

## Chapter 2

# Guidelines for Conducting Text Based Interviews in Virtual Worlds

Carina Girvan and Timothy Savage

**Abstract** Interviews are a staple data collection tool in social science research and in recent decades have been increasingly formalised and systematised. However, due to the specific affordances and constraints of virtual worlds, researchers cannot simply replicate traditional interview techniques in virtual worlds without careful consideration of the specific features of the technology. For example the prominent use of text as the medium for communication, role of the avatar, interview location and inworld objects have implications for all inworld research interviews. Building on the foundation of traditional interviews in educational research and the current literature on inworld interviews, this chapter focuses on the use of text communication tools in both one-to-one and group interviews inworld. Based on previous research by the authors the opportunities, implications, constraints and techniques for conducting text based interviews inworld are discussed. The chapter concludes with a set of guidelines for researchers considering the use of inworld text based interviews.

## 2.1 Introduction

While educators are challenged by the educational affordances and constraints of virtual worlds (Jarmon 2009), researchers also need to consider both the opportunities and obstacles to conducting educational research in virtual worlds (Moschini 2008). Within qualitative methodologies, interviews provide researchers with a particularly powerful research tool as a means to get ‘inside a person’s head’ (Tuckman 1994) in order to understand their subjective experience. With

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C. Girvan (✉) • T. Savage

Centre for Research in IT in Education, School of Computer Science  
and Statistics, Trinity College Dublin, Dublin, Ireland  
e-mail: girvanc@tcd.ie

an increasing body of literature on educational research in virtual worlds, it is perhaps surprising that there is not a relative increase in the number of reported interviews conducted inworld.

Interviews about inworld learning experiences, conducted in the virtual world, provide researchers with opportunities unavailable in traditional face-to-face settings, such as travelling with the interviewee to different locations in a learning milieu in order to stimulate recall. However there are also disadvantages to be considered such as the loss of non-verbal cues. Although a number of virtual worlds have integrated voice technology, text remains the primary medium of communication between users. As such, text is potentially a more appropriate medium for conducting interviews inworld.

Text based interviews are not unique to virtual worlds and have hitherto been chosen over face-to-face for reasons such as access to otherwise unavailable participants and cost (Chen and Hinton 1999). Text can be either synchronous or asynchronous and allows both interviewer and interviewee to edit statements before sending. As a result the medium can fundamentally change the nature of the discourse.

While insights may be gained from other text based interview tools such as instant messaging systems, features such as avatars and the opportunity to interview *in situ* provide researchers with unique opportunities, implications and constraints and as such require specific techniques. However the literature lacks clear guidelines specific to the use of synchronous text based interviews in virtual worlds.

This chapter has been developed as a guide for researchers considering the use of use of text based interviews in virtual worlds. Some of the issues raised in this chapter may also prove useful to researchers conducting other forms of inworld interview. The guidelines are broken down into three phases: prior, during and post interview.

These guidelines have been developed from an original research paper (Girvan and Savage 2011) in which the authors explored the opportunities, constraints, techniques and implications of conducting text based interviews inworld to understand learners' experiences. This work was based on an analysis of interviews the authors had conducted inworld in the course of researching different learning experiences in the virtual world *Second Life*. Each interview was conducted following learner's participation in one of these learning experiences. The analysis of this data was then combined with a structured reflection on the authors' experiences as both interviewers and interviewees. In total 20 individual and 10 group interviews were analysed to explore the effect of the interview medium.

To provide a foundation for the reader, this chapter begins by considering the role of interviews in educational research and the current literature on inworld interviews. This is followed by a detailed discussion of the opportunities, implications, constraints and techniques of conducting text based interviews in virtual worlds. Finally the guidelines for prior to, during and post interview phases are presented.

## 2.2 Understanding Learning Through Interviews

The popularity of interviews across social science research and educational research lies in their ability to generate a holistic understanding of the subjective lived experience of the participants. Educational research interviewers search for an understanding of learning from the perspective of the participants' meaning-making in their own socially situated lives (Brenner 2006).

Interviews generate data, as opposed to simply capturing data, representing the co-construction of knowledge relating to the lived experience of the participants. This focus on the collaborative construction between the researcher and the participants combined with the focus on the lived experience results in a powerful yet complex phenomenon.

There are five characterising features of interviews: purpose, type, form, medium and location. This section briefly presents each feature and is followed by an exploration of these characteristics within the current literature on educational research in virtual worlds.

### 2.2.1 Purpose

In any research study there are three distinct purposes for choosing to conduct interviews (Cohen et al. 2007). Firstly, and most commonly, the purpose of a research interview can be to collect information pertinent to the broader objectives of the study. Secondly the interview purpose can be to validate, refute or amend hypotheses. Finally the research interview can be used in conjunction with other data collection instruments to develop nascent understandings or delve further into emergent aspects of the phenomena under study.

