

A Reflection On Student Discussions In An Asynchronous Environment

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ABSTRACT

This study is a reflection on the online discussions of students in an honours degree module. The participants were distance education students at one of the distance education institutions in South Africa. To determine the level of participation and which topics were posted on the discussion forum, transcripts of discussion forums were analysed. Transcripts of these discussions, transcribed verbatim as they occurred over a period of 3 years (2012, 2013 and 2014), served as the largest data set for this particular investigation. The discussion transcripts were examined to determine if there were evidence of any learning having occurred in the module. The results of this study indicated that the majority of topics that the students post on the discussion forum are personal. Instead of discussing subject content the discussion forum was used by students to send complaints to the lecturer or to find study partners through posting their personal contact details like email addresses and cellphone numbers. Recommendations were made for the planning of future discussion forums.

Keywords: distance education, discussion forum, asynchronous, synchronous.

Introduction

The opportunity to engage in academic discussions between students about subject related issues is essential to the student's professional development and can potentially be achieved through online discussions (Clark, 2001). Such an opportunity can be offered through both synchronous and asynchronous online discussions. Asynchronous discussions allow students the freedom of choosing when and how often they would like to engage in such discussions (Beeghly, 2005) unlike synchronous discussions during which the exchange happens at the same time in real time (Benson, 2010). When students communicate with one another in real time, they jointly construct the conversation, regarding themselves and their partners as integral entities in the exchange. They perceive that they have mutual concerns and a common understanding of the issues under discussion. Students interacting synchronously, that is, in real time, can obtain immediate feedback from their peers and thus adjust their messages accordingly. This temporal immediacy, as with other forms of immediacy, should foster greater interactivity in the form of greater involvement, mutuality, and similarity (Burgoon, Fang, & Twitchell 2010). Although some researchers (Maushak, & Ou, 2008) argue that synchronous communication enables immediate feedback and responses and could provide online distance education learners with the opportunity to interact, research (Giesbers, Rienties, Tempelaar & Gijssels, 2014) shows that for distance education, asynchronous communication has an advantage over synchronous communication because it allows more time to reflect on and refine contributions. Students can respond when it is convenient for them to do so and can read peer reflections on issues. Students are able to log into their classes to view the questions and remarks made by other students and the instructor before making their own contribution. Another advantage to having asynchronous discussions is the fact that the discussions give the students more information and allow a more meaningful analysis (Meyer, 2007). Through these discussions students' professional development could be enhanced. Through reading, reflecting and reviewing peer work, students could learn how to improve their own writing while learning how to offer constructive criticism (Slowinski, 2000).

Bhattacharaya (1999) finds that learners prefer asynchronous discussion because it gives them an opportunity to read and craft responses and to reflect on the issues involved before responding. However it should be noted that asynchronous discussion

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is more than just crafted responses. Asynchronous discussion has the capacity to allow for both informal and formal or reflective talk. The latter follows a set of established criteria. Davidson-Shivers, Muilenburg and Tanner (2001) examined how graduate students participate in both synchronous and asynchronous discussion. They found that, although students enjoy both forms of online discussion, asynchronous discussion provides an opportunity for them to give reflective, thoughtful responses to posed questions and to provide insightful reaction to others' opinions and ideas. Rourke and Anderson (2002) state that asynchronous discussion allows students to consider others' contributions and to compose appropriate and coherent responses.

Research shows that students need informal and supportive conversations, advice on sensitive situations and reflection on experience followed by discussion with others (Chubbuck, Clift, Allard, & Quinlan, 2001). The expression of support and encouragement exchanged between students, according to Palloff and Pratt (1999), is one of the indicators that an online community has been forming (Maushak & Ou, 2008). These discussions are particularly important for students as they engage in consideration of their beliefs and knowledge (Munby, Russell & Martin, 2001).

Online discussion has emerged as a forum for conversation that overcomes the obstacles of distance and time (Zhao, Englert, Chen, Jones, & Ferdig, 2000). Students and particularly first-year students are provided with an opportunity to discuss concerns in a non-evaluative setting (Edens, 2000). Students can engage in individual reflection while coming to understand the context of a community of individuals (Nicholson & Bond, 2003). Furthermore, literature shows that successful online communities display a strong sense of commitment to an idea and a shared sense of purpose or well-defined domain of interest (Lieberman, 2000). These online discussions offered students the opportunity to learn from each other. However, in the online discussion the rules for participation should be determined (Moore & Marra, 2005).

Synchronous or asynchronous discussion forums are based on the pedagogical doctrine of collaborative learning (CL) theory. This implies collaboration between participants, experimentation, as well as open inquiry. Students should feel comfortable voicing opinions and exploring new ideas and approaches to the topic (Nelson & Carson, 1998). The role of the instructor is to provide guidance, keep the discussion on track, contribute his/her unique knowledge and insights, and weave together the various discussion threads keeping them relevant to the course content (Rohfeld & Hiemstra, 1995).

