Students’ experiences of the online learning environment: Working toward improvement

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Students’ experiences of the online learning environment: Working toward improvement.

Submitted by

Carmel Haggerty

as the final assignment to fulfil the requirements for Master of Online Education University of Southern Queensland

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INTRODUCTION

Good instructional design includes a front-end analysis to gauge the market for the product and design according to these market parameters. In order for web-based assets to work, they need to be designed well and used as intended (Wijekumar, 2005). Before developing the Blackboard (Bb) component of the Postgraduate Certificate in Nursing (Mental Health), a front-end analysis was conducted with an end product designed to support the students through the programme. It became clear to programme staff that following the initial flurry of activity; most students were not using the on-line component as we thought they would. This illuminative enquiry aims to undertake an evaluation through the use of both qualitative and quantitative data collection methods, to identify issues related to access and use of the on-line components of the programme. The evaluation will then inform further developments in the Bb on-line environment, based on the feedback from students.

The aim of this research is to
- illuminate issues relating to access and use of the on-line component of programme;
- illuminate the effect of cultural (ethnic) diversity on students access and use of the on-line environment of the programme; and
- develop recommendations to support access and use of Bb in future programmes.

Educational evaluation is a process of understanding the value and quality of an education programme or component. Through understanding the value and quality of the educational programme or component being evaluated, informed and purposeful decisions can be made. Gubba and Shufflebeam (1970) define educational evaluation as a process of evidence gathering, through which support can be improved to move educational processes forward in an insightful way.

The evaluation outlined in this paper illuminates issues relating to access and use of the on-line component of the Postgraduate Certificate in Nursing (Mental Health). This programme is offered annually to Registered Nurses from a wide geographical base. All students enrolled in the programme, have recently completed a Bachelor of Nursing programme and are not classed as new learners. Although the students come together for five weeks of the year, the programme is primarily classified as a distance programme. The programme utilises Bb to provide online support for students throughout the year. There had been no requirement for students to actively participate in the Bb environment, until 2006 when a formative assessment process was required to be posted on Bb. The evaluation took place during the second semester of two consecutive programmes, 2005 and 2006. The structured illuminative enquiry was undertaken using ethnic-based discussion groups during the 2005 programme, as well as a survey questionnaire completed by the students in the 2006 programme. Some supported quantitative data was collected during both years, using existing statistical capacities within Blackboard.
LITERATURE REVIEW:

Nursing education in New Zealand has only recently started to explore on-line learning as a viable option to face-to-face delivery. Billings (1999) states “Increasingly, information technologies are being used to deliver or support nursing programs, and distance education (DE) is becoming the norm rather than the exception” (p. 292). With the increasing access to and use of electronic medium, this type of learning delivery needs to be further explored in relation to how it best suits the needs of students within the postgraduate nursing environment in New Zealand. An American Association of Colleges of Nursing (1999) paper discusses the expansion of distance education to better meet the needs of working, adult learners, this is particularly relevant to the postgraduate programme under evaluation as at least fifty percent of the students are distance learners, who only come together for five weeks of the year for theory.

Holloway and Wilkinson (2002) conducted a study in New Zealand, of undergraduate nurse’s experience of the on-line learning environment. This study highlighted specific issues for students, with particular reference to access and the challenge of getting and being online, perceived lack of tutorial support and contact with classmates. Several recommendations were made relating to supported development of skills, access, clarity of role and support. This is supported by Billings, who identified access, convenience and connectedness as key elements of distance education in nursing. She goes on to describe one of the skills that a nurse educator requires is to “establish an inclusive, learner-centred environment that is mindful of the needs of multicultural, multigenerational learners” (p. 99).

There is little research into the effectiveness of online learning with Maori and Pacific Nations students. The Institute of Tertiary Providers in New Zealand (ITPNZ) has over the last three years commissioned research into this critical aspect of teaching and learning in the New Zealand context (NZ Council for Educational Research, 2004; Koloto & Associates Limited, 2006). Al-Harthi (2005) also identifies a clear lack of research into these cross-cultural differences.

Gunawardena and Zittle (1996) examined teaching and learning in distance education and implications for designing instruction. As part of this exploration they looked at five critical elements of on-line learning: social presence, interaction, cognitive strategies, collaborative learning and learner centeredness as well as how these critical elements impacted on the roles of both learners and teachers. The student’s experience in relation to working in an on-line learning environment is critical to this evaluation and as such it is important to understand the issues relevant to the student and his/her role. Benge (as cited in Collins & Berge, 1996) identified a variety of changing student roles in a computer environment that shift the student from a ‘passive’ learner to an active constructor of knowledge, both individually and in groups. The learner needs to adjust to actively seeking the knowledge within an environment that can at times be uncomfortable for them. There is the need for the learner to adjust to a new way of acquiring knowledge, as well as getting to grips with the technology in order to achieve this. The learner needs to interact within the environment in a variety of ways, with other learners, with the instructor, with the content and with the technology (Gunawardena & Zittle, 1996). These interactions require a learner to be technologically sound, self-motivated, be able to work collaboratively, as well as having independent learning skills to work within this environment. The changes required for the learner will vary depending on the learners’ experience of education in the past, as well as her/his technical skill and computer literacy.

This experience of education in the past is central to the epistemological perspectives of this evaluation. Epistemology is a way of understanding and explaining how we know what we know. The epistemological perspective of this project is that of constructivism. Constructivism describes the construction of knowledge from the individual’s interaction with their world. It refers to the construction of meaningful reality. Meaning is constructed from our interaction with the world around us. There are no objective or absolute truths, the
individual constructs meaning and knowledge from her/his interaction with the world and meanings emerge from these interactions. This meaning may be an individual meaning, or shared meaning within a social context. Individuals may not construct the same meaning from the same situation. When knowledge is relevant and useful within a given social context, that knowledge then becomes part of the self. Street (1992) discusses Habermas' (1971) position that there is more than one kind of valid knowledge as “knowledge is shaped within the context of social, historical, and cultural conditions, and is determined by specific needs, desires and interests” (Street, 1992, p. 90).

Constructivist philosophies fit well for on-line learning with adults as learners. Bugelski (cited in Collins, 1998) comments on teaching adults, “the best thing that can be done is to arrange conditions in which learning can occur” (Para. 18). Ramsden (cited in Laurillard, 1996) states, “the aim of teaching is simple: it is to make student learning possible” (p.13), that is teaching should be learner-centered. Learner-centered instruction is identified in Gundawardena and Zittle (1996), as constructivist, which requires a different set of communication strategies (and other skills), to support student learning within the computer-mediated environment.

PHILOSOPHICAL UNDERPINNINGS

Methodology:

The methodology utilised in this evaluation is illuminative enquiry (Parlett & Hamilton, as cited in Worthen & Sanders, 1987a). Illuminative enquiry is collaborative in nature and located at the ‘intuitionist-pluralist evaluation’ end of the continuum according to Worthen and Sanders (1987a). Torbet (as cited in Noblit & Eaker,1988), describes collaborative inquiry as the seeking of ‘valid social knowledge’. This valid social knowledge is then developed and applied to the context of the participants. This sits well with the purpose of the evaluation, as it is the evaluator (researcher), discussion group facilitators and the students who need to participate in the process as equally interested parties to the process and the outcome. Illuminative enquiry (or illuminative evaluation) addresses four orientations:

1. The definition of problems: the enquirer and the participants establish the questions and how to investigate them. However for the purposes of clarity and consistency in this project, the researcher will provide a guideline for each discussion group. This guideline will include questions relating to the themes identified by Gunawardena and Zittle (1996) - social presence, interaction, cognitive strategies, collaborative learning and learner centeredness. A table exploring Gunawardena and Zittle’s (1996) themes is attached as Appendix One.

2. The methodology: is broad and refined collaboratively and agreed on during the process. Hypotheses are kept tentative and grow during the enquiry process, allowing for transformation as new data is collected and concepts change.

3. The underlying conceptual framework: the subjective views of individuals are incorporated into the evaluation.

4. The values imbedded in the approach: the researcher’s values and bias are incorporated as valid and openly analysed with other data collected and may influence the interpretation of data (Barber & Norman, 1989).

These orientations are particularly relevant to the aims of the project, in light of the context variables within the programme – for example age, geographical location and cultural/ethical variations. By describing the current situation, within the context of the programme and it’s participants, and illuminating issues, informed judgements can be made, leading to sound recommendations for further development. Stake (as cited in Norris, 1998) argued that “Curriculum evaluation should go beyond the measurement of outcome data as reflected in
conventional achievement tests and discussion on antecedent conditions and classroom transactions, paying more attention to both description and judgement” (p. 6).

This illuminative enquiry provides an opportunity for face-to-face discussions, as opposed to questionnaires. The expectation is that the data collected from the discussion groups will be rich in participant’s experience of the on-line component of the programme and identify the strengths of, and barriers to this method of learning. Utilising a discussion method within an illuminative enquiry framework has also supports the process of partnership and participation, as outlined in the Treaty of Waitangi.

The use of discussion groups provides the digital immigrants [that is people not so comfortable/new to the on-line environment] (Prensky, 2004) in the student group with the opportunity to discuss the issues relating to accessing the on-line component. The use of an on-line questionnaire may have been appropriate for some student’s, however it would not have allowed the voices of those that have difficulty accessing the on-line environment to be heard.

The possible disadvantages of this methodology, according to Worthen and Sanders (1987b) are that this approach can be nondirective, with a tendency to be distracted by the bizarre or atypical. There was also the potential for the evaluation to be highly labour intensive with corresponding costs, as well as having a tendency to generate hypothesis with the possibility of not coming to a conclusion. The issue for this project was to maintain the focus of the evaluation and to ensure that there was ample opportunity for each participant to have her/his thoughts and/or voice heard, but not to the extent that the process was distracted from its ultimate purpose.

**Method**

The method is the enactment of the process and the specifics of carrying out the research process, drawing on the methodological underpinnings previously mentioned. The approach is outlined sequentially in this section and covers most of the items identified during the process of obtaining ethical consent for the research.

