Is lurking working? The role of non-assessed discussion boards in an online enabling program literacies subject.

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Abstract

Students' engagement online is not always visible. This presents challenges for assessing learning in an informal and formative way, and for clarifying expectations and understandings prior to assessment submission. Such challenges informed this small exploratory research project which aimed to analyse students' online behaviour and seek students' perspectives of their engagement in online learning activities in a tertiary enabling program. In the academic literacies subject analysed in this project, online discussion boards host the dialogues and weekly tutorial activities that on campus students participate in within their physical classroom environment. However, student participation in these discussion boards is low and wanes further over the academic session. Given the low participation, online students' use of the discussion boards was analysed to determine whether the functionality was perceived as valuable from students' perspectives. Student's use of the non-assessed discussion boards was then correlated with final grades to determine whether posting, replying to messages, and viewing forums, supported students' learning as reflected in their grades. This research found a high correlation between students posting and reading posts, with students' final grades. Whilst not all students were visible on the discussion boards, this did not devalue the pedagogical role of this learning site functionality from students' perspectives. What may be described as legitimate peripheral participation (Lave & Wenger, 1991) or lurking (Beaudoin, 2002; Taylor, 2002) was perceived by some students as beneficial.

Key words: Online education; Discussion boards; Enabling education; Academic literacies; Peripheral participation

Introduction

The lines between online and on campus higher education offerings have become increasingly blurred with many universities now moving towards a blended learning model which combines components of both. The increasing prevalence of a blended approach has led to its description as the new normal in course delivery (Norberg, Dziuban, & Moskal, 2011). Despite the increase in prominence of a blended approach, many universities still offer some subjects in two distinct offerings; on campus and online. Delivering the same subject simultaneously on campus and online necessitates questions of equity in delivery, equity in access to materials, and equity in the provision of opportunities for potential student engagement. It has been suggested that online and on campus students differ significantly in terms of age, employment status, and motivation (Johnson, 2015), so the challenge in providing the same experience to both cohorts is self-evident. However, there is an ethical impetus to ensure that neither cohort is disadvantaged by their enrolment status. Enhanced understanding of the

relationship between student engagement, students' online behaviour, and student learning, may contribute to a more effective delivery of online subjects, and more realistic expectations associated with the behaviour of online learners. Such an understanding may be especially important for online students in their first year of tertiary study, or in university enabling programs in which students may be learning how to learn.

University enabling programs

University enabling programs (i.e. pre-award programs that prepare students for the rigours of higher education) have become an increasingly popular pathway to higher education in Australia. In 2014, 11,588 equivalent full-time students were enrolled across 19 Australian enabling programs (Pitman et al., 2016). In 2016, non-school leavers made up 43% of undergraduate university program offers in Australia with many having accessed their place through such an enabling program (Pitman et al., 2016). Enabling programs typically run for three to six months, are government funded, and focus on equipping students with the skills required for success at university. In terms of efficacy, many studies have found that graduates of these programs succeed at university as well as those who enrol immediately after school (Chesters & Watson, 2014; Cooper, Ellis, & Sawyer, 2000; Willis & Joschko, 2012; Cantwell, Archer, & Bourke, 2001). This is noteworthy considering that students who enrol in enabling programs may not have received their required tertiary admission score or may have had a substantial break in their studies. Reasons given by enabling program graduates for their success in undergraduate studies after completion of such a program include: greater self-confidence, an enhanced belief in their academic capabilities, and the development of an ability to learn how to learn at a tertiary level (Taylor, van Eyk, & Syme, 2018). Enabling education moves away from a deficit approach, instead building on students' strengths. Enabling educators have been described as working in an iterative and reflexive way that builds on what students already know (Bennett et al., 2018). Kift (2009) suggests that learning in enabling programs needs to be student-focused, explicit, relevant, scaffolded, and aimed at engaging students through active and collaborative learning. One focus of enabling programs is enhancing students' academic literacy (Pitman et al., 2016), which is pertinent considering academic writing is a significant form of assessment in higher education (Read, Francis, & Robson, 2001; Russell, 1991).

