

Chapter XXII

Education Research with Electronic Focus Groups

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ABSTRACT

An emerging trend in education research methods is to integrate digital technologies into the research process. Electronic focus groups represent one such innovation. Drawing on four examples of research and practice undertaken using a synchronous, digital system, this chapter reflects on how an innovative tool can assist in focus group research in the fields of school and higher education. The examples presented illustrate how some of the theoretical, practical, and ethical problems that have arisen with traditional approaches to focus groups research can be overcome. It is anticipated that reflecting on such experiences and building upon the findings of these research projects will enable an understanding about the potential for innovative practices in education research that are possible with digital technologies.

INTRODUCTION

The use of technologies to assist in undertaking research is not a new phenomenon. Technologies such as notepads and pencils, cameras and tape recorders have assisted qualitative researchers' recording of data for some time. Since the turn of the 21st century however, there has been an

emerging interest in the incorporation of digital technologies into research methods including in focus group techniques. Electronic, synchronous focus groups and online, asynchronous focus groups have both emerged as research strategies. Choices about what digital technologies are used in research and how they are utilised through the synchronous digital system depend on

the nature of the research to be undertaken, and have consequences for the nature and quality of the data collected. While early work (Fitzgerald & Findlay, 2004) with *Zing* has shown it has the capacity to scaffold complex thinking while fostering collective sense making, it is argued here that when brought together with focus group techniques, the *Zing* system enables the incorporation of group interview strategies and generative social processes that are highly suitable for robust qualitative research data collection.

This chapter examines innovative examples of how the *Zing* digital system has assisted in the generation of qualitative research data. But before investigating these examples of research, it is useful to contextualise the discussion. We do so by firstly providing an overview of what is *Zing* and secondly by conceptualising digital technologies in relation to research, and in particular focus group research methods. Clarifying what is understood by these products and concepts is important because it is at the intersections of these that the arguments in this chapter are positioned.

BACKGROUND

This chapter starts from the premise that the use of digital technologies in research requires a level of technical knowledge, socially and theoretically applied in order for the technologies to meet their purposes. Different people require different levels of technical knowledge depending upon what sorts of technology they are using and for what purposes they are being used. Technologies are social and cultural constructs. They are created by people to apply to or to solve particular problems; they do not miraculously appear from thin air for no purpose. In order to consider the role of *Zing* in education research a brief description of what is the *Zing* system is provided here and shortly an explanation of how it is used in qualitative research methods is outlined.

The *Zing* system is a tool that combines hardware with a software application to enable the connection of multiple keyboards to a single computer to create a shared working space. It therefore allows individuals and groups to work together in the same space and time. *Zing* can be used in face-to-face or online settings, with both versions enabling several cursors to work on the same screen at once. Each cursor is allocated its own self-contained space on the screen. The face-to-face version of the tool comprises a computer with up to 12 keyboards attached via a multiplexer to display the multiple monitors as a common image to all participants. As such *Zing* can be arranged with the 12 keyboards linked to a portable computer thereby allowing a total of 13 cursors (i.e., the 12 keyboards and the portable computer's cursor) to operate at once on the same screen. With the use of a datashow and large screen, research questions can be shown visually to all the participants simultaneously. The online version of *Zing* employs a similar interface to the face-to-face version, and enables a network of computers to be connected via a server over the Web for real-time online sessions.

Zing has its origins in Group Decision Support Systems (GDSS) as an electronic meeting system for business purposes. It was originally developed as a tool to help organizations work more effectively in teams. Over the past 10 years it has become widely used in Australia and the United Kingdom as a tool for team building, strategic planning, business process re-engineering and stakeholder facilitation (Fitzgerald & Findlay, 2008). More recently, the software has been used for data collection in education research projects. In order to demonstrate how the system can contribute to data collection in qualitative research, it is necessary to reflect on what we understand by research, digital technologies, and the emergent notion of electronic focus groups as “e-research.”

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