Initially ethical approval was sought from Whitireia Community Polytechnic as the research participants were existing students of Whitireia and internal ethical approval was required to conduct the research.

Ethical approval was then sought and obtained from the University of Southern Queensland, Ethics Committee. The ethics proposal is attached as Appendix Two and outlines in detail the methods used for participant recruitment, confidentially and reduction of harm.

**Data collection**

Prior to the commencement of the project, it would have been useful to get some quantitative data from with the Blackboard statistics facility. The intention was to obtain data in relation to

- how many students are accessing Blackboard, with comparisons by ethnic group. This data was only available for 2006 and is reported on in the data analysis section of the report;
- when students are accessing Blackboard over the course of the programme. However the measures used to calculate this in the statistics function of Blackboard, altered between 2005 and 2006 and it was not possible to retrieve data that could be accurately compared.
- what components of Blackboard are being accessed, which is described in the data analysis section of the report.
• length of time students are remaining logged on. Although this was the intention, it was soon discovered that this is not a feature that the version of Blackboard the programme is using has access to. Therefore this information was not able to be identified.

This quantitative data was collected from the Blackboard statistics following obtaining consent from students to participate in the evaluation and collated in such a way as to not identify individuals.

The second data collection method used in this evaluation was that of discussion groups. The intention was have three separate discussion groups to accommodate the specific needs of the ethnic differences within the student group - Maori, Pacific and European. Despite enough participants being recruited for all three ethnic groups, no participants attended the Maori discussion group. A further time for the discussion group was arranged, unfortunately there were still no participants in attendance. Therefore, only two discussion groups were undertaken, i.e. Pakeha/European (four participants) and Pacific Nations (three participants). The discussion groups occurred during the final week of theory in November 2005, on campus at Whitireia Community Polytechnic.

Appropriate facilitators for the discussion groups were identified prior to the research being undertaken. This was to ensure that the facilitator was the appropriate person to undertake the role within the specific ethnic groups identified. These facilitators were Whitireia personnel, not associated with the programme, with some knowledge of on-line learning situations as well as culturally appropriate to each identified discussion group.

The initial discussion questions focussed on the themes that Gunawardena and Zittle (1996) examined in relation to distance teaching and learning (Appendix One). These are as follows:

- social presence;
- interaction;
- cognitive strategies;
- collaborative learning; and
- learner centeredness.

The discussions were audio taped and transcribed following the group meetings. This transcription was undertaken by a typist employed for the purpose. Tapes, discs and hardcopies of any transcribed data were then forwarded to the researcher for analysis.

The third data collection method was a questionnaire given to all 2006 students, on the completion of the programme, in November 2006. The questions focusing on the student's ethnicity, access to, and use of the Blackboard environment during the 2006 programme. These questions related to the themes identified by Gunawardena and Zittle (1996), as used in the discussion groups. There were also three open ended questions that allowed the students an opportunity to comment on their individual experience of Bb during the programme.
DATA ANALYSIS & RESULTS

Bb Statistics:
These statistics were collected to identify which components of Bb were being accessed. Figures 1 and 2 below show student access by component in 2005 and 2006 respectively. It is interesting that the pie graphs show marked variations between the two years. Announcements, although large in both years, were accessed more in 2006. The discussion board appeared to be accessed more in 2005, however, is this variation between the two years directly related to students using other components of Bb more frequently during 2006, which would reduce the percentage for the discussion board.

Figure 1: 2005 access by component
Findings from Qualitative Data Analysis

The qualitative data was obtained from the 2005 discussion groups. The data was analysed using a thematic analysis. Thematic analysis is “a method of identifying themes, essences or patterns within the text” (Taylor, Kermode & Roberts, 2006, p. 459). This was undertaken manually and is outlined below.

2005 discussion groups
The discussion groups identified two key themes, namely access and use to Bb, as well as lack of interactivity.

Access and use of BB:
The first issue discussed was the participant's frustration by the difficulty in logging into Blackboard. The Pacific participants said they had approached various staff members for help all to no avail. After several unsuccessful attempts at logging in, they were put off from using Bb altogether. This was apparently a common problem amongst their classmates and according to them, was the reason a lot of their peers (regardless of ethnic group) were not accessing Bb. The following are exerts from the discussion groups:

*The other important thing to look at is at the start of the programme to do more training in computer literacy. They must identify those who are less computer literate than the*
others, so that they help those people more than the once to can already do it. Those who have more experience with computers have a more advantage over us. (Pacific Nations Group)

Definitely more training for those who are not really computer literate (Pacific Nations Group).

I’m not a computer literate person by any means but and prior to starting this I had very little you know contact with computers but I did buy one to help me with this course. When we were first introduced to Bb we did have a training session that sort of like you know to walk you through the connecting part, however I didn’t connect I did connect with Bb once and that was successful but thereafter I didn’t have any luck in getting into the system so I really didn’t use it a lot (Pacific Nations Group).

You know I don’t think that my not being able to connect with the system is the fault of this place because I really didn’t come back to get some help. (Pacific Nations Group).

But I mean the training sessions we had at the start were really good but there were people in that class - some people were really computer literate and some people didn’t know anything, so maybe, the initial training could you actually split it, so if you didn’t know anything about computers you could go to that course, and if you did, ‘here’s some more about using the network’. (European Group)

The other issue discussed in the discussion groups was the “complexity” of BB, which was commented on more specifically by the Pacific discussion group. These Pacific students said they would rather get the information from other avenues and felt they needed more training in the beginning of the year. One suggestion was to divide the class into two groups: those who were confident with computers and those who had little experience and hold sessions for each group. The participants felt this division of the group would make training more specific to the learning needs of each student. Examples of participant conversations follow -

Some of our P.I. don’t have computers and yet we are sort of expected to be computer literate/or know the basics. I have a computer at home but I still you know, I know the basics about it. We still got our people who are shy to admit we can’t use a computer. (Pacific Island Group).

I think its technological challenging thing, more so than the actual tool itself. I think because of my/the literacy in relation to the technology or computers that hinders my ability to access it properly. If we were able to then for sure our learning would be that much more enhanced as a result. (Pacific Island Group).

[A fellow student asked me] whether I got into Bb to access information and I said no because I couldn’t. So she went into it [Bb] and so I was able to access information through her but in relation to my practice the relevance it was an area of development that I personally need to look at because computers are utilised quite a bit in hospital settings. (Pacific Island Group).

The facilitator of the Pacific Island group than asked “Did you find Bb difficult to navigate once you had gained access?”

Not really, … you know there is a list of instructions and the theory is that you can go into things its just a matter of clicking on to them. To get that information, you know teach them how to use them (Pacific Island Group)
Lack of interactivity:
The issue of how the Bb environment was used within the programme was discussed in some depth with those students participating in the European discussion group. Students identified they would have used the site more, had there been more discussion of concepts, rather than the focus on practicalities.

I would have done more on line stuff had it been available (European Group)

I’m talking about participation in class groups maybe, or if there was one, I would have definitely used it but then I find I enjoy doing the class stuff on-line. I’d be a really great distance learner. (European Group)

If I’d known what I know now, I’d probably use it more even if to just check in and see what people are doing. (European Group)

………………- (something about getting to know people online). It’s nice just having somewhere to go. (European Group)

You can feel quite disconnected from everyone when you are out in placements…. (European Group)

Several students talked about the concepts website that had been set up to support their development in Assessment Three: Professional Practice. They found this useful, although not easy to find, without having been told about it in the classroom by lecturers.

There was one thing about, was it assignment three, where you had to go into a website that, like I wouldn’t have found it had they not told us that in class. (European Group)

When they were talking about the professional identity. I found that it was good. (European Group)

The facilitator of the European Group asked - if someone had put in the effort to set up regular contact, would you have used the BB interactive features more?

Yes, most probably I think that what with everybody doing study I’d probably have sent out an email to the people that had emailed me and then just say, hey, look, I’m here all weekend studying all by myself so if you’ve got anything to contribute … (European Group)

Yes, chat rooms would have been quite good. When you were on-line we could have just popped in and out of each others stuff … (European Group)

If it had been more academic and perhaps directed to, all those who are in an inpatient unit at the moment, ‘can you give me some feedback on how you’ve found working in that environment’, and that would have maybe drawn in all of us who were working in inpatients or, if they’re working in the community, ‘can you let us know how that is at the moment’. (European Group)

I’m sure I used it to about 10% capacity, but I’m sure it’s a lot more (European Group)

The general opinion expressed within the Pacific discussion group was that Bb contained only notes and links to websites, which they could get from their peers anyway. However, when reminded about the tool in Bb in which they can interact with tutors and peers they
seemed surprised. The students participating expressed great interest in using this tool and agreed that had this tool been emphasised they would have tried a bit harder to access Bb. Interestingly the fact that Bb was not compulsory appeared to contribute to the lack of use by students.

… If we were able to then for sure our learning would be that much more enhanced as a result. (Pacific Island Group).

Findings from Quantitative Data Analysis

2006 Survey questionnaires
The questionnaires were handed out to 55 students during the final week of theory in November 2006. An information sheet was given out with the questionnaires and consent was assumed if the questionnaires were completed and returned. Fourty questionnaires were completed and returned, a response rate of 73%. The analysis of the quantitative data collected from the 2006 survey questions was undertaken using Statistical Package for Social Sciences (SPSS) for Windows. Descriptive statistics were obtained using frequencies, which identify how many participants gave each response (Pallant, 2001).

Participants identified as predominantly Pakeha/European (57%, n=23), Maori consisted of 17% (n=7), Pacific 7.5% (n=3), other/Tauiwi 7.5% (n=3) and Maori/European were 10% (n=4). Refer to Table 1. For the purposes of reporting on these statistics the writer has combined Maori and Maori/European as one ethic group as 27.5% (n= 11). Interestingly the number of Maori and Pacific Nation students within the programme in 2006 was statistically above the national population average. This supports the validity of the data, however can only at best be a snapshot of the current context and time. For the purposes of this evaluation a small, but valid picture of the issues was provided for these groups when utilising Bb as a learning tool.