### 2.2.2 Type

The purpose of the interview then guides the selection of the interview type. The literature in this area presents differing views on the number of types of interviews (Cohen et al. 2007), however the most common typology is that arranged along the continuum of *structure*, from the structured (or standardised) interview to the unstructured or open interview relying solely on open questions allowing the participant to form their own response (Creswell 2002; Cohen et al. 2007).

### 2.2.3 Form

One-to-one interviews are the most prominent form of interviews (Kvale and Brinkmann 2009) and are popular in educational research (Creswell 2002). Although

time consuming, the one-to-one interview allows the researcher to gather a personal perspective from the participant without fear of ridicule or the impact of group dynamics. Group interviews gather information from individual participants as well as collecting the shared understanding of multiple participants (Creswell 2002). As such they can be seen to represent aspects of a knowledge construction event (Kvale and Brinkmann 2009).

#### **2.2.4 Medium**

Whether conducting one-to-one or group interviews, there are several communication media through which the interview can take place. Traditionally interviews are conducted face-to-face or in some cases via telephone, however advances in computer mediated communication tools and environments have opened up the possibility of conducting interviews through synchronous and asynchronous text based communication through tools such as electronic mail and instant messaging. Alternative voice-based communication tools include voice over IP (VOIP) and video conferencing.

#### **2.2.5 Location**

The final feature to be considered is that of location. As previously mentioned, interviews traditionally take place face-to-face with both interviewer and interviewee in the same location. However telephone interviews provide an opportunity for interviewer and interviewee to be at a distance from one another. The location of an interview is typically a quiet and comfortable location where the researcher can minimise potential disruptions (Creswell 2002). Whether the interview is conducted in the research setting (in context) or out of context (for example in a private office) will depend on the purpose of the interview. Thus the traditional interview location may be face-to-face or at distance and in or out of context. In addition virtual worlds provide researchers with another choice, whether to conduct interviews inworld or out-of-world.

### **2.3 Research Interviews and Virtual Worlds**

While face-to-face interviews are currently the dominant medium in the literature on educational research in virtual worlds, there are a number of advantages to conducting interviews inworld. Unlike other online technologies, virtual worlds provide researchers with a range of opportunities to conduct interviews afforded through a combination of features, particularly the use of avatars and the variety of communication tools available. For example, Minocha et al. (2010) identified potential participants through serendipitous encounters with their avatars in selected

locations throughout *Second Life* and thus selected participants based on their avatar profile information. Having selected a participant they used inworld communication tools to initiate a conversation and invite them to participate in an interview either there and then or at a later time.

Hew and Cheung's (2010) review of the literature on educational research in 2008 identified only five studies that reported the use of interviews, none of which reported using virtual worlds to conduct the interviews. Since 2008 there has been a significant increase in the literature published on the use of virtual worlds in education and with that an increase in the number of studies using interviews. In a review of 208 articles published or made available as pre-print by July 2011, on educational research in virtual worlds, 54 described the use of interviews for data collection.

While interviews are a common form of data collection in qualitative research, the five key components of purpose, type, form, medium and location are often not clearly described in the method section of educational research articles. For example, of the 54 articles on educational research in virtual worlds that used interviews as a data collection method, it was unclear in 30 of the articles as to the type and form of interviews conducted. Of those that reported the form of the interview, semi-structured interviews were the most common, with only two conducting open interviews. In the same 54 articles it was unclear in 31 articles whether the interviews took place in the virtual world or face-to-face and of the 15 that took place in the virtual world only five reported whether they took place in or out of the learning context. Finally, while some studies employed multiple interview media including both face-to-face and voice-over IP (VOIP) such as Skype, the medium of 40 interviews was unreported.

Of the 15 articles that reported conducting interviews inworld, over half did not state whether text or VOIP were used. Of the seven that reported the interview medium, text was the most commonly used. However these articles provide little insight into the process of using inworld text based interviews.

Kirriemuir (2007) used inworld text interviews as follow-up to questionnaires. He found that these interviews provided little additional information, however he noted that this was likely to be constrained by his then lack of experience of interviewing inworld, technical problems and the long time to type questions and responses. Time was also a constraint identified by Vasileiou and Paraskeva (2010), who found that conducting the same structured interview inworld took almost twice as long by comparison to a phone interview. However Knorr et al. (2011) found face-to-face semi-structured interviews were significantly longer than those conducted through VOIP inworld.

Based on the literature reviewed, Minocha et al. (2010) provide the only notable description and advice on conducting interviews in virtual worlds, based on their experience of conducting interviews in two *Second Life* research projects. Logistics such as maximum length of an interview, codes of practice, ethics, researcher identity and interview locations as well as some discussion on the use of face-to-face versus voice are presented.

