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Online discussion boards: Improving practice and student engagement by harnessing facilitator perceptions

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Abstract

This research explores the perceptions of facilitators in asynchronous online discussion to improve practice and student engagement in Higher Education. Traditional didactic delivery of learning content may fail the expectations of student and academic stakeholders. The pressure to teach within constrained resources presents challenges, but also provides stimulating opportunities for optimising use of educational technology. Fostering student engagement requires rethinking traditional classroom and online delivery.

The study explores the challenges and benefits experienced, resulting in the identification of key themes from which implications for practice are discussed. In doing so, it broadens conceptual understandings, while offering recommendations for university teachers, administrators and leaders.

The impact of facilitated online discussion boards on student engagement and participation was investigated from the experiences and perceptions of facilitators of online discussion boards in a Health Science subject at the University of Tasmania. After the semester was completed, all facilitators were invited to participate in one-to-one, semi-structured interviews. Interview questions were grouped to produce both descriptive and reflective responses about roles as a facilitator, and about preparation, training and support.

Findings suggest that, with appropriately trained and prepared facilitators, online discussion can improve student engagement, enhance learning outcomes and satisfy stakeholder expectations.

Keywords

Asynchronous online discussion (AOD), e-learning, facilitated discussion boards, professional identity, student engagement

Introduction

Facilitated asynchronous online discussion (AOD) can provide a constructive and flexible form of professional learning and support for students and can be a valuable tool for educators to assess and maintain currency of unit content. As educators interested in eLearning, we formed a peer professional learning circle (PPLC) focusing on improving student learning and maximising outcomes of our individual and collective teaching practices. Our use of educational technology impacts both on how the student feels about a unit and how they engage with unit resources. We teach in different faculties and disciplines, using diverse strategies to engage students. Within our online learning environments, we challenge our students to contribute through online discussion, thereby enhancing knowledge acquisition and influencing professional learning. As practitioners we have experienced gaps in understanding the role and influence of online facilitators, and the question of what is needed to develop a positive facilitated online discussion experience has been central to our investigations.

The last decade has seen an explosion of literature concerning AOD. Hew, Cheung and Ng (2010) noted that AODs are known to support active learning and higher-order thinking, yet active engagement in online discussions commonly does not occur. Discussions and students working collaboratively using online communication tools have been shown to be the most effective means for learners to engage effectively with one another (Martin & Bolliger 2018). Yet even when discussion boards are prepared with forethought and planning, effectiveness may be elusive. The implication for practice is a fit between unit and course learning outcomes, and the ability of the facilitator to use AODs to positively influence desired pedagogical results. As noted by Valenti, Feldbush and Mandernach (2019), within the remote asynchronous context of online teaching, not all experiences, including discussion boards, are effective in engaging students.

Within the remote asynchronous context of eLearning, effective facilitation contributes to improved student engagement by drawing out knowledge and understanding of issues relevant to unit learning outcomes and current industry practice. As an alliance of academics teaching online, we noted a gap in truly engaged discussion and recognised that skilfully facilitated discussion boards could increase student engagement and subsequently learning. With our experiences of online facilitation forefront, we focussed our research on a fully online health science unit taught to multiple health disciplines and explored facilitator perceptions of their online experience throughout an academic semester.

This study considered the different impacts of online facilitators and adds to the understanding of the role of facilitators in providing contextual experience. We investigated facilitators' perceptions of the value and impact of online discussion throughout an academic semester in order to identify characteristics that support teaching. We review the current literature pertaining to the impact of online facilitated discussion on teaching outcomes. After outlining our methods, we examine the impacts and perceptions of online facilitators on unit learning outcomes in order to elicit appropriate recommendations that may reduce the negative impacts of discussions and foster engagement. Finally, we discuss the contribution of this research towards understanding the impact that online facilitation has upon student engagement and learning, including the impact on professional identity and make recommendations to promote online-supportive practices.

Our specific questions were:

What are the practices and challenges experienced by our online discussion facilitators throughout an academic semester?

From our experiences and perceptions and those of our facilitators, what enabling practices improve student engagement and learning?