Table 1: Cultural (ethnic) affiliation

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>40</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Maori</td>
<td>7</td>
<td>17.5</td>
<td>17.5</td>
<td>17.5</td>
</tr>
<tr>
<td>Pacific Nation</td>
<td>3</td>
<td>7.5</td>
<td>7.5</td>
<td>25.0</td>
</tr>
<tr>
<td>Pakeha/European</td>
<td>23</td>
<td>57.5</td>
<td>57.5</td>
<td>82.5</td>
</tr>
<tr>
<td>Other/Tauiwi</td>
<td>3</td>
<td>7.5</td>
<td>7.5</td>
<td>90.0</td>
</tr>
<tr>
<td>Maori &amp; European</td>
<td>4</td>
<td>10.0</td>
<td>10.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2: Access to Bb by ethnic groups indicates that students have access to Bb from a variety of places. Interestingly, all but 5 students were able to access Bb from their homes. All students were able to access the programme on-line, with 82.5% (n=33) being able to access Bb from more than one site.
Table 2: Access to Bb by ethnic groups

<table>
<thead>
<tr>
<th>Where students accessed Bb</th>
<th>Maori N=11*</th>
<th>Pacific Nation N=3</th>
<th>Pakeha/Euro N=23</th>
<th>Other/Tauwi N=3</th>
<th>Total = 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>WCP</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>7.5</td>
</tr>
<tr>
<td>Home &amp; work</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>Home &amp; WCP</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Work &amp; WCP</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Home, work &amp; WCP</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Home, work &amp; other</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

Key:
WCP = Whitireira Community Polytechnic
* Participants identifying as Maori (n=7) and Maori/European (n=4) combined

The results in Table 3 indicate the usefulness of individual components of blackboard by ethnicity. Between 62.5% and 82.5% of participants ranked all components of blackboard as useful.

Of the respondents, 80% (n=32) thought that the orientation sessions provided were useful. This was unexpected in light of the information obtained from the 2005 discussion groups, where several students identified ways in which the orientation sessions could have been delivered differently in order to be more effective.

Of interest, was 70% (n=28) of students agreed that the Discussion Board Activity facilitated as a formative for the students in Assessment Two was useful and supported their development of the summative component of this assessment. This was the only component of Bb that was compulsory, with all students required to post the formative part one of the assessment onto Bb to obtain feedback from their peers (as well as structured feedback from the tutor).

A total of 82.5% (n=33) of students felt that the Announcements posted during the programme were useful. Interestingly, this is reinforced anecdotally through student’s comments in the open ended question section.

Only 62.5% (n=25) of students felt that the Discussion Board was useful. This was reflected in the lack of discussion between students and tutors throughout the 2006 programme, despite the use of a Discussion Board Activity in Assessment Two to stimulate it’s use. In the 2005 discussion groups, students felt that this component of Bb could have been used more as a communication/networking tool.

80% (n=32) of students identified the Sociological Web-quest was useful. This web-quest was provided for support with the formative component of Assessment Two, giving the students an opportunity to practice the deconstruction of a sociological issue, before they were required to submit the part one deconstruction of the sociological issue of their own choosing.

Interestingly, 80% (n=32) of students utilised the concepts website that lecturers had set up to allow students to explore professional issues in practice. This website, which was linked to the programme, was utilised mostly for Assessment Three where students were expected to explore the characteristics of professional practice. Therefore this website supported this academic component of the programme. In the qualitative analysis from the 2005 programme discussion groups, participants identified that they had also found this website useful, but would not have found it if lecturers had not directed them to it in class.
Only 65% \((n=26)\) found the electronic book of readings helpful. This was a relatively new addition to the programme Bb site and replaced the hard copy book of reading usually given out to students at the beginning of the programme. Anecdotally, students often asked for these readings in hard copy to facilitate ease of use, which would be consistent with the needs of digital immigrants who are more comfortable reading in hard copy than from a computer screen (Prensky, 2004).

Even though the electronic drop box was identified in the open ended questions of the 2006 questionnaires as the least helpful aspect of Bb, 65% \((n=26)\) of students identified it as useful. Many students struggled with the use of the digital drop box, with many also sending their assessments via e-mail just to reassure them that the assessment had actually been received by the due date.

75% \((n=30)\) identified that working more closely with lecturers and peers through the Bb environment would have assisted their learning. This was reinforced with the themes identified in the 2005 discussion groups.

75% \((n=30)\) of students felt that they had received adequate support to use the Bb environment. Interesting this seems to contradict some of the qualitative data collected, in particular from the 2005 Pacific Island group. Table 3 below shows the comparison of the usefulness of the orientation and the support provided, by ethnic group. With 36.4 Maori and 67% of pacific participants choosing strongly disagree/disagree, it is clear from this table that it is the Maori and in particular Pacific Island students which found these least helpful. Whereas 82.6% of Pakeha/European choosing agree/strongly disagree and 100% of Other/Tauiwi choosing agree. One of the things identified in the 2005 discussion group was the reluctance of Pacific peoples to come forward and ask for help – “We still got our people who are shy to admit we can’t use a computer” (Pacific Island Group, 2005). This is something that lecturers/facilitators in the programme need to consider.

<table>
<thead>
<tr>
<th>Table 3: Usefulness of components of Bb by ethnic group</th>
<th>Maori N=11*</th>
<th>Pacific Nation N=3</th>
<th>Pakeha/ Euro N=23</th>
<th>Other/ Tauiwi N=3</th>
<th>Total = 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness of orientation sessions</td>
<td>SD 1 1 3 5</td>
<td>12.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D 3 3 7.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 7 16 1 25 62.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA 1 4 2 7 17.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Discussion board activity for Assessment two</td>
<td>SD 1 4 5 12.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D 2 3 2 7 17.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 8 14 1 23 57.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA 1 2 2 5 12.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Announcements</td>
<td>SD 1 1 2 1 5 12.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>SA 3 2 4 9 22.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Discussion Board</td>
<td>SD 1 5 6 15.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D 3 1 3 1 8 20.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 5 12 2 20 50.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA 2 2 5 12.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NR 1 1 2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Sociological webquest</td>
<td>SD 1 2 3 7.5</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>D 1 2 4 10.0</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A 7 12 2 21 52.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA 3 6 11 27.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NR 1 1 2.5</td>
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Table 3 continued.

<table>
<thead>
<tr>
<th>Usefulness of concepts website</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>NR</th>
<th>F</th>
<th>%</th>
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<tr>
<td>Maori N=11*</td>
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<td>7</td>
<td>3</td>
<td>1</td>
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<td>10</td>
<td>2</td>
<td>1</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>Pakeha/Euro N=23</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>13</td>
<td>32.5</td>
</tr>
<tr>
<td>Other/Tauwi N=3</td>
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<td>2</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>32.5</td>
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<table>
<thead>
<tr>
<th>Usefulness of Electronic Book of Readings</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>NR</th>
<th>F</th>
<th>%</th>
</tr>
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<td>Maori N=11*</td>
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<td>4</td>
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<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>Pakeha/Euro N=23</td>
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<td>4</td>
<td>9</td>
<td>1</td>
<td>14</td>
<td>14</td>
<td>35.0</td>
</tr>
<tr>
<td>Other/Tauwi N=3</td>
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<table>
<thead>
<tr>
<th>Usefulness of electronic dropbox</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>NR</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>6</td>
<td>7</td>
<td>7</td>
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<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Pakeha/Euro N=23</td>
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<td>10</td>
<td>1</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>32.5</td>
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<td>Other/Tauwi N=3</td>
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<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td>Total = 40</td>
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<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Working more closely with others would assist learning</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>NR</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maori N=11*</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<td>2</td>
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<tr>
<td>Pacific N=3</td>
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<td>4</td>
<td>1</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>20.0</td>
</tr>
<tr>
<td>Pakeha/Euro N=23</td>
<td>6</td>
<td>12</td>
<td>2</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>50.0</td>
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<tr>
<td>Other/Tauwi N=3</td>
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<td>6</td>
<td>10</td>
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<td>25.0</td>
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<td>Total = 40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Received adequate Support to use Bb</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>NR</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maori N=11*</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5.0</td>
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<tr>
<td>Pacific N=3</td>
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<td>2</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>Pakeha/Euro N=23</td>
<td>5</td>
<td>13</td>
<td>3</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>52.5</td>
</tr>
<tr>
<td>Other/Tauwi N=3</td>
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<td>1</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>Total = 40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key:**

SD = Strongly disagree  
D = Disagree  
A = Agree  
SA = Strongly Agree  
NR = No Response  

* Participants identifying as Maori (n=7) and Maori/European (n=4) combined.

**Open-ended questions**

Note that in some of the open-ended questions, respondents could chose more than one variable. Interestingly the themes that developed from the open ended questions in the 2006 questionnaire of students identified similar issues to the 2005 discussion groups, access and use of Bb and the lack of interactivity.

What aspects of BB did you feel were most helpful to you as a:  
A. **Support for your learning in the programme?**

There were 30 responses and 10 no responses to this question.