Academic literacies

Language and literacies are required for learning activities and assessment across all disciplines. As a result of this, teaching academic literacies has been described as core work of enabling educators (Baker & Irwin, 2016). Academic literacies is a sociocultural approach to the analysis and teaching of literate practices focusing on the experiences of diverse tertiary student cohorts (Lea & Street, 1998). In this approach, literacies are not classified as being present or absent but rather are analysed, assessed, and taught, within certain social and cultural contexts (Lea & Street, 1998). The plural form of literacies is used throughout this article to refer to the range of social and cultural practices associated with writing and reading at a tertiary level. As an approach, academic literacies challenges the view of students as deficient

or ill equipped for tertiary study (Lillis, 2001). Instead students arrive with literacy practices and use these to learn course content, and learn about language. Lea (1998) emphasises the importance of contrasting literacy practices as part of knowledge construction in students' understanding of course requirements. Academic literacy is seen as a domain that mediates between students' worlds and assessments (Lea, 1998). It is this analysis of literacy as sense making, knowledge construction, and identity representation that has informed the academic literacies approach which informs this study's research. Lave and Wenger (1991) suggest that adult learning occurs through legitimate peripheral participation in communities of practice through discourse and talk. That is, students gradually become part of a new community through engaging with its members and ways of communicating. In an online environment, students are encouraged to engage in a range of learning site functionalities which facilitate learning.

Student engagement

While there is little disagreement on the importance of student engagement in higher education, there is no agreed definition of the term. Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) define student engagement as all activities that contribute to student learning and foster a sense of belonging to an academic community. Kift and Field (2009) use the Australian Council for Educational Research (2008, p. vi) definition of; "students' involvement with activities and conditions likely to generate high quality learning", to develop a three-way engagement framework of motivation, learning climate, and learning activity, which is built into curriculum design. Taking a socio-cultural approach, Bowen (2005) suggests that the most important contribution of engagement is its focus on the relationship between the learner and learning which occurs within a social context. Kahu, Stephens, Leach, and Zepke (2013) divides the literature on engagement into four categories; the behavioural, the psychological, the socio-cultural, and the holistic, but warns that inattention to students' immediate emotional responses to activities may negatively impact learning. In this article, student engagement refers to activities which support learning and foster the development of an academic community (based on Kuh et al.'s, 2008 definition). These two components of engagement: supporting learning and developing an academic community, appear to be pertinent to online learning and online learners.

Engaging online students is essential considering attrition rates are generally higher online than for on campus modes of study (Pitman et al., 2016; Stone, 2017). Attrition rates may be further compounded by the nature of the course studied. For example, university enabling programs record high attrition, at around 50% (Hodges et al., 2013; Pitman et al., 2016). Student reasons for exiting enabling programs include health issues, life events, financial difficulties, family responsibilities (Hellmundt & Baker, 2017; Hodges et al., 2013), and a lack of connectedness to staff, students, and the institution (Baik, Naylor, & Arkoudis, 2015; Willans & Seary, 2018). However, retention is enhanced when students report feeling a sense of belonging to a course or institution (Liu, Magjuka, Bonk, & Lee, 2007). Engaging students may therefore serve the dual purpose of deepening learning as well as potentially reducing student attrition, which is significant where attrition rates are high, such as in enabling programs and online subjects. Identifying which activities best engage students online is therefore crucial. However, it has been suggested that no one activity automatically engages

students online (Dixson, 2010). Instead, multiple ways to build connections with students should be employed.

