

CHAPTER THREE DESIGNING e-RESEARCH

It is the theory that decides what can be observed.

Albert Einstein

Because the Net is a large, multipurpose, evolving tool, determining its best use in

any research application is a challenging task. However, the Net is also

Famous for

spurring innovation at "Internet speed." Frequently leaving authors of paper books

struggling to keep up. In this chapter we discuss what is perhaps the most important

and challenging task of the e-researcher—to design research that asks meaningful and

answerable questions and that coherently answers these questions in ways that match

the personal worldview of the researcher, the sponsor of the research, and the subjects

of investigation.

Considerable research is being conducted using the Internet as a data-gathering,

analysis, and dissemination tool, even though the advantages and disadvantages of

using the Internet for these purposes remain relatively unexplored. Often, those using

the Net do so with little guidance with respect to what kind of research data is most

appropriately collected online. Based on work by early adopters of e-research, it would

appear that when the researcher has a good understanding of the Net (including its

culture and technological limitations and advantages) that almost any kind of research

could be effectively adapted. Further, when creatively approached and thoughtfully

designed, research can be conducted and disseminated using the Net with a number of

notable advantages, which are discussed in the last section of this chapter.

This being

said, there are circumstances under which the Net will be of little or no use to the

research process. At one time, for example, the Net was only useful for observing

activities that took place on it. Now, however, Net-based surveys, focus groups, inter-

views, and unobtrusive Web cameras (Webcams) allow researchers to observe and collect data about events that take place both on and off the Net. Much of the research in the social sciences and education focuses on processes that cannot be seen and measured with external and quantifiable tools (e.g., the internal mental processes of learning). Since these processes are invisible, it takes the innovative skills of the researcher to develop both Net and non-Net techniques to understand