The most common aspect of Bb that was most helpful to students was access to the library databases, book of readings, announcements, as well as the ability to access grades and student tools. These are functional aspects of the Bb environment, with the interactive components, such as Discussion Board and E-mail rating very low. The responses are outlined in Table 4.
Table 4: Learning Support

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access the library databases</td>
<td>10</td>
</tr>
<tr>
<td>Book of readings</td>
<td>8</td>
</tr>
<tr>
<td>Announcements</td>
<td>7</td>
</tr>
<tr>
<td>Ability to access grades/student tools</td>
<td>6</td>
</tr>
<tr>
<td>Digital drop box</td>
<td>5</td>
</tr>
<tr>
<td>Course contents (descriptor/assignments)</td>
<td>5</td>
</tr>
<tr>
<td>Sociological Webquest / Prof. Practice Concepts</td>
<td>5</td>
</tr>
<tr>
<td>Website/Exemplar of Lit Review</td>
<td></td>
</tr>
<tr>
<td>Weblinks</td>
<td>3</td>
</tr>
<tr>
<td>E-mail</td>
<td>2</td>
</tr>
<tr>
<td>Discussion board</td>
<td>2</td>
</tr>
<tr>
<td>Lecture notes/presentations</td>
<td>1</td>
</tr>
<tr>
<td>Contact with Polytechnic</td>
<td>1</td>
</tr>
</tbody>
</table>

**Responses Frequency %**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access the library databases</td>
<td>10 33.3</td>
</tr>
<tr>
<td>Book of readings</td>
<td>8 26.7</td>
</tr>
<tr>
<td>Announcements</td>
<td>7 23.3</td>
</tr>
<tr>
<td>Ability to access grades/student tools</td>
<td>6 20.0</td>
</tr>
<tr>
<td>Digital drop box</td>
<td>5 16.7</td>
</tr>
<tr>
<td>Course contents (descriptor/assignments)</td>
<td>5 16.7</td>
</tr>
<tr>
<td>Sociological Webquest / Prof. Practice Concepts</td>
<td>5 16.7</td>
</tr>
<tr>
<td>Website/Exemplar of Lit Review</td>
<td></td>
</tr>
<tr>
<td>Weblinks</td>
<td>3 10.0</td>
</tr>
<tr>
<td>E-mail</td>
<td>2 6.7</td>
</tr>
<tr>
<td>Discussion board</td>
<td>2 6.7</td>
</tr>
<tr>
<td>Lecture notes/presentations</td>
<td>1 3.3</td>
</tr>
<tr>
<td>Contact with Polytechnic</td>
<td>1 3.3</td>
</tr>
</tbody>
</table>

B. Tool for keeping you in touch with your peers?

There were 27 responses and 13 no responses to this question.

The response to the use of Bb as a communication tool is outlined below in Table 5. The following response was also included as it outlines how a participant kept in touch with their peers, without the use of BB.


> Emailing addresses, phone numbers both home and cellular numbers – arranging times to meet up for lunch – sometimes through clinical supervision sessions and other times just bumping into peers while on placement.

Table 5: Communication Tool

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not use</td>
<td>10* 37.0</td>
</tr>
<tr>
<td>Discussion board</td>
<td>10** 37.0</td>
</tr>
<tr>
<td>E-mail</td>
<td>2 7.4</td>
</tr>
</tbody>
</table>

* Although stated they did not use, students must have for the compulsory posting of assessment two.
** Of these 10 responses, two qualified their comment with only during the compulsory posting for assessment two, otherwise did not use.

What aspects of BB did you feel were least helpful to you?

There were 31 responses and nine no responses to this question.

When asked what aspects of Bb were least helpful participants indicated that the dropbox and discussion board were least helpful. Some of the following comments were of interest in this question and as such have been noted here in addition to the responses outlined in Table 6 below.

Access to the library stopped working

Difficulty logging on at times – very frustrating, probably my technical incompetence
Discussion board – that the link to BB moved several times throughout the year - it should be on the home page of Whitireia.

– calendar not up to date – very slow at times – hard to get thru to library from BB – orientation session half computers didn’t work and mess to get login lds running – poor IT service.

Table 6: Least helpful aspects

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital drop box</td>
<td>8</td>
<td>25.8</td>
<td></td>
</tr>
<tr>
<td>Discussion board</td>
<td>7</td>
<td>22.6</td>
<td></td>
</tr>
<tr>
<td>Library / Database access issues</td>
<td>5</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>E mails</td>
<td>2</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>Announcements (not up to date)</td>
<td>2</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>Book of readings</td>
<td>1</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>None unhelpful</td>
<td>5</td>
<td>16.1</td>
<td></td>
</tr>
</tbody>
</table>

What suggestions would you advise to develop BB as a learning tool?

There were 19 responses (47.5%) and 21 no responses to this question. The responses were very useful in terms of looking at recommendations for improving the programme for future students. However, despite the relevance of the data collected, the low response rate reduces its validity. The responses to this question are outlined in Table 7 below. Of those that did respond, 26% suggested ‘no changes’.

The following comments from students were of particular interest and have also been included here.

Continual updates on info, happenings – changes to postgraduate, otherwise all good.

Extensive time on learning about accessing certain BB components, work alongside tutors, who would take us through steps of accessing certain components on BB. (PI)

I think working more closely with my tutors would have helped me better to understand the digital drop box. (PI)

Be able to access online databases easier, e.g. password for all!!!!

Table 7: Development suggestions

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better introduction and more support</td>
<td>5</td>
<td>26.3</td>
<td></td>
</tr>
<tr>
<td>Improve access to library &amp; databases</td>
<td>3</td>
<td>15.8</td>
<td></td>
</tr>
<tr>
<td>More Journal articles</td>
<td>1</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Working drop box</td>
<td>1</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>More updated information</td>
<td>1</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>More interactive</td>
<td>1</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>No changes/unknown</td>
<td>5</td>
<td>26.3</td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION

Access and use of Bb

The data collected in relation to access and use of Bb has been very valuable. It has identified for me the vast range of computer literacy within our postgraduate students. During the initial instructional design process for the programme the different ethnic groups that would be undertaking the programme were considered. However, the different computer literacy needs of these groups were not considered. Prensky (2003) discusses the difference between digital immigrants and digital natives and how this has impacted on both the face-to-face and the online learning environment. Prensky, goes on to state that it is important to understand these differences and how they will be addressed in practice when developing pedagogical processes.

Despite the fact that on-line learning is now used in most undergraduate nursing education programmes, several of our postgraduate students did not seem to be confident in its use. There has been a clear difference identified between the ethnic groups in relation to the orientation and support requirements when using Bb. The questions to be asked are, how appropriate is on-line learning across a variety of cultures and how can we as educators better understand and incorporate this understanding into our teaching/facilitation within the on-line environment. Al-Harthi (2005) identifies a clear lack of research into these cross-cultural differences. A New Zealand Council for Educational Research (2004) discussion paper exploring Maori and e-learning also identified a lack of research in this area. The paper goes on to discuss low participant rates in Internet activities due to a cultural preference for face-to-face contact, stating that a mixed mode of education delivery may indeed be better suited to Maori students from a traditional cultural perspective.

This would also appear to be the case for Pacific students. A 2006 report undertaken by Koloto and Associates Limited into critical success factors for effective use of e-learning by Pacific learners found that pacific learners identified a mixed mode delivery as the preferred option. The report also identified that as Pacific learners became familiar with the technology, their appreciation for e-learning increased.

Facilitator Presence & Sense of Community

The contact between student and faculty has been clearly documented as a critical component of both on-line and face-to-face education (Bangert, 2004; Pelz, 2004; Mahoney, 2006; Woods, Baker & Hooper, 2004; Blair & Hoy, 2006; Harper, Chen & Yen, 2004). Gundawardena and Zittle (1996) referred to this as social presence, whereas Pelz (2004) simply calls it presence. Both authors discussed the need for the tutor presence to be felt within the on-line environment. Tu and McIsaac (2002), state “an increase in the level of online interaction occurs with and improved level of social presence” (p.131). Mahoney (2006), in her research into similarities and differences between the sense of belonging in on-line and face-to-face programmes, found no statistically significant differences between the two groups. Mahoney (2006) goes on to state, “students need to feel connected and experience a sense of belonging to be successful in their academic endeavors” (p.19) no matter what the environment. Blair and Hoy (2006), state -

success of our online interaction depends on our recognition of the “neighbourly” relationships among students and between students and instructors, recognizing that among our adult learner populations there might be students who thrive as well in private space as they do in public space (p. 45).

This is a key component for the promotion of student learning, as interaction promotes learning. The desire to engage with other learners as well as the content, needs to be stimulated in such a way that it is appropriate to the learner’s context – situated learning, (Bangert, 2004; Hung & Chen, 2001; Gundawardena & Zittle,1996; Jonassen, 1998). Pelz (2004) discusses this as interactivity, which includes the student working collaboratively with
other students to facilitate learning. This can be achieved effectively within an on-line environment through discussions, both synchronous and asynchronous that utilize a variety of strategies to support student co-operation.

Ashar and Skenes (as cited in Rovia, 2002) found that there was a positive impact on retention rates when adult learners felt socially connected within their programmes. This strong sense of community also has a positive effect on the level of information sharing, commitment, co-operation and satisfaction in the on-line environment (Rovia, 2002). Gillespie (2005) identifies “student-teacher connection in clinical nursing education as creating positive outcomes for students’ learning experiences and professional socialisation” (p. 211). This is important in relation to the Postgraduate Certificate in Nursing (Mental Health) as the programme primarily caters for new graduate nurses entering the specialty practice setting of psychiatric mental health nursing. The socialisation process is critical during this first year of practice, as new graduate nurses need to have a feeling of belonging to the culture of nursing, of being accepted (Haggerty, 2000). Hollis and Madill (2006) state “evidence suggests that blending combinations of technologies with computer mediated learning enhances interactions and could address the higher order learning needs of professional programmes” (p. 61). Thus a positive sense of social connection, as well as a positive sense of community will support the student to develop the knowledge, skills and attitudes required to be successful within the chosen career pathway.

Argon (2003) and Swan (2002) discuss elements needed to ensure the creation of social presence/interactivity in an online environment. Argon (2003) sees the following strategies for instructors as essential to creating social presence –

- contribute to discussion boards,
- promptly answer e-mails,
- provide frequent feedback,
- strike up conversation,
- share personal stories and experiences,
- use humour and emotions,
- address students by name and allow students options for addressing the instructor.

Whereas Swan (2002) identifies – “clarity and consistency of course design, contact with and feedback from course instructors, and active and valued discussion” (p.23), as critical to interaction.

From a cultural perspective a sense of community is critical to success. In both Maori and Pacific cultures there is a strong connection to the whanau/family. This needs to be actively promoted with the online environment (New Zealand Council for Educational Research, 2004; Koloto & Associates, 2006).

**Interactivity & Structure**

It was clear from the analysis of the data, that respondents saw Bb as a functional support element of the programme, but did not engage with the interactive possibilities that were available. The way in which Bb is structured within the programme does not encourage this interaction, despite the availability of a variety of content. Students do not see the benefit of using what is available, nor did they appear to realise that they could. Interestingly many respondents identified that they would have appreciated a more interactive environment, and could see benefits for it.

