Article

Online Discussions as an Intervention for Strengthening Students' Engagement in General Education

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Abstract: Research suggests that students are skeptical about the values of General Education courses. This revelation calls for different strategies to improve students' engagement in the classes, including the use of online learning platforms. This study documents students' experiences of the online discussion forum as a tool for strengthening their engagement in the Social Sciences context of General Education. Data collection and analyses were conducted using quantitative and qualitative strategies involving learning analytics and critical incident questionnaire. The findings revealed that the forum aided students' engagement and learning in the courses, especially when reading and responding to colleagues' posts and relating topics to their personal experiences. Despite this, the findings showed that students' engagement was hampered while interfacing with each other on the platform when colleagues repeated ideas, and discussions were inconsistent with their personal experiences. The results suggested that constructive feedback, clear guidelines, and reflective questions can strengthen students' engagement and learning in online discussions. Based on the findings, implications for practice and stakeholders are discussed.

1. Introduction

General Education (GNED) programs supplement departmental core courses [1] by allowing students to learn concepts and ideas different from those in their specialization areas. Through an interdisciplinary approach, GNED provides students the learning opportunities for developing knowledge and skills to be functional and productive members of society. It is not surprising that literature indicates that GNED facilitates the transmission of social, cultural, economic, and educational values and goals [2]. Even so, research suggests that the objectives of GNED in many institutions may have been hampered as a result of several challenges [3]. For instance, a report indicates that some students see GNED courses as a sheer waste of time because of the inconsistency between those courses and their professional plans [4]. Another study reveals that students may not have an understanding of the values and missions of the GNED courses, and subsequently, they may deem the courses to be unimportant [5]. In the same study, the scholars state that students were undecided on the GNED program's relevance despite reorganizing their course [5].

That said, the literature indicates that technology innovations impact all the sectors of society, including the teaching and learning contexts, enhancing the quality of teaching and students' learning experiences [6,7]. Innovation is also seen as essential to move institutions forward, and in particular, the open type of innovation with a holistic method for exploring multiple innovative opportunities strengthens organizational capacities [8,9]. Open innovation, involving the process through which

external knowledge sources and technology are used to promote innovative internal measures, is required for institutional growth [10], sustainability, and success [9]. Besides, institutions can foster the adoption of innovative ideas when the culture for open innovation and collaboration is promoted [9]. Not surprisingly, some studies suggest that an essential means to enhance students' engagement and learning is the innovative use of online learning platforms [4,11], with collaborative features. In the same vein, it is explained that an open platform and advanced technologies promote knowledge development in institutions with collaboration, also considered as a driver of institutional growth [9]. Nowadays, institutions also use technology as a complementary measure to reduce students' attrition and also strengthen their engagement [12]. Corroborating this view, other scholars explain that the blend of online and traditional approaches was an attempt by higher institutions to reorganize teaching and learning to address the changing needs of today's students [13]. It also argued that online collaborative learning can reduce challenges and also foster quality teaching in large classes [14], such as the General Education classes. Despite the infusion of technology into the teaching and learning process, the extent to which it strengthens pedagogical practices, and learners' experience needs regular examination [6].

Accordingly, educators need to keep exploring strategies for strengthening students' engagement and participation in General Education courses, including online learning platforms. This measure is vital as students' engagement and participation significantly impact their academic performance [15].

Against this background, this study was conducted to document the lessons learned from the use of the online discussion forum as an intervention to strengthen students' engagement in General Education courses. The study offers insight into measures for strengthening students' engagement and participation in GNED classes using the online discussion forum. The research questions for the study are as follows:

(1) To what extent did students engage in the GNED courses through the online discussion forum?
(2) What did students find deterring and demotivating when interfacing with each other through the online discussion forum in GNED courses?
(3) What did students report as motivating for their active engagement in GNED courses through the online discussion forum?

The next section focuses on the literature review, with an emphasis on the benefits and measures required for effective use of online discussion. This is followed by the research methodology and the findings sections. The last two portions focus on the discussion and conclusion with the implications of the findings highlighted.

2. Literature Review—Benefits and Measures Required for Effective Use of Online Discussion

Numerous studies have documented the benefits of online learning tools [15,16]. Students can interact and engage with each other over the same time in the online forum [16]. Such interaction can provide opportunities to reflect, think, and organize ideas, thereby flexibly aiding personal and collective learning. Flexible time and flexible learning contexts offer students the opportunity to critically engage and take ownership of their learning [17]. Similarly, the asynchronous online discussions allow students to respond to questions at different times for several days, and this potentially increases the frequency of their participation [15]. This is in line with the thoughts that knowledge acquisition and sharing are more distributive and not restricted to a space [18].