Literature Review

Online Learning Experiences and the Influence on Student Engagement

Researching the use of educational technology to improve paramedic student education, Birt, Moore and Cowling (2017) considered that as educators, we are increasingly surrounded by individuals who tackle problems in different ways through digital technology. They also observed that higher education and health professions have seen a shift away from the traditional face-to-face didactic lecture and tutorial to online education. The journey of the learner from student to graduate is defined and underpinned by pedagogical platforms; a holistic approach to self-direction and self-reflective learning. It is also defined by the learner's engagement with teaching methodologies and resources (Biggs 2003). The use of mixed delivery modes including interactive discussion boards in online learning suggests such boards can be important tools to foster student engagement (Baldwin & Sabry 2003). Examination of online learning frequently focuses on the effectiveness of AOD, since it is commonly a core element in online learning management design and course delivery (Bradshaw & Hilton 2004, Hew, Cheung & Ng 2010).

The holistic approach above is similar to Van Merriënboer, Clark and de Croock (2002) who argue that complex learning requires the co-ordination and integration of structural progression through progressive skills. Collins, Greeno and Resnick (2001) define knowledge, learning and transfer as incrementally applying data (knowledge) through a process where association and skills are applied to learning. Transfer occurs when learning is applied in different contextual situations. Collins et al. (2001, p. 4276) add motivation to the knowledge/learning/transfer paradigm and define motivation as "a state of the learner that favours formation of new association and skills - primarily involving incentives for attending to relevant aspects of the situation and for responding appropriately".

Often student engagement in AOD cannot be captured as students may choose only to read posts rather than actively participate. Dennen (2008, p. 1624) defines this activity as 'lurking': "Students may engage in processes of reading and reflection on the discussion board, not leaving their mark; it is these acts that may be referred to as pedagogical lurking". Lurking is not, as sometimes implied, a lack of engagement (Tsiotakis & Jimoyiannis 2016) but needs to be addressed if student participation is essential to learning. A key factor for student engagement in online learning is a conducive learning environment that enables effective social, teaching and cognitive factors (Bair & Bair 2011; Garner & Rouse 2016; Zhao & Sullivan 2017).

Discussion boards can provide more reflection time and a potentially less stressful opportunity for students and facilitators to share their thoughts and opinions than face-to-face interaction. However, this does not necessarily result in more meaningful participation.

It is apparent that student engagement can support learning. The following example from a tutor interview (*Students' online learning experiences* 2003) illustrates how discussion boards may enhance learning in a safe environment:

...because people judged her on what she wrote and not on what she looked like...she didn't have to come up with lots of articulate ideas within the group setting...she could...get her references and then construct her argument...people judged her on the strength of her argument and not what she looked like or any peripheral information.

This student was able to present her work where she felt ‘safe’; perceived for her academic response and judged by nothing else. In this environment a skilled facilitator can scaffold learning which in a face-to-face traditional environment might not be nearly as ‘safe’ for some students.

Online discussion boards can be set up to be anonymous, providing a safe environment for some learners. Bunker and Ellis (2001, p. 3) suggested that the “perceived anonymity of discussion lists can encourage the shy learner who may hesitate to interact in face-to-face teaching and fail to ask for assistance or clarification if needed”.

Literature on the use of online interactive resources, including discussion boards, suggests there are complex links between emotional experience, engagement, flow and feedback (Csikszentmihalyi, Abuhamdeh & Nakamura 2005). When expectations are not met, student satisfaction can be affected, with disengagement and frustration occurring. Grossman (2009) stressed the importance of actively engaging the students in the process of recalling and reapplying knowledge in different contexts; this needs to be considered in the design of AOD boards.

Educators who use discussion boards estimate that their interaction with students can be up to three times longer than interaction with face-to-face students (Martin 2014). Facilitating discussions effectively while fostering both social and teacher presence is time-consuming (Thomas & Thorpe 2019). Staff workload and time allocation are significant considerations in designing AOD boards.

Facilitation Skills and Roles

Previous studies have explored the perspectives of both facilitators and students and consistently related perceptions of satisfaction to aspects of online discussion including forum structure, the level and type of interaction between facilitators and students, and the quality of content (Ghadirian & Ayub 2017; Ladyshevsky 2013; Thomas & Thorpe 2019). The value and success of eLearning programs is, to a large extent, dependent on the facilitators' skills and expertise. This was recognised by Hootstein (2002), who argued that facilitators wear “four pairs of shoes”; fulfilling roles as instructors, social directors, managers and technical assistants. Facilitation requires a guided and supported training system, based on educational theories and a model supporting online facilitation.