The concept of CL is largely rooted in Vygotsky's sociocultural theory (SCT) which views learning as inherently a social process activated through the Zone of Proximal Development (ZPD) (Dillenbourg, 1999). Vygotsky's sociocultural views have contributed significantly to social constructivist epistemology and highlight how learning is mediated in accordance with the context and experience with peers. This view illuminates the causal relationship between social interaction and an individual's cognitive development. Learning, from the sociocultural perspective, is essentially a social term rather than individual in nature, where interaction constitutes the learning process (Lantolf & Pavlenko, 1995; Lantolf & Thorne, 2006). Piagetians believe that peer experiences can help individual children modify their cognitive systems and foster intellectual growth, which would not easily be done by children working alone or children working with adults. When learners are involved in peer discussions, their minds are challenged by viewpoints from different perspectives and levels.

Therefore, social interaction is viewed as a prerequisite for the growth and development of cognition (Donato & McCormick, 1994), and the physical and symbolic tools that mediate human interaction cannot be separated from the social milieu in which it is carried out (Griffin & Cole, 1984). In other words, mental functions are "intertwined with socioculturally determined factors" (Lantolf & Appel, 1994). Vygotsky (1978) then based his paradigm on CL, claiming that working with a more capable person is pertinent to personal development. Vygotsky focused on the individual powerfully rooted in a CL context and famously made the following observations: learning is first mediated on a social level between a child and other people in his or her environment, and then is internalized by the child on an individual level. Secondly, learning on the social level often involves mentoring provided by more knowledgeable persons, either by adults or peers, who engage in activity with less experienced persons in a process of guidance or collaboration. In order for learning to proceed from the social to the individual level, language serves as a psychological tool to regulate objects, others, and oneself in organizing functions that are critical to mental activity. From this perspective, the development of an individual cannot be viewed only as the study of an individual. The external social world in which the individual life has developed should also be considered. Thus, learning, with regard to this notion, is "embedded within social events and occurring as a child interacts within people, objects and events in the environment" (Vygotsky, 1978).

More specifically, mental functions such as thinking, reasoning, and problem solving, can be performed by individuals as well as in collaboration with peers (Griffin & Cole, 1984).

Therefore, CL in the Vygotskian tradition aims at social interaction either among students or between students and a teacher, and essentially assists students in advancing through the Zone of Proximal Development (ZPD), which he defined 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” (Vygotsky, 1978).

Similarly, collaborative learning is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Usually, students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product. Collaborative learning activities vary widely, but mostly center around students’ exploration or application of the course material, not simply the teacher’s presentation or explication of it (Smith & MacGregor, 1992).

Collaborative learning represents a significant shift away from the typical teacher centered or lecture-centered milieu in college classrooms. In collaborative classrooms, the lecturing/ listening/note-taking process may not disappear entirely, but it lives alongside other processes that are based in students’ discussion and active work with the course material. Teachers who use collaborative learning approaches tend to think of themselves less as expert transmitters of knowledge to students, and more as expert designers of intellectual experiences for students-as coaches or mid-wives of a more emergent learning process (Smith & MacGregor, 1992).

Overall, collaborative learning assumes the following (Smith & MacGregor, 1992). Firstly, learning is an active and constructive process. This implies that learners integrate new material with what they already know-or use it to reorganize what they thought they knew. Secondly, learning depends on rich contexts. This means that rich contexts should challenge students to practice and develop higher order reasoning and problem solving skills. Hence in collaborative learning learners should be given challenging tasks and questions. Thirdly, learners in a collaborative classroom are diverse. In principle they bring multiple perspectives to the classroom, diverse backgrounds, learning styles, experiences, as well as aspirations. Hence teachers cannot assume a one-size-fit all approach. Fourthly, learning is inherently social. In other words the structure of learning should allow for learners to talk with each other and produce intellectual synergy through mutual engagement. Lastly, learner involvement should be central to collaborative learning. This is because involvement in learning, involvement with other students, and involvement with faculty are factors that make an overwhelming difference in student retention and success in college. Consequently, collaborative learning builds closer connections to other students, their faculty, their courses and their learning.

Problem statement

Good discussion, whether in class or online, requires teachers "to facilitate the engagement of students in a dialogical process that produces increasingly sound, well grounded, and valid understanding of a topic or issue" (Lang, 2000). Good discussion also moves from a sharing of descriptive content to one of reflection and critical thinking. Critical thinking may be considered “self-directed, self-disciplined, self-monitored, and self-corrective thinking” (Scriven & Paul, 2004). It entails careful observation of what is read, heard or observed followed by a thoughtful, organized analysis that results in a logical, reasoned response.

Sustained quality discussion (Collison, Elbaum, Haavind & Tinker, 2000) means negotiating discussion through an asynchronous format. Therefore, the students should be encouraged to incorporate their thoughts into the writing. They (students) should be more aware of the need for clarity and reflection on what they have written in the discussion forum. I have found that students tend to write more formally because they are acutely aware that their written responses will be read by both the instructor and their peers. Also, they are able to reread and, consequently, revise their own work for clarity in communication. However the support and culture of respect is needed as well as a cultivated reasoned discourse. Such a discourse needs to support the cognitive emotional aspects as a foundation. Using the online model, then, requires that teachers and designers make crucial decisions at various points. A key decision factor is based on the nature of the learning that is prescribed.

