Maintaining and Enhancing Blended and Online Teaching and Learning: Lessons Learnt from Student Experiences of Select Programmes During the Pandemic Period

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Abstract

This paper explores the teaching and learning experiences of students from selected programmes offered by the University of the West Indies, St. Augustine Campus during the period of Emergency Remote Teaching (ERT) and the early return to face-to-face teaching. The students' experiences are assessed in relation to the Community of Inquiry (CoI) Framework, which promotes a combination of teaching, cognitive, and social presence for an effective educational experience. A survey approach was used to gather both quantitative and qualitative feedback on the aspects of online, hybrid, and in-person teaching and learning, the aspects of the programmes most valued and most disliked by students, and areas for improvement. Findings suggest that the blended and online environment requires intentional integration of teaching, cognitive, and social presence to ensure effective educational experiences online. Useful and diverse course content that built focus and awareness, had real-world applicability, and exposed students to new topics and outlook essential to students. The need for, and use of practical applications and experiences that linked theory to practice, were also emphasized and students required access to readily available and easy to navigate resources that support their learning online. To maintain and enhance students' online and blended learning experiences, universities must be able to productively regulate teaching and learning through course design and instructor facilitation, set an effective climate for constructive instructor-student dialogue, and support discourse through peer interaction and engagement efforts. The institution should provide infrastructure, and support appropriate training for faculty and other staff, and should prepare guidelines and policies on maintenance of quality in the online and blended environment.

Keywords: quality in online and blended learning, transitioning from ERT, Community of Inquiry Framework

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Introduction

In response to the challenges presented by the Covid-19 pandemic, teachers and their students were left working and learning from home and separated from each other, many for the first time. No longer was there physical contact between these groups, posing a potential threat to the ability of many schools and universities to effectively deliver and regulate teaching and learning at a distance. Successful online teaching and learning is dependent on a combination of factors including specific attention to course design (Zimmerman et al., 2020), adequate technology, financial resources, skilled and motivated human resources, institutional support and effective use of the appropriate technology (Thurab-Nkhosi, Maharaj & Ramadhar, 2021). As such, the rapid migration to the virtual realm required educators to promptly adopt new methods and techniques to facilitate emergency remote teaching (ERT) during the pandemic (Hodges et al., 2020). Lessons learnt during this period can guide universities in their approach to maintain rigour and deliver quality online, and blended teaching, post-pandemic. This paper seeks to explore the experiences of students during the delivery of ERT and following the initial return to in-person teaching at The University of the West Indies (UWI), St Augustine.

Context

The 75-year-old UWI, is ranked among the top five percent of the best universities in the world by the Times Higher Education (THE) World University Rankings (The University of the West Indies, Mona, 2018). The institution has five campuses: Mona, Jamaica; St Augustine, Trinidad; Cave Hill, Barbados; Five Islands, Antigua and Barbuda; and the Global Campus (formerly the Open Campus). Serving 18 English-speaking countries in the region, The UWI must make every effort to ensure continuous quality improvement, therefore an exploration of student experiences as teaching modalities evolve is imperative.

The focus of this study is the St Augustine Campus of The UWI. It is important to note that prior to the Covid-19 Pandemic, St. Augustine Campus (STA) primarily delivered its programmes and

courses in the traditional face-to-face classroom setting. For about thirty-four percent of the courses on the campus, the student learning experience was supported by online tools and resources facilitated by the Moodle learning management system, branded "myeLearning" by the institution (Thurab-Nkhosi, 2018). This study is based on the feedback received from students of various programmes offered by the Departments, Institutes, Schools, Centres, Units and Sites (collectively known as 'DISCUS'), at STA, in preparation for Quality Assurance Reviews (QARs) facilitated by the Quality Assurance Unit (QAU). Although STA switched to ERT from Semester 1 of the academic year 2020/2021 (i.e. from August 30, 2020), this research is based on data collected during the period March 7, 2022 – March 31, 2023. Student feedback was collected from surveys specifically designed by the QAU to ascertain their experiences of online, blended, and in-person teaching and learning. The students' experiences are assessed in relation to the Community of Inquiry (CoI) Framework, which promotes a combination of teaching, cognitive, and social presence for an effective educational experience.

Issues to be Explained

In this regard the issues to be explored are reflected in the following research questions, which guided the study:

- Using the CoI model, what are the implications of the students' online, blended and in-person experiences, during and immediately following the Covid-19 pandemic, for maintenance and enhancement of quality?
- How familiar were students with using online platforms prior to the pandemic?
- What aspects of the online environment were rated most highly by the students?
- What aspects of the online environment were disliked by the students?
- How do students feel online teaching could be improved on the campus?
- How do students rate online classes compared with blended and in-person classes?

The first section of the paper explores the definitions of blended and online learning as they pertain to this study, and describes the CoI framework, which provides the context and conceptual framework for the paper.

