

Online learning preferences: revealing assumptions and working with difference

Sue Tickner
University of Auckland

Tony Hunt
University of Auckland

This paper describes a trial of an online survey that was intended to reveal the online learning preferences of students and staff at a Faculty of Education, and our conclusions to date about the usefulness of the tool and the results it revealed. As part of a wider work in progress, the trial arose from our desire to better understand the learning needs of students from diverse cultures and how best to support online and blended students and teachers in increasingly global communities of learning. Our conclusions to date do not enable us to validate the cultural dimensions of learning on which the survey was based, but they do lead us to believe there is value in using the instrument to reveal and explore difference in online learning preferences.

Keywords: Online learning preferences; cultural dimensions

Introduction

Universities are facing a combination of challenges, many of which are likely to grow in the foreseeable future. Among these challenges for New Zealand tertiary education, is an increasingly diverse student population, arising from rapidly rising immigration and expanding numbers of international students. Alongside these pressures there is a growing awareness of the needs of indigenous people and a recognition of difference in approaches to learning.

In New Zealand the proportion of Māori and Pasifika people participating in tertiary study is increasing while the numbers of students from other ethnic backgrounds is also growing. Ministry of Education statistics (Wensvoort, 2011) show that a decade ago the number of “European” students in tertiary education was around 70 percent, whereas in 2010 this had dropped to 59 percent, with 18 percent identifying as Māori, 8 percent Pasifika, 18 percent Asian, and 5 percent as from other groups. These figures include a significant number of International students, of whom 72 percent were Asian, together with students from Britain, Europe, Africa, Canada and the USA. Population projects show this trend continuing, particularly in Auckland.

Another major challenge is provided by the growth of online and blended learning which is breaking down barriers to connect communities of learners across social, ethnic and cultural backgrounds. Social software, open educational resources and mobile computing connect individuals with resources and networks which provide opportunities for informal as much as formal learning. An increasing number of online courses is offered at a distance to populations targeted as ‘new’ markets, with global competition for students. In the New Zealand context, these are mainly from Asian and Middle-Eastern countries.

The study that we report on here arose out of a desire to ensure that courses in the Faculty were designed to meet the needs of this diverse student population, through identifying culturally based factors which might affect student and lecturer engagement in online learning, and developing strategies to mitigate these effects.

Background

A survey of the literature relating to cultural differences and online learning, revealed a growing international concern based on these issues of educational globalisation. Several literature reviews examine culture and ethnicity in online learning environments, for example Rutherford & Kerr, (2008) and McAnany (2009). Some case studies illustrate differences in online learning behaviours that can be linked to cultural differences (e.g. Major, 2005) and provide recommendations for teaching practise. Others attempt to identify conceptual frameworks to account for such differences (Morse, 2003). Much of the literature on culture and learning stems from the model developed by Geert Hofstede (2008) and later colleagues. Hofstede’s five-dimensional model was claimed to characterise behaviours (initially in corporate settings) that originate from different societies. The dimensions are: relationship to authority (small vs. large power distance); individualism vs. collectivism; masculinity vs. femininity; tolerance of uncertainty and ambiguity (uncertainty avoidance), and the fifth dimension: long-term versus short-term orientation, was later added as a result of studying Asian societies.

Many later researchers have applied or adapted this model to educational settings, for example to develop guidelines for culturally-inclusive teaching and learning and designing for diversity (McLoughlin, 2007).

The Cultural Dimensions of Learning Framework (CDLF) (Parrish & Linder-VanBerschoot, 2010) describes eight key cultural dimensions regarding social relationships, epistemological beliefs, and temporal perceptions. The authors have developed a questionnaire (2009a) and analysis (2009b) based on the CDLF that can illuminate the range of preferences existing among learners.

Some literature focuses on national equity issues related to significant population groups. In New Zealand, for example, a body of research exists that focuses on Māori learning preferences and, to a lesser extent, on Pasifika students. However, as a recent report indicates, the bulk of published research relating to online learning emphasises the differences between 'Asian' and 'Western' learners (Guiney, 2012).

A strong message emerging from this survey of research is that both teachers and students need to be aware of their own cultural values and practices, as well as those of others, when they work together in an educational setting, online or face-to-face.

The current study

To us, the strategy of raising the mutual awareness of participants' learning approaches in online courses offered an appropriate way of meeting our goals within the Faculty. This has particular appeal within teacher education where a major concern is to raise students' awareness of their own role as teachers and develop their capacity for reflective practise (Major, 2005; Alton-Lee, 2003)

The CDLF questionnaire (Parrish & Linder-VanBerschoot, 2009a) offered a potential tool for stimulating reflection and discussion in online courses, but there was no evidence of its validity, beyond face validity, or empirical data about its use elsewhere. We have, therefore, established an initial phase of the project to gather data on student and lecturer responses from online teacher education courses, with the intention of carrying out a factor analysis, and comparing responses between students and lecturers, and between students of different ethnicities.