Therefore, the study seeks to contribute to the literature in two ways. Firstly, the author reflects on the posted discussion

topics and their relation to student learning by examining the topics posted in the three years, 2012, 2013 and 2014. Secondly, the study recommends ways of trying to improve discussion forums.

Consequently the study reflected on the following research questions: What is the nature of the comments posted by students in the discussion forum? Is there any evidence of learning that took place in the discussion forum?

Research methodology

Explanatory qualitative research

Ontologically this exploratory qualitative research consists of a set of interpretive, material practices that make the issue of student discussions visible. It (qualitative research) involves naturalistic approach to student discussions. This means that qualitative students' discussions were studied in their natural settings (Denzin & Lincoln, 2000). The use of quantitative research made clear some of the insights and experiences of students that needed to be understood in order to address the complexities of learning processes and the contextual factors required for the learning environment (Creswell, 1998).

Participants and context

The students who participated in this study were adults, most of them well over 20 years of age. On average, they were older than students attending a conventional university. They were registered for an honors in Science Education. The total number of Science Education students registered per year were as follows, 172 students in 2012, 165 students in 2013 and 109 students in 2014. The students in this research displayed characteristics documented in the literature on distance education students (Ipaye, 1992). Most of these students had jobs and families, hence in addition to being students they needed to coordinate the different areas of their lives which influence each other. These include, leisure pursuits, travels, religions which had to be juggled with studies. Some of them were single parents with one or more children in their care with all the attendant stress. Others were unemployed and may be spending a lot of time job hunting. A number of these distance learners have had no contact with formal schooling for a long time and have returned to education after a gap of many years. Engaging in studies in such circumstances may become rather hard to handle. The characteristics of these distance students were as varied as the number of students, because every student was different from the other, yet all of them were distance learning students whose main role or interest was to learn. This was a very challenging task, which under the best of circumstances requires motivation, dedication, planning, strategizing and the ability to analyse and apply the information being taught.

Data collection and analysis

The research was conducted at one of the distance education institutions in South Africa. Transcripts of student discussions, transcribed verbatim as they occurred throughout the entire three years, served as the largest data set for this particular investigation. The discussion transcripts were examined to determine if there is evidence of any learning having taken place in the module. Transcripts used were derived from discussion forums of the students registered in 2012, 2013 and 2014. Personal information, including the names of students, lecturers, email addresses and cell phone numbers were removed from the transcripts.

Qualitative data were analyzed empirically and methodologically in the analysis of the discussion comments within the students' context of communication (Merriam, 1998). In accordance with Denzin and Lincoln (2000) the data collected were read and examined several times in detail. Thereafter, a reflection on the analysis and attempts to identify and articulate patterns or themes was carried out. To determine the level of participation and which topics were posted on the discussion forum, transcripts of discussion forums were analyzed. Qualitative analysis took place throughout the data collection process. As such reflection on the impressions, relationships and connections was continuously done while collecting the data. The search for similarities, differences, categories, themes, concepts and ideas formed part of this continuous process. An analysis commenced with reading all the data and then dividing the data into smaller more meaningful units. The researcher used comparisons to build and refine categories, to define conceptual similarities as well as to discover patterns.

Coding as a process of organizing and sorting data was used. The codes served as a way to label, compile and organize the data. They also allowed for the creation of summaries and synthesize of what was happening in the data. In linking data collection and interpreting the data, coding was the basis for developing the analysis. In coding the data, phrases were assigned to

the comments on the discussion forum. Textual data was scrutinised several times so that ideas in the comments can be coded to fit the categories. A code book was created with list of codes and their meaning. Initial coding and marginal remarks were done on hard copies of discussion transcripts. The marginal codes were helpful when thinking about how codes fit together. After going through the transcripts and rereading the marginal notes, codes could be seen as part of the larger theme. Hence with the coding process, data showed the richness, complexities and contradictions of the social milieu.

As suggested by Creswell (2013), the coding practice/training was used to enhance the consistency in the interpretation of data and reduce individual interpretive bias. Therefore, before coding discussion board messages, three researchers were requested to choose messages from students' discussions to practice coding independently until 90% or greater reliability of coding was achieved. Differences in coding were constantly compared, discussed, and resolved to meet this level of consistency. At that point, a coding book was developed for use during the remaining data analysis. Additional coding rules were defined to establish consistency in segmenting the messages for coding. A coding unit was defined as a sentence. The following are some examples.

Indicator 1. Giving peers contact details.

Example: *“My email is indicated below, I am looking forward to a wonderful study relations with anyone doing the module*

Indicator 2 Asking peers for a meeting to discuss the module.

