- Buck, S. (2016). In their voices: Study habits of distance education students. *Journal of Library & Information Services in Distance Learning*, 10(3-4), 137-173.
- Ciotti, M., Ciccozzi, M., Terrinoni, A., Jiang, W., Wang, C., & Bernardini, S. (2020). The COVID-19 pandemic. *Critical*

- Reviews in Clinical Laboratory Sciences, 57(6), 365-388,
- Creswell, J. (2014). Educational research: Planning, conducting and evaluating quantitative and qualitative research. Pearson
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2*(2), 87-105.
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7-23.
- Gillett-Swan, J. (2017). The challenges of online learning: Supporting and engaging the isolated learner. *Journal of Learning Design*, *10*(1), 20-30.
- Hampels, R. & Pleines, C. (2013). Fostering student interaction and engagement in a virtual learning environment: An investigation into activity design and implementation. *CALICO Journal*, 30(3), 342-370.
- Kaisara, G., & Bwalya, K. J. (2021). Investigating the E-learning challenges faced by students during COVID-19 in Namibia. *International Journal of Higher Education*, 10(1), 308-318.
- Luo, N., Zhang, M., & Qi, D. (2017). Effects of different interactions on students' sense of community in e-learning environment. *Computers & Education*, 115, 153-160.
- Lushu, C. S. (2020). Distance students' perception towards e-learning at Namibia University of Science and Technology's regional centres.

  Unpublished Doctoral dissertation.
  University of South Africa.
- Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online learning*, 22(1), 205-222.
- Olusegun, B. S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *IOSR Journal of Research and Method in Education*, 5(6), 66-70.
- Rezaee, A. A., & Azizi, Z. (2012). The role of zone of proximal development in the students' learning of English adverbs. *Journal of Language Teaching and Research*, 3(1), 51-57.

- Roll, I., Russell, D. M., & Gašević, D. (2018). Learning at scale. *International Journal* of Artificial Intelligence in Education, 28(4), 471-477.
- Shikulo, L., (2018). Evaluation of student support services at the Namibia University of Science and Technology Centre for Open and Lifelong Learning. Unpublished Doctoral dissertation. University of South Africa.
- Thompson, I. (2013). The mediation of learning in the zone of proximal development through a constructed

- writing activity. Research in the Teaching of English, 47(3), 247-276.
- Vlachopoulos, D., & Makri, A. (2019). Online communication and interaction in distance higher education: A framework study of good practice. *International Review of Education*, 65(4), 605-632.
- Vygotsky, L. (1978). Mind in Society: The development of higher psychological processes. Harvard University Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*.
  Cambridge University Press.