

A sense of belonging to enhance participation, success and retention in online programs

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Abstract

Online learning presents an opportunity to expand access to higher education to traditionally underrepresented students. However the challenges for these students may persist even when study is undertaken off campus. Fostering a sense of belonging and personal connection to learning may present a way to improve the learning experience and retention of these students, especially in the first year. In a qualitative study of university students from non-traditional backgrounds and academics, sense of belonging was found as a characteristic highly valued in online courses. How sense of belonging was understood and experienced by students, and the strategies used by academics to foster belonging in online learning are discussed.

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Introduction

The implementation of the Bradley Review (Bradley, Noonan, Nugent & Scales, 2008) has brought about a demographic shift in higher education, both in terms of the number of Australians attending university, and also the diversity of the social and economic background of students. This shift has taken place alongside the expansion of online learning as an alternative or complement to on-campus offerings (e.g. Palmer & Holt, 2009). This research takes place in a context where the understanding of the interactions of these two trends in higher education is limited.

Online learning presents an opportunity to make higher education accessible for students from equity groups (e.g. remote/regional, mature age, primary caregivers, low socioeconomic status). However, despite the affordances of technology to support needs of diverse learners, it is still common to see “one size fits all” approaches to online curriculum design (Oliver, 2006). For various reasons, retention rates for online learning are low compared to students on campus (Carr, 2000). Research suggests that factors similar to face-to-face learning (i.e. class, educational background, occupation) tend to predict engagement in online learning (Gorard & Selwyn, 2005). Added to the tendency of students from equity groups to withdraw their enrolment at a higher rate in the first year of study (Krause, 2005), students from equity groups studying their first year online may be particularly at risk of abandoning their studies.

Strategies that aim to foster a sense of belonging and inclusion in the online context appear promising in improving retention in online learning. McConnell (2006) emphasises learning as a social process that is carried out in communities,

suggesting that knowledge is developed and negotiated between members. The creation and interpretation of knowledge is thought to be intertwined with personal and within group identity. Similarly, Koole and Parchoma (2013) describe belonging in online learning communities as an iterative process of dialogue and exchange with other members, and that individuals act to achieve a level of “cognitive resonance in which they integrate experiences and beliefs of the external world into their personal narratives” (p. 14). Hughes (2007) describes inclusion in terms of the congruence between the identities of the learners and the identities implicitly supported by the interactions of the online learning community. The challenge is for educators to create a learning environment that supports the diverse identities and experiences of students and foster constructive and respectful dialogue and exchange. While students withdraw from higher education for a diverse set of reasons (Krause, 2005), fostering belonging and inclusion can play a role in improving retention by motivating students to continue studying.

This paper reports on some preliminary findings from a study that is examining socially inclusive teaching and the online learning context. From an analysis of the data, a strong theme around sense of belonging emerged and was explored in detail. The purpose of this paper is report on the findings of the research related to the sense of belonging theme and demonstrate how academic teachers can support this in the online learning context.

Methodology

This study used a qualitative approach, appropriate to the exploratory nature of the investigation. The research was guided by the over-arching questions (a) what

challenges exist for students from non-traditional backgrounds engaging in online learning and, (b) what strategies support learning for students from non-traditional backgrounds in the online learning environment? The investigators sought to address these questions with data from both the student and academic teacher perspective. Students were recruited through a strategy of general advertisements to the student body of various universities asking for participants who identified themselves as being a non-traditional student and were studying, or had studied in an online or blended format. Academics were recruited through contact with Associate Deans of Teaching and Learning (or equivalent) from participating universities who were asked to identify and forward an invite to teaching staff who demonstrated socially inclusive online teaching practices. Efforts were made to ensure that participants represented a range of discipline areas and regions throughout Australia to ensure the relevance of the research to the broader national higher education context.