It is important to note that in addition to the consideration of the opportunities, constraints, specific techniques and implications of conducting interviews inworld, there are additional ethical concerns that may need to be addressed when conducting

interviews inworld. These include whether to use voice or text using public or private communication channels (Minocha et al. 2010), informed consent, privacy protection and the identity of the participant (Girvan and Savage 2012).

## 2.4 Why Use Inworld Text Based Interviews?

While there has been an increase in the use of virtual worlds to conduct interviews across research fields, there is limited existing literature on techniques, opportunities, implications and, importantly, the constraints of interviewing inworld. So why might a researcher opt to use inworld text based interviews?

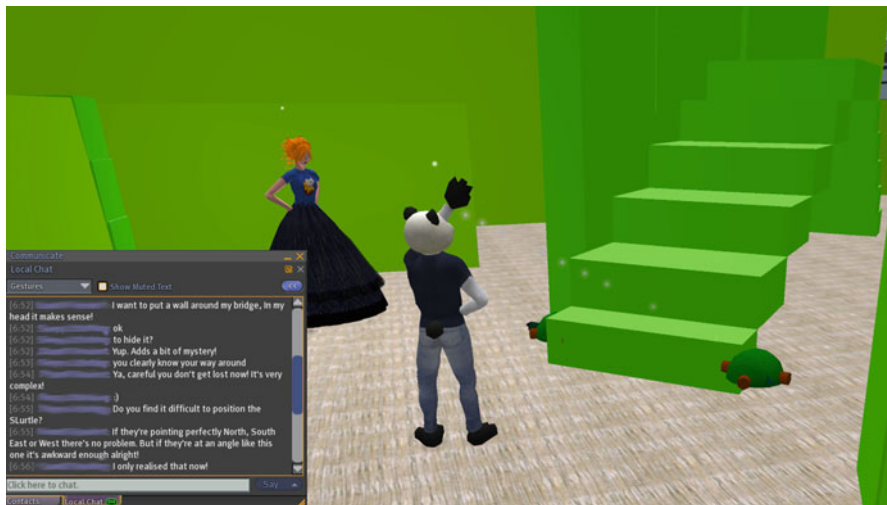
On a practical level the use of text based interviews offers advantages in terms of access to participants, the process of conducting an interview, and the form of the data gathered. However, unlike standard synchronous chat systems, researchers conducting inworld text based interviews need to consider the wider affordances of virtual worlds. These have implications for the preparation and execution of the interview as well as the nature of the data collected.

For example, avatars can support not only a sense of co-presence but also act as an additional communication tool, whilst allowing the user to be 'hidden'. Although some may perceive text to be slower than VOIP, it provides opportunities to limit technical problems, can be a valuable aid to the researcher during the interview and provides a ready-made transcript.

Since 2008 the authors have been implementing qualitative research into educational learning experiences in the virtual world Second Life and have developed their approaches to conducting interviews inworld across media. Our research has shown that inworld text based interviews can be a particularly powerful data collection tool, providing researchers with opportunities that are not available in other media. The use of inworld text based interviews has implications for the interviewer, interviewee and the data collected. There are additional constraints which need to be taken into careful consideration before deciding to use text based interviews. To negate these constraints we have found a range of techniques to be useful and these illustrate many of the points in the guidelines which follows this section. This section presents the conclusions of our research into the use of inworld text based interviews in both one-to-one and group formats, considering the opportunities, implications, constraints and techniques in the use of this approach to data collection.

## 2.5 Opportunities

While face-to-face interviews are currently the dominant medium in the literature on educational research in virtual worlds, there are a number of advantages to conducting text based interviews inworld. On a practical level the use of text based interviews offers advantage in terms of access to participants, the process of conducting an interview, and the form of the data gathered.



**Fig. 2.1** Interviewing in the learning context

Participants themselves may prefer to use text if they have participated in a text based learning activity or wish to protect their identity. Text based communication also allows access to participants otherwise unavailable, including: those with hearing impairments; those unable to travel due to cost, transport or time; and those that prefer to use text to VOIP. For example, this medium allows the participant and the interviewer to be in different locations, requiring only access to the virtual world. Once a time and virtual location have been agreed, all parties can meet for the interview with no concern over travel time or expenses.

Inworld text based interviews allow the data collection to take place in the context of the research location. This provides the opportunity for the interview to be conducted in the learning context allowing both interviewer and interviewee to move to, identify, share and demonstrate objects and activities during the interview. For example, Fig. 2.1 shows a one-to-one text based interview taking place in the location of the learning experience. In this example, the learner is demonstrating the installation they had created as part of a SLurtle learning experience (Girvan et al. 2013), producing a SLurtle from their inventory that they had already programmed to create a wall.

