Connecting to Students in HE: Methodological Issues and Concerns

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***Abstract*- Students at universities appear to want to engage with newer technologies in and out of the classroom; and this suggests that those universities focusing on connecting to students with an eLearning strategy may actually create better student-university relations as well enhance student learning conditions.**

The focus of the paper is to develop an assessment of the efficacy of the survey methodology used to generate the data. The purposes of this were to demonstrate the application of focus group/qualitative research techniques to an eLearning environment; and identify the key characteristics of survey methodology that contribute to the development of successful eLearning survey experiences.

This study draws data from a number of separate focus groups located at different geographical locations and conducted at the same time through Internet technologies. Various issues are raised in terms of the efficacy of the technology on focus group and survey methodology developments.

Questions and issues are raised that directly relate to university operations and student behavioural concerns in terms of survey methodologies.

The paper concludes with a discussion on the implications of such survey methodologies and how these could be better framed to expedite more effective eLearning data generation and analysis from the field.

***Keywords*- eLearning, survey methodology**

INTRODUCTION

Research using focus groups through the internet have been carried out by various researchers (Monolescu and Schifter, 1999); O'Connor and Madge, 2003; McPherson and Nunes, 2003). Unfortunately, *..most of our knowledge about focus groups comes from personal experience rather than systematic investigation* (Morgan and Krueger, 1993), and this coupled with an apparent absence of empirical research directed at focus groups (Heary and Hennessy, 2002; and Pincott and Branthwaite, 2000) in relation to internet methodology considerations (Chen and Hinton, 1999) concerning qualitative research outcomes determines that the need for such research is imperative.

The internet has been recognised as a tool for bridging groups views (Hodkinson, 1999), distributed in diverse geographical locations (O'Lear, 1996) thus illustrating the focus groups flexibility (Morgan, 1997). Consequently, on-line survey research has increased in popularity (Fraley, 2004), and may be seen by some as effective as mail surveys (Gosling, et al., 2004). Such methods may radically help develop data that would otherwise be lost or be considered unavailable. As such, focus group research is considered a *…unique and comprehensive form of participative research* (McPherson and Nunes, 2006) which may be further enhanced by using a co-operative environment that is data rich and stimulating for respondents (Fontana and Frey, 1994) through technology (Alexander, 1998) such as the internet. Open-ended questions used in focus group research produces a larger range of diverse responses (Schuman et al., 1986) and are therefore particularly useful to use in this exploratory study. Consequently, this

research is aimed at reducing this research gap, with the need to address the following questions:

What methodological implications are there for conducting distributed internet research?; and;

How does this help define and develop appropriate ways to support successful on-line eLearning survey experiences?

The aim of this research project was to assess the efficacy of focus groups as an appropriate research tool in eLearning contexts eliciting potential respondent views and acknowledging these respondents as culpable experts.

RESEARCH METHOD

3 separate groups - at different locations - were connected through the internet at the same time (singular synchronous session) which lasted approximately 1 hr (Atack, 2003). All three groups belonged to the same class or cohort, who were considered informed and mature (Wall, 2001). The respective groupings contained Group 1 (12), Group 2 (9) and Group 3(13) respondents - who were all enrolled undergraduate students at one university. By gender, there were twenty-one female participants - Group 1 (8), Group 2 (6) and Group 3(7); and 13 male participants - Group 1 (4), Group 2 (3) and Group 3(6). This accounted for 87% of the full cohort. Krueger (1994) argued that the size of these research focus groups are sufficient for complex topics. There were no established ethics approval committee at this university, so ethical standards associated with confidentiality and anonymity would be maintained at all times according to Glaze (2001); and included procedures such as written consent, freedom to withdraw at any time, anonymous transcription etc.).

A pilot focus group was carried with five pre-selected students from the class cohort and were used to develop insights into student perceptions. Thematic analysis enabled refined themes to surface following Polit and Hungler (1999). These themes formed the basis of the main focus group discussion in terms of process and the possible content of the discussion.

The basic focus group process tenet followed the internet focus group format of:

Introduction by moderator; tabling of questions by the moderator at appropriate times; controlling the discussion between the 3 groups and ensuring that the discussion followed the requirements of the research. The moderator probed for clarification if required. The appendix illustrates a sample of questions raised during the focus group process.

For the main focus group, the moderator for the focus group was situated at a separate locale in order to off-set direct association bias and the focus group process was initiated and controlled from this off-site location. All respondents and the moderator were digitally linked via internet technologies using a web-cam and microphone, with the video link carried to a projector where all groups and the moderator could be seen. A video was recorded for future analysis, after each respondent gave their agreement to be recorded in writing - thus reducing the effect of anonymity but this was mitigated in terms of the research frame and processes.

13,586 words were recorded during the hour session. Validity was enhanced through the process of posting the transcript (secured) (after Miles and Huberman, 1994) to a secure server which could be accessed only by the focus group participants. Here, a variety of methods could be used to add comments to adjust the meanings associated with the transcript data. The data was available for 3 days once the transcript was produced. Subsequently, 89 additions were posted – ranging from small comments of a few words to paragraphs or on 3 occasions even pages. This illustrated the position utilised for tests of validity to ensure that the final script matches respondent's intentions in terms of meaningful and judicious outcomes. However, the validity of the data

cannot be verified unequivocally - which is considered typical for such on-line surveys.

Bias is reduced considerably as the whole population is known and each respondent had equal access to respond as appropriate.

Whilst this project was not attracted to the actual data generated, it was however considered important to view the opinions of respondents in order to capture the emotive stance of the respondents in regards to the issues raised. These data analysis and outcomes using thematic analysis enabled refined themes to surface following Polit and Hungler (1999) and will be presented in a separate paper.