Sound educational practice dictates that the instructor/facilitator needs to include a variety of learning strategies into his/her teaching practice. This should occur up-front in the instructional design process by carefully considering all the elements of a programme, in particular the student profile and instructional pedagogy (Bangert, 2004; Gunawardena & Zittle, 1996; Collins & Benge, 1996; Bates, 1999). Good instructional design that supports interactive processes, is a key component of student learning, as learning is promoted through interaction. The desire to engage with other learners as well as the content, needs
to be stimulated in such a way that it is appropriate to the learner's context – situated learning, (Bangert, 2004; Hung & Chen, 2001; Gundawardena & Zittle, 1996; Jonassen, 1998). Pelz (2004) discusses this as interactivity, which includes the student working collaboratively with other students to facilitate learning. This can be achieved effectively within an on-line environment through discussions, both synchronous and asynchronous that utilize a variety of strategies to support student co-operation. Porima (n.d.) discusses this in relation to the Maori concept of whanaungatanga, i.e. connectedness and interaction with other students. She goes on to state that Maori can feel isolated in the online environment and recommends that interactive material is included in the course work.

To ensure that learning takes place a variety of well planned cognitive strategies need to be used to form the building blocks of knowledge construction. These strategies should be situated in the context of the students practice to be most effective (Jonassen, 1998; Hung & Chen, 2001; Gundawardena & Zittle, 1996). Hung and Chen (2001) discuss this as infrastructure – how the teacher facilitates the learning through the activities. Facilitating the learning experience through structuring activities that are timely and appropriate to the context. Pelz (2004) refers to this as let the students do most of the work, balanced with the need for clear structures for this to occur. Hudson, Owen and van Veen (2006) identify the need for the facilitation of purposeful engagement within and socio-constructive perspective to autonomous, independent learners. Current literature identifies three ways of working to support constructivist knowledge development as scaffolding, coaching and modeling (Jonassen, n.d.; Brickell, Ferry & Harper 2002; Donald, Northover, Koppi & Mathews, 2002; Hedberg, 2002). Vonderwell and Zachariah (2005) explored factors influencing learner participation in graduate online courses. They state –

Effective online learning required interdependence for a shared understanding of learning goals in a learning community. Monitoring students participation and patterns of participation closely can help instructors identify student needs and scaffold learning accordingly (p.213).

Karber (2001) states that in on-line environments students need timely feedback, which may be as simple as being advised that the teacher has received an assignment electronically. It is argued that one of the benefits of on-line environments is in fact the ability to provide instant feedback (Anderson, 2004; Porima, n.d.).

**RECOMMENDATIONS**

One of the aims of this evaluation was to develop recommendations to support access and use of Bb in future programmes. There are a variety of recommendations that come from this evaluation, in particular these relate to the preparation of

- the on-line environment,
- the teacher/facilitator, and
- the student.

In relation to preparation of the on-line environment, the importance of the instructional design process cannot be underestimated (Billings, 2000; Palloff & Pratt, 2000). The initial analysis phase did identify a variety of ethnic groups that would be involved in the programme, however it would appear to have failed in clearly identifying what the unique needs of these students would be. This evaluation has provided rich data to assist in understanding these needs and will be utilised to further develop the programme as a whole. The Bb environment provided extensive opportunities for learning, however in the programme there appears to be a focus on the functional components of the environment, not the ability of a well structured online environment to promote communities of learning through purposeful interactivity and meaningful discourse.
Lecturers/facilitators in the online environment need access to ‘experts’ in relation to instructional design, technical and pedagogical aspects of teaching and learning online (Billings, 2000; Palloff & Pratt, 2000). One of things that is interesting in relation to the data is that students although most had used Bb during their recent undergraduate education. It is therefore assumed that most had not been expected to interact with their lecturers or peers, other than superficially. This tends to be carried through to their postgraduate education and therefore required that lecturers/facilitators design the online environment accordingly. Social presence and interactivity is lacking in the on-line environment. There is a need for the lecturers to facilitate the discussion board more overtly – identify controversial questions for students to explore as part of their learning. There has been no requirement for interacting on Bb in previous programmes, interaction and use of Bb has not graded. Does this then tend to make students less likely to use the online resources that are available. Hall (2002) identified the need to “promote motivation within a supportive and meaningful context as fundamental” (p. 149). Durrington, Berryhill and Swafford (2006) identify problem based learning (PBL) as a strategy for fostering student interactivity. PBL is a model of teaching/learning that lecturers are introducing into the programme in 2007 and it would already appear to be having an impact on the interactivity within Bb. This will be evaluated further at the end of the programme.

It is clear from the data that there is also a clear lack of purposeful interactivity within the programme. Pedagogical processes that would support this development need to be further explored and implemented into the online component of the programme to facilitate a sense of social presence, leading to enhanced interactivity. This will require professional development activities to be developed for lecturers within the programme, as well a closer links with the Online Learning Centre to support this development.

In preparation of students it is important to ensure that the induction process within the programme is further developed for future programmes. The technology should be transparent. Better induction at the beginning of the year to ensure students can access Bb and understand what it can do. This needs to be in available to students in both the large and smaller groups that are more focused to the specific needs of the students. Motteram and Forrester (2005) identify induction as an ongoing process, not just the initial induction. Some students identified during the discussion groups that to have students working with them as buddies could be a way to support students in the development of skills in accessing and using the online environment. This is worth exploring future along with developing other possible strategies for better supporting student’s orientation through the programme.

There are many other aspects of online learning within the organisation that could be explored within this project. However, due to the size the writer has focussed on the programme and programme staff only.

**CONCLUSION**

The aim of this evaluation was to develop a better understanding of the issues relating to access and use of the on-line component of programme, including the effect of ethnic diversity and then to develop recommendations to support access and use of Bb in future programmes. This evaluation have provided several themes in relation to this, mainly access and use of Bb, in particular the needs of different ethnic groups; social presence and sense of community, as well as interactivity and structure. Each of these themes have been discussed with recommendations made that will support the ongoing development of the programme into the future.

This is not the end of the journey, this will be cyclical process as is the instructional design process itself.
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<th>Critical Element</th>
<th>Definition/s</th>
<th>Principle/s underlying its importance</th>
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<tr>
<td><strong>1. Social Presence</strong></td>
<td>The instructor being perceived as a real person in a non-f2f environment, and that in CMC environments the learners have a perception of social presence, connectedness, that is distinct from the class-room exchange (Gundawardena &amp; Zittle, 1996).</td>
<td>Immediacy of the teacher is critical to the sense of social presence. The medium needs to be interactive interesting and stimulate learners to interact with teacher and co-learners. (Gundawardena &amp; Zittle, 1996). Socially and contextually based to support interaction (Jonassen, 1998). “Practice ‘ways of seeing’ “ (Hung, cited in Hung &amp; Chen, 2001, p4). The learners identify with the practice setting of mental health nursing (social context of practice).</td>
<td>Regular monitoring of the discussion and interaction by the teacher to ensure that learner questions/issues are dealt with promptly. Net etiquette issue up front. The social setting of mental health nursing needs to be present within the on-line environment and becomes part of the students developing identity within the setting.</td>
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<td><strong>2. Interaction</strong></td>
<td>Interaction is what happens between the learner and ‘other’. The ‘other’ can be the teacher, other learners, the content (Moore, 1989) and the interface – the technology itself (Hillman, Willis &amp; Gundawarden, 1994)</td>
<td>Interaction on some level is critical to learning. Situatedness of the content is key to getting students to interact with the material. Desire to engage in the content and with other learners needs to be stimulated – Hung &amp; Chen (2001) discuss this as ‘infrastructure’ – needs to be appropriate to facilitate the activity.</td>
<td>Learner-interface interaction for adult learners is an area of key concern. Two ways to help the learner become more comfortable with the technology include in-class exercises and orientation sessions (Hillman, Willis &amp; Gundawardena, 1994), both of which we will use in our mixed mode delivery system. Problem based learning – scenarios Linked to outcomes - assessments</td>
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<td><strong>3. Cognitive strategies</strong></td>
<td>Strategies used by the learner to organize the information or content in such a way as to be able to make sense of, retain and utilize the learning (Gundawardena &amp; Zittle, 1996).</td>
<td>Staggered throughout the content to ensure that learning takes place. Jonassen (1998) in CLE’s is to use a variety of well planned cognitive strategies as the building blocks of knowledge construction. These activities need to be mindful and engaging. Situated in the context of the practice (Hung &amp; Chen, 2001).</td>
<td>On-line activities&lt;br&gt;Discussion Boards&lt;br&gt;Virtual Classroom (limited use at this stage, but could be further developed, particularly in relation to clinical supervision).&lt;br&gt;Web quests&lt;br&gt;Concept maps&lt;br&gt;Advance organizers&lt;br&gt;Modeling&lt;br&gt;Scaffolding</td>
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<td><strong>4. Collaborative Learning</strong></td>
<td>Group learning or learning generated from the interaction with co-learners. “Collaborative learning in an online learning environment is a process in which participants, learners and tutors, collectively interact, as often and variously as desired by participants and available technology allows, with content, both prepared and that arising from collaboration, to derive new shared meaning.” (Group definition – Industry Trainers and Teachers, Sept, 2004).</td>
<td>Collaborative group learning can enhance motivation (Gundawardena &amp; Zittle, 1996). Can be frustrating in relation to distance learning in a asynchronous CMC environment (Gundawardena &amp; Zittle, 1996). Jonassen (1998) shows how CLE’s can foster “communities of learners” (p.229), where knowledge is constructed in a collaborative way. Hung and Chen (2001) talks about communities of practice, and discusses the notions of ‘commonality’ and ‘interdependency” – shared interests and problems and learning form each other.</td>
<td>In a mixed mode delivery system the seeds of the collaborative learning can be within the f2f environment during theory blocks and tutorials with group activities that are then added to in the on-line environment and further developed in complexity (scaffolding)&lt;br&gt;Discussion forums.&lt;br&gt;Discussion groups&lt;br&gt;Web quests&lt;br&gt;Modeling of collaboration by the tutorial staff with the students – as we are all in the same ‘waka’ (boat) and need each other to paddle up stream.</td>
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<td>5. <strong>Learner-centeredness</strong></td>
<td>When the learner is the focus of the education, initiating inquiry and exploration. And the teacher facilitates, guides and supports the process (Gundawardena, 1992)</td>
<td>As adult learners the learner needs to be initially supported to become familiar with the learning environment to facilitate the learning. Adult learners do not like to look incompetent. Needs to have a clear analysis of the learners undertaken at the outset of the Instructional Design process, in order to understand the learner’s unique characteristics and needs. Learning environment structured to facilitate student learning. Constructivist epistemologies, approaches and principles. The learner needs to be motivated to learn and self directed (suites adult learners). Constructivist epistemologies and learning theories are suited to learner-centeredness. Scenario based learning – situated learning (Hung &amp; Chen, 2001). Learners develop the skills for life long learning.</td>
<td>Provide orientation to the learning on-line environment that supports a variety of learners. Have enough staff on hand to provide on-to-one as needed during the session. Be aware of cultural difference that may prevent asking for help. Also, the adult learner characteristics that do not like to be seen as incompetent (Knowles, cited in Campbell, n.d.) Tutor as facilitator - as learners become more experienced they will in turn initiate the discussion. CMC environment needs to meet the learners needs, large group discussion for some topics/issues, then the use of smaller group communication areas which may be group areas of forums, depending on size and need of students Problem based learning scenario’s that are authentic to the topic and situated in the practice of mental health nursing, relational (scaffolded) to support learning (Jonassen, 1998; Hung &amp; Chen, 2001).</td>
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Created by Carmel Haggerty (2005)
APPENDIX TWO – ETHICS PROPOSAL