Opportunities such as this may provide researchers with an opportunity to engage in a modified form of stimulated recall in which the researcher identifies a specific object in the environment and participants would be asked to describe their thought processes whilst engaging with it during the learning experience. Inworld but outside of the learning experience location, both interviewer and participant may take items from the inventories and place them in the environment to 'refresh memories'.

Interviews may be conducted through instant messaging in public locations. This allows the interview to remain private whilst interviewer and interviewee move

through and interact with objects in the public learning environment. It also allows the researcher to respond to other users who may try to initiate a conversation, whilst maintaining the flow of the interview.

The medium of text also provides the interviewer with a number of opportunities unavailable in traditional face-to-face interviews or inworld VOIP interviews, such as:

- back-up recordings created by participants;
- ready-made transcripts;
- the opportunity to note-take and scroll through the interview transcript during the interview, as shown in Fig. 2.1.

For example, by scrolling back through the text conversation the interviewer is provided with an opportunity to refresh his or her memory of questions asked during open interviews and earlier comments made by participants. Although sources on traditional interview techniques, (e.g. Cohen et al. 2007) would discourage the taking of notes during an interview or using a crib sheet for questions, as interviewer and interviewee are bi-located notes can easily be made and crib sheets used without losing engagement with the interviewee or interrupting the flow of the interview.

While technical problems may be more likely in virtual world interviews, text based interviews provide researchers with additional opportunities to collect data. Participants may be asked to record their text chat using the inworld tools or to copy and paste from the virtual world and email the transcript to the researcher. Chat loggers may also be used as a back-up with permission. In addition, the researcher can save a significant amount of time overall by comparison to audio recorded interviews, as text provides the researcher with a ready-made transcript.

As data gathered through text based interviews provide the researcher with a ready-made transcript, analysis of the data can begin immediately following the interview. This may be particularly useful when conducting research in a limited time-frame, for pilot or exploratory studies, or when using convergent interviewing (Jepsen and Rodwell 2008).

## 2.6 Implications

While both inworld text and VOIP interviews have been found to provide the researcher with an increase in efficiency (Knorr et al. 2011), inworld interviews should not be chosen just because they are more efficient than face-to-face interviews. As with the selection of data collection tools, research question, availability of participants, participant preferences, depth and type of data analysis, etc. all need to be considered.

The choice of interview type may influence whether a researcher chooses to use text based interviews and if so what techniques to use. Both structured and semi-structured interviews use pre-determined questions. These questions can be typed in



advance and quickly copy and pasted during the interview. This may be of particular advantage to less experienced interviewers and reduces the silence that occurs as the researcher types. The medium of text provides researchers choosing to conduct open interviews with the additional advantage of reducing their cognitive load whilst maintaining the flow of the interview. For example, as interviewer and participant are not face-to-face, the interviewer can take and check notes without disturbing the flow of the interview and can re-read responses.

The data collected from text based interviews may have implications for data analysis. Our findings show that while both one-to-one face-to-face and VOIP interviews resulted in a similar number of words elicited from participants, text-based interviews resulted in significantly less words. For example a 27 min face-to-face interview and 28 min inworld VOIP interview resulted in 3,705 and 3,822 words respectively. By comparison a 28 min text based interview resulted in 669 words from the interviewee.

It should be noted that the speed of typing by comparison to producing verbal language is much slower and may additionally discourage participants from being verbose. Self-censorship or editing responses may also reduce the number of words and researchers may wish to consider recording participants' screens to record this data, with permission.

There may be a number of questions that arise from this for data collection as well as analysis. For example where a participant requests to take part in the interview through text while the majority of participants take part in VOIP based interviews, is the data equally valid? Does it provide the same depth? Dependent on the data analysis approach, if text based interviews provide less depth it may be worthwhile to conduct them first, analyse them for emergent codes and themes, then use VOIP or face-to-face interviews to explore these in depth. Similarly this may support convergent interviewing.

Another implication of conducting interviews inworld is the role of the avatar. While Knorr et al. (2011) found during VOIP-based interviews that, despite prompting, there was no interaction between interviewer and interviewee avatars and participants did not initiate any movement, the participants involved in the study had no previous experience of virtual worlds. It is therefore unsurprising that one participant described "Having a person standing in the middle of the virtual world with no real purpose was a little strange". To be able to effectively compare and conduct face-to-face and inworld interviews we believe it is necessary for both interviewer and interviewee to be comfortable with the medium. Inworld this not only includes VOIP or text but also the use of an avatar (see editors' introduction, this volume).