Increasing pressure on university budgets and to teach within constrained resources conflicts with preparation expectations and time allocation. Failure to address these factors may lead to facilitators becoming isolated from their colleagues, and unable to be part of “meaningful discussions, constructive feedback and a sense of collegiality” (Crawford-Ferre & Wiest 2012, p. 13).

Facilitators who enable knowledge construction, posting regularly to discussions, enhance student learning outcomes (Ghadirian & Ayub 2017). Salmon (2004, p. 209) developed a five-stage e-moderating model, training online facilitators to recognise and cope with “access and motivation, online socialisation, information exchange, knowledge construction, and development”. The model was predicated upon cognitive, social and teaching presence, and stressed that of these, teaching presence (the role of facilitator) was the most critical.

Facilitators sometimes struggle to establish an effective online presence because they are experimenting with their own intervention strategies whilst supporting students in a non-instructionist online environment (Northover 2002). Nevertheless, developing a sense of presence is critical for positive student and facilitator participation (Shea & Bidjerano 2010).

Bradshaw and Hinton (2004, p. 6) noted that both lecturer and students can ‘scaffold’ the learning process in online discussions:

At the beginning of the term the lecturer provided scaffolding by providing model responses and by showing learners how to link the weekly topic with the other study material. Using these model responses, students chatted to each other about the weekly topic, refining and organizing their understanding of the area.

Bradshaw and Hinton also noted that providing students with a set of guidelines establishes parameters, promoting objectivity and the need to respect others’ opinions. These could be reinforced by the facilitator when students overstep the parameters.

Hew et al. (2010) found that most respondents preferred a facilitator to direct the discussion, whether postings were assessed or not. Douglas, Mather, Murray, Earwaker, James, Pittaway, Robards & Salter (2015) showed that students needed discussion posts to be engaging and fit for purpose, with facilitation enabling this to occur. This supports recent literature, which suggests that facilitators need to clearly indicate the purpose of AODs, designing tasks that enable constructive learning (Akcaoglu & Lee 2016; Botton & Gregory 2015). Furthermore, Gernsbacher (2016, p. 4), having hosted nearly 5,000 online discussion forums, uses the analogy of ‘directing traffic’, suggesting that facilitators need to prompt the discussion with action verbs such as ‘find’, ‘explain’, or ‘identify’. She also deters students from ‘parachuting’ into the discussion and suggests embedding preparatory links to each discussion forum. Students are directed to “read X, watch Y, and listen to Z, then go to the Unit 2 Discussion Board and identify a...”.

Confidence and Experience of the Facilitator with the Online Learning Platform

Both facilitators and students need to be competent in and confident about the online learning platform used for discussions (Tsiotakis & Jimoyiannis 2016), to engender successful learning. Tsiotakis & Jimoyiannis (2016) confirmed the usability and the functionality of the integrated community platform and the tools incorporated regarding their affordances to support teachers’ engagement and collaboration (i.e. the LMS). The goal of their study was to provide an integrated design framework to support professional development of the participants as well as enhance their pedagogical knowledge and instructional design skills.

Facilitators may perceive that some students are confident and experienced in posting online. This may make less experienced or less confident students fearful of contributing, because they cannot use the technology, or cannot conceptualise the content of the discussion thread. This requires the facilitator to be skilful in controlling the discussion accordingly.

Gulati (2004, p. 2) advocates that:

the formal educational environment and the emerging online learning practices need to give greater attention to the issues of safety, informality, confidence, and trust, and need to see mistakes as important for learning.

Gulati (2004) suggests this must be taken in context with a variety of learner-centred strategies, including a constructivist approach and an environment offering informal and flexible learning opportunities. This behaviourist approach is also supported by Jung et al. (2002).

Connecting Education with Graduate Outcomes and Professional Outcomes

Benveniste (1987) noted that professional roles are prestigious and can provide the role holder with autonomy. In a later study, Burke (2004) observed that identities are the meanings that individuals hold for themselves, being members of groups and having certain roles, including unique biological and personal entities. Professional identity is defined as one's professional self-concept, based on attributes, beliefs, values, motives and experiences (Slay & Smith 2011).

