DOING QUALITATIVE RESEARCH ONLINE

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Qualitative Approaches for Research in a Data-Intensive World

HIGHLIGHTS

Online communication pervades our lives. Now that it has leapt from our desks into our pockets, we communicate with others and access information anytime and anywhere. When we use these same approaches for qualitative research, either to communicate with participants or to access posted material, the considerations at play are quite different from those present in social uses of technology. In this chapter, the basic elements of qualitative research are discussed and then applied in the online context. The *Qualitative e-Research Framework* is introduced as a tool for thinking through and organizing the key elements of online qualitative research design.

OBJECTIVES

After reading and reflecting on this chapter, you will be able to:

- Understand the defining characteristics of qualitative research
- Analyze the attributes of online communication
- Consider ways qualitative research approaches can use online communications for data collection
- Understand key questions for applying the Qualitative e-Research Framework to the research design process.

QUALITATIVE RESEARCH: UNDERSTANDING HOW THE WORLD IS SEEN AND EXPERIENCED

What is *qualitative research*, and for what kinds of research questions is it appropriate? A common, universally agreed-upon definition is elusive. Qualitative researchers typically eschew simplistic descriptions and do not look for the big, generalizable answers. They are interested in the nuanced and the particular in their efforts to understand human experience. Rather than trying to define qualitative research, it might be more useful to understand its defining characteristics in order to apply those characteristics to new online approaches.

Qualitative inquiry is focused on studies designed to generate new understandings of the meaning people give to their lives (Yin, 2011). Qualitative studies aim to provide an in-depth and interpreted understanding of the social world of research participants by learning about their social and material circumstances, their lived experiences, perspectives, and histories (Snape & Spencer, 2003, p. 3). Given these broad goals, qualitative researchers operate from the assumption that people construct their own realities and interpret the world in unique ways.

Within these universal principles qualitative researchers have developed more particular approaches that guide the ways they study individuals or groups, organizations, communities or society. These **methodological** frameworks provide theoretical and practical guidance that helps researchers design studies that can focus on a particular issues associated with a research problem. Qualitative studies are carried out using data collection **methods** which involve close contact and interaction between researcher and participants to collect detailed, information-rich data (Snape & Spencer, 2003, p. 5). Qualitative researchers also try to understand the human experience with methods that entail careful review of static data sources found in documents and archives (Mills & Birks, 2014). Unlike quantitative research which involves large groups of participants, qualitative researchers engage small samples of participants selected because these individuals have experiences that will help the researcher understand their perspectives on the problem at hand. Qualitative research is emergent in nature, is reflexive and process-driven (Butler-Kisber, 2010; Hesse-Biber & Leavy, 2010) because researchers continue to look for and develop new ways to study and comprehend the lived experience. And it involves a holistic approach that is reflexive and process-driven (Hesse-Biber & Leavy, 2006).

Qualitative research is focused on generating in-depth, detailed explanations of the research problem or phenomenon based on the perceptions, experiences or behaviors of individuals or groups. The researcher learns about the nature and dimensions of these perceptions, experiences or behaviors by asking the individuals (interviews, focus groups), watching them (participant or unobtrusive observation), and/or by reviewing their writings or expressions (documents, written or visual expressions or records). Researchers may use one or more of these

methods within a single study. Once data has been collected, researchers review and analyze it using inductive and abductive reasoning to move from the particular to themes and trends and to generate findings.

For the purpose of this book, a concise working definition will be used:

> *Qualitative research* is an umbrella term used to describe ways of studying perceptions, experiences or behaviors through their verbal or visual expressions, actions or writings.

QUALITATIVE RESEARCH IN THE INFORMATION AGE

Qualitative research as defined above and the Internet have something in common: for both, communication and exchange are central. They would seem a natural fit! To consider the implications for doing qualitative research online it is important to understand the nature of the online milieu and Internet-mediated communications. While many conventional methods can be adapted and adopted to research conducted online, new thinking and emergent approaches are called for that make use of the unique forms of exchange and data retrieval possible online.

Online Communication Attributes

Communicating online has become a part of everyday life for many people, so the means of doing so has become routine. Step back and reflect on what you do each day with your computer, tablet or smartphone.

With little forethought, when we want to reach the people we know we may elect to tap out a text message, send an email, make a post on a social media site, or turn on the web camera and converse by video chat. We look for sites that offer us ways to find and exchange ideas with people who share common interests or experiences—or those we disagree with on politics and social issues. We may create ongoing relationships and enduring bonds with folks we will never meet in person.