Literature Review

Blended and Online Learning

Over the past decade, the rise in technological advancement has sparked interest and opportunity for universities and other teaching institutions to offer students online and blended teaching and learning experiences (Allen & Seaman, 2007; Diaz-Infante et al., 2022). The surge in demand for online and blended programmes, and the rise in competition for students, came however, as a result of the challenges presented by the Covid-19 pandemic. World-wide health restrictions forced traditional universities with little to no online teaching capacity to resort to instances of ERT where

the courses were not intentionally designed prior to the pandemic for online delivery (Hodges et al., 2020). Post-pandemic, these institutions must now focus on developing and enhancing intentional strategies of online and blended teaching and learning to remain competitive and meet the demands of their growing diverse student population. Prior pandemic, however, there seemed to be varying interpretations of the terms blended learning and online learning. The term "blended learning" in particular was defined in different ways in the literature and was used interchangeably with "mixed mode learning," "hybrid instruction," and "technology-mediated/enhanced learning" (Wang et al., 2015). Within recent times, new terms have emerged as well, such as multi-access, co-modal and hyflex learning. Since the pandemic, researchers have noted that there seems to be less confusion about the terms, and an understanding that they all describe the various ways institutions can deliver learning experiences to students (Amenduni & Ligorio, 2022; Johnson et al., 2022). While there may appear to be a lack of consensus about the definitions of these terms, research indicates that there is general agreement on the basic characteristics of the learning modes (Johnson et al., 2022). It seems clear that the most basic definition of blended learning is "a combination of face-to-face instruction and computer-mediated instruction" (Graham, 2006, p.5), however it is acknowledged that blended learning exists on a spectrum, with in-person teaching at one end and fully online teaching or what would be considered distance learning using the Internet, with no in-person interaction, at the other.

It is important for institutions to recognize the complexity of the variations of blended and online learning as they consider transitioning since these variations require different affordances to ensure quality in teaching and learning. The deliberate and complex nature of online and blended teaching challenge traditional approaches and demand the fundamental rethinking of the educational experience to include the role of the instructors, student interactions and meaningful ways of learning (Garrison, 2009; Vaughan et al., 2013). Therefore, to produce an effective and productive online learning environment, careful considerations of these elements and the collaboration of online instructors and students must be done (Shea & Bidjerano, 2009).

For the purposes of this study, online teaching and learning is conducted entirely online and involves courses which have been intentionally designed so that all instruction takes place using technology. There are no requirements for in-person classes. Hybrid teaching, also referred to as blended teaching in this paper, involves "the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies" (Garrison & Vaughan, 2008, p. 148).

Researchers have indicated the importance of building in different types of "presence" in online and blended learning environments (Martin et al., 2022). Frameworks, which highlight this idea of presence that need to be considered for maintaining and enhancing quality blended and online teaching and learning, include the Community of Inquiry Framework (CoI) and the Technological Pedagogical Content Knowledge Framework (TPACK). However, for the purposes of this paper

the focus will be on the CoI framework since the research addresses the perception of students and the CoI is concerned with enhancing the educational experiences. TPACK focuses on integrating technology effectively with pedagogy and content knowledge in teaching and learning. So, while important for quality, it is a consideration that will be useful for a focus on teachers more so than learners.

The CoI Framework

The Community of Inquiry (CoI) framework (Garrison, et al. 2001) provides an approach to designing learning experiences for the online environment. It is one of the more popular models, which draws on a constructivist perspective to pinpoint the community as a major element in effective online teaching and learning. Applying the CoI theoretical framework, Garrison et al. offer the view that student learning in online and blended learning environments occurs within a community of inquiry composed of social, cognitive, and teaching presence. The CoI framework identifies these three interdependent elements as critical to the educational experience as seen in

Figure 1

The Community of Inquiry Framework

Note. From Community of Inquiry: An Online Teaching Framework by A. Steele, 2019, Educational Technology @ HCT http://edtech.hct.ac.ae/2019/04/12/community-inquiry-online-teaching-framework/.

Social Presence

According to Garrison (2009), social presence relates to the human experience of online learning, the "ability of participants to identify with the community, communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities" (p. 352). As seen in Figure 1, social presence constitutes three categories listed as affective expression, open communication, and group cohesion, with emotions, risk-free expression, and encouraging collaboration as indicators (Garrison & Arbaugh, 2007). As a foundation to a productive CoI, the framework emphasizes the importance for online students to be seen as "real people" while also recognising the challenge this presents in a non-traditional classroom environment (Garrison et al., 2000). Vaughan et al. (2013) believes that creating opportunity for social interaction strengthens students' engagement and builds trust and familiarity such that social presence may emerge; this is central to setting the climate for rigorous debate and discourse and collaborative activity. The authors believe that pushing beyond social interaction to academic interaction and critical discourse moves the community from social presence to cognitive presence and into deep and meaningful learning (Vaughan et al., 2013).

Cognitive Presence

Another element of the CoI framework, cognitive presence, is defined "as the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry" (Garrison et al., 2001, p. 11). It has been operationalized through the developmental phases of inquiry – a triggering event, exploration, integration, and resolution.

Teaching Presence

Teaching presence can be considered the "glue" intended to bring together social presence and cognitive presence by creating the parameters for interaction. Garrison et al. (2000) describe teaching presence as the "design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Garrison & Arbaugh, 2007, p. 163). Teaching presence encompasses three components: (a) instructional design and organization, (b) facilitating discourse (originally called "building understanding"), and (c) direct instruction (Arbaugh, 2008).