In total, 50 semi-structured individual interviews and six focus groups were conducted. The interviewer posed a series of questions to facilitate discussion about online teaching and learning experiences and strategies that enable participation and success for a diverse range of students. Participants included students from non-traditional backgrounds who have studied online or in a blended learning context (n=21) and, academic teaching staff from Australian universities who teach in courses with an online component (n=46). Student participants represented a range of backgrounds including those who identified as low socioeconomic background, first in

family to attend university, with a disability, living in a remote or regional area, Indigenous, international, English as a second language, carer, worker etc. All participants were drawn from around Australia including representatives from New South Wales (NSW), Queensland (QLD), South Australia (SA), Western Australia (WA) and Tasmania (Tas)¹. Where a face-to-face meeting was not possible, individual interviews occurred via a telephone call or Skype meeting. All focus groups were facilitated in a face-to-face format and were grouped in either a student or academic teaching staff configuration.

The interviews and focus group discussions were audio-recorded and transcribed verbatim. Interference and audio issues created some difficulties in transcription and a total of 45 interviews and five focus group discussions were successfully transcribed and imported into NVivo software for qualitative analysis. To ensure data reliability, one researcher listened to each recording while following the transcript to check for errors in transcription (Gibbs, 2007). Data was coded following Tesch's (1990) eight step coding process allowing codes to emerge from the information collected in interviews and focus group discussions. Three members of the research team were involved in the coding process. A qualitative codebook was established within the software to provide coding definitions and maximise coherence between coders (Guest, MacQueen & Namey, 2012). Once codes were established and agreed upon, two interviews were chosen and coded by each member of the team. The team then met to cross-check the codes to reach inter-coder agreement (Creswell, 2014). Throughout the coding process, regular meetings were held to

¹ The acronyms for each state are used later in reporting the data. For example "Staff 4 SA" refers to an academic staff member coded as number 4 and from South Australia.

continually cross-check coding. This enabled a cohesive understanding of the coding system among team members to ensure the reliability of the data analysis.

The purpose of this paper is to demonstrate the findings of the research with regard to sense of belonging in the online learning context. Thus the results presented here report on what students and teachers say about sense of belonging in the online context.

Results

Participants were asked to describe their experiences with online teaching and learning and also to discuss strategies that enhanced participation and success for a diverse range of online students. Through the analysis of interview and focus group data, the theme of “sense of belonging” emerged. Among the data, there were references from both student and academic teaching staff with regard to sense of belonging. In total, seven students and 17 academics discussed issues pertaining to sense of belonging in the online learning context. Their comments were identified as being related to the experience of a sense of belonging in online learning or strategies that foster a sense of belonging in online learning.

The experience of a sense of belonging in online learning

It was often reported that a sense of belonging to a community was a desirable aspect within an online learning context. One academic teacher spoke of an optional face-to-face component in an online course and stated:

Because it's not compulsory, it's up to them whether they want to come in so the mere fact they're wanting to come in

sort of tells you that they want some sort of community. (Staff 4 SA)

Some students spoke of positive experiences of sense of belonging in an online learning context. For one student, their online experience had been more conducive to community building and the development of a sense of belonging than the face-to-face contexts in which they'd studied. They said that:

[In my] course there was a week of workshops we had to attend in person. You felt like you'd already met most of the students because you'd been talking to them online. There was.... Even though everybody was online doing it, it was much more of a group camaraderie feeling that I don't get on campus. (Student Focus group 2 WA)

Another student set out to take the online relationships further and arranged to meet with other students in person as they reported:

We had to have our own little discussion group and we had to participate within that discussion group at least twice a week. As a result of that, a few of the students who live locally really wanted to get together and meet up externally and go and have a coffee, just to say “hello” and put a face to the name and stuff like that. (Student 10 WA)

For other students though, their online learning experience was not as positive with respect to developing a sense of belonging. One student commented that:

I sort of feel a bit isolated sometimes doing it online.... I just feel like with the on-campus students there seems to be a lot of discussion which I don't have, you know, obviously doing it externally. (Student 6 WA)

The absence of the experience of a sense of belonging in some online learning courses was reported to impact on some students' desire to continue with learning in the online context. This student said:

I prefer social interaction with other people to help me, I don't know, consolidate ideas and build on information that I've learned in lectures so for me personally, I found doing both units externally quite difficult. I would really have liked to do more units externally but because of the troubles I felt with doing external learning I wouldn't do anymore I don't think. (Student 14 WA)

Academic teachers also discussed their observations of student isolation in the online learning context. One said:

I think some students feel quite disengaged and lonely and I think that's particularly true for students who are really active in posting on the discussion board. There are always some students who are really, really keen and then the response kind of dies off sort of Week Four or Week Five and I think that's quite isolating for students who are looking for conversation and discussion and engagement and that kind of kills that motivation and buzz for them. (Staff 4 Tas)

When academic teachers explicitly adapted their online program to enhance sense of belonging, they noticed changes with student satisfaction. One academic stated: "They're (students) saying they feel like there's more online sense of community, we're finding less anxiety, we're finding more retention, less attrition." (Staff 4 SA). Another reported:

This semester you know, the feedback from the students has been things like "The first time I felt I've been in a real classroom" so the change in the ...

especially just the last strategies we've been using, you know, we've noticed a really big change in just the perspective of the students about their feelings (Staff 1 QLD)

Strategies that foster a sense of belonging in online learning

Academic teachers and students discussed the development of a sense of belonging in online learning contexts during the interviews and focus group discussions. This was often described as a priority for teaching in the online context. One academic stated "that's the main thing for me is to make a feeling of a class and a group of people" (Staff 7 NSW). However, it was also recognised that fostering a sense of belonging online was a challenging task. This academic commented on the challenge:

To try and encourage students to form an online learning community, to feel engaged and to feel like you're part of something, but I think it's really hard to achieve. (Staff 4 WA)

One academic explored this a little further as they said "They (students) are happy to reply to me or respond to a question I put online but in terms of responding to someone else, they find that challenging" (Staff 3 QLD). This same academic offered a solution suggesting "there's a need there to assist students to participate in those online discussions with people they haven't met" (Staff 3 QLD).

Icebreakers were a strategy reported to promote collaboration between students as a prelude to establishing a sense of belonging to a community of learners. One academic teacher suggests that such activities should be a feature in the early stages of an online subject:

Spending some quality time front-ending it and doing the ice-breaking and getting to know people... all those sorts of things that we probably invest in more when we've got the students on campus. It's come home to me that this needs to be front-ended a lot more. (Staff 3 QLD)

One academic used icebreakers to demonstrate geographical variety of students, sharing:

I get them to post Google map links to where they live... the town or suburb ... so that they have a get a sense of where everyone is, a sense of place and I think that's really important. (Staff 7 NSW).

Another academic added professional purpose to the icebreaker and also developed it as a low-stakes assessment task as they reported:

I have an assessment component that requires them to share something online and I try to do that at the beginning of the subject. We all start off with a kind of low stakes assessment ... that requires them to do something scholarly but often is based on their own professional experience and reflection so they can share something about themselves... it's a nice way of getting to know the other students on sort of a, you know, more of a kind of professional basis ... So, start with something like that and what I've found is that that tends to build collegiality that then progresses later on in the subject so those students who want to engage with each other do. (Staff 5 NSW)

Embedding collaboration into assessment was viewed by some as essential and positive in promoting social interactions and sense of belonging. One academic advised:

Make sure that communicating with each other in class is part of your assessment so that they have to do that because if you don't make them, it's too easy just to lurk or not engage. (Staff 7 NSW).

The outcomes for students when collaborating in online assessment tasks was illustrated in this student's comment:

I actually made friends with ... we had a group project in one of my units were we had to interact - there had to be five of us get into a group ... And so we got to know one another within our little group (Student 5 WA)

Not all student-to-student collaboration occurred within structured activities. Some academic teachers spoke of discussion forum spaces that they called "student lounge" or "café space" which they set up to enable students to have unmonitored discussions. One academic teacher pointed out that there was not a need to set up such a space for students, but instead, encouraged students to do this for themselves "You can use Skype, Facebook, whatever and you're free to set those up, use them as you like but we won't interact in those" (Staff 2 SA). The reasoning behind this being "That gives them a freedom there that they don't have knowing that we might be overlooking what they're doing" (Staff 2 SA). In a similar situation, another academic reported student satisfaction with this approach, saying "I've had nothing to do with their Facebook site at all but the feedback they've given me, it seems to be working okay" (Staff 1 QLD).