One way to engage online students is through asynchronous discussion forums, also known as discussion boards. Discussion boards can be set up to host informal, social conversations as well as more formal discussions. Ongoing contributions allow for knowledge to be developed or gradually constructed (Johnson, 2007) through teacher and student collaboration. Online discussions between teachers and students are often seen as evidence of engagement and learning (Redmond, Devine, & Bassoon, 2014) thereby providing a rationale to encourage students to post on the discussion boards. Student interaction on discussion boards has been equated with increased motivation (Duemer et al., 2002) and with enhanced grades (Dalelio, 2013; Romero, López, Luna, & Ventura, 2013). However, much research into online discussion board participation focuses on assessed discussion board posts (cf. Robinson, 2011) where students are obliged to post to obtain marks. It is not clear what motivates students to post when they are not being assessed, and whether non-assessed discussion board participation enhances student learning and contributes to the development of an online community; two aforementioned hallmarks of engagement. Whilst challenging, encouraging engagement in non-assessed discussions provides an opportunity for students to test their learning and beliefs, and for teachers to support learners (Taylor, 2002). Such early interventions are particularly important for students in enabling programs who may be engaging with academic concepts for the first time.

Studies investigating ways to increase participation on discussion boards have focused on forum set-up as well as student behaviours. In terms of setting up forums there is debate around the value of fostering different types of discussions online; student-student or teacher-student interactions (Kuo, Walker, Schroder, & Belland, 2014; Loizidou-Hatzitheodoulou, Vasala, Kakouris, Mavroidis, & Tassios, 2001) and the value of assigning different roles to contributors (Vonderwell & Zachariah, 2005). Ringler et al. (2015) investigated the quality of teacher questions as a driver for response quality and quantity. When absent from discussion boards, students' behaviour has been equated with 'lurking' (i.e. participating peripherally by reading not posting) (Beaudoin, 2002; Taylor, 2002) and 'shirking' (i.e. logging on infrequently) (Taylor, 2002). However, not all studies perceive these behaviours in a negative light. For example, some researchers acknowledge that students may learn vicariously simply by reading other students' contributions (Nieuwoudt, 2018; Redmond et al., 2014). This view aligns with what Lave and Wenger (1991) describe as legitimate peripheral participation in which apprentices become part of a community of practice. From this view, learning is a process which occurs over time at different rates for different learners. Initial meaningful participation may be peripheral, with observation preceding increased participation. An additional factor to consider when encouraging participation on discussion boards is the relatively private nature of academic writing, one practice of academic literacies. Swales (1996) describes academic writing as an occluded genre of writing. Students' academic writing is usually written for, and read by, an audience of one; a marker. Using group discussion boards to facilitate the practise of a usually private activity may therefore present challenges in discussion board set up and contribution.

To advance the understanding of the role of non-assessed discussion boards in engagement and learning, further research is needed. Student writing on discussion

boards can be seen as *sense making and knowledge construction*, as well as evidence of participation in an *online academic community of practice*. The former conceptualisations of writing stem from an academic literacies approach (Lea, 1998), and the latter from legitimate peripheral participation (Lave & Wenger, 1991). An additional consideration is how students feel using the discussion boards, as emotional responses to activities may have an impact on engagement and learning; as explained by Kahu et al. (2013). To address this, a research project was conducted with online students enrolled in the academic literacies subject of an enabling program at Southern Cross University, Australia. The purpose of the research project was to: (a) investigate if non-assessed discussion boards contributed to students' engagement and learning in an online academic literacies subject in an enabling program, and (b) determine how students felt using the discussion boards.

Methodology

Context

Southern Cross University is a regional university with its main campus located in Lismore, northern New South Wales, Australia. The Preparing for Success Program (PSP) at Southern Cross University is an enabling program that prepares students for the rigours of higher education. The PSP is offered in all three sessions of the academic year and can be studied either online or on campus at Coffs Harbour, Lismore, or the Gold Coast. The PSP is 12 weeks in duration (or 24 weeks part time) and consists of four subjects. Three compulsory subjects equip students with communication, study, and numeracy skills. The fourth subject is an elective which is either arts or science focused. Successful completion of the PSP provides a guaranteed pathway into tertiary education at Southern Cross University. The subject Communication at University (one of the compulsory subjects) introduces students to the culture of academic enquiry and to academic literacies, specifically the conventions of written academic communication. The skills developed in this subject focus on critical thinking and analysis, academic reading, genres of academic writing, academic integrity, information literacy, and research skills. The research was conducted within this communication subject.