THE UNIVERSITY OF SOUTHERN QUEENSLAND

ETHICS COMMITTEE APPLICATION FOR

ETHICS CLEARANCE FOR INVESTIGATIONS INVOLVING

HUMAN RESEARCH

Psychological and Sociological Research

Name of Chief Researcher: Carmel Haggerty

Address for Future Correspondence: c.haggerty@whitireia.ac.nz

75 Pine Avenue
Upper Hutt
Wellington
New Zealand

Title of Project: Students’ experiences of the online learning environment: Working toward improvement.

Funding Body: Being funded internally at Whitireia Community polytechnic as part of programme development.

Other Principal Investigators: Staff contracted from within Whitireia Community polytechnic to facilitate the discussion groups with students.

Is this a postgraduate research project? Yes

If ‘yes’ name Supervisor: Kaye Cleary

Indicate the principal methodology to be employed in this research project:

- Anonymous Survey
- Identified Survey
- In-depth Interviews
- Human Experiment

✓ Other (please specify) –
  o Discussion groups with students of the 2005 programme
  o Access and use data collected from Blackboard statistics
  o Student evaluation of on-line component of the 2006 programme – questionnaire completed at the end of the programme.
1. In plain language give a brief explanation of the study and the importance of the study (approximately 100 words).
The intention of this study is to develop a greater understanding of access and use issues for students enrolled in a postgraduate programme that utilised a mixed mode of delivery – face-to-face and on-line support. The study will support the ongoing development of the programme being evaluated, leading to an on-line environment that better supports student learning, through greater understanding of the student perspective. This research will add to the body of knowledge related to on-line learning and be available for use by other on-line and tutorial staff within Whitireia Community polytechnic. As well as adding to the body of knowledge in the discipline of on-line/flexible learning, with the dissemination of results through publication and research presentations.

2. Describe the study's stages, processes and instruments.

Data Collection
The method of data collection will be a questionnaire given to all 2006 students, on the completion of the programme – November 2006. This questionnaire will be included in the routine programme evaluation. With the additional questions focusing on the student's access to, and use of the Blackboard environment during the 2006 programme. These additional questions will provide a mixture of qualitative and quantitative data. The quantitative questions will directly relate to the themes identified by Gunawardena and Zittle (1996), as used in the discussion groups. The qualitative questions will provide the students with the opportunity to comment on their individual experience of the Blackboard environment as utilized during their time in the programme.

Some quantitative data will also be accessed from the Blackboard statistics, in relation to:
- how many students are accessing Blackboard;
- when students are accessing Blackboard;
- what components of Blackboard are being accessed, and
- length of time students are remaining logged on.

As well as the above, access rates for specific cultural groups, for example – Maori, Pacific, European. This information can be collected through an already existing facility available within Blackboard. This quantitative data will be collected by the Blackboard administrator, thus ensuring that the anonymity of the students will not be compromised. The Blackboard Administrator has already been contracted to ensure the information can be obtained from the site and collated in such a way as to not identify individuals. This quantitative data will be used as a benchmark for comparison in November 2007, to establish if the rates of access and use have altered once the recommendations from the evaluation have been put in place.

This data will then be added to the already collected data from the 2005 Discussion Groups (Appendix One), which has at this stage not been analysed. This 2005 data will be analysed and included in the final report.

Data Analysis
A thematic analysis will be used to analyse the results from the 2005 discussion groups and the qualitative responses to the programme evaluation. The analysed themes will then be described in the final report, providing the opportunity to explore appropriate alterations to the on-line component that will better meet the needs of the students.

SPSS will be used to analyse the quantitative data collected in the programme evaluation.
As previously stated the statistical data will be analysed and the data used to undertake a comparison at the end of Semester Two, 2007 to see if access rates have altered, once the recommendations from this evaluation have been implemented.

2(a). How will the participants in your study be recruited?
Participants were recruited for the discussion groups from students in the 2005 Postgraduate Certificate of Nursing (Mental Health). Students were invited to participate in the research by being sent an information sheet and a consent form by the researcher. This consent form was returned to the research assistant who selected from the respondents the required number for each discussion group. The Research assistant then notified the students of the date, time and any other details of the discussion group.

Participants for the additional programme evaluation questions will be recruited from students enrolled in the current 2006 Postgraduate Certificate in Nursing (Mental Health). Students will be given the evaluation during the last week of the programme. The additional questions relating to the research will be optional and an information sheet will be attached to the front of the evaluation form, explaining the research, its aim and how the information will be used. Participants will be deemed to have consented by completing the additional questions and returning the evaluation.

2(b). Do you have written permission to recruit participants from the relevant organisation(s)?
Yes attached electronically. If you have further questions please contact the HedSS Faculty Research Facilitator –
Dr Debra Wilson
(0064) 237-3100
d.Wilson@whitireia.ac.nz

3. Specify any psychological and other risks to the participants.
The researcher was the Programme Coordinator of the Postgraduate Certificate in Nursing (Mental Health) in 2005 and is the Programme Leader: Nursing Centre of Learning: Postgraduate Studies in 2006. Thus the researcher has overall responsibility for the programme and undertakes some teaching in the programme.

Any risk of prejudice will be reduced by -

- the Programme Leader Nursing Centre of Learning: Undergraduate Studies Leanne Pool, has and will continue to act as student advocate throughout the project. Leanne is not directly involved in the research, nor in a direct line management position to the principal researcher and therefore will provide independent advocacy.
- Leanne Pool will be available to students throughout the project should they have any concerns regarding consent, withdrawal of consent or prejudice. Leanne will act as the first point of contact from students and will either follow-up herself or refer to appropriate personnel/services depending on the unique needs of the individual.
- The discussion groups were facilitated by Whitireia Community polytechnic personnel who are not directly associated with the programme. Three individual facilitators were appointed from each of the following centres:
  - BN Pacific
  - Te Wananga Maori
  - On-Line Learning Centre

To reduce the risk of prejudice and/or penalty in relation to the programme, regardless of whether or not the student participates in the research project, the following will occur:
- The researcher and programme lecturers were not notified of which students participated in the discussion groups.
Discussion groups were facilitated by staff not associated with the programme.

The discussion groups were transcribed by the contracted transcriber and the tapes held by the research assistant until the completion of the research, then destroyed.

The research assistant forwarded the transcripts to the discussion group facilitators, for verification.

The researcher did not receive the transcripts of the discussion groups until after the programme completion date (18 November 2005). In fact these were not received by the researcher until March 2006.

The above outlined processes supported participants in feeling free to discuss, and share any issues relevant to the research. Leanne Pool has not been approached by any participants, or other students of the programme, at this stage of the project.

4. Justify the study in terms of the risk to, and imposition on, the participants.

Any potential risks to the students have been minimised as outlined above. The 2005 discussion groups were held during theory time, when the participants were already on campus therefore there was not additional travel or time required for the participants. The 2006 programme evaluation is completed routinely each year, however the additional questions relating to the project will be optional and able to be completed during class time.

The potential risks and imposition to the students, have as stated been minimised, however these can be justified by revisiting the overall aim of the project. This is to develop a greater understanding of access and use issues for students enrolled in a postgraduate programme that utilised a mixed mode of delivery – face-to-face and on-line support. As well as to inform ongoing developments, leading to an on-line environment that better supports student learning, through greater understanding of the student perspective.

5. What steps will be taken to ensure protection of the participants’ physical, social and psychological welfare?

Several steps have been taken to protect participants and other students. They are as follows:

- The appointment of an independent person that students (whether participants or not), can access easily should they have any concerns relating to the study.
- The appointment of culturally appropriate facilitators to each of the three discussion groups.
- Maintaining the anonymity of participants throughout the project.
- Participants can be referred to the Student Support Centre, where a Counsellor is available should this be required.

6. Does your research address issues of cultural difference?  

- Yes
- No

If Yes, please provide details.

The research looks at the perceptions of Maori, Pacific Island and European students in relation to the on-line environment of the programme.

Students were asked to participate in culturally targeted discussion groups to ascertain their perceptions of the on-line environment, in relation to access and use of the facility.

Consultation has occurred with the following personnel in relation to the cultural components of the project.

- Te Wananga Maori Programme Leader – Tame Te Rangi at the time the research proposal was being developed, with Maori input to the final proposal. Te Wananga
Maori will be asked to identify an appropriate person to undertake the role of discussion group facilitator.