Real-time interactions were used in some online courses to promote a sense of belonging. Virtual classrooms, using technologies such as Adobe Connect enabled students and staff to interact with each other from various locations. To meet

the diverse needs of the students, one academic offered the sessions more than once a week “I’ve got a couple of tutors there because we run four during the week and we range them across different times to suit our different types of students” (Staff 1 SA). This academic reported on the value of this approach stating “That’s working really well and a lot of students are really saying how wonderful that is just to be able to touch base with somebody once a week” (Staff 1 SA). Virtual classroom interactions can also be recorded and made available to students who cannot attend the live session. This academic teacher commented:

Even if they don’t attend the live sessions, (students) have written in and said it really makes them feel more a part of it to be able to listen to what’s going on. (Staff 3 SA).

The ability to watch real-time classroom interaction via video was also discussed by students who were studying externally in a mixed-mode course. While many of the students in the same course were studying in a face-to-face format, these students accessed learning material in an online format. This student commented on the availability of lecture recordings saying:

The lecture is recorded –it’s presentation and audio so you can see exactly what’s going on in the lecture and you can also hear some of the discussion in the lecture... you might not be able to hear all of the audio and discussion but, you know, it’s very good in giving you a sense of being there. (Student 11 WA)

Another student shared what “good teachers” do to in this situation stating:

Some lecturers are very good in this and they also even suggest to remind them “Can you say it again for the external students” so that we can hear the questions that are asked and the answers

that the lecturer gives. I find that very helpful and I feel more connected to it as well. (Student 13 WA)

For external students in a mixed-mode course, access to the same learning resources as the face-to-face students was not always equal. One student reported:

They’ve got different presentations with industry specialists and ... obviously it’s not an option for us. I mean, I could go if I really, really wanted to but it would take a lot of work and I would have to be sure it was definitely on the money for me to do that (Student 2 WA)

Another student pointed to how this impacted on sense of belonging by stating:

The lecturer referred to a DVD that they would be watching in tutorial and I was like “Well, hang on, I want to see the DVD too. Is it made available online?” “No, it’s not,” so then I went into this big rigmarole of getting a copy of the DVD, getting it sent down to the campus near my house and then trying to go and pick it up. So that was a little bit difficult being left out. (Student 11 WA)

Academic teachers and students commented on teacher/student relationships and the teacher presence in online learning that contributed to a sense of belonging. Such relationships and presence were seen as important in sustaining an engaging learning environment as reported by this academic “having that personal engagement with them, using technologies in a way that helps to personalise and foster engagement between them but also between them and you” (Staff 7 NSW). One academic introduced the teaching team to students early on in the online course as they described:

I actually opened it up at the beginning of the study period with a photo of myself and then I put the photos of all of my tutors up there so students would know who they were. (Staff 1 SA)

This casual approach was also supported by another academic who stated “working with them, some of them through encouragement and by casualising the language required, a lot of them will gain confidence and engage” (Staff 5 SA). From the learner perspective, this student commented on the impact of teacher presence in the online context:

I think the thing that made the difference as to whether you felt you were actually part of a class and there was any interaction was how involved the lecturer was as in, in the forums, there were some lecturers who would say after everyone had sort of introduced themselves, not really have any more to do with us so there'd be discussion between students about topics but some lecturers would just not be involved whereas others would check it frequently, have their input ... she (tutor) was so interactive on the forums that it really got a lot of people involved that I don't think would have normally bothered. (Student 7 WA)