Online communications allow us to convey the same message to many 'friends' or 'followers' or to total strangers by sending it to an email list, posting it on a website, blog, and social networking site or comment area. Or we participate in group exchanges where anyone can initiate and/or respond to messages. The first example can be described as a 'one-to-one' dialogue, the second is an example of 'one-to-many' and the third of 'many-to-many'. In Table 1.1 online communication options are distinguished by the type of interaction and notions of one-to-one, one-to-many or many-to-many. These distinctions become fuzzy when individuals can forward or post messages intended as one-to-one to other recipients with or without the permission of the original writer.

Table 1.1 ICTs and communication

Communication Options	One-to-One	One-to-Many	Many-to-Many
Text	Email	Posts to websites	Social networking sites
	Text message	Blogs	Comment areas
	Chat	Microblogs	Crowdsourcing
		Email list	Discussion forums
Verbal	Voice over Internet Protocol (VoIP) calls	Podcast	Voice over Internet Protocol (VoIP) conference calls
Visual	Image or media attachments	Image or media attachments	Virtual worlds
	Links to images or media	Links to images or media	Massively open online games (MOOGs)
	Interaction as visual, digital or avatar representation	Vodcast	
		Interaction as visual, digital or avatar representation	
Mixed or multiple	Videoconference, video chat	Webinar	Virtual worlds
	Web conferencing space		Massively open online games (MOOGs)

Reciprocal computer-mediated exchanges of message and response may occur at the same time (**synchronous**) or we may post or send a message not knowing when a response will be received (**asynchronous**). Communication may occur through text-based, verbal and/or visual exchanges and is facilitated by the computer or device used. We select among options made available to us by the design and function of the hardware (computers, laptops, mobile devices or phones), bandwidth of connection, and software interface. The design and function of most information and communications technologies (ICTs) and social networking sites (SNSs) are driven mostly by highly competitive commercial interests. Each has affordances (the ability to communicate anywhere with mobile devices) and restrictions that may be obvious (you can only post certain image formats or message lengths) or subtle (incompatibility of competing software). The features may or may not align with the priorities of those who want to communicate online.

We may communicate online with words alone, through written (text messages, chat, posts or email) or verbal conversations or recordings (**Voice over Internet Protocol (VoIP),** podcasts). Or we may decide to communicate visually, by sharing a

picture or media clip which we have created or found online. Alternatively, we may decide to share applications, enter a **virtual world** or game, and interact through an **avatar** or digital persona we have created.

When we communicate face-to-face we are together in the same place and time. We see and hear each other, sending and receiving complex verbal and **non-verbal** signals. Face-to-face we see and hear people and things in the environment in a space we experience together. We may have a physical connection—a touch on the arm, handshake or hug. Some of these ways of communicating are replicated online. For example, with videoconferences, calls or chats we can see and hear each other even if we are not face-to-face. We can use gestures and non-verbal signals; we may display emotions. But in this instance we are in our own respective environments that may be geographically close or on the other side of the globe. We share only what can be seen through the lens of the web camera, which we can choose to direct in such a way as to reveal, disclose or avoid other elements of the environment.

Another distinction between online and face-to-face communication relates to the concept of privacy.

> The concept of privacy can generally be defined as the individuals' ability to control the terms by which their personal information is collected and used. It has also generally been defined as the right "to be left alone," meaning that it represents a sphere where it is possible to remain separate from others, anonymous and unobserved. (Karyda et al., 2009, p. 196)

Unless we are government spies who suspect that we are being bugged by enemy agents, in a physical room when we close a door we generally expect that the conversation is being conducted in private and no enduring record documents it. We rely on the ability to close the door and have private moments in life. Online, every communication leaves some kind of footprint or trace. Each site has varying policies about the level of privacy users can expect, and the degree of protection of information posted using their services.

> Users supply personal information to service providers with every post, query or click in applications like Google Search, Facebook, and Twitter. Users benefit from this data exchange because they can use search technology, social networks and the like without charge. Yet the relationship between citizens and service providers is highly asymmetric, and the resulting loss of privacy for users and bystanders is profound. The providers of these services exploit this content in a wide variety of ways. (Oostveen et al., 2012, p. 44)

The user's profile information and record of communication may be available, to some degree, to other users, the company hosting the site, and others. Some users are aware that they are making a choice when they create online identities or settings or select where to participate and what information to share about themselves. Others are unaware of the implications of seemingly innocuous online activities.