In a study, scholars considered inclusion and support for all students as a social justice issue [19]. As such, they argued that instructors need to provide equal opportunities for students to access and engage in course resources [19]. To these scholars, online discussions can provide opportunities for students who may not like to speak in the class to contribute and make their voices heard online. It also offers a comfortable and non-threatening environment for students to engage in learning conversations with their colleagues [20].

Further, an online learning forum allows students to learn autonomously and co-construct knowledge, especially while engaging collaboratively with their colleagues and instructors [11,21,22]. This could be likened to open innovation which is said to involve collaborative acts of co-creating knowledge across different fabrics of an institution [9]. With this opportunity, the platform also fosters independent learning and critical thinking skills among students [11]. From the existing literature, there is no question that technology in the classroom is beneficial to both students and instructors. Students can visualize concepts and receive prompt feedback while instructors also receive instant feedback on students' understanding of concepts discussed [23].

Despite its well-documented merits, online discussion has its challenges; stakeholders, including instructors and students, need to know the potential difficulties and means for reducing the problems. It is known that stakeholders in education, such as students, instructors, and administrators, now use web-based applications [24]. However, this might not necessarily suggest that they all have adequate knowledge and skills to use technology in the educational context [24]. Thus, systematic orientations and regular training should be given to students and instructors to use technology effectively [16]. Not surprisingly, the literature suggests that students' computer literacy skills need to be enhanced to boost their confidence in online learning platforms [25]. Besides, learners need to have communication, self-regulation, and time management skills to be successful in online learning contexts [26].

For productive online discussions, it is also pertinent that students have access to the technological platforms used and be highly motivated to participate in online discussions [27]. So, instructors need to get students to see the values in the approach and create an enabling environment for students to engage online. Adult learners are motivated to learn when they understand why they need to learn some concepts using a medium [28]. Besides, online activities must be configured based on an iterative design and evaluation process for improved pedagogical practices and to enhance students' learning experiences [22]. For example, necessary modifications can be made, and students should be informed of any changes to plans already agreed on regarding online activities as an essential part of the iterative process. Online activities must also be planned and configured so that prompt feedback is given to students as it helps them learn and reduces their anxiety [29].

Studies also suggest that students' attitudes and participation can significantly impact their performance and learning. For instance, students' attitudes about coursework impact their motivation and education [5]. Students' participation also has positive effects on students' learning and performances [15]. Thus, instructors need to explore ways to strengthen students' engagement and involvement as a matter of importance [15]. The scholars stress further that it is necessary to keep on examining the factors promoting or hindering the effectiveness of technology since its roles are increasing in education. More so, the knowledge of how students learn can be beneficial to both instructors and students [30]. It is also necessary to identify the perceived usefulness that can help develop strategies for enhancing students' learning experiences and academic performances in e-learning [24]. In the same vein, it is germane to have an understanding of what promotes students' engagement in online discussions [31].