Critiques of CoI

Though the framework has been referenced by thousands of authors (Bektashi, 2018), there have been criticisms questioning its utility, especially since online learning has been evolving at a rapid rate. Annand (2011) argues that social presence is overstated and that "students do not attach much value to the group-based influences of social presence" (p.41). He also opines that although the CoI is developed within the constructivist paradigm, "CoI research has for the most part morphed into quantitative analysis" (Annand 2019, p. 5). Annand sees this as somewhat of a contradiction.

Responding to Annand (2011), Garrison (2012) points out that the construct of social presence requires more refining but expressed the view that Annand's critique reflects a misunderstanding of the basic assumptions of the CoI framework.

The CoI framework has been described as presenting too much of a simplified view of online learning. While this simplicity can be helpful for conceptualizing online learning environments, it may not fully capture the complexity and messiness of online interaction. While interaction is important, the framework might also not fully consider other aspects of online learning, which could be disorganized (Xin, 2012). It is also important to note that it is a challenge for researchers to get a comprehensive understanding of the inter-dependence of the three presences. The three elements of: selecting content/regulating learning, supporting discourse, and setting climate overlap within all three presences (Xue et al., 2023). To address the complexities, some researchers suggest that more "presences" or constructs should be added to the framework such as learner presence, (Bektashi, 2018). Kovanović et al. (2018) suggest adding three sub-components to the three constructs, namely: course organization and design (a sub-component of teaching presence), group affectivity (a sub-component of social presence), and resolution phase of inquiry learning (a sub-component of cognitive presence).

While the Community of Inquiry (CoI) framework has some limitations, it provides useful considerations for the creation of meaningful online and blended learning experiences.

Methodology

Research Design

For this study, a survey approach was used to gather both quantitative and qualitative feedback on the aspects of online, hybrid, and in-person teaching and learning, the aspects of the programmes most valued and most disliked by students, and lastly areas for improvement. Student data and contact information were collected using The UWI's Argos Enterprise reporting tool. A convenience sample was utilized to gain feedback from a total of 902 respondents of the 4,695 students enrolled in programmes offered by the various DISCUS targeted by the QAU for quality assurance review between 2021 and 2022. An overall response rate of nineteen percent was achieved. While this response rate is low, the data can be used to inform further research, in tandem with other sources of information, to guide action on blended and online learning developments. The names of the DISCUS have been replaced to ensure confidentiality of the information.

Sample Population

While ERT was implemented between March 7, 2022 and November 25, 2022, the QAU surveyed 3,832 students enrolled in the programmes of seven DISCUS, which for the purposes of this study

have been renamed ERT 1-7. Feedback was received from 659 respondents on the aspects of online and hybrid teaching and learning.

Following the return to physical classes in September 2022, students were also surveyed between February 27 and March 31, 2023 on aspects of hybrid teaching and learning. The QAU surveyed 863 students enrolled in the programmes of three DISCUS, which for the purposes of this study have been named BL 1-3. Feedback was received from 243 respondents on the aspects of physical teaching and learning.

Data Collection

To capture the varying context of the students' online and blended learning experiences, the study used two survey instruments developed by the QAU and distributed and monitored via SurveyMonkey. The first student feedback questionnaire contained 15 closed-ended items to reflect quantitative data and six open-ended items to reflect qualitative data. The survey targeted students online during the period of ERT. The second survey contained 20 closed-ended items, which reflect quantitative data and 10 open-ended items to reflect qualitative data. This survey was developed to gain feedback from students who experienced blended learning in the period of early return to in-person teaching. Both surveys included several 5-point Likert Scales measuring students' perceptions of the quality of their programme and resources, the application of the key attributes of the UWI graduate, and their perceptions of their learning experience. The scales used were coded: strongly disagree, strongly agree, poor and excellent. The statistical measure Cronbach Alpha, a common measure of internal consistency or reliability, was used as part of the data analysis to determine the consistency of responses among the respondents. It is most used when there are multiple Likert questions in a survey/questionnaire that form a scale or subscale, and one may wish to determine if the scale is reliable. Data relevant to the research questions were derived from the surveys and entered into the IBM Statistical Package for the Social Sciences (SPSS) software. Frequency tables were generated for information regarding the demographic characteristics of participants and Microsoft Office Word 2016 was utilized for the generation of charts and graphs. Student responses to the open-ended questions: aspects of the programmes most valued, aspects of the programme most disliked and areas for improvement, were also recorded and coded based on themes emerging from the responses. These themes were then further categorised according to the CoI framework. Percentages pertaining to the frequency of the themes were obtained and compared. Data from the responses were used to answer the specific research questions for this study identified in the Introduction.

Ethical Considerations

To ensure anonymity and protect the confidentiality of participants, the seven DISCUS were coded as ERT 1-7. By removing all identifying information, the study avoided revealing the identities of the DISCUS and deterred any link to the study's results, protecting them from any potential stigma that may arise from their connection in the research.

Limitations

This study was limited to a convenient sample of students enrolled in programmes during a period of ERT and early return to in-person classes in The UWI St Augustine Campus and may present two possible limitations. The first is linked to representativeness as feedback gained from students may not reflect the fully online student population who experience intentional online and hybrid teaching strategies such as asynchronous sessions. Secondly, a low response rate of only nineteen percent was achieved from a sample size of nine hundred and two respondents. Ideally, a higher participation rate would have allowed for more diverse opinions to be reported. Yet, students were self-selecting in participation lending credit to the validity of the results gained and though the response rate is low, the data can be used to inform further research, in tandem with other sources of information, to guide action on online and blended learning developments.