For online students enrolled in Communicating at University, weekly tutorials were held in Blackboard Collaborate™ via the Blackboard Learn learning management system (LMS), a virtual classroom where students and teachers can interact online during a live synchronous session. The virtual classes were recorded and made available to students to watch at a more convenient time if they were unable to attend live as attendance was neither recorded nor mandatory. Students also had access to an interactive online Study Guide. This guide consists of reading content, video clips, and interactive activities that consolidate the weekly learning. Weekly activities related to the class content were also posted on the discussion board. Examples of the weekly tasks included rewriting informal sentences and phrases to make them more formal, paraphrasing and summarising, evaluating sources, writing topic sentences, writing short paragraphs, and editing sentences. Students were encouraged to participate in the weekly activities on the discussion board as well as posting questions, but it was neither mandatory nor graded. These non-assessed weekly discussion board activities are the focus of this research.

Data collection

This research project comprised of two studies: Study 1 consisted of a focus group, and Study 2 consisted of an online survey. Study 1 (i.e., the focus group) was conducted in Week 10 of Session 2, 2017. Based on this preliminary investigation, a questionnaire was designed for further investigation. In Study 2, this questionnaire was distributed via an online survey that was open during Weeks 7 – 11 of Session 2, 2018. Discussion board usage data and final grades were retrieved from the LMS. Ethics approval for both studies was obtained from the Human Research Ethics Committee of Southern Cross University (approval number ECN-16-039).

Study 1

Students (*N* = 70) were invited to participate in a focus group about the perceived value of the non-assessed discussion boards. The inclusion criterion was enrolment as an online student in the Communicating at University subject at Southern Cross University in Session 2, 2017. A consent form was emailed to all online students, and participants were asked to sign the consent form prior to participating in the focus group. The focus group consisted of 15 questions assessing how students used the discussion board, the perceived value of participation on the discussion board, and students' motivation for using the discussion board. The focus group was 45 minutes in duration. The focus group was conducted in Blackboard Collaborate™ (via the Blackboard Learn LMS), in Week 10 of Session 2, 2017, and recorded to be analysed at a later stage.

Study 2

Students (*N* = 151) were invited to participate in an online survey assessing their views on the usefulness of the discussion board. The questionnaire used in the online survey was designed by the researchers and consisted of closed-ended questions (with the option to provide more information). An information statement was provided at the start of the questionnaire. Participant consent was implied by completion of the survey and this was written in the research description sent to students. Participation was voluntary, participants could withdraw at any time of the study, and participants were also able to skip questions they did not wish to answer. The online survey was opened during Weeks 7 – 11 of Session 2, 2018 and was supported by Qualtrics research software. Discussion board data were retrieved from usage information data provided by the LMS. Final grades were acquired from the LMS as an indicator for academic success.

Data analysis

Study 1

The focus group discussions were transcribed and analysed for content focusing on key words students used to describe their perceptions of using the discussion boards. Participants were assigned a code in order to maintain anonymity.

Study 2

Descriptive statistics were used to explore the study population's characteristics. Mean (*M*) values of the measurements with standard deviation (*SD*) were reported. Variables were not normally distributed (Kolmogorov-Smirnov statistic sig. value = .000), thus non-parametric tests were used. The level of significance was set at $p \leq .05$. Spearman Rank Order Correlation (*rs*) analyses were undertaken to examine the associations between final grade and student interaction on the LMS. Statistical analyses were performed using IBM SPSS, Statistics 24 (IBM SPSS; Chicago, Illinois).