This section has presented a range of strategies to foster a sense of belonging as discussed by the participants. Two academics discussed the importance of allowing the individual to decide upon their level of interaction within the online context. One academic stated “It's really about giving them the option about their level of engagement and supporting them in that” (Staff 5 NSW). Another academic supported this statement by saying:

Build that into a community – it doesn't have to be all forced by us and I know there's Facebook and other things but somewhere that needs to be facilitated

that they know they'll actually still connect with people I think (Staff 1 QLD)

Discussion

From a broad exploration of the experiences of students from non-traditional backgrounds engaging in online learning, sense of belonging emerged as an important part of the educational experience. Wenger (1999) argues that the value of education, whether it be face-to-face or online, is in the learners' social interactions and involvement in learning communities. Of the students who discussed this in their interview or focus group, most reported a desire to feel a sense of connection with fellow students and teachers. Both staff and students expressed greater satisfaction with online courses that successfully fostered a sense of belonging among students. Palloff and Pratt (2005) suggest that the formation of online learning communities is what distinguishes online learning from simple correspondence courses, and leads to enhanced student outcomes and satisfaction. Students reported that greater engagement and collaboration with peers fostered a sense of camaraderie that diffused some of the isolation often associated with off-campus study. This was in part about personal/professional connections, but also reduced anxiety about some aspects of studying which are often associated with the first-year experience. Having other students available and actively engaged in discussing the work, helped students to consolidate and build on ideas. This discussion and exchange reflects Koole and Parchoma's (2013) model of learning in online communities, in particular the role of connecting personal identity and experiences to learning.

Feelings of isolation were reported when communities were not fostered within the

online learning context, leading to dissatisfaction with the learning experience. The value of social interactions can easily be overlooked when content delivery and teaching become the primary focus, pushing aside opportunity for networking and friendship (Stuart, 2006). Some students commented on the impact of this on their commitment to continue with online learning. For students who studied online alongside on-campus students in the same course, feelings of isolation were further exacerbated, as they were often not included in learning experiences offered to their on-campus peers. Online students were often frustrated when students were talking about content or resources that were not available to them. Some teachers also identified that participation in the online forums by on-campus students often ebbed over the course of the semester, leaving students that relied on online communication to discuss and exchange with fellow students feeling quite “left out”.

All of these aforementioned online learning phenomena—workload, isolation, sense of community and scaffolding to reduce anxiety—have been discussed by various authors (e.g. Haavind & Carter, 2011; Palloff & Pratt, 1999) throughout the history of e-learning. There are various effective facilitation strategies for the needs of online learning to “motivate students to go deeper and further with the material” (Palloff & Pratt, 1999, p. 75) but also, just as importantly, to stimulate and open further discussion in the learning community; a community that starts to build through these interactions. Such facilitation needs to be prompt, and connected with the overall course design, otherwise the instructor feels online learning is “a lot of work”, and the students sense the inconsistency and isolation. For the purposes of student engagement and retention, this is a necessary feature in the early stages of all

courses, and particularly important in those catering to first-year students. This requires online teachers to consider how to best foster the development of community and sense of belonging in online courses for the purpose of high quality learning experiences.

Becoming an online teacher requires academics to reconsider aspects of their teaching practice. Whilst essentially many of the same principles of good teaching apply to both the face-to-face and online contexts, there is an added layer of complexity involved in maintaining student motivation, interaction and engagement online (Bennett & Lockyer, 2004). In this research, academics talked in detail about some of the strategies they employed to develop the students’ personal investment in their learning. The importance placed on belonging in online learning reinforces the social nature of learning and the negotiation and co-creation of knowledge (McConnell, 2006). Students wanted to be provided with a framework with which to dialogue with other students about their understanding, the importance and relevance of course content to their context, and their personal experience of engaging in learning (Koole & Parchoma, 2013). Having online learning communities that were accepting of the myriad of identities was also a priority for teachers (Hughes, 2007) who made active efforts to facilitate an inclusive environment.