Considering the need to strengthen students' engagement in General Education courses, the online discussion forum was used to promote students' participation in this study in line with the best practices described in the literature. However, exploring students' take on the approach can help to determine what is working as well as measures necessary to foster students' engagement in General Education courses through the online discussion forum. As such, the research framework used in the study is shown in Figure 1, highlighting the steps followed to complete the research.
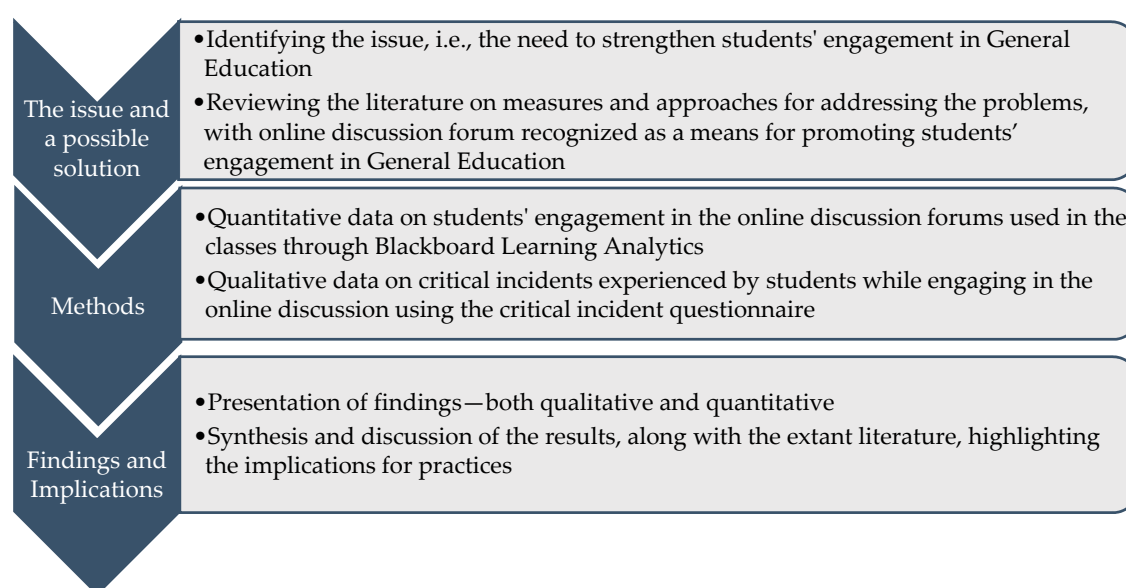
The issue and a possible solution	• Identifying the issue, i.e., the need to strengthen students' engagement in General Education • Reviewing the literature on measures and approaches for addressing the problems, with online discussion forum recognized as a means for promoting students' engagement in General Education
Methods	• Quantitative data on students' engagement in the online discussion forums used in the classes through Blackboard Learning Analytics • Qualitative data on critical incidents experienced by students while engaging in the online discussion using the critical incident questionnaire
Findings and Implications	• Presentation of findings—both qualitative and quantitative • Synthesis and discussion of the results, along with the extant literature, highlighting the implications for practices

Figure 1. Research framework.

3. Methodology

3.1. Research Context

This study was conducted in the context of two courses in the Social Sciences Cluster of the General Education Department at a North American Public University. The two courses ran for 14 weeks. Students' learning was facilitated in the class and supplemented with asynchronous online debates using the discussion forum embedded in Blackboard Learning Management System (LMS).

In this context, the use of the online discussion was grounded in the constructivist theory. As explained, constructivism sees learning as an active process characterized by knowledge construction and personal interpretation of one's experiential world [32], and reflection [33]. Five reflective questions were posted in the online discussion forum, and students' participation accounted for 20% of their final grade. This incentive followed a study noting that students may choose not to participate in online discussions if given the impression that the activities' extrinsic value was insignificant [29].

For each online discussion, students were given one week to participate and engage with one another. They were advised to post their initial thoughtful response in 200 to 300 words and also make comments on at least two colleagues' posts during the week. Doing that provided them with the opportunity to reflect and make connections between concepts and real-life situations and help each other learn. Instead of using just texts, students were asked to watch and analyze videos as part of online discussion activities [34]. This approach is also in line with the idea of blended learning being a hybrid of different pedagogical approaches, including online activities, to facilitate teaching and learning.

3.2. Research Design

A mixed-methods design, involving both quantitative and qualitative approaches, was used in the study. Influenced by the pragmatic paradigm, the method was adopted on the premise that the integration of quantitative and qualitative data can strengthen researchers' understanding of a complex issue [35]. The process involved in the collection and analyses of the quantitative and qualitative data is explained below.

3.3. Data Collection

For data collection, both quantitative and qualitative strategies were used in the study. Through the learning analytics of the online discussion forum on Blackboard, the quantitative data was collected to have a sense of students' level and trends of engagement in the online discussions. On the other hand, the qualitative data was garnered using a modified version of Critical Incident Questionnaire (CIQ) [36] to seek explanations for the quantitative findings through direct students' narratives. As explained, the CIQ provides students the opportunity to document critical incidents in the teaching and learning process and the possible factors responsible for such events. Through the CIQ data, facilitators can make informed decisions on measures for improving the teaching and learning process [36].

3.4. Participants

All of the 67 students that enrolled in the two courses were invited to participate in the study. However, 40 students, accounting for 60%, consented to participate in the research, and their online discussion posts were quantitatively analyzed. Additionally, the 40 students were invited to complete the Critical Incident Questionnaire (CIQ) with five essential questions anonymously online. Of the 40 students, 23 (34% of 67) completed the questionnaire providing qualitative data (See the Appendix A for the survey). Conducting the study in the two classes without a large student populace may be seen as a limitation to the study. However, the number of participants involved was considered suitable as the study's goal was not to generalize but to seek rich and nuanced thoughts to understand the participants' take on the subject explored [37].

