
Online discussion boards for focus group interviews: an exploratory study

Cher Ping, Lim and Seng Chee, Tan

National Institute of Education

Nanyang Technological University, Singapore

Abstract

Certain attributes of information and communication technology have many potentially useful applications for qualitative research. With reference to an exploratory study, in this paper we consider how online discussion boards can facilitate the collection of qualitative data from focus group interviews. We also evaluate the advantages and limitations of conducting these interviews through online discussion.

The increasing usage of information and communication technologies (ICTs) in educational institutions has a significant impact on qualitative research in education (Burgess 1995). ICTs have been used to help record, sort, retrieve and analyse qualitative data. The applications of ICTs in qualitative research range from simple word processing to sophisticated data sorting, retrieval and analysis (eg using QUALPRO, ETHNOGRAPH and NUD•IST). The contexts, experiences, potentials and limitations of using these ICT packages have been well documented (Armstrong 1995; Tallerico 1991; Weaver & Atkinson 1995).

However, most of these research studies only look at the methodological features of qualitative data analysis to consider how, how much, and how well it can be computerised (Richards & Richards 1998). In this paper, we consider how ICT can be used to facilitate the *collection* of qualitative data, relating the experiences of one author in using an online discussion board to conduct a focus group interview for an exploratory study. We also evaluate the advantages and limitations of using ICT in such interviews.

Focus group interviews

Purposes

Focus groups rely on interaction within a group, rather than a question-and-answer format. Through debating issues and struggling to understand how other group

members interpret key terms, interviewees are more likely to contribute their views than in a one-on-one interview (Morgan 1988). Moreover, interviewees may feel more at ease and spontaneous in a group situation, especially if they are classmates, colleagues or close friends (Bers 1994).

According to Morgan (1998), focus group interviews are:

1. methods for collecting qualitative data to be analysed and related to research questions
2. focused efforts for gathering data on specific topics
3. group discussions to generate data across a range of experiences and opinions.

A focus group interviewer must balance a directive role with that of a moderator, which calls for managing the dynamics of the group being interviewed; he/she 'must simultaneously worry about the script of questions and be sensitive to the evolving patterns of group interaction' (Frey & Fontana 1998). Blumer (1969, p 41) claims that interviewees should be 'acute observers' and 'well-informed', because 'a small number of such individuals brought together as a discussion and resource group, is more valuable many times over than any representative sample'.

The purposes of focus group interviews are threefold. First, they are intended to probe intensively for qualitative data related to a specific area of study. They are especially useful for exploration and discovery of topics that are poorly understood, providing contextual information and depth. Through a process of investigating their similarities and differences and sharing and comparing, participants generate their own interpretations of the discussion topics.

Second, focus group interviews may be used to generate new ideas prior to a quantitative research study. For example, interview data provide evidence of how participants typically talk about the topic in question, ensuring inclusion of items/scales that may otherwise have been ignored in the construction of a survey. Third, these interviews may be conducted to elicit participants' experiences and reactions to a lesson, an education ICT package, or an idea that requires testing before implementation or further development. In this paper, only the first and third purposes of focus group interviews are discussed.

Challenges

The main strength of this qualitative method is its ability to elicit rich data that are more cumulative and elaborate than individual responses (Morgan 1998). The flexible format of focus group interviews, plus the interaction within the group, tends to enable collection of data with relatively little direct input from the researcher. However, focus groups do pose certain challenges for an interviewer.

On a practical level, it is always difficult to get all participants together at the same time and place. This is especially so if they are busy professionals based in different locations. Moreover, selecting an interview site that meets the needs of participants and the researcher may pose a problem. The site must be easily accessible to participants, yet be an environment suitable for audio-recording.

Once the time and the place have been confirmed, carrying out the interview itself can be challenging. Compared to individual interviews, the researcher has less control over the data generated. This lack of control may pose a problem if there is 'a clear set of predefined issues or a strong need to maintain strict comparability across separate interviews' (Morgan 1988).

Moreover, emerging group culture may interfere with individual expression, and the views and stances of dominating participants may become that of the group - a phenomenon known as 'group-think' (Fontana & Frey 1998). This may be a serious problem, especially if one person dominates the discussion.

On the other hand, bringing together participants with vastly different opinions may produce group conflict. This may create barriers to active and easy interaction and jeopardise the success of the interview, such that only scattered data is collected. In both cases, the researchers must be equipped with the skills and experiences to handle the particular group dynamics and any conflict. They might also consider building back-up data collection methods into the research design.

It is thus evident that collecting data through focus group interviews can be a challenging task. This raises two questions:

- Is there an alternative way of collecting data from focus group interviews that has less inherent problems?
- Do new technologies better facilitate the data collection process than traditional audio or video recordings?