Findings

How familiar were students with using online platforms prior to the pandemic?

Thirty-three percent of all respondents surveyed on the aspects of online and hybrid teaching and learning indicated that they were familiar with using some online learning platforms prior to the pandemic. While twenty-seven percent of undergraduate respondents indicated using online learning platforms before the pandemic, only six percent of postgraduate respondents indicated a similar experience (Table 1).

Table 1

Student Respondents Familiar With Using Online Learning Platforms Prior to the Pandemic

Respondents	Frequency	Percentage
Undergraduates	1048	27%
Postgraduates	218	6%
Total	1266	33%

What aspects of the online environment were rated most highly by the students?

Students were also asked to respond to questionnaire items, based on their perception of aspects of their online teaching and learning experience. The following categories were used:

- I feel comfortable using online learning tools.
- Online classes have increased my technological literacy.
- Adequate course materials are available online.
- Adequate visual and audio aids are used during sessions.
- I receive enough support from my lecturers.
- I receive enough resources from my lecturers.

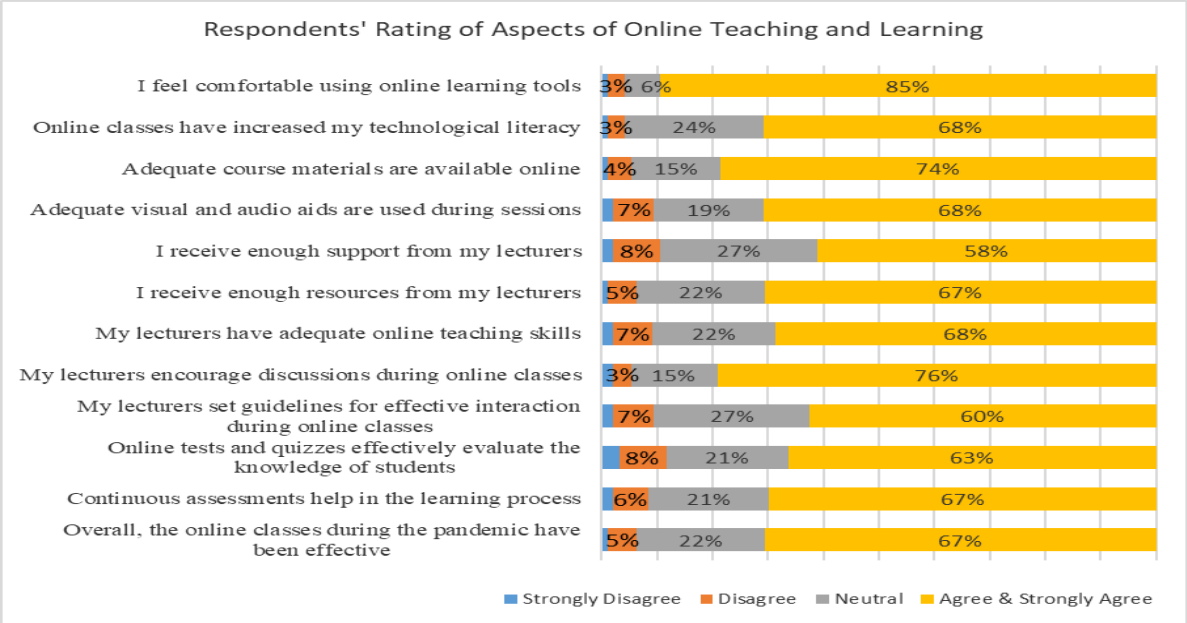
- My lecturers have adequate online teaching skills.
- My lecturers encourage discussions during online classes.
- My lecturers set guidelines for effective interaction during online classes.
- Online tests and quizzes effectively evaluate the knowledge of students.
- Continuous assessments help in the learning process.
- Overall, the online classes during the pandemic have been effective.

Most respondents positively rated the aspects of online teaching and learning (Figure 2), the mean rating was "agree". Almost all the respondents agree and strongly agree with the statement "I feel comfortable using online learning tools" and sixty-eight percent felt that online classes had increased their technological literacy. Seventy-four percent of respondents believed that adequate course materials were available online and sixty-eight percent stated that ample audio and visual aids were used during sessions. Fifty-eight percent of respondents indicated that they received enough support from their lecturers and sixty-seven percent stated that they had received enough resources from their lecturers. Sixty-eight percent of respondents believed that their lecturers had adequate teaching skills; seventy-six percent stated that their lecturers encouraged discussions during online sessions and sixty percent stated that their lecturers set guidelines for effective interactions during online sessions. Regarding the statement "online tests and quizzes effectively evaluate the knowledge of students" sixty-three percent of respondents agree and strongly agree. Sixty-seven percent of respondents indicated that continuous assessments help in the online learning process. Sixty-seven percent of respondents also agree and strongly agree with the statement "overall, the online classes during the pandemic have been effective."

The survey instrument also sought to gather qualitative data on the aspects of online teaching and learning that respondents valued the most. Open-ended feedback received was coded based on themes emerging from responses and were further broken down to reflect the various features described by respondents (Table 2). These were then linked to the presences identified in the CoI framework. Most frequently, respondents indicated course content, dedicated lecturers, knowledge and skills developed, peer and classroom interactions and physical and online resources as being the most valued aspects of online and hybrid teaching and learning. Practical applications and experiences, lecturers' feedback and communication, online sessions, assessment methods and teaching methods were some other aspects also identified as most valued by respondents.