Findings

Quantitative results

In the first semester of 2012 the CDLF questionnaire, with slight modifications to make the terminology relevant to online learning, was administered as an anonymous online survey to participants in 9 courses which make significant use of the Faculty of Education's Moodle online system, following ethics approval from the University of Auckland. Responses have been received from 57 of 122 students (47%) and 2 lecturers. The questionnaire will be administered to a further group in the second semester. The respondents were overwhelmingly female (97%) and covered a wide range of ages from 20 to over 50 years old, reflecting the programmes in which they were enrolled, which included pre-service (B.Ed. and graduate diplomas) and postgraduate, in-service qualifications. In light of our interest in cultural difference it is significant that most respondents (47 or 80%) identified themselves as European or Pakeha (a Maori word describing Europeans). Other respondents identified themselves mixed Maori and European (4), Samoan (3) including one part Chinese, Filipino (2), Indian, Latin American and Middle-Eastern.

The number of responses received so far do not provide enough data to carry out a valid factor analysis, but does give initial indication of some trends in student responses. In addition to completing the 36 items of the questionnaire, participants were given the opportunity to make open-ended comments about the survey and these provide some useful insights into student perceptions of online learning.

The questionnaire data has been initially analysed according to the eight dimensions with which Parrish and Linder-VanBerschoot identified the items. Responses for most items show high variability and this is not necessarily a problem where the purpose of the instrument is to stimulate reflection and discussion. There are some identified dimensions within which the correlation between items is moderate to high, but there are also many correlations which are low and occasionally negative. A full analysis with more data will be required to establish how strongly the items are related to the dimensions identified.

It is interesting to note, however, the dimensions where there appears to be a high degree of agreement amongst the respondents to date. A score for each respondent was calculated for each of the proposed dimensions representing the mean ranking of the items associated with that dimension. Items had been ranked between the two poles of the dimension on a scale of 1 to 10. The means of these scores were computed for all respondents and a score between 1 and 3.5, or between 7.5 and 10 were taken as implying strong preferences for the polar positions.

These mean scores indicated that there was a strong preference, on average, for an equality-oriented approach to learning rather than an authority-oriented approach ($m=3.06$, $s.d.=1.19$), nurturing compared with challenging ($m=2.74$, $s.d.=1.06$), and for uncertainty-accepting compared with stability-seeking ($m=7.32$, $s.d.=1.24$). Despite the apparent high degree of agreement between respondents, there were some individuals whose choices were very different; this supports the belief that the questionnaire might enable individual students to develop awareness of how their approaches to learning differ from the approaches of others, and to alert lecturers to these individual differences.

Qualitative results

Included in the amendments we made to the CDLF questionnaire was the addition of a final open question inviting comments on the survey. We felt that our audience, in a Faculty of Education, would be sufficiently aware of educational research to be likely to give valuable feedback on the instrument. In fact, whilst a small minority made some superficial comments on the questionnaire, more interesting were the comments reflecting on online learning.

Less than half of respondents made open comments. However within these there seemed a possible bias towards the 'authoritarian' end of the scale, with an apparent student preconception that the responsibility for creating the learning experience rests with the lecturer. One learner expressed a wish for lecturers to close discussions after they (the lecturer) had posted 'closing' comments, as this student didn't want to have to 'waste time' going back to view the comments of her peers after that. Another stated that the best lecturers had given her 'the necessary push' when needed, and wanted recordings, to listen to lecturers 'lecturing' more often. Teacher-led discussions seemed to be in demand by a few respondents, which felt at odds with the espoused socio-cultural approaches of most lecturing staff in the Faculty. Whether these comments reveal a mismatch between online teaching styles and online learning preferences would require more data from lecturers, as well as discussion with the students concerned. Furthermore there seemed little correlation between the individuals' comments and where they placed themselves on the scales for relevant dimensions. The two respondents who made the comments above, for example, placed themselves clearly in the quality-oriented approach to learning over an authority-oriented approach. One response appeared to arise from an individualistic preference:

The online forum is very powerful. It gives me ownership over who I choose to 'listen to' and engage with. I used to find it a frustrating waste of my time when lecturers had to repeat themselves for students who did not understand concepts. The online forum is much more efficient for learning in my opinion.