The following section is an account of how we used an online discussion board to conduct a focus group interview with tutors in the PED503/513 course at the National Institute of Education (Singapore). Drawing upon the experiences of the first author as interviewer, we explore the potentials and limitations of online discussion boards as platforms for conducting focus group interviews, and the implications these have for the roles of interviewers and interviewees.

An exploratory study: the use of an online discussion board for a focus group interview

Instructional Technology (PED503/513) is one of four core modules in the Postgraduate Diploma in Education (PGDE) program at the Singapore National Institute of Education. The module has an average annual intake of 900 and aims to acquaint students with skills for integrating Instructional Technology (IT) into their classroom practices. Due to large tutorial class sizes, and the tasks requiring

completion in the two-hour tutorial slots, little dialogue has typically been possible between tutors and students.

To encourage more dialogue in the tutorial groups and reflection on the lecture readings, online asynchronous discussions were introduced as an integral part of the course in the academic year 2000/2001, to complement the face-to-face tutorial sessions. The Communication Centre of the Blackboard™ platform was used. Blackboard™ is an off-the-shelf, integrated online delivery and management system. Each week, the tutors added a new forum onto the discussion board, based on issues raised in the lecture readings. Initially, the tutors facilitated and moderated these discussions, but after the first two weeks, students were assigned as moderators to ensure the efficient management and operation of the discussion board. Students were assessed based on their roles as moderators and participants in these discussions.

As this was the first time that discussion boards were used in the PED503/513 course, the first interviewer, who was also the course coordinator, was concerned about how online discussions should be organised to facilitate the students' learning. A study was thus designed to investigate this, using multiple strategies for data collection, including a focus group interview with the tutors. The resultant data was intended for triangulation against other data collected from observations and a student survey.

When the researcher attempted to organise sessions to interview the 20 tutors in a group, he faced a major problem. About 40% of the tutors were only part-time, due to other commitments elsewhere during office hours. While the other 60% were full-time at the Institute, they were also all heavily involved in other courses and research projects. It was thus a formidable task to organise a focus group that could spend about one and a half hours talking about the online discussions in the course. There was also a concern that the voices of the part-time staff might be drowned by those of the more dominating full-time staff, resulting in 'group think'.

After some exploration, the first author decided that the anywhere/anytime, asynchronous nature of the online discussion board in Blackboard™ afforded the best platform for conducting these focus group interviews, particularly as all tutors were already familiar with it. A new forum was then added to the board as a topic for the focus group interview, titled: 'Online discussions for the PED503/513 course'. Participants were given a brief description of the online discussions in the course and a list of objectives for the focus group interview (see Figure 1). The researcher then initiated the first thread of discussion, on the subject of whether the objectives of the online discussions for tutorials had been met.

The focus group interview was conducted via the online discussion board for 12 days. All threads of discussion received at least six replies. As can be seen in Figure 1, the average length of postings was 128 words; long enough for the participants to express or defend their views, but not too long to deter other participants from reading them.

Figure 1: Participation details

No. of participants	19
No. of threads	7
Total no. of postings*	60
No. of postings/participant	2.5
Average length of postings	128 words

** includes those of the interviewer*

Advantages of online discussion boards

Convenience

All except one tutor participated in the discussions. This high rate of participation suggests that online boards are a viable means of conducting focus group interviews, as they eliminate the problem of scheduling a common site and time for busy professionals based in different geographical locations, which often results in exclusion of certain participants for logistical reasons. So long as the participants have internet access, they can participate in the focus group interview anytime and anywhere.

Reduced social interference

In a face-to-face interview, participants are expected to respond and interact within the context of the ongoing conversation. Participants may hold back responses or comments that are not in line with the ongoing discussions. For example, a participant may want to contribute his/her views on the objectives of online discussion (a subject that has been discussed), but is prevented from doing so as the ongoing discussion is on another subject. Unless that participant recalls his or her intended contribution later and there is an opportunity to present it, the data may be lost. The asynchronous nature of online discussion boards reduces social interference and hence prevents the loss of such data.

Moreover, the asynchronicity of the online discussion board allowed participants to take part in previous threads of discussions, rather than being confined to the present one. Latecomers to the focus group interview did not miss out on earlier discussions; about six participants took part in the interview six days after its commencement. Participants had the choice to view and contribute to the subjects of their interest and were empowered to start new threads of discussion whenever the need arose; of the seven threads of discussion, the interviewer started only three. Three out of the four participant-initiated threads were posted when the respective participants were replying to other threads (similar to the case of Paul, described below).

For example, full-time tutor Paul (names of participants have been changed to ensure anonymity) at one stage replied to a previous thread on the 'Structure of online discussion - threading', rather than the ongoing thread of discussion. He then started a new thread on 'What worked for me – sharing a school experience'.