In the Web 2.0 context, online learning environments offer endless opportunities for interaction. Rovai (2001) suggested two types of online interactions for the purpose of building online community: task-driven interactions for the goal of learning and, socioemotional interactions to facilitate social-wellbeing and friendships. The balance of task-driven and socioemotional interactions are of equal importance in the

development of community (Liu, Magjuka, Bonk & Lee, 2007). In this study, participants discussed a range of strategies that contributed to community building and sense of belonging, many of which necessitated getting students to go beyond the basic requirements of interaction to actually be personally invested and connected to their learning. Examples of how the academics went about this included front-ending activities with ice-breakers and low stakes assessments that required collaboration. This was often enough to build a basic level of engagement for students interested in actively participating in online learning. Following on from icebreaking activities, building ongoing collaboration into assessments was important. Frequently, online group work provided an incentive for students to not just do the required interaction with fellow students, but to contribute to group discussions. Lectures through video-conferencing were also thought to help to facilitate belonging, partly due to their regularity. Even when students were not able to directly participate, they were able to access these live lectures and vicariously participate through watching student discussions. Having the questions and discussion of the material from the lectures available in particular was thought to be valuable.

More than opportunities for interaction, teacher presence contributed greatly to the sense of belonging in the online context. This was less about being actually present, but more a sense that they were available if needed, and that discussions remained on track and relevant through teachers' subtle intervention. Students often appreciate regular contact with teachers, even when students do not have any particular problems. Some students and academics talked about how even a simple phone call could change the way students viewed their

connection to the class. Goodyear *et al.* (2001) propose a model identifying eight roles associated with online teaching. These include: content facilitator, technologist, designer, manager/administrator, process facilitator, adviser/counselor, assessor, and researcher. Within each of these roles a theme of teacher presence is communicated, ensuring that students' needs are well considered from a variety of angles.

In a framework that fosters a sense of belonging, there is a need for flexibility. With an ever-diversifying student body, higher education must cater to students with multiple identities and barriers to participating in traditional forms of education (Morgan, 2013). In the online context, teachers must be able to accommodate students that prefer to be self-sufficient or do not have the time to participate in a learning community, and still provide a high-quality learning experience. This research presented a variety of strategies that offer opportunities for interaction. Some of these were built into the curriculum, with or without an assessable component, others were opportunities to socialise beyond the learning context. Through the offer and support of multiple opportunities, learners were able to select a path that best suited their learning needs, thus providing a differentiated pathway for various learners.

Conclusion

The research suggests that students and academics highly value efforts to create a sense of belonging across the students undertaking an online course. Where academics were able to foster a sense of community, collaboration, and personal engagement in learning, students tended to enjoy their learning experience more, feel as though they learned more, and were less

inclined to withdraw from learning. Beyond merely improving the satisfaction of students, successfully developing a sense of belonging in at course had real pedagogical benefits, consistent with much of the literature describing learning as a process of a group interpreting and negotiating knowledge (e.g. McConnell, 2006). Online courses that offered multiple and varied opportunities to interact provided a means of allowing a diverse range of students to select opportunities to engage that best fit within their own unique learning needs. Fostering a sense of belonging presents as a broad and inclusive strategy to improve retention of students in online learning, especially in the first year where attrition is high for non-traditional students (Krause, 2005).

The main purpose of this paper has been to analyse a theme of sense of belonging that emerged from the findings of a broader study investigating the practices and principles of socially inclusive online teaching. Through the analysis of data from both academic teachers and online students from non-traditional backgrounds the researchers were able to explore the experiences of belonging in online learning contexts and the strategies used by teachers to foster a sense of belonging amongst their students.

In conclusion, this paper demonstrates that many students and teachers seek to achieve a feeling of community in the online learning context, to varying levels of success. Where a learning environment provides multiple layers for engagement and participation, learners are offered opportunities to participate in a manner most suitable to their needs. This analysis highlights the importance of embedding a range of community-building strategies for a truly inclusive online course to cater for

the diversifying student body in higher education.