3.5. Inference Quality and Trustworthiness

Validation of data collection tools and findings are meant to minimize the human influence, which may corrupt information [38], and also establishes credibility through triangulation [35]. In this study, the data collection and analysis procedure were discussed with six colleagues in the Scholarship of Teaching and Learning (SoTL) team at the University. Their feedback was used to validate this research process right from the beginning through to the end. The study's findings were also shared with two colleagues in the team who provided some feedback, lending credibility to the study [39]. Besides, the triangulation of data was performed by drawing on the primary quantitative and qualitative data and the extant literature, which lent validity and dependability to the study [38].

3.6. Data Analysis

The quantitative data generated through learning analytics on Blackboard were analyzed using simple descriptive statistics and presented in graphs in terms of analysis. On the other hand, the qualitative data generated through the CIQ were analyzed using the inductive thematic approach [40–42]. In doing so, the CIQs anonymously completed by the students were meticulously read several times. Students' responses were then categorized to each of the CIQ questions into coherent thoughts through which the common and consistent viewpoints were developed into themes. Lastly, the qualitative findings were presented in tables showing the themes and vignettes of students' common thoughts.

3.7. Ethical Issues

This study was conducted in compliance with scientific bodies' standard ethical guidelines such as the American Education Research Association. As required, an ethical consideration form was completed and approved by the research office of the university. Consent forms were distributed to all the students in the classes by an administrator who has no teaching responsibility, and those willing to participate in the study completed the forms. Through the consent form, students were given information about the study's purpose, their voluntary roles, and how they can withdraw from the research without any repercussions. Students were also assured of their privacy and the confidentiality of their information.

The consent forms were kept in the Department's administrative office until the students' final results were released, and grade appeal time passed. So, information about the students who indicated their willingness to participate in the study was unknown until their results were released, and the grade appeal time has passed. Data from those who signed the consent forms were retrieved and analyzed. Despite retrieving the data based on the completed forms, students' privacy and confidentiality were respected as no name was mentioned in any part of the study. By getting students to complete the CIQ online voluntarily and anonymously, their privacy and convenience were also respected as they were able to complete the questionnaires in their leisure time. In the next section, findings from the quantitative and qualitative phases of the study are presented.

4. Results

The results of the study are presented in this section, using the research questions as a framework.

4.1. Research Question 1: To What Extent Did Students Engage in the GNED Courses through the Online Discussion Forum?

In the online discussions, students were expected to post their initial thoughts in response to questions and make comments on two colleagues' posts. So, students were to have a minimum of three posts in each of the online discussions. From Figure 2, it is clear that the majority of the students were able to meet the expectation. Thus, this finding indicates that the students' engagement level through the online discussion forum in the courses was very high.
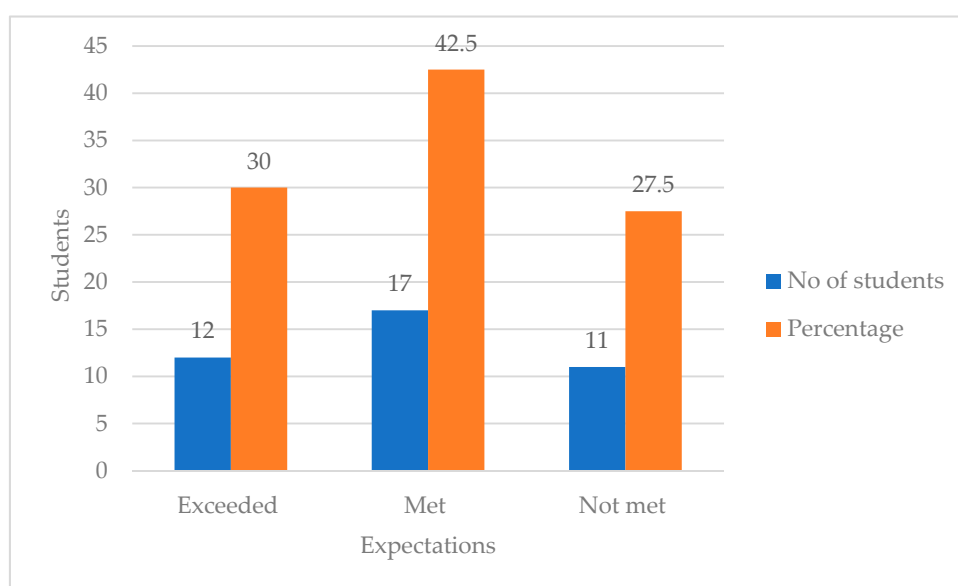
Figure 2. Students' online post expectations (n = 40).