The findings from our own research suggest that avatar interactions were common in text interviews, with participants sharing objects and moving around the environment. As a result the avatar is more than just an embodiment of the interviewer and participant(s) in a 3D environment but another communication mode and further research needs to be conducted to explore the impact of the avatar on the interview process.

Although it is not possible to observe the participant directly, it is possible for the researcher to observe and record the actions of the avatar if prior permission has

been obtained. However it should be noted that the avatar is controlled by the participant, therefore the researcher can only observe what the participant chooses to share, which may or may not be misleading. As suggested, it may also be of interest to observe/record participants' screens, particularly in group interview settings, providing insight into what was typed and then edited before sending, or not.

## 2.7 Constraints

While there are a number of opportunities that inworld interviews can provide the researcher, there are also a number of constraints to which the researcher should be aware. Text based interviews can be perceived as slow, thus discouraging participation. We also found that in group-based text interviews it could be particularly difficult for the interviewer to gain the attention of participants when they began to go off-topic.

Some constraints, such as the lack of non-verbal cues, can be difficult for the interviewer to work with, while others may be turned into an advantage. For example, in group inworld interviews, participants may engage in back-channel conversations through local-chat, IM or, as found in one case, through VOIP. These conversations may be distracting to participants and result in a lack of engagement with the interview. However it may be possible for an interviewer, with permission, to collect these as an additional data set.

Not all participants may be comfortable using text based communication tools and may find the medium 'slow' due to the time taken to type messages. Using text may also discourage learners from participating if they have a perceived language barrier. In addition participants may misread questions, the equivalent of which did not occur in face-to-face or VOIP interviews. For example, in one text based interview a participant began answering a different question to the one asked, stating "oops, didn't read the question" when this was realised.

Our findings show that in both one-to-one and group interviews participants may wish to take a break from the interview. While in a one-to-one interview a participant may request a short break, in group interviews they may not make this request. As a result a particular concern in group text based interviews is the 'invisible whilst present' interviewee. What this means is that although the participant's avatar is present in the interview location, the researcher is uncertain as to whether the participant is there or not. This leaves the interviewer uncertain as to whether the participant is experiencing a technical problem, is listening to others or has left their computer. Depending on the situation different courses of action may be required and there may be an implication for the data collected.

Finally, as text based interviews do not project identifying features such as gender, validating informed consent by verifying that the person giving consent is who they say they are, becomes more difficult. Despite the ethical concern, accepting unverified consent is not uncommon in online educational research

(Kanuka and Anderson 2007). Researchers willing to accept unverified consent therefore need to be aware that participants may misrepresent demographic information, particularly if they have an incentive to do so (Girvan and Savage 2012).

## 2.8 Techniques

In this section we focus on techniques to address some of the constraints and opportunities discussed, to support researchers whilst conducting interviews inworld. To address the phenomenon of ‘invisible whilst present’ participants, at the start of group interviews the researcher may indicate that any participant needing to leave the interview for any reason may do so, and should inform the researcher. Depending on the context this may be most appropriate via a private IM to the researcher. While this may not discourage participants from disengaging, it should encourage participants to acknowledge to the researcher that they have left and may thus be noted in transcript annotations.

In one group text based interview we had a participant who suddenly stated “brb” (be right back). The remaining participants continued to talk and when the missing participant returned the researcher had to get them ‘up to speed’ by informing them of what they had missed and asking any questions they had missed. The result of this can be a loss of interview time as the interview is paused and the researcher has to type. However this may provide a useful review for participants, particularly in open interviews.

When conducting research inworld, a number of alternative researcher strategies need to be employed as interviewer and interviewee(s) are unable to see each other, and thus non-verbal cues are lost. This is particularly true in text-based interviews when they are also unable to hear each other. While inworld tools such as gestures and animations may be used, we have found them to be distracting to participants and sometimes go unnoticed. Instead we use emoticons and emotes. For example, typing “/me” followed by “nods” will be displayed as “[Avatar name] nods” in Second Life. This provides the interviewer with an opportunity to add a form of non-verbal encouragement and demonstrates that the interviewer is still engaged. There was evidence that these techniques were also used in group interviews by participants who had familiarity with these gestures.

Demonstrating engagement is particularly important when researcher and participant cannot see or hear each other and should be remembered when note-taking or scrolling through interview text during the interview. Another approach used to demonstrate that the interviewer is engaged is to comment directly on what the interviewee has said, for example “That’s an interesting point, do you think it affected how you worked?”

Whilst the interviewer accidentally interrupted participants across all media, our findings show that interviewer interruptions most commonly occur in text-based interviews in both one-to-one and group settings. This is attributed to the lack of non-verbal cues, as it is not possible to anticipate if someone is about to type.