Seligo (2015) also emphasises the importance of developing a professional identity through learning, noting that the job market for graduates is tightening and that graduates view their degree as training for the first job rather than a broad education for life. Bredillet et al. (2013) suggest that universities and students should recognise the importance of connecting studies with the needs of the labour market, to prepare for rewarding careers through experiential learning. In the online environment, students value opportunities to work on real-world projects (Martin & Bolliger 2018). This highlights the importance of authenticity for student engagement.

Designing discussion boards to enable rich discussions between students and discipline-specific facilitators may therefore enhance professional and graduate outcomes. Whitchurch (2015, p.79) looks at the dilemmas of what she terms "third space professionals", the nexus between academics and professionals as areas where academic and non-academic staff are required to work together as collaborators "without role or identity conflict".

Higher education teachers need to create a professional identity, often requiring a change in their perceptions rather than just learning new techniques (Teräs 2016). According to Tsai (2016), many academics are still discovering their changing role within the online environment, where control of the learning environment is shared with students to enable self-motivated, independent learning to occur (Baran & Correia 2009).

Next we cover how we investigated the experiences of our facilitators, identifying what practices will foster student engagement.

Methods

This study was part of a larger research project of a common interest in online discussion boards. Our emphasis was exploring the perspectives of students and facilitators regarding effectiveness in AOD, focusing on improving student learning, maximising outcomes of our individual and collective teaching. The larger study explored two main areas: firstly, whether introducing facilitation and assessment in online discussions shaped student perceptions of satisfaction with and level of participation in discussions; and secondly, what enhanced student learning and engagement from a facilitators' perspectives.

The original project team comprised staff members from different faculties and institutes of the university, each with an interest in improving teaching practice. Concentrating on the facilitation process for one unit (subject) throughout an academic semester enabled the project team to derive a deeper understanding of the variables of interest, given that the overarching institutional and policy environment is similar across faculties. Most of the project team and facilitators had worked at other Australian institutions and were able to offer perspectives that were not limited to their experience of one semester.

These considerations were weighed against anecdotal evidence from project team members who have facilitated AODs or have supervised facilitators. The decision was made to undertake research via confidential one-on-one interviews. Following approval of the interview protocol from the University of Tasmania, Human Ethics Committee (H0013544), all participants consented to be part of the study. Our Health Science unit adopted a new mechanism of online discussion involving active participation of facilitators to enhance online engagement. Each facilitator was responsible for 2-3 discussion groups, each of 20-25 students. Their role was to initiate questions and facilitate the discussion for a period of 11 weeks. Each week a new topic was introduced, supported by relevant narrated lectures, videos and readings. The facilitators were allied health professionals who had previously been assessors in the unit but had not facilitated online discussions. Their preparation involved a brief introductory discussion with the unit co-ordinator, a one-hour training session with an academic developer on how to operate the learning management system (LMS), and associated readings. Students were assessed (30% weighting) with respect to content and participation in the discussion boards.

After the close of the discussion boards at the end of semester, all nine instructor/facilitators were invited to participate in one-to-one, semi-structured interviews. Eight facilitators were interviewed. The facilitators were women aged 30-65, all allied health professionals, employed on a casual basis. To minimise any sense of coercion, recruitment emails were sent from a research team member with no relationship to the unit. The interviews were conducted face-to-face or via telephone and recorded with the permission of the participants. Each interview was planned to take approximately 20 minutes. However, two interviews took over an hour each, and one interview was very short, as the facilitator covered only one module in the semester, related to a specific area of expertise.

The interviewers were familiar with the LMS (known as MyLO), which helped to establish rapport. The interviewers had not previously worked directly with the participants. The interviews were later transcribed independently by contractors with no relationship to the units or the participants. All data were de-identified to ensure participant anonymity.

The interview questions were reflective and open-ended. Questions were grouped to produce both descriptive and reflective responses about participants' roles as a facilitator, and about their preparation, training and support. The final part of the interview recorded facilitators' self-assessment of their overall online proficiency and experience.