To ensure that students express themselves and critique each other, drawing on relevant readings and their personal experiences, each of their posts was between 200 and 300 words. Figure 3 shows that most of the students were able to meet the word count expectations, with some slightly going above the limit to engage in the discussions thoroughly.
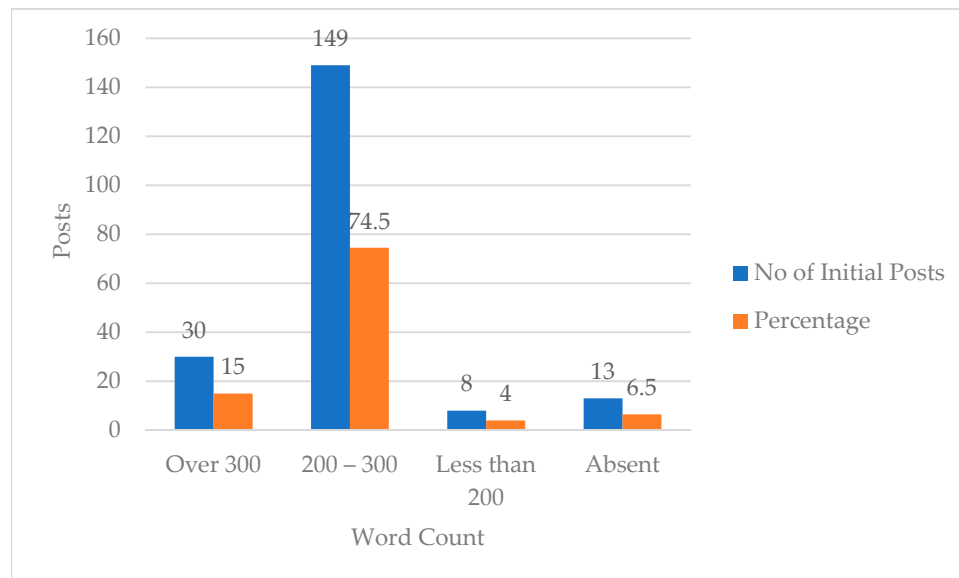
Figure 3. Students' online post word count (n = 40).

This revelation echoes the previous finding that students' engagement in the courses through the online discussion forum was highly encouraging. This finding may have been informed by some factors and conditions. As can be seen in Table 1, four themes emerged from students' responses regarding what made them feel the most engaged in the course.

Table 1. Moments in which students feel most engaged while interfacing with colleagues in the courses through the online discussion forum.

Themes	Vignettes
Reading from others	• When I was reading everyone's answers, it keeps me engaged and helps me to learn more (AP2). • When reading through other people's responses (BP6).
Responding and commenting on others	• Replying to group members was the most engaging and enjoyable part (BP8). • I felt most engaged when responding to others because I learned a different perspective on the same topic (AP5).
Reading and responding to others	• When I was able to interact with other students and read their work, and respond to their ideas. It opened my mind to new perspectives (A10). • I felt having the opportunity to read and respond to my peers' discussion threads helped me feel engaged with the ideas discussed. It helped me feel like I was contributing to others' learning as well as expanding my own (AP12).
Topics related to life experiences	• I felt most engaged when I could relate the discussion topics to my life, either currently or in the past (AP3). • I felt more engaged when the topic about families was discussed and it really brought how the family is viewed to be valuable to many people (BP4).

From the data, it is clear that students felt engaged the most in the courses through online discussions when reading their colleagues' posts and responding to their comments. The data

underscore students' need to be given a considerable time to read and respond to posts in the online discussions. Additionally, they felt engaged when the topics explored are related to their life experiences. As such, online questions should be crafted to provide students the opportunities to critically reflect on course content and connect to their real-life experiences.

4.2. Research Question 2: What Did Students Find Deterring and Demotivating When Interfacing with Each Other through the Online Discussion Forum in GNED Courses?