Our findings show the average utterance length in text based interviews was 10 words as participants would tend to use several short messages. In group interviews this may result in the appearance of participants interrupting each other. As a result it may not always be possible to know whether participants had finished their answer or whether they had become silent because a more dominant voice had moved the conversation away from the point they wished to make. This can also cause additional confusion when analyzing the transcript at a later date. To address this it may be necessary to annotate text transcripts as soon as possible after the interview to clarify any sections that may be confusing later on.

The lack of non-verbal cues, combined with the artificial silence created whilst waiting for someone to type, can result in the text ‘flying’ (or in other words, appearing too fast) during group interviews. This occurs because several participants are composing their responses at the same time and sending them within a short space of time to one another. Those that use multiple short responses can compound this substantially. This can be difficult to read, lead to several conversation threads, has the potential to exclude participants who are not comfortable with the speed and can cause confusion for the researcher reading the transcript at a later date. If all participants are engaged and the researcher is experienced this can result in a fast flowing conversation with multiple views expressed. Less experienced researchers may wish to use a turn-taking policy. This will slow the pace of the communication and make it clear who is responding to what. This may be achieved by asking participants to respond only when directly asked. While this may also support participants less comfortable with this medium, there are disadvantages such as the silence created waiting for responses and additional time to conduct the interview. Both of these can also lead to disengagement with the interview and increase the possibility of invisible whilst present participants. With experience, the researcher should be able to manage multiple threads and engage those not participating. One technique to achieve this is to recap the points made and ask for an individual’s opinion.

From our experience as research participants in one-to-one text based interviews we have found that silence, although a traditional interview tool, can be difficult to use well in this medium. For example in our own interviews we would wait whilst we observed the participant’s typing animations or in IM saw messages such as ‘X is typing’. However as participants, having given a detailed answer to a question, we have waited while our interviewer has remained silent with no typing animation. This has given us the sense of great unease, wondering whether the interviewer is experiencing technical problems, is away from their computer or is otherwise not engaged in what we had to say.

We recommend that interviewers should avoid using silence during text based interviews as it may lead the participant to believe that the interviewer is uninterested or is experiencing technical problems. As such the traditional interview technique of using silence to prompt the participant to expand on what they have already said is not appropriate. However participants still need to be given sufficient time to think and respond to questions. Both IM and local-chat animations provide the researcher with cues that the interviewee is typing and so participants should be encouraged to turn the typing animation on if previously turned off. As a result it is clear in Fig. 2.2 that the two participants closest to the camera are still typing responses.



**Fig. 2.2** Group interview

Group text based interviews were identified as the most likely to contain off-topic utterances and the most difficult in which to gain the attention of participants. In seven out of the eight group text based interviews there was evidence of off-topic utterances from participants. This was contrary to our initial expectations which suggested that off-topic utterances would be least common in text-based interviews. The off-topic utterances were related to in-world distractions such as props and animations, for example an avatar drinking a Martini resulted in the other participants joking and sharing objects. Interestingly humour was most common in text based group interviews. The percentage of off-topic utterances in an interview averaged 9.39 % across the seven interviews with 15.72 % the highest.

Our data show that regaining the attention of participants when they go off-topic is most difficult in group text interviews, over any other medium or form. In one example it took the researcher two minutes to regain the attention of the group and direct them on to the next question. Tactics included the use of capital letters e.g. “NEXT QUESTION” and persistent short messages. It is important in contexts such as this, especially when time is limited, for the researcher to remember that text-based communication is open to misinterpretation. For example while short messages can be used to gain attention they may also fill the screen, which in addition to gaining attention may be perceived as rude. In the case of the two minute attempt to gain the attention of the participants and to move them onto the next question, the interviewer took 50 % of the lines of text and used short messages such as “guys”, “if we may....”, along with longer utterances such as repeating the question. It is also important to consider the rapport between interviewer and interviewee(s).

In this context the researcher had recruited participants and engaged with them throughout the learning experience which had taken place over several days.

While off-topic utterances such as sharing drinks between avatars may be useful to support group cohesion they can be distracting mid-interview. The researcher should therefore provide an opportunity for participants to engage in such social activities prior to the interview, for example by offering them a virtual cup of tea via the avatar's inventory.

## 2.9 Guidelines

Presuming that the purpose of the interview, type and form have already been established and inworld text based interviews have been chosen as the medium, the following guidelines are broken down into three phases: prior, during and post interview.

The key considerations prior to conducting the interview focus on the researcher, participants, group interviews, interview location, data collection and ethical concerns. During the interview the researcher has to focus on the implications of using synchronous text based communication as the medium. The speed of text based communication, interruptions, location, engagement, and lack of non-verbal cues are all presented and can be further complicated when conducting group interviews which can magnify these issues. After the interview both data and participants require the researcher's attention.