Results

Study 1

A total of 11 of the 70 students invited students participated in the focus group (15.71% response rate). The majority of participants (*n* = 10) indicated that they were using the discussion board. Participants indicated that the discussion board supported their learning, but that scrolling and reading through posts took up a lot of time. As the weeks progressed, discussion board participation decreased. The majority of focus group participants indicated that they felt "bad", "sad", "guilty", "flustered and overwhelmed" for not contributing. However, they did feel "relieved" and "better" knowing that other students were also contributing less. Only one participant was not actively contributing on the discussion board, but was reading the forums, especially the ones related to assessments. The participant indicated that she did not actively contribute as it took too much time and that her own shyness was also a factor preventing her from posting on the discussion board.

One focus group participant said: "*so I've been having trouble figuring out the right time to complete the weekly online tasks. I know university's all about independent learning and whatnot but I'm finding it unclear as to the best/most appropriate time to work on them? At the start of the week I felt I didn't have enough context to contribute meaningfully, and by the end of the week all of the relevant discussions seems to have already taken place (I have a nasty habit of procrastinating that I'll hopefully eliminate in the coming weeks). Any advice or info? These online tasks are probably my biggest anxiety-producer so far in the course, as I'm not really sure of their relative importance compared to assessments and so on (not saying that I wouldn't complete them if they were less important). Otherwise having a great time*."

Study 2

A total of 151 students were invited to participate in the online survey. Nineteen students participated in the online survey (12.58% response rate). Final grades across the whole cohort ranged from Fail to High Distinction, as presented in Table 1. Fail grades were awarded to students as a result of non-submission of one or more assessments, or an overall score of less than 50% for the subject. Absent Fail grades were awarded to students who did not submit any assessments.

Table 1

Students' final grade distribution (*N* = 151)

Final grade	*n*	%
Absent Fail	47	31.12
Fail (0 -49%)	36	23.85
Pass (50 – 64%)	25	16.56
Credit (65 – 74%)	23	15.23
Distinction (75 – 84%)	15	9.93
High Distinction (85 – 100%)	5	3.31

Student interaction and participation on the discussion board is shown in Table 2. Students viewed the forums more often than posting or replying to the discussion board posts. Spearman rank order correlational analyses found significant correlations between final grades and interaction and participation on the discussion board, as presented in Table 3.

Table 2

Students' interaction and participation on the discussion board

	Mean	Median	Standard deviation	Minimum	Maximum
Post message or replied	1.63	0	4.061	0	28
Create Forum Threads	0.54	0	1.625	0	14
View Forums	8.61	3	14.529	0	92
View Forum Messages	11.87	2	19.769	0	107
View Threads	13.64	2	24.188	0	142

Table 3

Spearman Rank Order correlation between final grades and students' interaction and participation on the discussion board

	Post message or replied	Create forum threads	View forums	View forum messages	View Threads
Final grade	.516 (*rs*)	.340 (*rs*)	.714 (*rs*)	.663 (*rs*)	.640 (*rs*)
	< .001 (*p*)	< .001 (*p*)	< .001 (*p*)	< .001 (*p*)	< .001 (*p*)
	134 (*n*)	134 (*n*)	134 (*n*)	134 (*n*)	134 (*n*)

While only 26.32% of participants posted messages on the discussion board on a weekly basis, the majority (63.16%) of the participants did read the messages every week. Participants reported that their using the discussion board helped them to connect with peers (*n* = 8), improve their understanding (*n* = 15), improve grades (*n* = 6), consolidate their learning (*n* = 10), learn from other students' posts (*n* = 14), read their teachers' posts (*n* = 10), read their teacher and students' posts (*n* = 13), feel like they were part of an online community (*n* = 9), and ask questions (*n* = 6).