As shown in Figures 1 and 2, a few students could not engage in the courses as expected. Besides, Figure 4 below shows that students' engagement level was found to depreciate towards the end of the semester.
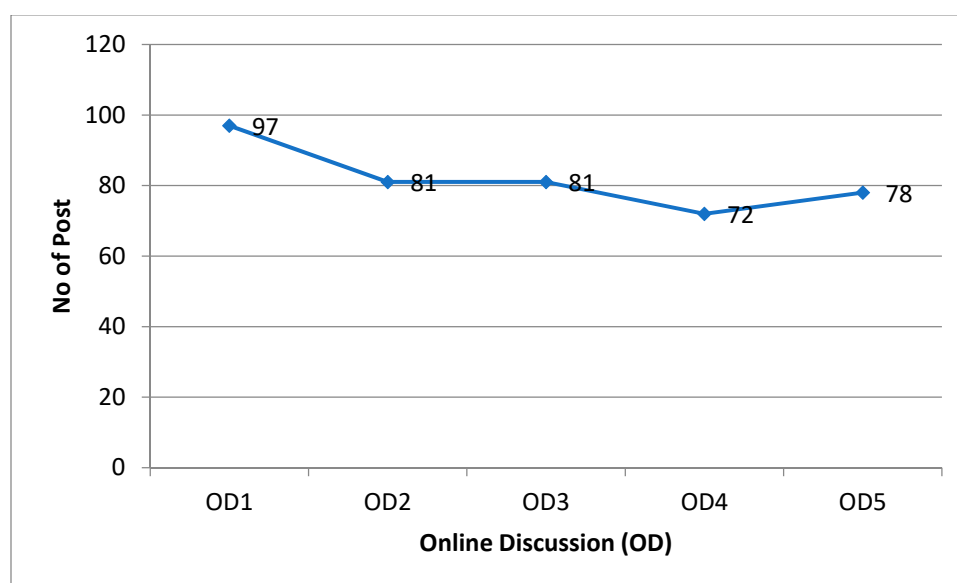

Figure 4. Trends of students' posts in online discussions.

This finding calls for concerns and does suggest that some deterring factors and conditions may have impacted students' participation in the courses through the online discussion forum. Thus, students were asked to indicate what made them feel most distanced when interfacing with each other in the courses through the online discussion forum. From their responses, three themes emerged, as can be seen in the Table 2 below.

As earlier pointed out, most students did not feel distanced in the courses while engaging with colleagues through online discussions. However, some students did indicate they felt distanced and deterred mostly when unable to relate to posts and also when their colleagues repeated ideas already expressed. Thus, the findings suggest that online discussions are to be facilitated and moderated by instructors with clear guidelines on students' expectations to prevent unnecessary repetitions in their posts. Doing this may also stimulate the students to remain on track right from the beginning of the semester to the end without reducing their level of engagement.

Students were also asked to mention the actions which they found puzzling, confusing, and demotivating while participating in the online discussion forum. From the data analyzed, two themes emerged as the actions that students found baffling and confusing while engaging in the courses through the online discussion forum.

Table 2. Moments in which students feel most distanced in the courses when engaging through the online discussion forum.

Themes	Vignettes
Did not feel distanced	• I did not feel distanced from what was going on and the ideas discussed. I felt that the online discussion was very beneficial in aiding in my learning and helping me to feel included and valued within the classroom setting (AP12). • I never really felt distanced. All the online discussions were pretty interesting (BP9).
Unable to relate to posts/topics	• I felt the most distanced from the discussion when I could not relate the topics to my own experience (AP3). • I felt distanced if I read a post by another student that did not make sense to me, or made points that I could not relate to (BP1).
Repetition of ideas	• I felt that people copied each other's ideas sometimes when they are desperate to finish in time (AP10). • I did think there was a fair repeat among my classmates' answers (BP2).

As can be seen in Table 3, some students did not have any experience of confusion in the online discussions. However, it is also clear from the findings that some had issues with the platform used. Therefore, it is crucial to provide students with training and information on how to use the platform to maximize its benefits. By doing this, students who may be new to the online discussion environment will better understand the space and its usage as a tool for collaborative learning.

Table 3. Actions that students found most puzzling or confusing while interfacing with others in the online discussion forum.

Themes	Vignettes
No experience of confusion	• Didn't find any actions that were confusing or puzzling (AP7). • There was no situation that confused me. The whole course was very straightforward (BP9).
Issues with the online discussion forum	• I found the submitting to be a little confusing and using the online discussion was not as easy as I was hoping (AP1). • At first, I didn't understand how to use the online discussion. I did not know how to use the tool, and I did not know why the discussion will be beneficial. However, by the end of the semester, I found the discussion the process to be very beneficial (AP11).

4.3. Research Question 3: What Did Students Report as Motivating for Their Active Engagement in GNED Courses through the Online Discussion Forum?

Regarding the measures that students found most motivating and helpful while engaging through the online discussion forum, the three themes from the data analyzed, as shown in Table 4.

Table 4. Actions that students found most affirming, motivating and helpful while engaging with the course in the online discussion forum.