### 2.9.1 *Prior*

#### **Researcher**

- The researcher needs to be experienced in navigating and communicating in the virtual world.
- If a slow typist, consider structured or semi-structured interviews as questions may be pre-typed, ready to be cut and paste into the text channel.
- Turn on avatar typing animations, if supported by the virtual world, to reassure participants of engagement.
- Consider the appearance of the interviewer's avatar. Is it appropriate for the context?
- Be aware that participants may check the avatar's profile, which should therefore include relevant professional and personal information. For example a student may state the name of their course and institution.
- Consider creating an avatar purely for research purposes but be careful not to mislead participants.
- Avoid. deception.

## **Participants**

- Ensure that the participants are familiar with the virtual world and communication tools to be used.
- Consider participants' preference for voice or text based communication.
- Decide, and agree with the participants, whether to use real names or avatar names.

## **Groups**

- Decide whether or not to record back-channel communication between participants and how these will be recorded.
- If interviewees are co-located, will they communicate with each other face-to-face? Consider whether/how to collect this data.
- Provide time for group cohesion and social exchange prior to the interview.
- Engage in ice-breaking avatar activities, such as sharing virtual cups of tea, to overcome novelty, build rapport and reduce distractions later.
- Plan for breaks if needed and agree with participants whether and how breaks may be requested.
- Request that participants inform the researcher should they disengage with the interview at any point for any reason.

## **Location**

- Consider whether to use the location of the learning experience, a purpose-built meeting space or neutral inworld venue.
- A private, access controlled area is preferable but if not possible plan how to limit interruptions.
- Ensure that all participants have access to the venue in advance of the interview.
- Provide a comfortable location, e.g. with chairs for the avatars.
- Ensure that both researcher and participant have sufficient permissions to create objects and run scripts as necessary.

## **Data Collection**

- Decide whether public or private communication tools are to be used. This may be dependent on the location or participant preferences.
- Decide whether or not to record observations and how this will be done.
- Ask participants to record the interview (as well as any back-channel conversation between participants) in case of technical problems, using cut and paste or settings in the application.

## **Ethical Concerns**

- If inworld tools are to be used to collect data ensure that these comply with any terms of service of the virtual world and that participants are aware of them and what they will record.
- Any offline tools used to collect data need to be described to participants in advance.

- Ensure that participants are aware when data is and is not being recorded and how it will be recorded.
- If in a public location ensure that data is only collected from those providing consent and consider using private communication tools.
- Consider how informed consent will be collected and validated.

## **2.9.2 During**

### **Speed of Text Communication and Sequencing**

- Recognise that text based communication can be slow and therefore frustrating to participants.
- Have your interview questions ready in a text document to cut and paste into the text channel.
- Use multiple short lines of text when composing questions and to reduce the 'silence' experienced by participants as you type.
- Recognise you may have to remind people of the question, especially if the question is no longer visible in the chat channel due to multiple responses.
- Be prepared to provide participants with a short recap of main points that have been covered during the interview.

### **Interruptions**

- Recognise that interrupting each other is common in text based interviews and expected in group text based interview.

### **Interviewing in the Location of the Learning Experience**

- Use the location to prompt discussion and responses.
- Lead the respondents around the location according to your question context.
- Ask respondents to show you the items or areas that demonstrate their responses.
- Accept that there will be off-topic utterances, commonly triggered by elements in the environment.

### **Maintaining Engagement**

- Use non-verbal cues such as avatar animations, emoticons or emotes to demonstrate engagement.
- In open interviews explain the link between what the participant has said and the question to be asked. Remember to use short lines of text.
- Make notes concurrently with conducting the interview, this can be achieved with an inworld text editor to avoid switching applications. Also useful if asked to recap during the interview by a participant.

### **Non-verbal Cues**

- Consider using avatar gestures but be aware that they may become distracting or go unnoticed.
- Use emoticons and emotes in text.



- Promote engagement by commenting directly on what the participant is saying or summarizing their responses back to them for validation.
- Recognise that the lack of non-verbal cues causes participants to interrupt each other.
- Avoid “silence” as a technique to elicit more information from a participant as it promotes a sense of unease or uncertainty for them.

### **Group Interviews**

- Be aware that your respondents have differing typing proficiencies and that whoever types the fastest speaks the loudest.
- Text can appear too quickly so be prepared to outline key points and request individual responses.
- Monitor who is not responding in group interviews and elicit their opinions.
- With a particularly dominant or quiet participant consider directing questions at individuals within the group or introduce a turn-taking policy.
- Multiple responses in the text channel can become confusing so be prepared to seek clarification as to what question or comment a response may be referring to.
- Be prepared to summarise any missed discussion and directly ask individuals for their response.
- To regain attention in a group interview, use short utterances and take care not to appear rude.
- Decide when to move on to the next question or topic and make this clear to all participants.
- Monitor private messages in case a participant should wish to speak to you privately.