Example: *“Hi all, I am doing the same module this year, I am coming with a suggestion that we all meet in a central place that’s suits everyone to discuss this module together as a group in one of the holidays in April”.*

Indicator 3 asking academic support from the lecturer

Example: *“ may you please help me with previous exam papers, my student number is....”*

Indicator 4. Lecturer responding to students

Example: *“I suggest you research the answers. By giving you the definitions for this terms I will be doing the assignment for you”*

Indicator 5: Students confused

Example: *“Please I am lost I do not understand, what is meant by curriculum scope, integration, continuity and balance. Can you please shed some light on this for me....”*

Indicator 6. Advice to peers from students

Example: *“Discussion for exams in this module, I suggest we start ASAP, ladies and gentlemen”*

Therefore the following codes were adopted from the discussion forum.

Table 1 Codes Adopted from the discussion forum

- 1.1 Giving peers contact details.
- 1.2 Asking peers for a meeting to discuss the module.
- 1.3 Asking academic support from the lecturer
- 1.4. Lecturer responding to students
- 1.5. Students confused
- 1.6. Advice to peers from students

Once the data had been coded, regularities, variations and peculiarities were examined and patterns identified. The process of identifying substantive connections (Dey, 1993) by associating the codes or linking data was done. Correlations or relations between different codes were studied and a picture of the data was built.

A profile of student discussions in the module was drawn and is depicted below (Figure 1). Comparisons of the level and topics discussed in the forums were made.

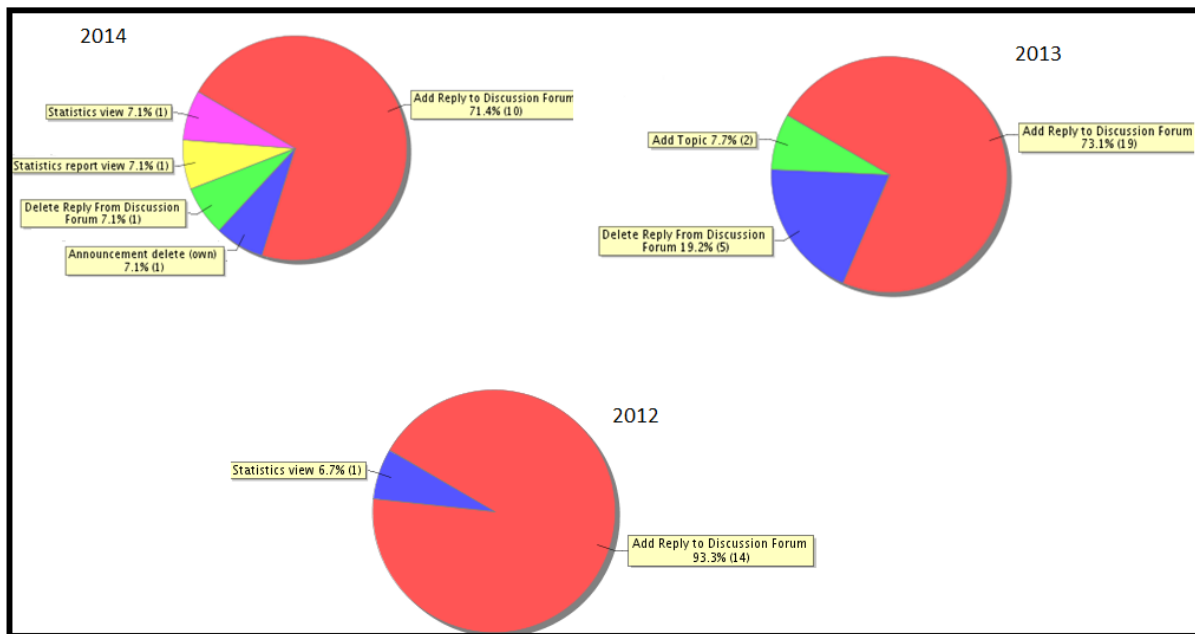


Figure 1 Level of discussion forums per year



Figure 2 Print screen discussion forums

Results and discussion

To determine which year yielded more discussions, the number of participants in the discussion by year is added to determine the high and low points of participation for use in this particular investigation (see Figure 1).

The analysis was conducted by examining the content of the individual comments in an effort to group the topics into codes (Bogdan & Biklen, 1992). A major point of discussion was gleaned by reading each individual comment on a particular topic. In some cases, the topic name that the student chose was appropriate and in other cases it was misleading. For instance, students posted their contact details requesting other students to contact them to form a face-to-face discussion group.

The frequency and times of use were easily determined. The system records the name of the student as well as the time and date at which the students commented on the discussion forum. (See print screen in Figures 2, 3 and 4). Hence I can determine how often each of the students logged onto the discussion forum as well as count the number of comments made by each student. The results show that students participated minimally during the day. This is because most students work during the day and when they knock off from their respective works stations they are often tired and consumed by family related issues. The only time that these students might participate is over the weekends and during school holidays. By exception some students have access to the internet at their work stations and have time to log onto the system during the day.

The topics discussed in these forums were not initiated by the researcher, nor did he act as a mediator or participant in the discussion. The researcher only participated when a comment was directed at him. For instance, one of the students asked the researcher how to access electronic resources on the system. He responded to the students on the discussion board by indicating the step by step procedure on how to access the electronic resources.