The majority of participants (*n* = 15) reported a lack of time as a challenge preventing them from using the discussion board, while some participants (*n* = 4) explained that they were not confident in the activities and thus did not post a message. Nine participants said the level of importance was a challenge in using the discussion board, for example, there were competing priorities with other subjects. Participants were asked how using the discussion board made them feel. Eight participants reported that using the discussion board made them feel motivated, four participants felt collaborative, but none of the participants felt happy using the discussion board. Participants explained that using the discussion board made them feel frustrated (*n* = 1), nervous to speak (*n* = 1), overwhelmed (*n* = 1), prepared (n = 1), and encouraged to test their knowledge (*n* = 1). When participants could not participate on the discussion board, they felt guilty (*n* = 7), like they were missing out (*n* = 5), anxious (*n* = 1), and like they were falling behind (*n* = 1). However, some participants (*n* = 5) reported that not participating had no impact. One participant said "*Sometimes a little overwhelmed, as there was so much reading to do & then the discussion board and online learning also. I guess it's good practice though. I felt like I needed a break from doing it every week but made sure I got it done, even if at the end of the week*".

The majority of participants (*n* = 11) reported that they would have participated more on the discussion board if it was assessed (e.g. worth 10%). Not all participants were sure, saying it would most likely (*n* = 4) or probably (*n* = 3) increase their participation. One participant indicated that an assessed discussion board would not have increased

participation, while two participants reported that it probably would not have increased participation.

When participants were asked what would have encouraged them to use the discussion board more often, 21.05% of participants said “nothing”. However, other participants reported different activities (*n* = 2), more teacher feedback (*n* = 1), and having a set time to use them (*n* = 3). Some participants indicated that they often forgot about the discussion board, and that notification/reminders may be useful. One participant indicated that having more spare time would have enabled them to use the discussion board more often. Another participant said “*I read them but I am reluctant to leave comment due to my own lack of confidence*”.

Seven participants did not notice that students’ participation on the discussion board decreased as the weeks went by, while nine participants did notice but it did not bother them. Three participants indicated that the decreased participation had a negative effect on them.

The majority of participants (94.74%) reported that engaging in the discussion board enhanced their learning. The participants explained their learning was enhanced as they were able to ask questions, get feedback from teachers, connect with fellow students and feel connected to the online community, and were able to practice skills and test understanding of new material without any consequences on their overall grade. One participant commented that “*It gives space for everyone to ask questions & share ideas. Even if people aren’t confident to ask their own questions, you can see what other people have asked & learn that way*”. The participant also explained that engaging in the discussion board “*provides an opportunity to test understand[ing] of new material and gain feedback*”. However, another participant said, “*I believe it would if I could get past thinking I don’t know anything*”.

Discussion

Student interaction and participation on discussion boards have been found to increase engagement (Redmond et al., 2014) and motivation (Duemer et al., 2002). It is also suggested that ongoing contributions on discussion boards promote learning (Johnson, 2007; Redmond et al., 2014). This is supported by researchers who found that participation on discussion boards may lead to increased grades (Dalelio, 2013; Davies & Graff, 2005; Nieuwoudt, 2020; Romero et al., 2013). Bernard et al. (2009) advises that interactions can be enhanced by including high-quality learning activities that engage students cognitively, and promote interdependence and individual accountability. One way to do this is to use the discussion board to facilitate the construction of learning through student interaction with the content, another student, and the teacher. However, it is difficult to determine the quality of such interactions, especially as they may be perceived differently by different students (Anderson, 2003).

It is suggested that learning is facilitated when students interact with each other, the teacher, and the content (Anderson & Garrison, 1998). This interaction is the way Lave and Wenger (1991) have suggested that students become part of a new community, by first participating peripherally, and then gradually becoming members of the new community - in this case an online academic literacies community. The current research project was interested in determining the number of interactions students

were having online and possible relationships between these interactions and student learning. In the current research project, significant relationships between students' interaction and participation on the discussion board and students' final grades were found (see Table 3). This is in agreement with research indicating that there is a positive relationship between grades and the amount of time students spent online interacting with each other, the teacher, and/or the content (Davies & Graff, 2005; Nieuwoudt, 2018, 2020; Wong, 2013). It is possible that students in the current research project were part of a community of practice (as posited by Lave & Wenger, 1991), and that learning was indeed facilitated when students interacted with each other, the teacher, and the content (as explained by Anderson & Garrison, 1998).