- The programme leader of the Pacific Bachelor of Nursing – Wendy Scott, who appointed one of her staff members to facilitate the Pacific Island discussion group.
- On-line Learning Centre Manager – Kate Hunt, who appointed one of her staff as the facilitator of the European discussion group.

A copy of the completed report was given to the facilitators of the individual discussion groups.

A formal feedback session will be held with Te Wananga Maori, Pacific Bachelor of Nursing and On-line Learning staff to share the outcome of the research.

7. Does the study involve deception? If so, explain why it is necessary and justify.

This study will not be undertaken with any deception.

8. How will the study benefit the participants?

The study will not directly benefit the participants involved in the study, unless they were to enrol in another programme with an on-line component at Whitireia Community polytechnic in the future. The main benefits will apply to future students of the programme and other on-line programmes delivered at Whitireia Community polytechnic.

Significance of the research

This research will also provide information that will add to the body of knowledge related to on-line learning and be available for use by other on-line and tutorial staff within Whitireia Community polytechnic.

This research will support the ongoing development of the existing programme, leading to an on-line environment that better supports student learning, through greater understanding of the student perspective.

The research is in line with the key priorities identified by the Tertiary Education Commission (TEC) in this Statement of Education Priorities 2005-07, with particular reference to:

- taking responsibility for, and actively working to improve, the quality of teaching to ensure that all students and learners gain the best value possible from their participation in tertiary education.

Last, but not least the research will add to the body of knowledge in the discipline of on-line/flexible learning with the dissemination of results through publication and research presentation.

9. Will the aims of the study be communicated effectively to the participants? How will this be done?

Participants from the 2005 programme were notified of the aims of the research verbally by the researcher before the information sheet and consent forms are given to the students to participate in the discussion groups.

The researcher will also verbally inform the participants from the 2006 of the aims of the research prior to the programme evaluation form being handed out to students. An information sheet will be on the front of the programme evaluation, which will outline the aims of the study.
10. **What steps will be taken to ensure informed consent of the participants/guardians?**

- Potential participants will be provided with a written information sheet, which explains the research, its purpose, benefits and perceived risks. This written information sheet was sent out, by the principle researcher, to all 2005 students of the Postgraduate Certificate in Nursing (Mental Health).
- Potential participants from the 2006 Postgraduate Certificate in Nursing (Mental Health) will be provided with a written information sheet, which explains the research, its purpose, benefits and perceived risks. This written information sheet will be given to each student on the front of the programme evaluation in the last week of the theory for 2006.
- Opportunities to ask questions about the research were provided prior to the commencement of the research and when necessary during the course of the project, with the contact details for the researcher, mentor and independent person included in the information sheet.
- The processes put in place to ensure confidentiality and anonymity will be fully explained to the participants, (see plain language statement - Appendix I (a) & (b)).
- The participants of the discussion groups were informed that they have the right to withdraw from the research at any point without prejudice or penalty.
- Written consent, containing all the information outlined above, was required prior to commencing the discussion groups.
- Completion of the additional questions on the programme evaluation will be taken as consent.

11. **Will the participants be assured that they may withdraw from the study at any time without any fear of the consequences?**

YES – as outlined above and in the attached consent form.

12. **What steps will be taken to:**

(a) **provide feedback to subjects?**

- All students in the 2005 and 2006 programmes will receive a summary of the outcomes of the research on its completion, which will be sent to them by the existing programme co-ordinator.

(b) **debrief participants?**

This was undertaken by the discussion group facilitators at the end of the group session. Participants could be referred to the Student Support Centre should this be required, where they will have access to a counsellor. However this was not required during the discussion group phase of the project.

13. **Describe the measures which will be taken to ensure the confidentiality of the participants. If confidentiality is not ensured, justify.**

It is difficult to maintain full anonymity of the perspective participants of the research as the principle researcher is the students’ lecturer. It is intended that anonymity and confidentiality will be supported by:

- Maintaining confidentiality surrounding the consent to participate in the project. Proposed participants notified the research assistant of their consent to participate in the 2005 discussion groups, confidentially using the return addressed envelope.
- No identifying information relating to individual participants’ personal, geographical location or professional employment details was included in the transcripts and final written report.
- The research assistant and the typist transcribing the discussion group tapes will be required to sign a ‘Non disclosure of Information’ statement.
The Research assistant, typist and discussion group facilitators are the only people with access to the tapes, which will be held by the research assistant and destroyed on completion of the research.

Transcribed data from the discussion groups was not to the researcher at the completion of the programme (18 November 2005). In fact, this was not received until March 2006.

Confidentiality will be a feature of the research, with participant’s responsibility relating to confidentiality of group membership and information negotiated and agreed upon at the commencement of the first discussion group.

There will be no identifying data collected as part of the 2006 programme evaluation, other than asking student’s to specific a cultural affiliation, e.g. Maori, Pacific Island, European, or other.

The 2006 programme evaluation will collected by the programme administrator and then initially collated by her. The research will only receive the collated information with no identifying data.

The Blackboard Administrator will collect the statistical data from Blackboard and forward this to the researcher once it has been collated, with no identifying data.

14. **Explain how you intend to store and protect the confidentiality of the data.**
   - All data (tapes and transcripts) will be stored in a locked cabinet in the research assistant’s office and destroyed on completion of the research report.
   - All tapes will be electronically erased at the completion of the project.
   - All paper data will be shredded on completion of the project, except where there is a requirement to hold the information for a period of time post completion. Then destroyed.

15. **Do you certify that the persons undertaking the administration of the study are suitably qualified?**
   - YES

   If NO, explain.

16. **Do you certify that you will administer the project with due regard to recognised principles for the ethical conduct of research?**
   - YES

17. **Date by which it is anticipated that the research project will be completed**

   After this date you will be requested to report to the Committee certifying that the research was conducted in accordance with the approval granted by the Ethics Committee for Research Involving Human Subjects.

Signed: Carmel Haggerty  
Dated: 28 August 2006
2005 Data Collection

Data for this evaluation was initially collected in 2005 (following Whitireia Community Polytechnic ethics approval) with the intention of completing an internal report for programme purposes. The data collection method used in this evaluation was discussion groups. Three separate discussion groups were held in November 2005 to accommodate the specific needs of the cultural differences within the student group - Maori, Pacific and European. Each discussion group did not exceed four in number, therefore giving a maximum possible number of participants at 12. The groups were undertaken during the final week of theory in November 2005, on campus at Whitireia Community polytechnic.

Appropriate facilitators for the discussion groups were identified prior to them being undertaken, to ensure that the facilitator was the appropriate person to undertake the role within the specific cultural group identified. These facilitators were appointed prior to the research information going out to potential participants and therefore there was no participant choice of facilitator. This also ensured that the discussion groups were facilitated by Whitireia Community personnel –

- not associated with the programme,
- with some knowledge of on-line learning situations,
- as well as culturally appropriate to each identified discussion group.

This process also reduced the risk of prejudice to students.

The initial discussion questions focused on the themes that Gunawardena and Zittle (1996) examined in relation to distance teaching and learning. These are as follows:

- social presence;
- interaction;
- cognitive strategies;
- collaborative learning; and
- learner centeredness.

The discussions were audio taped and transcribed following the group meetings. This transcription was undertaken by a typist employed for the purpose. Tapes, discs and hardcopies of any transcribed data were forwarded to the research assistant following the discussion groups. The completed transcripts were then forwarded to the researcher once all students had completed the programme, March 2006.

I have attached the information sheet and consent form that was used for your information. I have also included the key ethical processes that were followed in the main body of this ethics proposal so you are aware of what was put in place to protect the participants.

Postscript:
Unfortunately the Maori students who had agreed to participate, did not attend the first scheduled discussion group. A second time was agreed to and again no participants arrived. Therefore no data was able to be collected from this group. This will need to be discussed further in the final report.
MEMORANDUM

TO: Carmel Haggerty
FROM: Jude Pauwels
DATE: 26 September 2005
SUBJECT: Approval – Student’s experiences of the online learning environment: Working toward improvement

Thank you for your application for ethical approval from the Whitireia Community Polytechnic Research and Ethics Committee.

Your application was approved at the meeting dated 19 September 2005.

The Committee wishes to commend you for the thorough and concise documentation and clarity and robustness of this project. All ethical considerations are well covered within the documentation.

Thank you for making the amendments to the document as requested by the Committee.

The Committee further wishes to request permission for this proposal document to be used as an exemplar of best practice. Could you please advise your thoughts regarding this?

Resolved:
That the research proposal by Carmel Haggerty Student’s experiences of the online learning environment: Working toward improvement be approved by the Research and Ethics Committee.

Hurihanganui/Southwick
Carried

The Committee wishes you all the best with your research.

NB Jude Pauwels has now left – contact Glenys Williams –
g.williams@whitireia.ac.nz
Information Sheet

Information Sheet for 2005 Discussion Groups

My name is Carmel Haggerty and as you will be aware I am the Programme Coordinator for the Postgraduate Certificate in Nursing (Mental Health) and the Graduate Diploma for Psychiatric Practice. I am conducting an evaluation research project as part of ongoing quality assurance within the programme, with a view to increasing our understanding of access and use issue in relation to the on-line Blackboard support within the programme.

The aims of the research are to:
- illuminate issues relating to access and use of the on-line (Blackboard) component of the existing programme; and
- illuminate the effect of cultural diversity on students access and use of the on-line environment (Blackboard) of the existing programme; and
- develop recommendations to support access and use of Blackboard in future programmes.

In order to do this, I would like to invite you to be a participant in this research project.

The intention is to have three separate discussion groups to accommodate the specific perceptions of the cultural differences within the student group - Maori, Pacific and European. The groups will be undertaken during the final week of theory in November 2005, on campus at Whitireia Community polytechnic. Discussion group facilitators from within Whitireia Community polytechnic (but outside of the programme you are enrolled in) will be utilised. This is to ensure that each individual cultural groups has an appropriate facilitator identified.