Consistent with the research by Chow and Sharman (2007), the findings show that students' interactions did not involve critical thinking nor do they examine the course contents. The interactions were mostly of a social or personal nature or involved enquiries about administrative matters. One of the comments posted indicated a desire for a face-to-face discussion group as opposed to online discussions. The student comments: ***"Hi all, I am doing the same module this year, I am coming with a suggestion that we all meet in a central place that's suits everyone to discuss this module together as a group in one of the holidays in April"***. The findings confirm the assertion by Xia, Fielder and Siragusa (2013) that students find that discussion forums are one of the key ways of promoting collaborative learning. The results are in agreement with Tunison and Noonan (2001) that many students find it difficult to communicate complex ideas in an online environment and that their ability to express their questions clearly and comprehend detailed explanations is limited by the lack of face-to-face interaction.

Since most students in this module were teachers, they preferred to have face-to-face discussions during the school holidays. The desire to have someone to discuss the module with is further indicated by another student who posts: ***"My email is indicated below, I am looking forward to a wonderful study relations with anyone doing the module."*** This student feels that he/she cannot do it alone, hence the posting of contact details in the hope of getting a study partner. Even though the relations may not be face-to-face, students want to feel that they have class mates who are available to share challenges and to work with in the module. The findings confirm findings by Xia et al., (2013) that online learners, in particular, face challenges such as lack of contact with peers, limited sense of belonging to the learning community, and frustration about receiving delayed feedback to postings. Hence, the students in this study found discussion forum as a way of getting contact with other students by requesting their cell phone numbers and email addresses.

Although some students ask personal questions, the profile indicates that students do ask academic questions. Even with personal questions, these questions have an academic context. For example, one of the students posts: ***"My email is indicated below, I am looking forward to a wonderful study relations with anyone doing the module"***.

In Figure 2, one of the students commented, ***"Hi guys I am ... I am doing the same module and interested in joining the discussion group. I am residing in East Rand Katlegong ... Can you give me the venue for this weekend"***. What is promising about the comment is that the student is interested in the formation of a discussion group. Note, however, that the type of discussion group referred to here is a face-to-face discussion group. This finding is derived from the last part of

the student's comment: *"Can you give me the venue for this weekend"*. This again emphasizes the fact that students prefer face-to-face as opposed to online discussion. One of the reasons students request face-to-face contact as opposed to online discussions is that they seem to regard them as invaluable, especially because many of them come from contact universities. If we are to continue with online discussions, students will have to be trained how to conduct online discussions properly.

Discussion Forums

Author	Message
	Welcome to the General Discussions topic. In this topic you can correspond with your fellow class members on any issues regarding this course. Use the Your Message box below to add your message to the list. If you want to start a totally new topic of discussion, use the Add New Topic link which you will find in the Topics List. (2012-02-13 15:40:17)
	Dear Colleagues I need help with IKS. If someone has it in electronic format, kindly send it to my email: [redacted] I would appreciate anything exam related. Kind regards. (2013-01-26 12:14:23) [lock]
	Hey guys this was assignment 2 was the interesting topic I really enjoyed it!!! Even though it was 3 pages but I think I had enough facts!!! I hope u also enjoyed it guys 😊 (2012-06-14 09:10:34) [lock]
	Dear Students Kindly note that I am your lecturer for both [redacted] and [redacted], [redacted] is no longer responsible for any of this modules, for any problems related to this modules do not hesitate to contact me on [redacted] and my email is [redacted] Regards (2012-06-07 10:23:35) [lock]
	I have sent a lecturer an email and he does not reply. Good ppl we are submitting the assignment next week and we do not know how long should it be, plz help!!! 🙏 (2012-06-06 09:46:54) [lock]
	Hi to all of you guys. lets not relax the next due date for HBEDCIU is nocking. From Mlu In KZN (2012-05-31 17:32:54) [lock]
	Hi to all of you guys. lets not relax the next due date for HBEDCIU is nocking. From Mlu In KZN (2012-05-31 17:32:49) [lock]
	My e-mail adress is [redacted] I am looking forward to wonderful study relations with anyone doing either [redacted], [redacted] or both. (2012-05-24 14:30:35) [lock]
	ia Amon i live in Namibia can someone tell me where i can finde the prescribed text book? if there is someone in Namibia who is doing the same course can he/she contact me on [redacted] the course code is: [redacted] PLEASE HELP ME I AM STUCK. (2012-05-17 11:27:30) [lock]

Figure 3 Some of the topics posted in 2012

As can be seen in the figure above (Figure 3), each discussion forum had a welcome message. In the welcome message the lecturer welcomes the students to the discussion topic and gives guidelines on how to navigate the discussion forum. It is the lecturer's responsibility to ensure that the rules are spelled out clearly so that when students write on the forum they know what and how to do it.



Figure 4 Some Topics posted on the discussion forum in 2013

Many of the issues raised on the discussion forum (Figure 4) show that the students are frustrated and lonely. For example, one of the students writes: *“Guys where do I find the content to tackle the assignments”*. However, comments like this one: *“I have not received assignment three”*, should not have been written on the discussion forum, instead the query should have been sent directly to the lecturer. The comments written by students clearly show that they did not know what was appropriate for the discussion forum.