## **2.9.3 Post**

### **Participants**

- Thank them for their time and answer any questions they might have.
- Establish whether and how contact will be maintained, for the reporting of results etc.
- Collect interview and observation data collected by participants.

### **Preparing the Data**

- Copy the text transcript immediately from the virtual world and store securely.
- Read the transcript through and annotate areas that may be confusing at a later stage.
- Synchronise notes and observations with the transcript.
- Anonymise names including avatar names. Be aware that participants may use short forms of names, so a ‘find and replace’ may not be sufficient.
- Remove any text that came before or after the interview.

## 2.10 Conclusion

In order to understand a learners' experience, inworld interviews provide an opportunity to use not only the location and objects of the original learning context but to also use the most prevalent communication medium. This provides researchers with opportunities that would have been unavailable to them in a face-to-face interview context. However along with these opportunities there are constraints that need to be considered.

This chapter has presented techniques and guidelines to reduce the constraints and leverage the opportunities of conducting inworld interviews through text. The guidelines highlight key considerations the researcher should make prior to, during and post interview. Researchers can apply many of these points to inworld voice interviews.

When deciding whether to collect data inworld, researchers need to consider how the medium of the interview may influence the discourse between interviewer and interviewee(s). It is through this discourse that data is generated. Therefore the researcher must remain cognisant of the opportunities and constraints of conducting interviews inworld, the implications for data collection and analysis, as well as the techniques which will be required. By keeping these in mind throughout the research process, researchers using text based interviews in virtual worlds will provide a strong foundation to the data collected.

## References

- Anderson, K. (2007). Ethical issues in qualitative e-learning research. *International Journal of Qualitative Methods*, 6(2), 20–38.
- Brenner, M. (2006). Interviewing in educational research. In J. Green, G. Camilli, & P. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 357–370). Mahwah, NJ: Lawrence Erlbaum Associates.
- Chen, P., & Hinton, S. M. (1999). Realtime interviewing using the world wide web. *Sociological Research Online*, 4(3). <http://www.socresonline.org.uk/4/3/chen.html>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River: Merrill Prentice Hall.
- Girvan, C., & Savage, T. (2011). Conducting text-based interviews in virtual worlds. In A. Peachey (Ed.), *Proceedings of researching learning in immersive virtual environments (ReLIVE2011)* (pp. 78–86). Milton Keynes: The Open University.
- Girvan, C., & Savage, T. (2012). Ethical considerations for educational research in a virtual world. *Interactive Learning Environments*, 20(3), 239–251.
- Girvan, C., Tangney, B., & Savage, T. (2013). SLurttles: A tool to support constructionist learning in second life. *Computers in Education*, 61(1), 115–132.
- Hew, K. F., & Cheung, W. S. (2010). Use of three-dimensional (3-D) immersive virtual worlds in K-12 and higher education settings: A review of the research. *British Journal of Educational Technology*, 41(1), 33–55.

- Jarmon, L. (2009). Pedagogy and learning in the virtual world of second life. In P. Rogers, G. Berg, J. Boettcher, C. Howard, L. Justice, & K. Schenk (Eds.), *Encyclopaedia of distance and online learning* (2nd ed., pp. 1610–1619). Hershey, PA: IGI Global.
- Jepsen, D. M., & Rodwell, J. J. (2008). Convergent interviewing: A qualitative diagnostic technique for researchers. *Management Research News*, 32(9), 650–658.
- Kirriemuir, J. (2007). *An update of the July 2007 “snapshot” of UK higher and further education developments in second life*. Bath: Eduserv.
- Knorr, R. M., Bronack, S. C., Switzer, D. M., & Medford, L. F. (2011). Methodology of a novel virtual phenomenology interview technique. *Journal of Virtual Worlds Research*, 3(3). doi:[10.4101/jvwr.v3i3.1400](https://doi.org/10.4101/jvwr.v3i3.1400)
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing*. London: Sage.
- Minocha, S., Tran, M., & Reeves, A. (2010). Conducting empirical research in virtual worlds: Experiences from two projects in second life. *Journal of Virtual Worlds Research*, 3(1), 3–21.
- Moschini, E. (2008, November). The second life researcher toolkit. An exploration of inworld tools, methods and approaches for researching educational projects in second life. In *Proceedings of the researching learning in virtual environments conference, ReLIVE08*, Milton Keynes.
- Tuckman, B. W. (1994). *Conducting educational research*. London: Harcourt Brace College Publishers.
- Vasileiou, V. N., & Paraskeva, F. (2010). Teaching role-playing instruction in Second Life: An exploratory study. *Journal of Information, Information Technology, and Organizations*, 5, 25–40.

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