Figure 2

Aspects of Online Teaching and Learning Rated by Respondents



The aspects of online teaching and learning most valued by respondents were linked to cognitive, teaching and social presence of the CoI framework, and the intersecting aspects identified in the framework as "regulating learning", "setting climate" and "supporting discourse" respectively (Figure 3). The focus was on these intersecting areas linked to educational engagement.

Figure 3

Aspects of Online Teaching and Learning Liked by Respondents

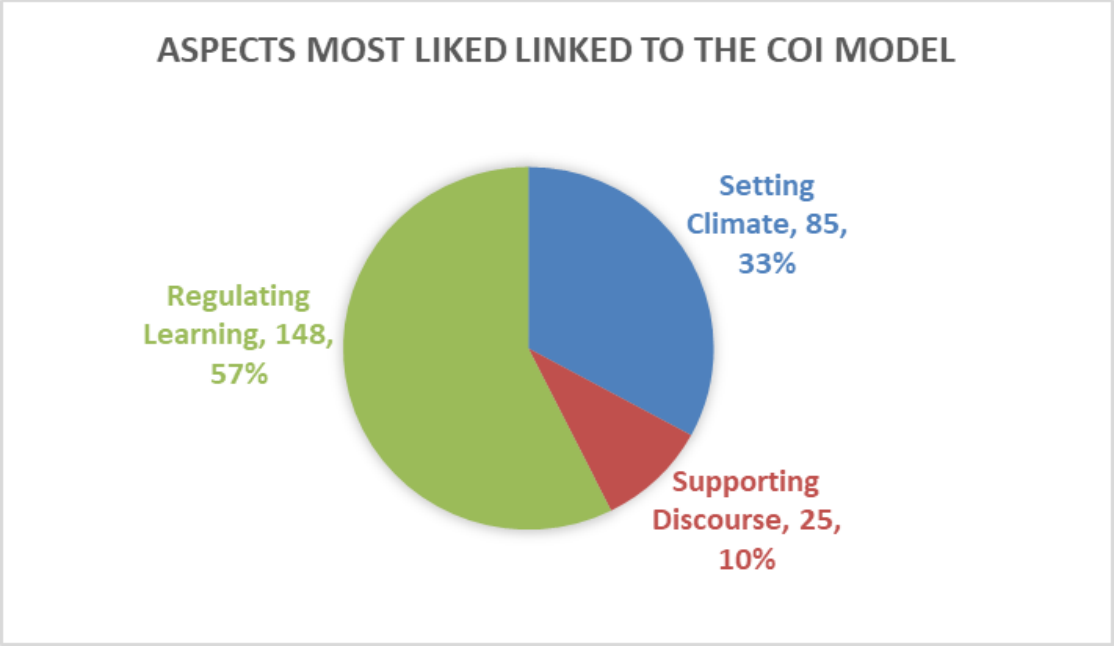


Table 2

Aspects of Online Teaching and Learning Most Valued by Respondents

Themes	Sub-Themes	Frequency	CoI Elements	CoI Features
Course Content	Topics build focus and awareness Useful Real-world issues/applicability Availability of content Level and depth of knowledge Connections to other aspects/ courses in degree Diverse fields Exposure to new ideas/ outlooks	74	Cognitive and Teaching Presence	Selecting content/ Regulating Learning
Knowledge and Skills Developed	Knowledge gained Critical thinking Leadership skills Communication skills Confidence	31		
Physical and Online Resources	Readily available Easy to use/navigate Class recordings/lecture notes My eLearning	20		
Practical Applications and Experiences	Theory linked to practice World of work connections Expands knowledge New skills and experiences gained Hands on approach to learning	16		
Assessment Methods	Continuous assessments /100% coursework Coursework/exam split Effective evaluations	7		

Dedicated Lecturers	Support Willingness Passion Knowledgeable Kindness Patience & Effort Teaching Skills Helpful Guidance Mentoring	63	Teaching and Social Presence	Setting Climate
Lecturers' Feedback and Communication	Guidelines for assignments Requirements for tasks Quick response times	8		
Online Sessions	Access and opportunity Effectiveness Convenience Cost effective Offers flexibility Time management and scheduling skills	9		
Teaching Methods	Fosters desire to learn Techniques and tools Peer learning opportunities Interactive learning activities	5		
Peer & Classroom Interactions	Interactions with peers Interactions with teachers/tutors Verbal communication Engagement Conversations/ discussions Community/ connections Collaborations Problem solving Idea creation/generation	22	Social and Cognitive Presence	Supporting Discourse

Lecturers' Feedback and Communication	Student–lecturer dialogue	3		

What aspects of the online environment were disliked by the students?

Respondents were also asked to provide feedback on the aspects of their online teaching and learning experience they most disliked. Feedback was coded based on themes emerging from the responses and were further broken down to reflect the various features described by respondents (Table 3). Heavy workloads and assignments, the lack of online and physical resources, and poor course content and delivery were themes most frequently identified by respondents as the aspects of online teaching and learning most disliked. Other aspects most disliked included unsupportive lecturers, online delivery, poor teaching methods, poor feedback and communication, rigid class schedules, the lack of internships and employment opportunities, the lack of practical applications and experiences, poor academic advising, and poor administration. When linked to the CoI framework, aspects of online teaching and learning most disliked by respondents most frequently related to regulating learning, followed by setting climate and supporting discourse (Figure 4).