Some of the comments made on the discussion forum indicate that the students were not sure about how to access the electronic resources from the university website, so that they can do the assignments. For instance one student comments: *“Some of the e reserves are inaccessible, I am not able to down load”*. It should be noted that the e-resources were available online at the time. The students were supposed to just click through the link to the electronic article. However, it was evident that the students were unable to access and download the resources. In this case Xia et al., (2013) suggest that technical support is needed, this means that students should be technically supported to use online tools and resources.

The comments posted by students did not deal with the content of the module, but rather with issues such as finding resources: *“Guys where do I find the content to tackle the assignments”*. One element this student did not understand is that on postgraduate level the expectation was that students should demonstrate the ability to conduct independent inquiries in a specialized field of education, training or development, and to report their findings in academically appropriate ways. The comments posted by students generally indicate that students were frustrated and did not know what to post on the discussion forum. This confirms findings by Kalman and Rafaeli (2005) and Niemi (2002) that the distance students often express frustrations in their messages.

However, regardless of the type of discussion used in distance education courses, online discussions allow the students to “build a sense of community” (Appana, 2008).

Discussion Forums

Author	Message
	Good morning Is there anyone else doing this module? Regards (2014-02-26 08:59:17)
	Hi there I'm looking for an exam study group around DBN. My contact details are , cell number) (2014-11-25 00:02:40)
	Hi there I'm looking for an exam study group around DBN. My contact details are , cell number) (2014-11-24 23:47:05)
	Hi Is there anyone who lives in Mpumalanga or Limpopo doing this module who is prepared to meet for discussions before exams in January? (2014-10-21 15:51:14)
	Hi guy! Is there anyone who stays around DBN im also doing da same module nd im really struggling.Thabitha (2014-07-24 02:02:01)
	Could any clarify for me, what is this question asking for ." developmental models for schools and their implications in the curriculum. I , Assignment 2? (2014-07-19 04:16:32)
	Hi guyz, 8m residing at PTA West. Interested in study groups also. or I always available. (2014-07-14 08:21:57) Attachment
	Hi! everybody <i>Im residing at Thulamahashe in Mpumalanga. I've registered looking for anyone who registered the module.contact no.!</i> (2014-07-11 10:51:57)
	Hi i'm also doing this module contact me at for discussion around Lenyenye Tzaneen (2014-07-08 14:59:46)
	Hi I am can you please help me I am struggling to open additional resources in this module . please help me how to open itor access toit (2014-06-19 12:53:43)

Figure 4. Some of the topics posted in 2014

The results of this study suggest that a synchronous discussion forum is important. For this to work effectively, the system should be connected to the student's cell phone so that when there is a discussion taking place on the discussion forum, the student can be alerted immediately, and participate in the discussion. The challenge is that many distance education students work during the day and hence may not be able to participate. To counter this drawback the lecturer could make time in the evening for a synchronous discussion forum. The results of this study show that the presence and full participation of both the lecturer and the student are crucial. The presence of the lecturer or student means that when a student posts a comment on the discussion forum either the lecturer or other students should be available to respond to the post.

When the content is available online the student should be able to engage with the content at his/her own time. Of major importance is that the content should be engaging in order to keep the student actively involved. To keep students engaged, students should be allowed to ask questions online and a lecturer should respond to the questions promptly so that the students will not feel that he/she is alone. Most of the messages posted by students on the discussion forum indicate that they feel isolated while participating in distance education. For example, they send messages requesting study partners so that they can form study groups and work on the content of the module and do assignments.

Even though distance learning to some extent encourages independent learning, students need companionship to succeed. This can be in the form of online classmates and visible online lecturers and tutors. According to the results few students participated in the discussion forum. Reasons for this could include amongst others that some students may have challenges in accessing the internet and students may not be technologically literate or do not make time to access the internet. Many of the students do not know what to write on the discussion forum.

These codes (Table 1) indicated that students need academic collaboration. For example, code 1.1 shows that students attempted to find contact details from their fellow students. Above all, they further requested a meeting between peers to

discuss the module (code 1.2). Realizing that their fellow peers were not responding to their messages, they requested academic support from the lecturer. Even though the lecturer responded, this was not enough for students. They ended up confused (code 1.5), and thus requested advices from their peers (code 1.6). These findings support Vygotsky's (1978) theory by showing the need for online interpersonal interactions between students and the lecturer. Therefore peer discussions should challenge learner's minds through perspectives from different viewpoints. Generally the results shows that students want to participate in the discussion forum. However it seems they lack motivation and support from lecturers to engage in the online discussions. Consistent with Chubbuck et al., (2001) and Palloff and Pratt (1999) students need advice, support, encouragement and reflection on experience followed by discussion with others. In summary, the findings of this study indicate that the use of discussion forums as a student learning tool appears to be a platform for students to engage in topics unrelated to the content of the module. The results have educational implications and these are discussed below.

