

## Chapter 17

# Using Digital Tools in Qualitative Research: Supporting Integrity, Simplicity, Deep Insight and Social Change

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### ABSTRACT

*Digital tools can help simplify qualitative researchers' work. They can also add depth and richness by capturing data in a way that can be viewed and reviewed without preliminary transcription. This chapter shares an approach to working with digital data that honors participant voice and the lived experiences of those under study. The chapter also suggests new tools and common software applications. Further, it suggests a workflow to guide researchers as he or she begins to work to incorporate digital data into their studies.*

### INTRODUCTION

In 2005 I wrote my first article on the use of digital tools to support qualitative research (Crichton & Childs, 2005). In that paper, coauthored with my doctoral student, we described an approach I developed and that she used to work with primary

source data (in that case digital recorded interviews) and minimize the need for transcription. Our argument was, by clipping and coding the digital files, using simple editing software, the vitality and integrity of the participants' voices and lived experiences were retained throughout the data analysis process. Further, we described a process of maintaining tables within Microsoft Office that would help researchers to organize

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themes and codes as well as references and digital data to determine when a research theme had become saturated.

Since that time, researchers and graduate students (Childs, 2004; Shervey, 2005; Bremner, 2007) have contacted me about the approach, and I have presented it at various conferences (Hawaii International Conference on Education; International Advances In Qualitative Methods Conference)—typically receiving great enthusiasm and interest. I have used this approach extensively in my own work—often with unexpected impacts such as those described later in this paper (see A Case in Support of the Point). Existing and emerging technologies are helping to make this approach easier and appropriate to different approaches to qualitative research.

Einstein's statement "Everything should be made as simple as possible but not simpler" helps frame the discussion in this paper of how and why we might use digital tools for qualitative research.

## **BACKGROUND**

In 2005 we wrote "Qualitative researchers have been attempting to make sense of the world around them since armchair anthropologists and sociologists left the confines of their familiar environments and ventured into the field (Crichton & Child, 2005; Crichton, 1997). Little has changed about the nature of the work and the challenges of working in the field. What have changed are the rapid development of digital tools and the increased availability of rich digital sources of data.

Typically, qualitative research, in particular ethnography and case study attempt "to construct in-depth depictions of the everyday life events of people through active re-searcher participation and engagement" (Crichton & Kinash, 2003, p. 102). Therefore, the biggest challenges of the work is managing the sheer quantity of data captured and the need to develop an elastic yet rigorous structure in which to organize and analyze it. Further, this

management structure has to be nimble enough to allow the researcher to "read" and "re-read" the data, and organize and share it in a way that is accessible and ethical. The researcher has the added challenge of representing and maintaining the integrity of the firsthand experiences, in a narrative form that allows a reader, not familiar with the field, to gain insight and make personal sense from the rich description. As Genzuk (2004, p. 10) notes, it is through the narrative that "readers ... understand fully the research setting and the thoughts of the people represented ... [stopping] short, however, of becoming trivial and mundane" (Genzuk, 2004, p. 10).

With a bounty of rich digital data, the researcher is challenged to determine the balance between the essential description required to set the context and the critical analysis and interpretation that is necessary to help the reader come to an understanding of the findings. When that balance is achieved, the reader is able to interpret and understand the work and make relevant links that might extend the work and generalize the findings.

Typically, research findings that have been reached using qualitative methods will include thick descriptions of the experiences, contexts, and general environment of the site, individuals, and/or phenomenon under study. These descriptions are critical for the reader to understand the details of what has happened and the various viewpoints of the participants. They help to create a holistic picture, so that the findings do not lose their credibility and impact. Traditionally, these findings have been reached through the analysis of transcribed data or using [complicated and expensive] qualitative analysis software (Crichton & Kinash, 2003).

## **SUPPORTING A DIGITAL PROCESS**

Many researchers (Creswell, 2003; Merriam, 1998; Hammersley, 1990; Stake, 1995) would agree that qualitative research is, at its core, so-

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