To reduce the risk of prejudice and/or penalty to any student in relation to the programme, regardless of whether or not that student participates in the research project, the following processes have been put in place:
- The researcher and programme lecturers will not be notified of which students are participating in the discussion groups.
- Discussion groups will be facilitated by staff not associated with the programme.
- The discussion groups will be transcribed by the professional Dictaphone typist and the tapes will be held by the research assistant until the completion of the research, then destroyed.
- The research assistant will forward the transcripts to the discussion group facilitators for verification.
- The researcher (and other programme staff) will not receive the transcripts of the discussion groups until after the programme completion date (18 November 2005).

These processes should allow participants to feel free to discuss, and share any issues relevant to the research.

Your involvement will consist of attending one discussion group that will consist of a discussion group facilitator and up to four participants. The participants will all be currently enrolled students in the Postgraduate Certificate in Nursing (Mental Health). The discussion will be based around questions formulated from the themes that Gunawardena and Zittle (1996) examined in relation to distance teaching and learning. These are as follows:
- social presence;
- interaction;
- cognitive strategies;
- collaborative learning; and
- learner centeredness.

The discussions will be audio taped and transcribed following the group meetings. The transcripts, once completed will be sent to you for verification, giving you an opportunity to check these for accuracy and make any changes that you feel are necessary.
All information shared in the discussion groups will remain strictly confidential. Your name would not be used and there will be no information that could identify you in any written or verbal research reports. The discussion group interviews will be tape recorded and then transcribed by a professional dictaphone typist. The typist will sign a confidentiality agreement.

You may request to have the tape stopped at any time during the group discussion.

There are no risks and no direct benefits to you in taking part in the study. However the results will assist in developing informed understanding in relation to the access and use issues associated with the on-line support contained in Blackboard.

In the event that information shared causes any distress the researcher will be able to provide you with at least three contacts that will be able to provide/facilitate the support that you may require.

Tapes and transcripts will be stored in a secure, locked cabinet, and the tapes will be destroyed at the completion of the research project. The transcripts will need to be retained for at least three years as verification of the data collection process utilised in the research. Following this time the transcripts will be destroyed.

From the information that you give a research report will be prepared. Later the material could be used in conference presentations and in journal articles.

Participation is voluntary. You have the right to withdraw at any time without penalty.

Any questions or concerns raised by you will be discussed as they occur. Please feel free to contact either:

<table>
<thead>
<tr>
<th>The Researcher</th>
<th>or alternatively</th>
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<tbody>
<tr>
<td>Carmel Haggerty</td>
<td>Kathy Holloway</td>
</tr>
<tr>
<td>Nursing Centre of Learning: Postgraduate Studies</td>
<td>Programme Leader</td>
</tr>
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<tr>
<td>Phone: (04) 237-3103 Ext. 3732</td>
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<tr>
<td>E-mail: <a href="mailto:c.haggerty@whitireia.ac.nz">c.haggerty@whitireia.ac.nz</a></td>
<td>Phone: (04) 237-3103 Ext. 3804</td>
</tr>
<tr>
<td></td>
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Leanne Pool, Programme Leader, Nursing Centre of Learning: Undergraduate Studies has agreed to be available to participants for any questions or concerns regarding the consent process and/or research. This is to ensure an independent person is available on campus for participants who are also students in the Postgraduate Certificate in Nursing (Mental Health) and the Graduate Diploma for Psychiatric Practice, of which the researcher is the Programme Coordinator.

If you are willing to accept the invitation to participate in the research please complete the consent form attached and return to the research assistant in the enclosed stamp addressed envelope by ....................

Carmel Haggerty
Researcher
Consent Form

Student’s experiences of the online learning environment – understanding access and use issues.

I have read the information sheet which has explained the details of the study to me. Any questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate, I am aware I have the right to withdraw from the study at any time, share only the information that I feel comfortable to share and I can decline to answer any particular questions without prejudice.

I understand I will be asked to identify myself in relation to my cultural identity, for the purposes of the research aim of illuminating the effect of cultural diversity on students access and use of the on-line environment (Blackboard) of the existing programme.

I agree to provide information to the researcher on the understanding that my name and any other identifying information will not be used in any written documentation relating to the research. And that the information will be used only for this research, publications arising from the research project and for the purpose of informing programme development.

I understand that the tutorial staff associated with the Postgraduate Certificate in Nursing (Mental Health) will not:

- know which students have agreed to participate in the research; nor
- have access to the transcriptions of the discussion groups until after the programme has concluded on 18 November 2005.

I understand that the group discussion will be being audio-taped.

I understand that I may have the audio-tape turned off at any time during the course of the group discussions.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signed: ...........................................................................

Name: ...........................................................................

Cultural Identity: .................................................................

Date: ..............................................................................
Information Sheet for 2006 Survey Questionnaire

Student’s experiences of the online learning environment – understanding access and use issues.

Information Sheet for 2006 Programme Evaluation

My name is Carmel Haggerty and as you will be aware I am the Programme Leader – Nursing Centre of Learning: Postgraduate Studies. I am conducting an evaluation research project as part of ongoing quality assurance within the programme, with a view to increasing our understanding of student’s access and use issues in relation to the on-line Blackboard support within the programme.

The aims of the research are to:
- illuminate issues relating to access and use of the on-line (Blackboard) component of the existing programme; and
- illuminate the effect of cultural diversity on students access and use of the on-line environment (Blackboard) of the existing programme; and
- develop recommendations to support access and use of Blackboard in future programmes.

In order to do this, I would like to invite you to be a participant in this research project.

To reduce the risk of prejudice and/or penalty to any student in relation to the programme, regardless of whether of not that student participates in the research project, the following processes have been put in place:
- The researcher and programme lecturers will not be notified of which students are participating in the discussion groups.
- The evaluations will be collected by the programme administrator, Vicki Halverson.
- The evaluations will be collated by the programme administrator, Vicki Halverson.
- The researcher (and other programme staff) will not receive the collated results until all identifying data has been removed.

Your involvement will consist of completing the optional section of the attached questionnaire.

There are no risks and no direct benefits to you in taking part in the study. However the results will assist in developing informed understanding in relation to the access and use issues associated with the on-line support contained in Blackboard.

From the information that you give a research report will be prepared. Later the material could be used in conference presentations and in journal articles.

Participation is voluntary. You have the right to choose not to complete the optional section of the questionnaire without penalty.
Any questions or concerns raised by you will be discussed as they occur. Please feel free to contact either:

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Leanne Pool, Programme Leader, Nursing Centre of Learning: Undergraduate Studies has agreed to be available to participants for any questions or concerns regarding the consent process and/or research. This is to ensure an independent person is available on campus for participants who are also students in the Postgraduate Certificate in Nursing (Mental Health).

If you are willing to accept the invitation to participate in the research please complete the optional section of this questionnaire.

Thank you for your attention and support

Carmel Haggerty
Researcher
Postgraduate Certificate in Nursing (Mental Health)

Students’ experiences of the online learning environment: Working toward improvement.

2006 Student Survey

Your name is not required on this form.

Gender
MALE / FEMALE

Cultural Affiliation:
Maori
Pacific Nation
Pakeha/European
Other/Tauuiwi

Access to Blackboard: Where you able to access Blackboard from:
Home
Work
Whitireia Campus
Other: Please specify

Record your response to the following statements in relation to your on-line learning experiences:

1 Strongly Disagree
2 Disagree
3 Agree
4 Strongly Agree

1. The Blackboard orientation sessions were useful.

2. The discussion board activity was helpful in Assessment 1: Part A.

3. The following are useful components of Blackboard:
   (a) Announcements.
   (b) Discussion Board.
   (c) Sociological Imagination Webquest.
   (d) Professional Practice Concepts Website.
   (e) Electronic Book of Readings.
   (f) Digital Drop Box.

4. The opportunity to work more closely with your lecturers and peers in Blackboard would have assisted my learning.

5. I had adequate support to use the blackboard resources.
6. What aspects of Blackboard did you feel were **most helpful** to you?

7. What aspects of Blackboard did you feel were **least helpful** to you?

8. What suggestions would you advise to develop Blackboard?
Confidentiality Agreements

Research Assistant

I, ……………………………… Research Assistant, agree to maintain confidentiality in relation to those students of the Postgraduate Certificate in Nursing (Mental Health), participating in the research project being undertaken by Carmel Haggerty.

My role in relation to this research project will be to:
- receive and collate consent forms;
- liaise with the programme administrator re participant selection
- notify participants of selection and details of the discussion group
- receive transcribed tapes and forward to transcriber
- received transcribed data,
- forward completed transcripts to facilitators for member checking
- receive returned transcripts and amend according to feedback.
- forward transcripts to researcher, no earlier than Monday 21 November 2005.

This confidentiality agreement is in relation to any and all correspondence, and other research related duties completed by me in relation to this research project. In particular
- the names of the students participating in the research groups will remain confidential;
- no correspondence will be saved to my computer;
- all tapes from the discussion groups will be destroyed post transcribing;
- all hard copies will be keep in a locked cabinet for safe keeping, and destroyed by shredding on completion of the research project.

Signed: ...........................................................................
Name: ...........................................................................
Date: ..............................................................................
Typist

I, ..........................................................................., agree to maintain strict confidentiality in relation to the information supplied to me for the purposes of transcribing audio tapes of the discussion groups undertaken by Carmel Haggerty, the researcher.

My role in relation to the research is to:

- receive discussion group tapes from the research assistant
- transcribe the tapes
- return the transcripts, tapes, discs and any other data to the research assistant.

This confidentiality agreement is in relation to any and all audio tapes, computer files, floppy disks and printed material. In particular

◊ the names of any participants contained on the audio tapes will remain confidential;
◊ no files and/or information will be saved to my computer;
◊ all floppy disks used to save the transcribed material will be returned to the Research Assistant for safe keeping and electronic erasing on completion of the research project;
◊ all hard copies will be returned to the Research Assistant for safe keeping, and destruction by shredding on completion of the research project;
◊ all audio tapes will be returned to the Research Assistant for erasing.

Signed: ...........................................................................

Name: ...........................................................................

Date: ..............................................................................