The interview protocol consisted of an icebreaker question to elicit story-telling, remove general concerns and pre-scripted statements, and establish rapport. There were seven open-ended key questions, three with subsections, and 26 optional funnelling questions. The funnelling questions encouraged depth of response, or to refocus the interview should it stray off topic. General questions were followed by more targeted ones. The questions related to facilitators' experiences and were organised into the following topics: how academic/professional experience informed the facilitation role; strategies helpful to better prepare for the facilitator role; techniques useful in helping to facilitate online discussion; manageability with the resources and training available; time invested in the facilitation process; internet use and prowess before the facilitation role; and the effectiveness for students of facilitation, in terms of broad engagement and learning, and the perceived limitations of online learning environments.

The interviews were recorded, then transcribed and analysed by the project team. Anonymity was ensured in the transcription process by removing names of participants and any identifying features. Our approach to the data analysis was inductive in nature. The research team comes from a range of

disciplines and are users of the discussion board teaching strategy. The research team had exposure to diverse teaching strategies pertaining to the issues. The themes discussed below were derived from analysis of the data and were later compared with published work.

Results

The facilitators reported a variety of experiences in their facilitation of a fully online Health Science unit. Experiences often reflected the diversity of the unit's student cohort.

Facilitators often experienced discussions that were difficult to control, especially where the personality and opinions of students dominated. In contrast, some facilitators experienced lacklustre or stilted responses. Another challenge identified was time efficiency: the additional amount of time that discussion boards required as opposed to traditional classroom delivery.

The facilitators also realised that they might be unintentionally preventing initial postings, or not promoting discussion. One facilitator explained that putting too much into responses resulted in closing discussion rather than opening it.

One facilitator suggested that student response might be related to their own ability to generate a 'sense of presence':

An effective facilitator is someone who is there. So they have a presence. They're not there responding to every post.

This facilitator noted the time taken to respond to posts, and that if the board has too many posts, that can be 'off-putting'.

The concept of facilitator presence was displayed in the instance of a mature-age first year student who despite feelings of insecurity, finally posted apologising for being late. The facilitator responded with an encouraging prompt:

Please don't be shy, if you have opinions about what you found useful and what was confusing or if you have suggestions on how things could be done better, please post a comment, or reply to another post. Thank you.

In another case, a student wanted the facilitator to know that they were away from home as a parent had undergone surgery, and this was why they had not participated in discussions. The student assured the facilitator that they would post as soon as possible. What was striking in this explanation was the need felt by the student to provide such detailed personal information to justify not posting in a timely manner. Alternatively, perhaps the student found the anonymity of a discussion board a comfortable place to share.

In such cases, the ability of the facilitator to carefully manage personal issues through training or experience in their professional field of expertise becomes paramount. Both incidents illustrate an opportunity for a confident and prepared facilitator to encourage a sense of trust in students, as well as the confidence to share personal experiences relating to their ability to interact with others.

Our interviews revealed that the facilitators confidence and sense of capability in their role was compromised when some students were also current health practitioners. Facilitators considered that

some students were very confident and experienced, therefore whilst they made meaningful posts, they may have influenced the less experienced to question whether they could contribute as meaningfully. This required the facilitator to be skilful in monitoring and controlling the discussion, as previously observed by Gulati (2004). One facilitator commented:

Students need to know that they are valued as students as well as practitioners and being able to communicate about their current knowledge base.

Another facilitator commented that all students needed to feel their contribution was valued. The facilitator noted:

Some [undergraduates] were fearful to comment because of the paramedics that had taken over.

The facilitators noted that if experienced students were using acronyms, they needed to regulate the discussion. An example from one facilitator:

We all use terminology as clinical practitioners...we all use [acronyms]. That doesn't mean everybody understands... maybe I need rules of engagement, in terms of if you're using acronyms, make sure that you tell us what it means.

The AODs presented an opportunity for students to make a personal point and not necessarily remain 'neutral'. This required skilful intervention by the facilitator. It was observed that some students used the forums to 'push their barrow', making a point relevant to them rather than other more relevant issues.

Our research questions focussed on improving student engagement, and we found that facilitators had various views on 'discussing as opposed to just posting'. Facilitators observed that while some students actively engaged in and broadened the discussion, others simply responded to questions posted. It was considered harder to judge if the students were engaged on AODs, than in a face-to-face environment. Some students used statements from books rather than discussing the content. One perception of the benefits of AODs was that less confident students found the online process "allowed them to get involved with the unit and feel part of a class" as if they were in a classroom. This perception reflects the findings of Gernsbacher (2016), who also noted that many students prefer online to face-to-face discussion, most likely because they can communicate asynchronously.