In contrast, Cheng, Pare, Collimore, and Joordens (2011) found that a high level of participation on discussion boards did not necessarily equate to high grades. In the current research project, the majority of participants (94.74%) reported that their learning was enhanced by engaging in the discussion board. However, the participants viewed the discussion board forums more often than posting or replying to the discussion board posts, as seen in Table 2. The majority of participants (63.16%) read messages on the discussion board, whereas only 26.32% of participants posted messages on the discussion board. This may present a challenge to teaching staff if contributions alone are considered hallmarks of engagement. Participation and engagement are too complex to be judged solely on the number of times students post messages on the discussion board (Garrison & Cleveland-Innes, 2005; Kebritchi, Lipschuetz, & Santiague, 2017).

Posting on the discussion board provides an opportunity for students to test their learning, and for teachers to support students (Taylor, 2002). Participants in the current research project indicated that the discussion board supported their learning by improving their understanding. However, while participation on the discussion board made students feel motivated, it did not make all students feel happy. Further to this, participation on the discussion board decreased as the weeks progressed. Some students indicated that a lack of participation on the discussion board had no impact on them, while others suggested that non-participation made them feel guilty. Kahu (2013) has cautioned that attention must be paid to students' immediate emotional responses to activities and that the anxiety experienced by some first-year students may negatively impact their engagement (Kahu, 2013). This view is supported by Ketonen and colleagues (2019) who also focused on the role of emotions, finding that students' perceived value of tasks were associated with higher positive emotions. Therefore, online activities with unclear value or that are described by students as a source of guilt or unhappiness (as the activities on the boards were) may negatively impact engagement, relationships promoted through engagement, potential learning gains, and in turn, further engagement. Such differences in the perception of discussion board activities that are designed by teaching staff to engage students but are associated with negative emotions by students may suggest a mismatch between teacher and student understandings of engagement. As Solomonides and Martin (2008) have remarked, educators may see engagement in cognitive terms, whilst students may see it as predominantly affective. In other words, teachers may be focused on student thinking and learning whilst students may be more focused on the value of the activities, the emotions evoked, and their motivation to participate. These possible differences between educators and students views of engagement, or two components of engagement to consider, align with Kuh et al's.

(2008) aforementioned definition of engagement which emphasises both activities to support learning, as well as highlighting the importance of an academic community. Redmond et al. (2014) posited that students from different disciplines use discussion boards differently. This may be due to the ways disciplines think differently about knowledge (Swann & Salmon, 2014). The PSP is a non-discipline specific enabling program consisting of three compulsory subjects and one elective subject (arts or science focused). Participants in this research may have been aiming to study in different discipline areas, as they were enrolled in one of the compulsory subjects (i.e. Communicating at University). It is thus possible that because students in this research were headed to different disciplines, they may have used the discussion board differently.

Online student participation has been described as being too complex to be judged based on the quantity of discussion board posts (Kebritchi et al., 2017). Online participation occurs offline as well as online and includes communicating, thinking, feeling, belonging, and doing (Hrastinski, 2008). In other words, online participation is more than what students may leave behind on discussion board posts. Many students in this research project were reading the discussion board posts, but not posting on the discussion board. This behaviour has been described as lurking (Beaudoin, 2002; Taylor, 2002). However, lurking is not necessarily negative. The benefits of lurking depend on the content and the quality of the post (Beaudoin, 2002). Students may be cognitively present (Garrison & Cleveland-Innes, 2005) and learning vicariously by reading other students' posts (Nieuwoudt, 2018; Redmond et al., 2014). Such behaviour may also be described as learning from peripheral participation (Lave & Wenger, 1991). In the current research project, one participant explained that "e*ven if people aren't confident to ask their own questions, you can see what other people have asked & learn that way*". This is in agreement with previous research where participants stated that reading and or browsing posts are enough (Küçük, 2010) and that "they felt they were learning just as much or more from reading others' comments than from writing their own" (Beaudoin, 2002, p. 151). This pattern of interaction is often observed when participation in the discussion board is not mandatory (Cheng et al., 2011), as was the case in the current research.