Table 3

Aspects of Online Teaching and Learning Most Disliked by Respondents

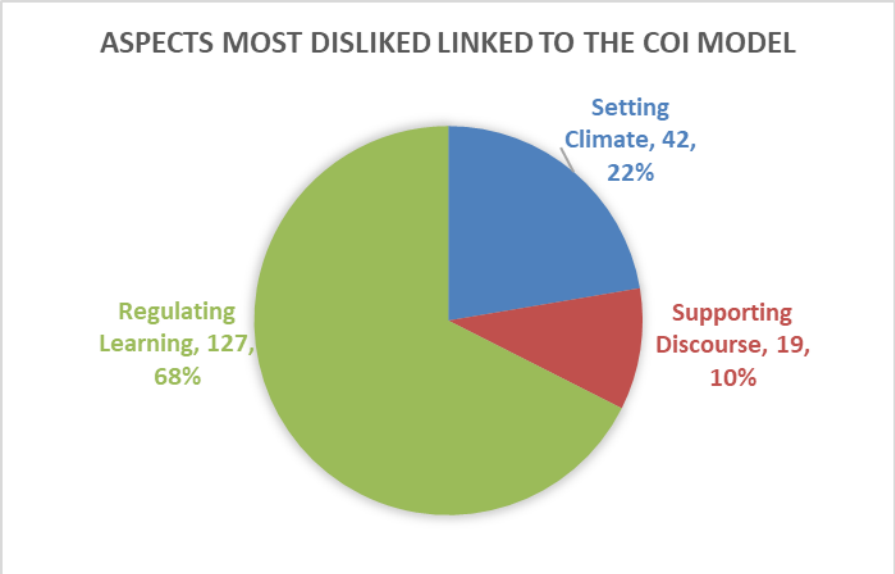
Themes	Sub-Themes	Frequency	CoI Elements	CoI Features
Heavy Workloads and Assignments	Overwhelming number of assignments Unrealistic deadlines Heavy course load Fast-paced learning	62	Cognitive and Teaching Presence	Regulating Learning
The Lack of Online and Physical Resources	Limited content online	29		
Poor Course Content	Unclear course outlines Limited exposure to content	29		
The Lack of Internships and Employment Opportunities	Poor job opportunities in the field Lack of internships to gain work experience	4		

The Lack of Practical Applications and Experiences	Limited enhancement of skills	3		
Unsupportive Lecturers	Poor support and guidance	18	Teaching and Social Presence	Setting Climate
Poor Teaching Methods	Poor teaching skills Not enough explanations Lack of engagement	13		
Poor Feedback and Communication	No feedback on assignments/opportunity for correction Unclear guidelines and requirements for tasks Poor response times	11		
Poor Academic Advising	Inadequate advising resources available Lack of support in navigating the system	2		
Poor Administration	Disorganised Poor communication	2		
Online Delivery	Lack of physical learning environment Isolating Limited interactions online Practical skills and labs lost	15	Social and Cognitive Presence & Teaching and Social Presence	Supporting Discourse & Setting Climate
Rigid Class Schedules	Late night sessions	4		

How do students feel online teaching could be improved on the campus?

Respondents were given the opportunity to voice their recommendations for improvements to the delivery of online teaching and learning. Coded based on emerging themes, the responses were as follows: more online/hybrid sessions, review workload and assessments, diverse and practical course content, more practical experiences, improved teaching methods, and more support from lecturers and supervisors. These themes were further broken down to reflect the various features described by respondents (Table 4).

Figure 4
Aspects of Online Teaching and Learning Most Disliked by Respondents



How do students rate online classes compared with blended and in-person classes?
Overall, the aspects of physical and blended teaching and learning were positively rated by respondents; the mean rating was "agree". When compared with blended and in-person classes, it was found that respondents rated aspects of online teaching and learning more favourably (Figure 5). These aspects include the amount of course materials available during sessions, the amount of visual and audio aids used, the level of support and resources received from their lecturers, their lecturers' teaching skills, whether discussions were encouraged during sessions, and the overall effectiveness of teaching and learning.