Thomas, a part-time tutor, replied to three different threads of discussions within 12 minutes. In his first posting, he agreed with one of the postings on the 'Objectives of online discussion' and emphasised the need to consider objectives with respect to both the online and forum elements of the discussions. He then moved on to another thread ('Structure of online discussion - threading'), agreed with the rest of the participants that threading was crucial in online discussions, and suggested that more time be allocated to familiarise students with threading. Finally, he contributed to the ongoing thread of discussion on 'What worked for me', and shared his experiences of how he facilitated discussions in his group by setting the language and tone. Such deviation from ongoing discussions is likely to be disruptive in a face-to-face situation, but is permissible and desirable in online discussion boards.

Reduced 'group think'

As mentioned previously, in a face-to-face situation, a participant with greater social presence may dominate or influence the group through social cues such as voice, eloquence of speech or particular facial expressions. A participant who is loud and aggressive may deter others from expressing their views, or a persuasive participant may sway others. Once 'group-think' is established, individuals with opinions that differ from the dominant may be pressured to comply.

In a focus group interview conducted via an online discussion board, participants can focus on the textual arguments and avoid being distracted by the social cues. As stated earlier, in the case of the PED503/513 tutors, the full-time tutors usually dominate face-to-face meetings. However, one-third of the 60 messages in the discussion board for this study were posted by the part-timers. A few of these messages were comments regarding the messages posted by full-time staff.

For instance, one part-timer, Raja, challenged a full-time tutor about assessing the online discussions. He argued that the course should strive towards 'making e-discussions more meaningful and as authentic as possible. Things we could discuss can be - scenario analysis, case studies, practical issues in schools, etc. ...'. Such challenges from part-time tutors are less likely in face-to-face meetings.

Reflection

Due to the spontaneity of face-to-face focus group interviews, there is often little time for reflection. In an asynchronous discussion board, the participants have more time to think and organise their thoughts before responding, and can preview and revise texts before posting them. In this study, it was evident that participants had

reflected on their own experiences before typing their views, replies and suggestions.

For example, for the thread 'What worked for me', most participants responded over a period of six days to the first posting. Paul started the thread by recounting how he successfully facilitated the discussions by providing both online and face-to-face scaffolding for his students. Sophia, a part-time tutor, contributed her experiences of providing real-life scenarios and varying students' roles in the online discussion boards. After reflecting on such responses, Paul started another new thread five days later, titled: 'What didn't work for me'. The observations made from this study thus further support Wegerif's (1998) claims that the asynchronicity of online discussions allows for more reflection among participants.

Control

An interviewer is more readily able to moderate an electronic discussion than a face-to-face interview. For instance, if a particular message is deemed unsuitably worded and is predicted to spark off a series of irrelevant discourse, the interviewer can hold the message and advise the contributor through one-to-one communication like e-mail. In extreme cases, the interviewer may even bar a difficult participant from the discussion; an option that can be less painfully carried out in the electronic platform than a face-to-face situation.

In this study, the interviewer held back a posting likely to lead to off-track discussions, and personally emailed the tutor who sent it, explaining the action. In another instance, the interviewer advised two tutors via email to address the group rather than individual participants during the course of discussion. In both cases, the problems were resolved amicably.

The researcher also felt readily able to facilitate and moderate the interview. The longer response time enabled him to review the various postings within a thread, synthesise them and provide a platform for a more in-depth discussion. He was also able to more effectively overview the whole interview, such that he was in a better position to start off new threads of discussion whenever necessary. For example, five days into the interview, based on his review of the 18 messages, the researcher was able to initiate a new thread of discussion in light of the key points raised so far, which he titled: 'Assessing students on e-discussion':

The discussion so far has been on the why and how of e-discussion. Mary's experiences of getting students to select their own topics ... Others shared their experiences of structuring e-discussions, and then fading the structure ... Tommy suggested getting students to make their postings more explicit in terms of the type of dialogue ... The pertinent question now is, should this e-discussion be assessed at all? Is this done out of pure pragmatism to ensure that students participate online?

Records and transcription

Recording and transcribing the discourse of an interview is usually a challenging and labour-intensive process. This is especially with a focus group, where one

interviewer faces several participants. Rapid exchanges of ideas among the participants and overlapping conversation presents a great challenge to the researcher, even with the help of technologies like audio or video recording. In an online discussion board, the participants type in their messages and send them to a central database. The electronic discussion board automatically sequences and arranges the messages into threads according to the time and title of the message; there is no need for manual recording and transcribing!

In this study, the transcript of the focus group interview was stored in a central server, and exported into a word document file, without any manual recording and transcribing on the part of the interviewer. Hence, more time and resources could then be spent on analysing and interpreting the data.

Limitations of online discussions

While the use of discussion boards for focus group interviews has advantages, we need to be aware of its limitations. The following factors may affect the outcome of the interview and must be taken into consideration to enable effective collection and interpretation of reliable and valid data.