Another reason students may be reluctant to write on discussion boards is that the format may feel too "public" (Beaudoin, 2002). This feeling may be further compounded by the design of the discussion board in this subject. Students were encouraged to practise a range of skills such as editing, writing topic sentences, paraphrasing, and summarising. Using the discussion boards in this way was different to the more informal and chattier discussions on boards in students' other PSP subjects. The more structured use of the discussion boards in this subject may have presented an additional challenge to students. Their induction into the community of academic writing – a largely private or occluded genre of academic writing (Swales, 1996) was performed publically. Whilst some participants described the discussion board forums as a means to obtain feedback prior to assessment submission, one participant reported that a lack of confidence in the activities prevented them from posting, and another explained that a lack of confidence in themselves made them feel reluctant to post. Using discussion boards to facilitate the practise of a usually private activity may therefore present challenges in discussion board set up and contribution.

It is generally accepted that online students need to belong to an interactive community of learners in order to be academically successful (Garrison & Cleveland-Innes, 2005). In the current study, some participants indicated that posting on the discussion board helped them to connect with peers and made them feel like they were part of an online community, while learning from other students. However, the majority of participants indicated that participation on the discussion board was too time consuming, and as a result their participation decreased as the weeks progressed. Online students are often time-poor (Stone, 2017), and students have to manage their time effectively (Nieuwoudt & Brickhill, 2017). However, students have to make "constrained choices in relation to what is available to them, the degree of risk involved and their sense of commitment to other aspects of their lives, such as employment and family" (Burke, Bennett, Bunn, Stevenson, & Clegg, 2017, p. 35). Students are not necessarily managing their time ineffectively (Richardson, King, Olds, Parfitt, & Chiera, 2019), it is possible that students simply do not have enough time to participate in non-assessed discussion boards (Nieuwoudt, 2018). Students enrolled in the PSP are typically from diverse socioeconomic backgrounds and may be juggling multiple responsibilities as single parents or carers of elderly parents (J. A. Taylor et al., 2018). Mature-aged online students with family and work commitments are often self-motivated to study and may not be interested in forming social networks (Owens, Hardcastle, & Richardson, 2009) nor feel the need to belong to an online community (Delahunty, Jones, & Verenika, 2014).Whilst teaching staff may design activities online to ensure similarity in delivery across modalities it may be the case that different study modalities attract different students with different needs. This may result in different practices to constitute engagement, including lurking.

Limitations and future research

It is acknowledged that the current research project had several limitations. The small sample size limits the interpretations and generalisations that can be made from the results obtained. Future studies could collect data from a larger sample of online students including those who were not visible online. In the current research project, participation on the discussion board was measured in terms of the quantity of the interactions, rather than the quality of the interactions. Students' motivation for participation on the discussion boards is also still largely unknown. Future studies may benefit from observing both the nature of the discussion board posts and students' rationale for posting. Further focus on students' motivation for participating on the discussion boards, feelings associated with posting, as well as the perceived value of online activities, would contribute to a richer understanding of students' motivations for their online behaviour.

Conclusion

The aim of this research project was to consider the role of non-assessed discussion boards in students' engagement and learning. Related to this, we were interested in how students felt using the discussion boards. Considering student engagement on those boards was optional it is important to consider students' motivation for posting. Whilst educators may design activities (such as discussion board forums) to engage online students and offer opportunities to consolidate learning (to mirror on-campus activities), it may be the case that online students exhibit different practices to

constitute engagement, including lurking. Far from being a passive or negative form of interaction, this research found that lurking was working for some students. Being present in the online environment by reading other students' posts was sufficient to support the learning of some students in this research project. However, active contributions are required from some students in order to provide an opportunity for others to lurk. Research questions may therefore need to be redirected away from why students are or are not posting on the discussions board. Alternative considerations could be how students feel when they are posting, and how to encourage and endorse all practices of online engagement, including legitimate peripheral participation and lurking.

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