Consequent analysis showed that not everyone made comments on all questions tabled. For example, some respondents did not comment – even when probed – regarding their experiences of eLearning at other universities. Either this reflected an inability to answer because they had not experienced eLearning at other universities or that the platform was too public for them to contribute honestly. Further, it was noticed that abbreviated responses to questions were evident from the video analysis coupled with an overall lower level of individual dialogue in the discussion (Schneider et al., 2002), which may run counter to the experiences of Burton and Goldsmith (2002). This was not perceived during the orchestration of the focus group, which may reflect the distraction component of carrying out an on-line distributed focus group at the same time.

Various issues are raised in terms of the efficacy of the technology on focus group and survey methodology developments where a variety of main themes emerged. These are discussed in three parts - students related; technologically related and methodologically related, as follows:

Student Raised Issues

Some students appeared to be overwhelmed with the technology as it shows connections to other students at different locations. Of more interest was after the focus group, when students played with the technology - using the internet bridged whiteboard for example. This showed the need for experimentation with this technology and the linking of new ideas between groups. They appeared to enjoy the less formal arrangement as simple drawings were created across sites and shown on screen. They appeared to be less concerned in this after-environment. Although it wasn't part of the project design, these comments are included in order to show that participants could engage with such diverse technologies and make some use of it. In the end, it took a technician to switch the technologies off in order to make the participants return to their normal student activities.

Technological Issues Raised

Some students suggested that discussing issues across sites became a little confusing – especially when a topic was raised that many respondents wanted to comment on. Consequently, control issues are raised, as is the notion of dampening the discussion free-flow. From the pilot study, in order to enable a more effective experience, the possibility of showing which group respondent is talking was put on screen which then inhibited the sound from other contributors across sites. In this way, a more uniform and controlled process was utilised that helped engender the procurement of supplementary listening skills. The moderator ensured that all groups could discuss the topic issue and all groups could listen to each site environment at the same time – which was deemed important in order to ensure the ambiance of the total focus group. Concerns were raised that included students' ability with the technology, but this is dismissed as students were not expected to administer or utilise such technologies for the purpose of the focus group. However, this did raise the notion of student's fear of technology for their own purposes - which may have suggested why some students *played* with the technology after the focus group had concluded (reported in last section).

Whilst there were no difficulties with synchronising the digital feeds between the various locations in the research, it is acknowledged that if such issues did arise, that they may have a material effect on the efficacy of the research methodology in terms of process bias, lost data and concerns relating to reliability.

Methodological Issues Raised

A variety of methodological issues were raised and are discussed below:

Focus group preparation. Preparation starts as soon as the objectives and research questions are finalised. Elements that appear to have been important were issues regarding group content, focus group question order (question route), focus group schedule, moderation and control concerns, recording, analysis (which consists of examining, categorizing, tabulating or recombining the data) and reporting.

Group size. Heary and Hennessy (2002) found 33 studies that reported focus groups of between 4 and 8 participants and 30 studies with at least 8 participants. Which indicates that more than eight is reasonable starting point for internet focus group sizes as Fern (1982) suggested that focus groups with eight members or more produced more ideas than focus groups with less members. However, since there were no research data about the most effective size for focus groups using internet technology, the present study specifically inquired as to what respondents thought. Many respondents thought that having three groups was *chaotic* and was perceived by a significant minority as *unfriendly* and perhaps *too public*. This has implications for trust and meaningful dialogue though balancing moderator involvement and influence may help (Burton and Goldsmith, 2002).

Recruitment/Participant selection.

Respondents were recruited from the single cohort that they belonged to. Each member of the class was allocated to a separate group at random.

Length of interview. Most focus group interviews last about an hour. This project adopted this setting. However, this may have been too long, and the possibility that length of interview and number of focus group locations interviewed at the same time may be related. This raises the notion that more groups means more process complexity and this makes it more difficult for the moderator to control the focus group operation.

Gender. Gender composition may have an effect on meaningful dialogue, as some participants reported that it may have been *difficult to explain an issue with other members of the opposite sex present*. This wasn't surprising, as many studies utilise single sex groups in order to mitigate such issues (for example, Davis and Jones, 1996).

Triangulation and Credibility. Using three groups together may increase triangulation effects (Fern, 1982) as corroborative evidence from different groups went towards the robustness of the methodology.

Timing. Since there were three groups in operation, data generation was faster and allowed groups to be assessed against each other if needed.

Data Analysis. Following on from other qualitative research, for example, Yin (1989), the transcription and analysis took a long time - over 3 days (35hours) with the data analysis consisting of a number of consecutive stages, i.e. examining, categorising and tabulating. The more separate groups, the more generated data that needs to be assessed. Consequently, in order to minimise the potential bias introduced by analysing and interpreting focus group data Krueger & Casey (2000) point out that the analysis should be systematic, sequential, verifiable, and continuous. This may be especially important when the data takes more than one session to assess.

CONCLUSIONS

The use of focus groups conferencing technology *holds great potential for*

synchronous online interviewing (O'Connor and Madge, 2003).

The issues raised in this paper are presented as an exploratory outcome and more work is needed to assess the methodological implications of pluralistic focus groups using internet technologies.

Consequently, the uniqueness of this methodology by using a distributed focus group and its potential ability to generate diverse data based on the synergy of the group interaction (Green et al. 2003) through the internet is perhaps a very strong and robust methodological development.

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Appendix - Sample Focus Group Questions:

How effective is the present technology when conducting on-line eLearning assessments?

What improvements could the university management develop to make on-line eLearning experiences more effective for student learning patterns?

In what ways could the university eLearning provision be improved?

Can students really learn through eLearning practices?