Themes	Vignettes
Colleagues' feedback and response	• When students replied to my ideas, especially if they disagreed (BP7). • I think this would be having my peers respond to my discussion posts. This helped me gain a larger perspective and helped to broaden my understanding of issues discussed in class. I found that responding to my peers' discussion posts was very affirming (AP12).
Instructors' roles (feedback and instructions)	• I feel that the instructor commenting on my own posts very helpful and motivating because of some reason, I feel like the other students aren't as sincere in their comments as I would be when I leave comment on their threads (AP6). • Specifically, when the instructor would give us thorough instructions on our assignments (BP9).
Students' efforts	• People were very kind in responding to each other's responses (AP10). • The effort that was put in by all the students in the class. Almost the full class always submits a discussion, and it was motivating for other students to also submit a discussion (AP11).

As the data showed, students found colleagues' feedback and efforts in participating in the online discussions to be beneficial and motivating. Thus, instructors need to provide clear guidelines to students on their roles and responsibilities in online discussions in order to be actively engaged and to enhance the learning experiences of their colleagues. Perhaps, this explains why students indicate that instructors' roles, including constructive feedback and clear guidelines, are stimulating and helpful.

Further, students were asked to indicate the actions and events they considered surprising while engaging with colleagues in the online discussion forum. Three themes emerged from the data, as seen in the Table 5 below.

As shown above, it was surprising to some students that colleagues were able to share personal stories online while some were amazed by the magnitude of colleagues' participation. Moreover, astounding to the students was the level at which colleagues demonstrated respect for diverse perspectives. This finding underlines the importance of clear guidelines and establishing a safe and respectful space where students can freely share thoughts without any fear of intimidation. With creating an enabling space characterized by a culture of respect, students are also likely to be more proactive in engaging and participating in online discussions.

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Table 5. Things and actions that students found most surprising about the online discussions in the courses.

Themes	Vignettes
Personal stories and life experiences	• Hmmm . . . usually when someone says something about their own experiences relating to the topics (AP3). • I was quite surprised by how people could be so opened. I guess this class topic is right for everyone in our class, but I was still impressed by how people could be open with themselves (AP5).
Level of engagement	• The class participation rate was surprising and welcomed. Students replied to more than the mandatory posts (BP7). • I was surprised at the outcome of the discussion and how engaging and thorough everyone's responses were (AP9).
Respect for different perspectives	• The thing that surprised me the most was seeing the different perspective on the given topics. Some people I would agree with while with others, I would not always agree with (AP4). • I was surprised by how much I enjoyed seeing other people's opinions. Not everyone speaks up in class, however, the online discussions allowed me to browse varying opinions which I found intriguing (BP3).

5. Discussion

As shown in the literature, using a pedagogical strategy may not necessarily translate into effective student engagement and enhanced learning experiences [5]. However, that was not the case in this study, as the supplementary online discussion forum aided students' engagement and learning to a large extent. For instance, the quantitative data reveals that the majority (72.5%) of the students met the requirements for engaging with course materials and colleagues through online discussions. Not surprisingly, the qualitative data indicates that students did not feel distanced in the course of engaging with colleagues and exploring the recommended resources through the online discussion forum. This revelation could be because they were given clear guidelines as they indicated that they did not have a sense of confusion and found the whole process straightforward. The qualitative data also suggested that students feel most engaged through the platform when reading colleagues' posts, responding to comments, and topics related to their personal life experiences. Therefore, this study reinforces the previous reports that students could engage and learn from one another through an online learning forum [4,11], characterized by open innovation ideas, including collaboration and technology [8–10,18]. More importantly, the findings echo the need for students to be given ample time to analyze questions, drawing on personal experiences and co-constructing knowledge with their colleagues [17,18]. Doing this can create an opportunity for students to make thoughtful contributions.

Conversely, it is worth noting that some (27.5%) students were unable to meet the expectations, and a few (6.5%) were unable to participate in the online discussions. Given that students were regularly reminded of the values of the courses [24] and the online discussions, it is apparent that some may have faced some difficulties while interfacing with colleagues. Figure 3 revealed that students' participation levels dropped towards the end of the semester. The revelation calls for concerns, and reinforces the view that students were faced with some challenges while engaging with colleagues in the online discussion forum. As such, educational developers and instructors need to keep tracking students' engagement and learning in the online discussion forum to determine what may be hindering their participation [10]. The qualitative data confirmed the sentiment that some factors hampered students' engagement in the online discussion forum. As the data revealed, some students could not wholly

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participate when unable to relate posts/questions to their personal experiences, and so their colleagues repeat ideas. The findings suggest the need to post questions helping students to critique issues and make connections to their personal life experiences. With this considered, there is the possibility that students will reduce the repetition of ideas since they will have different ways of interpreting their own life experiences [28]. Instructors will also need to be active online to moderate discussions and to always remind students on the need to be thoughtful in their posts to enhance their learning.