What motivations underlie our decisions to communicate via text or email versus video chat or posts to a social media site? Do we think about what is most convenient or preferable for us, for the person with whom we want to have a conversation, and/or group with whom we want to share? Do we aim to match the medium to the message? Do we consider whether or not the message is private, or whether it could be made public without our authorization? Our decisions about what ICT to use for personal and social communications or information gathering may be made based on our own preferences, but when using the Internet for research the decisions must be much more strategic. Choices need to be appropriate for the participants with whom we interact, and permit collection of the types of data that will allow us to answer the research questions.

Qualitative e-Research

What do the attributes of online communication mean to qualitative researchers? Qualitative research approaches and online communication share some characteristics since both place essential value on the significance of human exchange. The working definition introduced earlier can be refined to encompass online methods:

> *Qualitative e-research* is an umbrella term used to describe methodological traditions for using *information and communication technologies* to study perceptions, experiences or behaviors through their verbal or visual expressions, actions or writings.

The presence of the Internet in the research design does not necessitate a wholesale redefinition of qualitative inquiry per se. Yet even this subtle shift in definition carries numerous implications for the research design, methodologies and methods, conduct, ethics and reporting. Online, qualitative researchers have numerous options for selecting and studying participants regardless of geographic location. Given the varied modes of Internet-mediated communication that are possible, researchers also have numerous options for the types of data (text, visual, media) and ways to access it. These wide-ranging possibilities call for new ways to think about research designs that take into account the unique characteristics of the Internet.

Adapting Qualitative Research for the Online Milieu

Rich data is at the heart of a qualitative study. Where and how the data can be found, drawn out or generated online is as broad as the Internet itself. Any way that people can communicate using computers and mobile devices can potentially be a means of collecting data. Three broad types of data collection are introduced here and suggestions for using them are explored in depth throughout the rest of the book.

Qualitative data collection is typically characterized by the method used. At the most basic level the methods are defined as follows:

- **Interviews.** The researcher poses questions or suggests themes for conversation with research participants. Research participants respond to questions and any follow-up prompts. The exchange is recorded and/or the researcher takes notes during the interview. Transcripts of the interview together with researchers' notes are the data analyzed and interpreted to answer the research questions.
- **Observations.** Researchers using observations to collect data take note of whatever may be occurring that relates to the topic of the inquiry. Research observations can take place in a controlled or laboratory setting; naturalistic observations can occur anywhere. Depending on the type of observation, the researcher may or may not engage with those being observed.
- **Document or archival analysis.** Historical or contemporary documents and records of all kinds are analyzed in this type of qualitative research. The term *documents* may also refer to diaries, narratives, journals and other written materials.

Numerous variations and schools of thought exist about each approach and associated skills, techniques, and practices. Many books are available on each of these types, and a resource list of some excellent ones is included in the Appendix.

However, given the unique characteristics of the online environment and communication, different ways are needed to classify the types of data collection. One distinction to address concerns questions about where the data resides and how the researcher accesses it. Another distinction is about the relationship of the researcher to human participants and to the data. To address these distinctions and advance a new way of thinking, three types of online data collection are defined here: *extant*, *elicited*, and *enacted*. The way each type is used in a study has implications for the overall design, role of researcher, and process for analysis. A study may use one approach or combine them in multimethod designs.

Extant. Much online communication involves posting text, images or other materials on websites or blogs, social networking sites or various communications applications. Some of these messages are conveyed through one-to-one channels others ostensibly cannot access. But much of this kind of communication is available for anyone to read, copy, scrape or download. Materials relevant to the study may also be available through libraries, archives or databases. Collecting this kind of data involves adapting the methods traditional qualitative researchers refer to as **observation, document analysis, archival research, narrative research** or **discourse analysis**. The differentiating factor of these approaches is that the data exists without any intervention or influence by the researcher. The researcher may take field notes or write memos about the data or collection process, but the data itself was generated by users without prompting from the researcher. The researcher has no direct contact with the users, unless the study entails consent or permissions. (For more on ethical issues, see Chapters 4 and 5.)

Extant data collection can occur either synchronously or asynchronously. The researcher could, for example, observe a synchronous online event, such as a webinar or meeting. The live session could be recorded or notes taken. More often the researcher using these approaches works asynchronously, since archived records, documents, or materials may have been posted over a period of time.