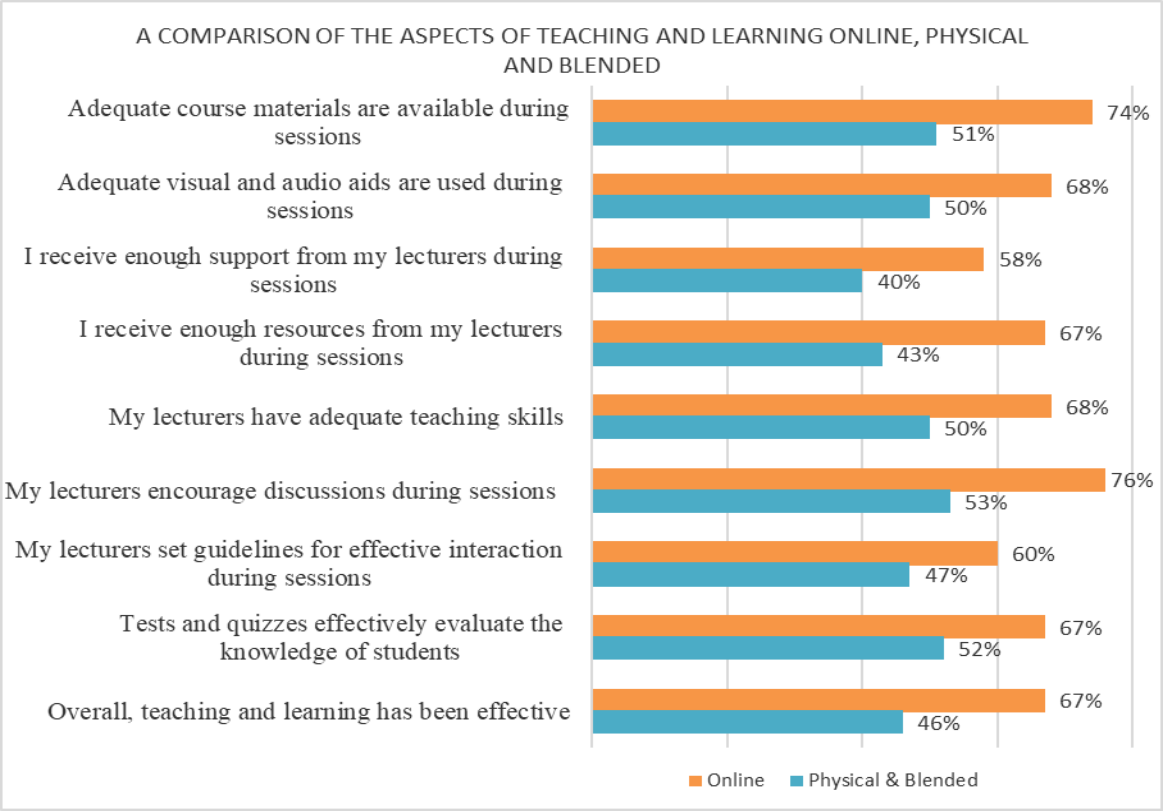
Using the CoI model, what are the implications of the students' experiences for maintenance and enhancement of quality?
To confirm maintenance and enhancement of quality, students' online and blended learning experiences were explored in relation to teaching presence, social presence and cognitive presence as indicated in the CoI framework. Findings suggest that the blended and online environments require intentional integration of these presences to ensure effective educational experiences online. Creating and enhancing cognitive, teaching, and social presences require an innovative approach by teachers during planning, implementing, and evaluating their online courses (Gogus, 2023).

Table 4

Recommendations for Improved Online Teaching and Learning

Themes	Sub-Themes	Frequency	CoI Elements	CoI Features
Review Workload and Assessments	Continuous assessments More time to complete physical exams Practical assessments vs theory based	20	Cognitive and Teaching Presence & Teaching and Social Presence	Regulating Learning & Setting Climate
Diverse and Practical Course Content	Range of materials Real-world connections Exposure to new ideas Useful in the world of world	18		
More Practical Experiences	Real-world experience Internships Hands-on approach to learning Connecting theory to practice	13		
More Online/Hybrid Sessions	Technologically enhanced teaching Convenience Better scheduling	20	Social and Cognitive Presence & Teaching and Social Presence	Supporting Discourse & Setting Climate
Improved Teaching Methods	More interactions/discussions Group activities More explanations	9	Teaching and Social Presence	Setting Climate
More Support from Lecturers and Supervisors	Encouragement Guidance Timely feedback Mentorship	8		

Figure 5
A Comparison of the Aspects of Teaching and Learning Online, Physical and Blended



Regulating Learning – Teaching and Cognitive Presences

Results reveal that students most valued aspects of online learning related to regulating learning, a mix of teaching and cognitive presences. Aspects such as course content, knowledge and skills developed, online resources, practical application and experiences, and assessment methods were essential to maintaining and enhancing their online learning experience. The students' comments in relation to instructional design and course organization are well aligned with teaching presence. These online aspects identified also credit the exchange of information and connecting and applying new ideas as important to student engagement and are therefore also linked to cognitive presence. Directly tied to the knowledge and skill they developed, and key in their online education, students indicated having useful and diverse course content that built focus and awareness, had real-world applicability, and exposed them to new topics and outlook. The need for and use of practical applications and experiences that linked theory to practice was also emphasized as it enables students to apply and expand the knowledge they gained in the classroom to world-of-work and further enhance their skills and confidence. Students also required access to readily available and easy to navigate resources that support their learning online, well-paced course loads with realistic expectations and learning outcomes, and manageable evaluations that effectively assess their knowledge. Researchers such as Kucuk and Richardson (2019) found that a dominant determinant of student satisfaction in the online environment is teaching presence.

Further supporting these findings, Hosler and Arend (2012) in a study on student perceptions of the relationship between teaching presence and cognitive presence, found that critical thinking was positively influenced when an instructor designed an organized course with clear goals and relevant assignments. Likewise, Shea et al. (2003) examining students' perceptions of teaching presence online, found that the instructional design and organization component correlated most highly with student satisfaction and reported learning. Given the importance of teaching presence, it is crucial for instructors to undertake intentional preparation when designing and co-ordinating learning activities, with clear expectations for "classroom norms" (Baker & Taylor, 2012), ensuring the infusion of teaching presence and offering foundation for cognitive presence online. In this way, the "grand design" of the course is evident (Garrison et al., 2001) and importantly, supports critical thinking and meaningful learning (Garrison et al., 2000), thereby regulating learning.