References

- Bennett, S., & Lockyer, L. (2004). Becoming an online teacher: Adapting to a changed environment for teaching and learning in higher education. *Educational Media International*, 41(3), 231-248. doi: 10.1080/09523980410001680842
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education. Final Report*. Canberra, Australia. Commonwealth of Australia.
- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *Chronicle of Higher Education*, 46(23), 39-41. Retrieved from <http://www.chronicle.com/article/As-Distance-Education-Comes-of/14334>
- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Gibbs, G. (2007). Analyzing qualitative data. In U. Flick (Ed.), *The Sage qualitative research kit*. Thousand Oaks, CA: Sage.
- Goodyear, P., Salmon, G., Spector, M., Steeples, C., & Tickner, S. (2001) Competencies of online teaching: a special report, *Educational Technology Research and Development*, 49(1), 65-72
- Gorard, S., & Selwyn, N. (2005). Towards a learning society? The impact of technology on patterns of participation in lifelong learning. *British Journal of Sociology of Education*, 26(1), 71-89. doi: 10.1080/0142569042000292725
- Guest, G., MacQueen, K., & Namey, E. (2012). *Applied thematic analysis*. Thousand Oaks, CA: Sage.
- Haavind, S., & Carter, R. (2011). Four steps to fostering collaborative presence in online discussion forums. In *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2011* (pp. 1245-1253). Chesapeake, VA: AACE. Retrieved from <http://www.editlib.org/p/38886>
- Hughes, G. (2007). Diversity, identity and belonging in e-learning communities: *Some theories and paradoxes*. *Teaching in Higher Education*, 12(5-6), 709-720. doi: 10.1080/13562510701596315
- Koole, M., & Parchoma, G. (2013). The web of identity: A model of digital identity formation in networked learning environments. In S. Warburton, & S. Hatzipanagos (Eds.), *Digital*

- identity and social media* (pp. 14-28). Hershey, PA: Information Science Reference. doi: 10.4018/978-1-4666-1915-9.ch002
- Krause, K-L. (2005). Serious thoughts about dropping out in first year: Trends, patterns and implications for higher education. *Studies in Learning, Evaluation Innovation and Development*, 2(3), 55-68. Retrieved from <http://sleid.cqu.edu.au/viewarticle.php?id=84>
- Liu, X., Magiuka, R., Bonk, C., & Lee, S. (2007). Does a sense of community matter? An examination of participants' perceptions of building learning communities in online course. *The Quarterly Review of Distance Education*, 8(1), 9-24.
- McConnell, D. (2006). *E-Learning Groups and Communities: Imagining Learning in the Age of the Internet*. Buckingham, UK: Open University Press.
- Morgan, M. (2013). Student diversity in higher education. In M. Morgan (Ed.), *Supporting student diversity in higher education: A practical guide* (pp. 10-23). New York, NY: Routledge.
- Oliver, R. (2006). Exploring a technology-facilitated solution to cater for advanced students in large undergraduate classes. *Journal of Computer Assisted Learning*, 22(1), 1-12. doi: 10.1111/j.1365-2729.2006.00155.x
- Palloff, R., & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco, CA: Jossey-Bass.
- Palloff, R., & Pratt, K. (2005). Online learning communities revisited. *21st Annual Conference on Distance Teaching and Learning*. Retrieved from http://www.uwex.edu/disted/conference/resource_library/proceedings/05_1801.pdf
- Palmer, S., & Holt. (2009). Staff and student perceptions of an online learning environment: Difference and development. *Australasian Journal of Educational Technology*, 25(3), 366-381.
- Rovai, A. (2001). Building classroom community at a distance: A case study. *Educational Technology Research and Development*. 49(4), 33-48.
- Stuart, M. (2006). "My friends made all the difference": Getting into and succeeding at university for first generation students. *Journal of Access Policy and Practice*, 3(2), 162-184. Retrieved from <http://www.ingentaconnect.com/content/niac/e/japp/2006/0000003/0000002/art00005>
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York, NY: Falmer.
- Wenger, E. (1999). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.