An organisational issue expressed by our facilitators was the difficulty in learning and using MyLO. They also noted that students were struggling. Examples of facilitator comments were: "I can't work it (MyLO) out myself"; "I struggled with MyLO I have to admit"; "The use of MyLO is always difficult. I can do the basics".

This frustration of some facilitators with the MyLO platform may have had negative effects on the online experience for students.

An unexpected theme that emerged from our analysis, was that facilitators were keen to help their students learn and develop in preparation for their profession. Our facilitators were actively engaged online, not just in helping their students with the unit content, but with the broader objective of students developing their own professional identities. One facilitator explained how she moderated a debate about politics amongst her students:

...in a professional regard we need to keep it non-political. You can say that, you know, ... it's happening, but try not to use specific names...[or] make it really obvious what your political stance is, because you take away from your own professionalism when you do that.

Another facilitator spoke about the value of her own professional identity in the workplace as a health care practitioner and how she brought that to the classroom and discussion boards:

I still work in private practice... I find that experience legitimises what I do...

This facilitator's professional identity brought legitimacy to her authority regarding the content and, legitimised her modelling of how a health care practitioner 'acts' or, in the language of Goffman's dramaturgical framework, 'performs'.

Discussion (Implications for Practice)

Student engagement can be enhanced by effective learner-instructor interactions online (Martin & Bolliger 2018). Our facilitators observed that creating content on discussion boards and responding to the replies or questions of other posters helped foster a positive learning experience for their students. This bears out Grossman's argument (2009) that students need to be actively engaged in the process of recalling and reapplying knowledge in different contexts. Online learners want to know their facilitator and feel their presence (Elander 2016) and to experience some structure to their discussions to enable them to interact effectively (Ghadirian & Ayub 2017). We concur with Gernsbacher's (2016) approach of facilitating in a way that deters students from 'parachuting' into the conversation by embedding links that encourage students to read, watch or listen to information before they post.

From the facilitators' perspectives, we note that AODs can provide a rich, flexible form of professional learning and support for students, offering a valuable tool for access to practitioners and information sources and thus have the potential to influence graduate professional identity and learning outcomes. This supports previous studies which have also indicated an ability for professional identity to develop through rich online discussions (Teräs 2016). Even when discussion boards are prepared with forethought and planning, effectiveness may be difficult to achieve due to time constraints or other factors. The presence of an engaging facilitator, however, is paramount to discussion board effectiveness (Thomas & Thorpe 2019).

We consider engagement and reflection to be crucial to developing effective dialogue and learning opportunities. Such skills are of importance for the transition phase from completing studies to applying university learning and skills as the foundation of lifelong learning. Our findings indicate that increasing engagement in online discussion requires the facilitator to consider how students will apply what they have learned to the real world.

Our findings also suggest that facilitated AODs targeting necessary industry knowledge, and sometimes controversial issues, are an excellent platform for engaged learning and fostering professional identity. AODs are a student-centred learning approach and, as recognised by Ferreri and O'Connor (2013), promote application of transferable skills such as problem solving, teamwork and interpersonal capabilities. Providing students with more autonomy in online discussion forums has also been suggested to be an effective learning transformation (Thomas & Thorpe 2019). Students can be progressively encouraged towards self-direction as confidence and knowledge grows.

Facilitators commented on the postings, creating additional practitioner-based discussion. The facilitators actively engaged in helping students with the unit content and with the broader objective of developing their emerging professional identities as health care practitioners, while progressively adding to and deepening the skills and knowledge that foster professional identity. We consider that by keeping the target of professional identity in mind while designing, implementing and evaluating online discussion, effectiveness is heightened. This has also been shown by Teräs (2016).

As illustrated by Bredillet et al. (2013), engagement and participation in appropriately facilitated AODs promotes active student learning and enhances professional identity. The experience of facilitators as professionals in an academic environment is valued. We consider active engagement through discussion to be crucial in developing effective dialogue and learning opportunities. When a structured discussion atmosphere is fostered, the facilitator can open the board for discussion and students can then initiate and direct conversation themselves.