Educational implications

The comments posted by students have important educational implication to researchers, distance education lecturers and pedagogy. This is because online communication has become essential element of distance education. One of the advantages of online learning (Al-Hosa & Oyiad, 2012) is that it offers an individualized learning experience. Hence it offers flexibility in terms of time and place (Barbour & Reeves, 2009). Another important advantage is the ease with which the information provided can be modified, hence making learning more enjoyable and individualized (Al-Shanak & Doumi, 2009). Therefore, online discussions have become a necessity in realizing how meaningful and continuous learning can be facilitated in distance learning.

Various studies have argued the importance of continued communication between the lecturer and the students. Hence students should be encouraged by using various means to participate in online discussions. For example, Al-Fadda and Al-Yahya (2010) used blogs to encourage pre-class reading assignments and to enhance learning and discussions among students. They found blogs to be an effective tool in encouraging students to engage and do reflections. Research (Hamdan, 2012; Wilkinson & Barlow, 2010) has shown that when students engage in online discussion with their peers and instructors their perceptions of and perspectives on their learning change. Therefore, online discussion can be used to break down barriers for shy students who are not accustomed to participating in classroom discussion.

The results of this study suggest that activities that provide students with grades should be introduced. This is because (Al-Jarf, 2005) students do extra work that have grades and if grades are not part of online learning they do not participate. Another dimension to this can be that grades can be deducted if students post irrelevant comments not related to the module. The consequent fear of losing grades may constrain their interaction to some extent. Therefore, grading may actually encourage students to participate in the discussion with due consideration and adequate preparation. On the other hand time seem to be a challenge to students because of their many commitments, as such, online tutorial on time management can be introduced.

In accordance with Shana (2009), to help students become comfortable with the discussion forum, the intervention should start with the instructor posting a welcoming introduction; followed by asking students to privately reply to their instructor expressing their first impressions of online discussions. Subsequently, students can participate in a group discussion about previous knowledge of the module topic, and their objective for taking the module. Students can be encouraged to share links to websites pertinent to the module. These non-graded tasks can be designed to ensure that all students can get connected to the conference and know how to send messages. Since the point of online discussions is to have students talking to each other the first two weeks of the intervention, the instructor's presence can be intensive at first, gradually reducing with time. Instead, senior students can be encouraged to participate in the discussion and take the role of the instructor. Shana (2009) pointed out that this strategy worked well and proved to be beneficial to all students.

Naturally, e-learning serves as a basis for distance education, hence it provides a platform for collaborative learning. In e-learning (Anderson, 2004) the distant student can interface with the content/knowledge in an online environment. Online discussion forums in formal educational contexts (Anderson, 2003) should specifically be designed to induce learning

directed towards defined and shared learning objectives or outcomes. Such discussions should lead to student interactions with their peers followed by constructive feedback (Chow & Sharman, 2007). The constructive feedback should provide for a richer learning experience, provide more varied perspectives, and make provision for improved writing skills. In view of the fact that there is a lot of technological changes and improvement, distance education students have more opportunities for web-based interaction. Consequently, developers of distance courses should invest these opportunities to include more high level interactions in the e-learning environment. These opportunities can include amongst others, using a variety of web-based synchronous and asynchronous activities (video, audio, computer conferencing, chats or virtual world interaction).

In the e-learning environment, interactions occur at various levels. Students interact with the course content which might be print-based with supplementary material on the university web. The student also interacts with other students using online discussion boards on which messages to other students or lecturers/tutors can be posted. Lecturers can pose academic questions to students and in return answer students' questions.

The e-learning environment should be characterised by independence (Moore, 2005). Hence, the students may be given the opportunity to set their own study aims, objectives, study methods, learning activities, pace of learning as well as determine their own progression and evaluation.

The learning tools associated with independent learning include computer-assisted tutorials, drills, and simulations. Quite important is that students can make use of virtual labs. In virtual labs, students complete simulations of lab experiments, and make searches. Retrieval tools are also becoming common instruments for individual learning. In addition, printed texts can be made available to students by distribution, or alternatively made available online for reading. These may help to convey the lecturer's interpretations and insights into independent study. However, it should also be emphasised that, although engaged in independent study, the student is not alone. Often colleagues in the workplace, peers located locally (or distributed, perhaps across the internet), and family members have been shown to be significant sources of support and assistance to independent students (Potter, 2013). To further support the arguments above, Knowles's (2005) theory of andragogy emphasises that adult learners perceive themselves as self-directing human beings and define themselves in terms of their personal achievements and experiences. They have the freedom to make choices and are motivated to learn. As such they are self-directing students with a desire to control their learning outcomes.

A major problem for many students as indicated in this study is the loneliness that results from limited access to student peers; the urge for individual freedom may intensify the problem. To deal with loneliness, Anderson (2004) suggests that online science students should be afforded the liberty to learn social skills and collaborate with other students in the learning of content. In this way, the student can develop personal relationships with other students. Technologies such as audio conferencing, video conferencing and computer conferencing can be used to connect students and reduce loneliness (Paulsen, 2003).