Disjointed transactions

While the asynchronicity of online discussion boards affords participants more time for reflection, it also results in disjointed transactions. Freedom to not participate in all threads of discussion means that some messages may not reach everyone, such that some participants may not get a good overview of the ongoing discussion and may contribute ill-informed views. Here, although the first 40 postings were read about 25 times each, some participants contributed to ongoing threads of discussions without knowledge of what had been discussed in previous threads.

A good example of such observations was the posting by Serena, a part-time tutor. In the ongoing discussion of 'Enhanced online discussions', she recounted how she used the online board as a management tool. However, the previous discussion had established that tutors should move away from using online discussion boards as a mere management tool. She had obviously not read the previous thread of discussion on the 'Objectives of online discussion'.

In addition, most discussion boards, including Blackboard™, do not have cross-referencing features. Relating instances in one thread of discussion to another can be a tedious process for participants. In this study, the interviewer addressed this limitation by synthesising and starting a new thread when the discussions had met a saturation point. For example, after the first two threads, the interviewer started a new thread on 'Structure of online discussion':

This is a new thread instigated by the previous two threads. There seem to be some agreement that given the objectives of such discussions, there is a need for a clear structure to guide the students. Toulmin's model of argument was suggested as one possibility ... Can we adopt a few models and get the best of all worlds to structure our online discussions?

Participation requirements

The success of online focus group interviews presupposes that participants have the skills and equipment to use the electronic format of discussion, including keyboarding skills, a fast and reliable internet connection and an understanding of the features and structure of the discussion board. The interviewer has to ensure that participants are comfortable and competent in this mode of discussion, and may even have to provide assistance to those having difficulty.

In this study, all participants had been using online discussion boards with their tutorial groups for at least six weeks as tutors of the PED503/513 course, hence they already understood the relevant structure and protocols. A short session had been conducted by the course coordinator (also the interviewer) at the beginning of the course to acquaint the tutors with online discussions. Further, all full-time tutors had internet access in their offices with reasonable transmission speed, and the part-time tutors had home access (using at least a 56.6-kp modem). All participants thus had the prerequisite skills and computing infrastructure to meet the study requirements.

Lack of non-verbal cues

In face-to-face focus group interviews, participants can also contribute through exchanges of non-verbal signals. However, the only visible sign of participation in discussion boards is written words. Although some participants may be actively reading and reflecting about the posted messages in discussion boards, research studies have shown that such individuals pose a threat to the group and are seen as 'lurkers' (Pearson 1999; Selinger 1998). The existence of 'lurkers' may lead to group fading, as some active participants may be disheartened to continue with the discussion when they fail to get any feedback, verbal or non-verbal, from others.

In the first five days of discussions, there were only 18 postings by six tutors. Five other tutors had logged into the discussion board but did not post any messages. Fortunately, the existence of 'lurkers' at the initial phase of this study did not result in group fading. As most of the tutors had been working together for at least one year, they had already interacted and socialised face-to-face many times before the focus group interview was conducted online and hence might not have felt threatened by 'lurkers'. Further, the topic of discussion was not on a sensitive issue that might lead to mistrust and conflict.

Conclusions

In this paper, we have identified and verified the strengths and limitations of the use of online discussion boards for focus group interviews.

Online discussion is convenient in that it links participants across time and space, reducing the hassle of scheduling. Its asynchronous nature affords more time for participants to reflect and react and for the interviewer to manage and facilitate the discussion and resolve conflicts. Asynchronicity also allows non-linear 'hyper-talk', through which participants can contribute to different threads of discussion

within a short period of time without disrupting the discussion. In a sense, it offers participants relatively more freedom to participate only in certain parts of discussion and to think and contribute to multiple threads, instead of conforming to the flow of discussion as in face-to-face situations.

Further, the lack of social cues reduces social dominance and the possibility of 'group think'. Using electronic textual discourse also allows for automatic recording and some pre-sorting of data, eliminating the labour-intensive tasks of recording and transcribing.

On the other hand, asynchronous discussion also has limitations. It can lead to disjointed transactions, requiring the interviewer to maintain an overview of the discussions and provide the participants with a focussed perspective whenever necessary. The participants also lose feedback through non-verbal cues; they must thus make conscious efforts to 'verbalise' a thought; be it a simple agreement or disagreement. Use of online discussion boards also presupposes the availability of network connections for all participants and their competence in making contributions of electronic text.

While this paper has focused on online interviews, their use can be complemented with face-to-face discussion. It should be mentioned that the data collection via online discussion referred to here was supplemented by a face-to-face session involving the interviewer presenting a summary of the online data. This was used as an opportunity to clarify and elaborate data and to articulate more ideas. Future studies in this area should be focused on exploring the synergy of online discussions with face-to-face focus group interviews.

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