The lecturers' ability to set the climate for teaching and learning in the online environment was also rated highly by students. There is general consensus that online classes can often be impersonal. Such classes can lack the simple but meaningful verbal and nonverbal cues and the overall social presence and immediate response-time that permeates traditional, face-to-face classrooms (Cunningham, 2015). In this regard, it is vital for instructors and course designers to integrate aspects of teaching presence to reflect the social presence of lecturers online, to ensure productive online instruction, engaged and motivated students, and overall success in class (Jones-Roberts, 2018). The data suggest that by setting clear guidelines for effective interactions, encouraging discussions, and having adequate teaching skills to foster the desire to learn online, lecturers were able to construct and maintain social presence. Teaching methods used also supported interactive learning online and fostered student engagement, critical for the exchange of information. Additionally, students saw their lecturers as being knowledgeable, supportive, and helpful. Their passion, willingness, patience, and kindness were also emphasized as valuable in the students' learning online as it created an environment of trust and openness (Garrison, 2009). Yet, it is likely more important for the instructor to simply be available for students through a well-structured course (Preisman, 2014). Supporting this claim, findings reveal students' dissatisfaction with the poor levels of feedback and communication received from lecturers online. Particularly in relation to their assignments and opportunities for correction. From the data, students indicated that lecturers needed to respond to their concerns and queries in a more frequent and timely manner. Frequent and timely interaction and communication with students online offer the perception of "being there", bridging one of the many gaps of the non-physical environment. Dunlap and Lowenthal (2018) also reported that contact between students and faculty in and outside of class is critical for student engagement because it influences student motivation and involvement which underpin cognitive presence.

Supporting Discourse – Social and Cognitive Presences

Students identified aspects of teaching presence as important to engagement in the online environment but clearly indicated a dislike for the isolation of online learning. To achieve engagement in online education, teaching and learning must be regulated in an effective climate and supported by functional discourse. Closing the loop, it is vital for lecturers to set the stage for purposeful and collaborative learning processes and activities as indicated by the perceived relationship between social and cognitive presence (Garrison et al., 2000). While the instructor's presence is "seen" through course design and instruction, students' social presence is facilitated and encouraged in relation to a sense of being and belonging in a course (Picciano, 2002).

Findings reveal that students valued their peers and the interactions they shared in and outside of the classroom setting. Verbal communication, opportunities to share opinions and engage with each other and their lecturers online created a sense of community and connection. This led to students feeling more engaged and encouraged to collaborate, share ideas, and problem-solve. Such engagement and collaboration support critical thinking and therefore integrate the workings of the combined triad of presence. Supporting findings were reported by Hosler and Arend (2012) as critical thinking was positively influenced when an instructor designed an organized course with clear goals and relevant assignments, provided direct feedback that was encouraging, timely, and specific, and actively facilitated discussions that kept everyone focused and participating at a meaningful level. In this way teaching and learning online was intentionally planned for and designed to combine the presences and accommodate successful online learning experiences.

Practical Application and Future Direction

Results from this study support the previous reports that advise the careful consideration and integration of the teaching, social, and cognitive presences required for successful online education (Akyol, 2009; Gogus, 2023; Voegele, 2013). Findings are based on a period of ERT and the early return to in-person teaching. Insights gained from students' experiences adds value in such context. Centred on the aspects of online and blended teaching and learning most valued, and those disliked, along with recommendations for improvement, key results endorse the following:

- Lecturers have a key role in blended and online teaching and learning to ensure the course is well organised, clear, and they communicate frequently and in a timely fashion. This requires intentional planning and organising, and adequate follow-up and academic student support.
- Climate setting, which allows for collaboration, and removes feelings of isolation is critical to student engagement in the online environment. This also requires proper planning and investment of the institution, to select the right platforms and to have adequate technical and emotional support for students.
- The ability to practice competencies, through internships and other practical experiences, remain crucial in either online or blended environments. In this regard collaboration with

employers and planning to facilitate authentic assessments and or competency-based activities in the online environment will also be critical.

The key results of this study support the existing literature and suggest that for the maintenance and enhancement of quality in online teaching and learning institutions need to ensure that preparation for blended and online learning is intentional, and integrates the presences, as identified by the students. The features most liked by students, those disliked and their recommendations in this study, give some indication of the affordances that may be required depending on the context.

In addition, these findings suggest the role of the institution in providing infrastructure, supporting appropriate training for faculty and other staff, and preparation of guidelines and policies on maintenance of quality in the online and blended environment. Existing quality assurance rubrics such as the Quality Matters (QM) rubric for higher education can serve as a useful framework, along with findings from internal studies. Orientation and continuous, robust, support for students is also critical to ensure there is mutual understanding of roles and responsibilities, and there are realistic expectations.

To maintain and enhance students' online and blended learning experiences, universities must be able to productively regulate teaching and learning through course design and instructor facilitation, set an effective climate for constructive instructor-student dialogue, and support discourse through peer interaction and engagement efforts. In this way teaching, social and cognitive presences work in tandem to produce quality educational experiences online.

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