Yet this student placed herself at the collectivist end of the scale. Another respondent mentioned that as a student-practitioner, their answers were given partly as a student and partly as a teacher. We would like to interview students, and to examine whether there is cognitive dissonance in these roles in online learning preferences.

Conclusion

Soon after embarking on our project we became aware of related research. The HEART (Hearing And Realising Teaching voice) tools support teachers and learning designers involved in planning, developing or reviewing course (or learning) designs (Donald et al, 2009). The tools are intended to help make explicit teaching beliefs and educational practice in learning designs. At an early stage the HEART researchers also explored the CDLF questionnaire for their purposes, but have since based their work on Bain and McNaught's 13 belief/practice dimensions (Bain & McNaught, 2006).

We, however, are primarily interested in revealing learner preferences, and as a result of the additional open ended comments in our survey, we feel more confident that the value of the CDLF is in the wider discussions that it could stimulate, about the nature of good online learning experiences and individual preconceptions of

learning. Strategies which encourage students to examine their epistemic beliefs and approaches to learning appear to be important, particularly when they are, themselves, teachers.

By the time of the conference we will have more data, and aim to interview students about their responses, after asking them to place themselves on the scale for each question. The next stage of the project will be to explore how this approach can be incorporated into regular teaching of online courses, and whether this is beneficial for student learning.

We understand from the authors of the CDLF questionnaire that data is being gathered from other trials of the instrument with a view to refining the dimensions. Although our questionnaire was modified for online courses, we have agreed to contribute our data to a growing global collection to enable future analysis of a critical mass of findings.

References

- Bain, J. & McNaught, C. (2006) How academics use technology in teaching and learning: understanding the relationship between beliefs and practice. *Journal of Computer Assisted Learning*, 22, 99-113.
- Donald, C., Blake, A., Girault, I., Datt, A. & Ramsay, E. (2009) Approaches to learning design: past the head and the hands to the HEART of the matter. *Distance Education*, 30, 179-199.
- Guiney, P. (2012). *Learners' participation, retention and success in e-learning: An annotated bibliography*. Wellington: Ministry of Education. Retrieved from http://www.educationcounts.govt.nz/data/assets/pdf_file/0011/107597/Learners-Annotated-Bibliography.pdf
- Hofstede, G. H. (2008). *Culture's consequences : international differences in work-related values*. Beverly Hills, CA: Sage Publications.
- Major, J. (2005). Teaching education for cultural diversity: Online and at a distance. *Journal of Distance Learning*, 9(1), 15-26.
- McAnany, D. (2009). Monkeys on the screen?: Multicultural issues in instructional message design. *Canadian Journal of Learning and Technology / La revue canadienne de l'apprentissage et de la technologie*, 35(1). Retrieved from <http://www.cjlt.ca/index.php/cjlt/article/view/512/242>
- McLoughlin, C. (2007). Adaptive e-learning across cultural boundaries: A framework for quality learning, pedagogy, and interaction. In A. Edmundson (Ed.), *Globalized elearning - cultural challenges* (pp. 223-238). London: Information Science Publishing. <https://doi.org/10.4018/978-1-59904-301-2.ch013>
- Morse, K. (2003). Does one size fit all? Exploring asynchronous learning in a multicultural environment. *Journal of Asynchronous Learning Networks*, 7(1), 37-55. <https://doi.org/10.24059/olj.v7i1.1862>
- Parrish, P., & Linder-VanBerschoot, J. A. (2009a). The cultural dimensions of learning questionnaire. [Questionnaire]. Retrieved from http://homes.comet.ucar.edu/%7Epparrish/papers/Survey%20on%20Culturally%20Based%20Learning%20Preferences_final.doc
- Parrish, P., & Linder-VanBerschoot, J. A. (2009b). The CDLF questionnaire analysis form. Retrieved from <http://homes.comet.ucar.edu/%7Epparrish/papers/Analysis%20of%20Survey%20on%20Culturally%20Based%20Learning%20Preferences.doc>
- Parrish, P., & Linder-VanBerschoot, J. A. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *International Review of Research in Open and Distance Learning*, 11(2), 1-19. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/809/1553>
- Rutherford, A. G., & Kerr, B. (2008). An inclusive approach to online learning environments: Models and resources. *Turkish Online Journal of Distance Education*, 9(2), 64-85.
- Wensvoort, M. (2011). *Tertiary education enrolments - 2010*. Wellington, NZ: Ministry of Education.

Author contact details:

Sue Tickner, s.tickner@auckland.ac.nz and Tony Hunt, t.hunt@auckland.ac.nz

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