Guiding questions combined with unit content or key issues provide a foundation to design and direct an interactive debate. Thomas and Thorpe (2019) provide a number of practical suggestions for facilitating online discussion groups. These and other readily available strategies can be utilised to create a sense of an online community.

Our findings indicate that for facilitators to enhance student learning and engagement requires a change in thinking and practice, from the traditional academic teacher role to that of an active guide and consultant. Facilitators need to be comfortable within the LMS and to be trained and supported. Rather than provide answers to questions, facilitators should utilise the industry knowledge of all participants to be a ‘questioner’ and move into deeper learning. This is a strategic approach to developing professional identity and creating a rich learning experience that requires a change of focus from designing unit content only, to designing student learning experiences.

We make the following recommendations:

- Control the process of recalling and reapplying knowledge. Students want to know their facilitator and feel their presence.
- Embed links into discussions that lead students to read, watch or listen before they post, to deter ‘parachuting’ into the conversation.
- Invest time in the initial compilation and structure of groups. In larger units, mix distance and off-campus students, and those with industry experience. Keep the target of professional identity in mind when designing, implementing and evaluating online discussion.
- Use content reflection to develop dialogue in transitioning from completing studies to applying university learning and skills as the foundation of lifelong learning. Encourage application of the unit content to the real world.
- Control controversial issues; use these as opportunities for engaged learning and to foster graduate professional identity.
- Promote application of transferable skills, such as problem solving, teamwork and interpersonal capabilities; gradually provide students with more autonomy towards effective learning.
- Gradually release control; guiding questions combined with unit content or key issues provide a good foundation to design and direct debate. Once a structured discussion atmosphere is created, open up the discussion for students to initiate and direct themselves, lessening facilitation.

As an outcome of this study and an internal Teaching Development Grant, we developed a guide to online discussion boards (Douglas, Earwaker, James, Mather, Murray & Salter, 2017). The guide provides information regarding purpose, learning design, netiquette, student engagement, facilitation, assessment, referencing, review and evaluation. The guide provides strategies to improve positive and informative dialogue between students and facilitators and effective dialogue between students.

Study limitations and implications for future research

Our results are relevant given online learning is one of the fastest growing tendencies in higher education and the use of discussion boards continues a pedagogical debate. This study, while providing useful insight into our facilitators' perceptions, suffered from a small sample size. The study was limited to one unit and the experience over one semester, where facilitators had been newly introduced to facilitated AOD. Future studies could give consideration to facilitators maintaining a diary documenting their journey and perceptions throughout the semester.

It is important to note that many students are learning through a second language and this study did not consider the impacts on discussion board experience for these individuals. Online discussions tend to take on a localised slang and terminology as students and facilitators become more comfortable in their posts. James, Schriever, Jahangiri & Girgin (2018) noted that learners of a new language make translations into their native tongue and search for meaning in the cultural and linguistic discourse of that familiar environment. This study did not consider how the interactive nature of the online boards allows students learning via a second language to improve language acquisition. This is an important potential area of future research.

Another identified area for future research is in the usability of learning management systems. Our facilitators noted strongly that using the institution's LMS was problematic. It is acknowledged that facilitator training and support in the LMS were crucial for successful engagement.

Conclusion

By interviewing discussion board facilitators and analysing key themes in their experiences, this study contributes to the understanding of how students use online discussion and how they might be motivated to contribute in more engaged and meaningful ways. The implications for practice are a better fit between the learning outcomes of the unit and the ability of the facilitator to use technology to achieve these outcomes. Studying the facilitators' experience throughout the semester resulted in recognising that the role and influence of the facilitators can have a positive impact on student learning and professional identity.

A review of the theoretical and practical literature of online discussion along with the experiences of our facilitators suggest that facilitator participation allows diverse perspectives to be explored, debated and applied to relevant professional outcomes. When skilfully facilitated, discussion boards can provide a rich interaction between students, the benefit of which reaches beyond the class to foster a range of graduate outcomes. Thoughtful posting of guiding questions, including content that may be detailed and highly interactive, provides a strong foundation for the facilitator to design and direct discussion. Students can initiate and direct conversation with initial facilitator guidance but with the aim of becoming confident participants exchanging information and self-belief expression. This is predicated upon appropriately skilled facilitators.

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