Elicited. By contrast, the researcher may elicit consenting participants' responses to questions or other prompts. The researcher has a direct interaction with participants who consent to participate. The researcher can influence the direction or level of specificity and can probe in ways not possible with extant data. The researcher may have carefully planned and structured the elicitation to focus on specific questions, or it may be loosely structured to allow ideas to emerge through conversation. Collecting this kind of data involves adapting the methods traditional qualitative researchers refer to as *participant observation*, *interviews*, *focus groups* or *questionnaires*.

Elicited data collection can occur either synchronously or asynchronously. For example, an interview may be conducted using a synchronous text or video exchange, or an asynchronous email exchange. Researchers using participant observation online may post to a social media or online community site, or use synchronous text chat to engage with group members. Online questionnaires collect data asynchronously.

Enacted. The term *enacted* refers to approaches for generating data through some kind of online activity that engages researcher and participant in the generation of data. As with elicited data collection, the researcher has a direct interaction with consenting participants. Researchers construct a situation that allows for data to emerge from within the interaction or event, in response to various kinds of prompts. During these events the researcher collects data through observations and records field notes. The researcher may also decide to add an elicitation component to the study, with interviews or focus groups.

Collecting this kind of data involves adapting the methods traditional qualitative researchers refer to as *vignettes*, *role-plays*, *simulations*, *arts-based research* or *games*.

Metaphors for Qualitative E-Researchers' Roles

A way to think about the distinction between styles of data collection is through the stances of the researcher, described metaphorically as the miner, traveler (Kvale, 2007; Kvale & Brinkman, 2014), and gardener (Salmons, 2010, 2015). According to the metaphors Kvale and Brinkman devised to explain various roles that interviewers take, the researcher who digs out facts and feelings from research subjects is characterized as a *miner*. The *traveler* journeys with the participant to experience and explore the research phenomenon. The metaphor of the *gardener* was introduced to describe a nurturing process often needed when building rapport with participants online. The metaphor alludes to ways a researcher

uses questions to plant a seed and follow-up or probing questions to cultivate the growth of ideas and shared perceptions. While these metaphors can apply to any kind of research, they are particularly relevant to the consideration of the online approaches described here as extant, elicited or enacted research (see Table 1.2).

Extant research is clearly aligned with the metaphor of the miner. The researcher has to locate the potentially rich seam and start digging. They may have to burrow through extraneous materials to get to the desired ore—or may find the gold is eluding them. Like miners, researchers may be fortunate to readily locate the rich, relevant records of users' conversation and abundant archives. Or they may discover that materials relevant to the study are not in the anticipated location or readily available online at all. Researchers using extant materials may also encounter access issues, proprietary boundaries or closed, members-only communities. Again, since this researcher does not influence the substance or nature of the data, using only what has been posted or curated, the researcher may find that the extant data is not adequate to achieve the purpose of the study. In a multimethod study the researcher can add an interview or questionnaire component to the study and elicit explanations from participants to fill in missing pieces of the story.

Elicited research is most appropriately aligned with the gardener metaphor. The researcher may use verbal or written questions to elicit responses to interviews. In a study using participant observation, the researcher may elicit data by informally asking questions or conversing with others engaged in the activity under observation. Researchers using these methods may also use images, graphics or media that represent some aspect of the research problem or phenomenon to elicit reactions or answers. Elicitation is flexible and, unlike the researcher using extant data, researchers can draw out detailed replies specific to the phenomena being studied.

Researchers using *enacted* research approaches fit the metaphor of the traveler. This kind of study researcher designs and carries out events or activities that require the researcher to be a co-participant. The researcher is thus highly engaged with the participant(s) throughout the process.

Table 1.2 Typology, metaphors and research questions

Type	Data Collection	Metaphor(s)	Types of Research Questions
Extant	Studies using existing materials developed without the researcher's influence	Miner	*What? How?* What are the activities, types of behaviors, trends in activities exhibited in the ways people post or interact online? How do people express themselves or describe their worlds in the writings, images or media they post?

(Continued)

Table 1.2 (Continued)

Type	Data Collection	Metaphor(s)	Types of Research Questions
Elicited	Studies using data elicited from participants in response to the researcher's questions	Gardener	*What? How? Why?* What motivates people to act as they do? Why do individuals or groups engage in some activities and not others? How do they use communications technologies? How do they feel about it?
Enacted	Studies using data generated with participants during the study	Traveler	*What? How? Why?* What is the experience of participating in online events? How do people engage with known or unknown others online? What can be learned by interacting with participants using visual, mobile, virtual reality and other online communication dynamics? Why are some choices made over others?