Further, some students had issues with the online discussion forum as they struggled with submitting their posts and did not know much about the platform initially. Perhaps, this explains why it is contended that web-based applications are now used in education, but not everyone understands how to use online applications effectively [20]. Thus, the finding underscores the need for students to be given orientations, technical support, and a constant reminder about the platform's benefits and values.

However, the findings suggest that students' engagement and learning through the platform can be strengthened under certain conditions. For instance, students indicated that they find colleagues' feedback, response, and efforts helpful, along with the instructor's feedback, and clear guidelines are useful and motivating in the online discussions. Literature shows that online discussions allow students to share thoughts comfortably without any sense of threats or intimidations, unlike the traditional face-to-face context [15,16]. Thus, the data underscores the need for instructors to create a safe, collaborative and enabling online discussion forum where students can freely participate and provide feedback. Creating such an environment and culture of open innovation also offers students the opportunity to build learning communities, strengthening their engagement and learning through the platform [8,10,25]. Not surprisingly, students indicated that they were astonished by the magnitude of their colleagues' engagement level, personal stories shared, and respect for different perspectives.

Along with a safe and enabling learning space, instructors need to provide students with clear guidelines on their responsibilities along with constant feedback, as they can learn better when supported by experienced others [25,29]. Besides, instructors need to facilitate online discussions intentionally and also craft questions in ways which students can make connections to their personal life experiences. Since the courses are meant to equip students with the knowledge and skills to contribute meaningfully towards societal growth, this needs to be given an utmost priority.

6. Conclusions and Implications for Stakeholders

This study explored the place of online discussion as a means for strengthening students' engagement in GNED courses, drawing on student experiences. The study is unique to a context, and generalization based on the findings is impossible. Future studies may involve more courses using a collaborative research model with more stakeholders as participants. Future studies may also consider a longitudinal approach following students for some semesters, linking findings to their grades, and highlighting possible practical skills gained through the application of online discussions.

However, the study does have implications for stakeholders, such as administrators and instructors. For instance, the platform's use as a supplementary teaching strategy in GNED courses needs to be encouraged by administrators, including provosts, deans, departmental chairs, and course coordinators. This idea is essential as students' demographics are changing and different pedagogical strategies for strengthening their learning and promoting the goals of GNED need to be considered. Administrators also need to provide continuing technical training support for both instructors and students in order to use the online discussion forum to effectively teach and learn. During the new student orientation event, administrators also should educate students to be open to learning from the different platforms and pedagogical approaches, including the online discussion forum.

The online discussion forum should be used intentionally by instructors with clear guidelines given to students when orientation is organized at the beginning of a course. Clear instructions can help reduce the repetition of ideas and also reduce tension for students who may be relatively new to the platform as a learning space. Instructors need to continually remind students of the learning space's

value and post questions that help students critique issues and relate discussions to their personal experiences. Further, instructors need to provide regular feedback to students and give the impression that the platform is a safe space for everyone to share thoughts without intimidation. Doing this will, in turn, encourage students who may not be talking in the face-to-face teaching context, to freely share their opinions, learn from others, and also help others to learn. More importantly, instructors need to provide students with ample time to think, reflect, engage, and learn collaboratively with colleagues while also tracking students' performances through the platform. Doing this can provide insights for instructors to determine what is working and what they need to work on to strengthen the platform's goals.

For students' learning experiences to be enhanced, they need to be open to learning through different contexts, including the online discussion forum. They need to respectfully engage with each other, appreciate differences in colleagues' perspectives, and provide each other with feedback to help each other learn. When necessary, students should ask for assistance from colleagues or their instructors, as some may sometimes need clarifications on online discussions or need technical support.

Appendix A

Critical Incident Questionnaire (Adapted from Brookfield, 2006).

You are invited to kindly respond to the following five questions about your experiences of online discussions in this course.

(1)　At what moment in the online discussion, if at all, did you feel most engaged with what was going on/ideas discussed?
(2)　At what moment in the online discussion, if at all, did you feel most distanced from what was going on/ideas discussed?
(3)　If any, what action(s) that anyone (instructor or student) took in the online discussion did you find most affirming, motivating and helpful?
(4)　If any, what action(s) that anyone (instructor or student) took in the online discussion did you find most puzzling or confusing?
(5)　If any, what about the online discussion that surprised you the most?

Thank you so much for taking the time to complete the questionnaire.

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