To conclude the educational implications, we should consider that web-based discussion forums are much like face-to-face discussions. They require preparation and active management in order to facilitate student learning. In particular, online environment needs special care for producing a comfortable conferencing system that helps students communicate clearly without any fears.

Conclusion and recommendations

The results of the study indicate that if students are not guided and trained in the use of discussion boards, their posted messages may not show any learning activity. Instead of discussing subject content the discussion forum is used by students to send complaints to the lecturer or to find study partners through posting their personal contact details like email addresses and cellphone numbers. The results show that students are desperate to see and discuss the content of the module with their peers face to face. Their messages show that students feel lost and not attended to. It is clear from the results of this study that as long as the rules of engagement are not explained on the discussion forum, students will write anything they want. A similar trend is noticeable throughout the three years of 2012, 2013 and 2014. Overall, these findings suggest

that lecturers should make every effort to incorporate training on the use and benefits of using a discussion forum. A training manual could be given to students. As such, even students who are not necessarily intrinsically interested in the discussion forum or students who do not have a great deal of experience using discussion forums may also benefit from the availability of training and training manual.

In addition the lecturers should be visible on the discussion forum. Visibility means that the lecturer should participate fully in the discussion forum, set the rules, guide the discussion so that the students can focus on the modules, respond to the students' questions or redirect the questions to other students. In this way, a vibrant discussion forum may be created. Credits towards their final mark can be awarded to students so that they know that participation in the discussion forum will be rewarded. In accordance with the findings in the current study and its consistency with existing literature, students should be informed about the rules of engagement from the beginning of the discussion forum.

Also in line with other research on distance education, the study suggests asynchronous discussions as a platform for students to discuss module related issues. This is because of students' geographical locations and their different personal commitments. However, the discussion forum should not be the only option that the students can engage. If students are able to organize themselves and arrange face-to-face discussions they should be afforded such an opportunity.

To tackle the challenges of teaching distant students, a number of factors (Al-Shalchi, 2009) should be borne in mind when planning and developing online discussions. First, there should be clear and to the point directions from the instructor. The students must know if the discussion is to be synchronous or asynchronous. If it is synchronous, the students must know when to meet and where, if asynchronous, the deadlines for responding to questions on the discussion forum should be clearly stated. Secondly, students should be motivated to contribute towards the discussion. A number of ways can be adopted. The instructor can ensure that students' participation in the discussion counts towards their year or semester marks. A clear rubric that will assess their participation should be available online. In that way students might participate more readily. Thirdly, feedback should be given to all the students on every task that has been given to the students. This will motivate them to do more tasks. Fourthly, the instructor should indicate and put forward clear expectations of the students. Students should know what can be posted on the discussion forum and what should not be posted. For example, they should know if they can respond to other students' questions and queries or not. Fifthly, the organisation of the discussion forum is very important. This means demarcating the forum in terms of topics to be discussed and that resources to be consulted should be readily available online. Lastly, the type of questions posted on the discussion forum plays an important role as it determines whether students will participate or not. It is most important that different types of questions should be posted. While the study yielded rich data about student comments on the discussion forum, the number of participated in the forum is too small to make a significant statistical claim and to generalise the findings for other higher education courses or institutions. However it adds interesting findings about what students write when there are no rules in the discussion forum. Therefore this findings could help determine how future online discussions might be modified to better meet the needs of the students especially at honours degree level.

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بيان مناقشات الطلبة الالكترونية في بيئة غير متزامنة

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ملخص

تهدف هذه الدراسة الى بيان المناقشات الالكترونية للطلبة في وحدة من وحدات درجة الشرف. وقد كان المشاركون من المتعلمين عن بُعد في واحدة من مؤسسات التعليم عن بعد في جنوب افريقيا. ولتحديد مستوى المشاركة والموضوعات التي تم تناولها في المنتدى النقاشي، جرى تحليل المخطوطات المتعلقة بالمناقشات التي تمت في المنتديات النقاشية الالكترونية. وتم فحص تلك المخطوطات كما حدثت على مدى ثلاث سنوات (2012 و 2013 و 2014)، وشكلت المخطوطات المدروسة اضعف مجموعة بيانات لهذا البحث. لقد كان الغرض من فحص المخطوطات تحديد ما اذا كان هناك دليل على ان أي نوع من التعلم قد حدث في تلك الوحدة. وأشارت نتائج الدراسة إلى ان غالبية الموضوعات التي طرحها الطلبة في المنتدى النقاشي كانت شخصية وبدلاً من مناقشة محتوى المواضيع، استُخدم المنتدى النقاشي من جانب الطلبة لإرسال الشكاوى إلى المحاضر او للعثور على شركاء في الدراسة يصنعون تفصيلات شخصية للتواصل معهم، مثل عناوين البريد الالكتروني وأرقام الهواتف النقالة. وفي الختام، تم تقديم عدد من التوصيات من اجل التخطيط للمنتديات النقاشية المستقبلية. **الكلمات الدالة:** التعليم عن بعد، المنتديات النقاشية، بيئة غير متزامنة، بيئة متزامنة.

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