———————————————— RESEARCH CAMEO 1.1 ————————————————

Metaphors and Research Questions

Three researchers are designing ways to study the same hypothetical research problem: the implications of social media use at work. We will follow these three researchers throughout the book in order to illustrate ways to apply research concepts.

Researcher 1 will use extant data, researcher 2 will elicit data, and researcher 3 will generate data with enacted approaches.

- *Researcher 1* designs a study to answer the research question: 'What are the patterns of social media use by office workers during business hours, as compared to off-work hours?' He will use extant data; he plans to 'mine' for data by reading and studying users' activities and discussion archives.
- *Researcher 2* designs a study to answer the research question: 'Why do workers use social media during business hours and how does such use influence their perceptions of productivity?' She plans to conduct a study that involves eliciting data. She plans to exemplify the 'gardener' metaphor by cultivating rapport through regular exchanges with each participant.

- *Researcher 3* designs a study to answer the research question: '**How do workers use social media during business hours?**' She plans to conduct a study that entails generating data with enacted approaches. She intends to journey with participants through experiential research activities so selects the 'traveler' metaphor.

A HOLISTIC APPROACH TO DESIGNING AND CONDUCTING QUALITATIVE E-RESEARCH
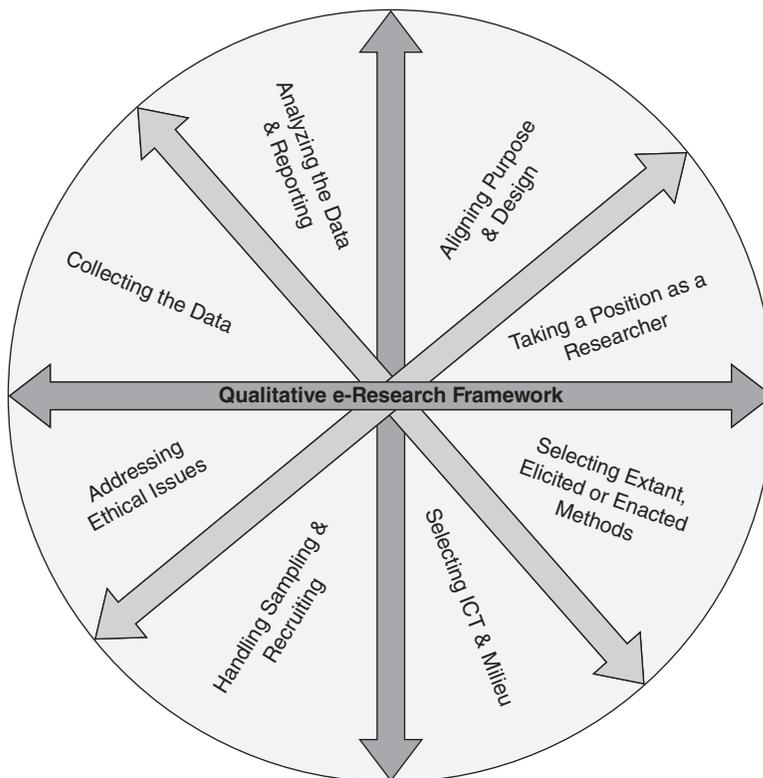
Figure 1.1 Qualitative e-Research Framework

As may be apparent, the online researcher has many decisions to make when designing a study. While it is true that all researchers face daunting design challenges, distinctive characteristics about how people interact and behave online mean there are additional factors to consider when designing a study that will be entirely or partially conducted online. Additionally, approval from others may be needed—whether faculty or committees in an academic setting, editors or peer

reviewers—and those individuals may not be familiar with online research. Clarity in the development and presentation of the research design is always a positive step.

The Qualitative e-Research Framework offers a conceptual schema of key questions about interrelated facets of qualitative online research (see Figure 1.1). While there are sequential phases in a research project, qualitative research is rarely linear. The Qualitative e-Research Framework is displayed as a circular system to facilitate a holistic approach to thinking through all elements of a study. It is comprised of interrelated categories, each with a set of questions and models.

- Choosing a qualitative e-research approach for the study:

  o Can you provide a compelling rationale for why you are conducting the study online?
  o Do ICTs serve as the communications medium, the setting for the research, and/or the phenomenon the inquiry is designed to explore?
    See Chapters 2 and 3 for more about creating a rationale for conducting online research.

- Aligning purpose and design in qualitative e-research:

  o Are theories and epistemologies, methodologies, and methods appropriate for the study and clearly aligned?
    See Chapter 2 for more about creating a coherent research design.

- Taking a position as a researcher undertaking qualitative e-research:

  o Does the researcher clearly delineate an *insider* or *outsider* position? Does the researcher explain implications related to that position, including any conflicts of interest or risks of *researcher bias*?
  o Does the researcher perceive a position as miner, gardener or traveler?
    See Chapters 5–8 for more about the researcher's position in the study.

- Selecting extant, elicited or enacted methods for collecting data online:

  o Does the approach fit the purpose of the study, in the context of the research problem and population?
  o How does the researcher align ICT functions, features, and/or limitations with the selected approach(es)?
  o Within each approach, are the specific methods (interviews, observations, etc.) appropriate to the study?
    See Chapters 2 and 3 for more about choosing and using the appropriate approach.

- Selecting ICT and milieu for qualitative e-research:

  o What ICT features will be used and why?
  o Will the study collect text-based, audio, and/or visual data?
  o Will the setting be in a public or private online milieu?
    See Chapter 3 for more about choosing and using ICTs in the study.

- Handling sampling and recruiting in qualitative e-research:

  o Will the study engage human participants? If so, what sampling approaches are appropriate given the purpose of the study and target population?

- o Will participants be recruited online, if so, how?
- o In a study using extant data, how will archives or data sets be selected? What criteria will be used for selection of specific posts or user-generated content?
  See Chapters 6–8 for more about issues related to determining participants and/or materials as part of the design and conduct of the study using extant, elicited, or enacted methods.

- Addressing ethical issues in qualitative e-research:

  - o Has the researcher taken appropriate steps to protect human subjects and, where appropriate, their avatars or online representations?
  - o Has the researcher obtained proper informed consent?
  - o Does the researcher have permission to access and use posts, documents, profiles, or images?
    See Chapters 4 and 5 for more about ethical issues.

- Collecting the data online in qualitative e-research:

  - o Is the researcher experienced with all features of the selected technology?
  - o For studies using extant methods, is the researcher familiar with the setting, archive, or other online environment where the data will be collected? Does the researcher have a guide or plan for recording observations?
  - o For studies using elicited or enacted methods, does the researcher have a plan for conducting interviews or other interactions with participants with either prepared questions or a guide?
    See Chapters 2 and 6–9 for more about choosing and using technology in the study.

- Analyzing the data and reporting on qualitative e-research:

  - o Does the researcher have a plan for preparing, organizing, and coding all types of data?
  - o Does the researcher have the proper permissions for using excerpts or quotations in published reports?
    See Chapters 9–11 for more about data analysis, and presenting and writing about the findings.

When introduced in *Cases in Online Interview Research* (Salmons, 2012) as the e-Interview Research Framework, the central focus was on data collection with online interviews. The updated framework encompasses a full range of qualitative online data collection based on the use of extant, elicited or enacted data—or a mix of these types. In addition to its use at the design stage, the Qualitative e-Research Framework can be used in analytic contexts to evaluate proposed or published studies because it offers guiding topics and questions to review.

SUMMARY OF KEY CONCEPTS

Chapter 1 offers foundations for the rest of the book by defining qualitative research and qualitative e-research. Given the unique characteristics of online

communication, three types of data are defined: extant, elicited and enacted. The type of data will determine ethical and research design questions, and the options for collecting and analyzing data. Chapter 1 introduced the Qualitative e-Research Framework as a schema for thinking through design decisions.

ON THE WEBSITE

Additional resources on qualitative research foundations are available on the companion website. Media pieces, including the author's overview of the Qualitative e-Research Framework, can also be found on the website.

DISCUSSION QUESTIONS AND EXERCISES

1. To think through communications choices you might make for research purposes, look more closely at the technologies you typically use. Identify and deconstruct the choices you make for your own personal and social communications. Keep a communications log for three days. Note what form(s) of communication you use, with whom (family member, friend, or colleague). On the book website you will find a communications log for this exercise.
2. Consider the areas depicted in the Qualitative e-Research Framework. Identify at least one question you would ask a researcher in each area of the model, in order to understand the design of the study.
3. Using your university library or open access journals, locate one article that uses extant data, and one that uses data elicited from participants. Compare and contrast the research questions, approaches and findings. Critique and discuss choices the researchers made at the design stage. How different would the study have been if it had been conducted online?
4. Using your university library or open access journals, locate one article that describes a study that involves an approach described here as 'enacted'. Why did the researcher select the approach? What was gained by collaborating with participants in an arts-based, performative or experiential study?