other. While the focus group interview was originally inspired in the 1950s as a way of obtaining consumer product preferences, this technique eventually found its way into educational and social science research methodology. It has been shown to have the capacity to garner rich and credible qualitative data. Further, according to Patton (1990), focus group interviews provide quality controls on data collection, as partici-pants tend to question and eliminate false or extreme views. The result is a tendency to focus on the most important topics and issues and to assess the extent to which a rel-atively consistent, shared view exists among participants–as well as identifying incon-sisttent views.

This method is called a focus group interview because it is focused in two ways. First, the group participants are similar in some way (e.g., they have similar experiences of the topic being investigated investigated). Second, the purpose is to gather data about a single topic (or a narrow range of topics). They are most often guided by open-ended dis-cussion questions proposed by the researcher, with an emphasis on gaining insights through group opinions rather than on specific facts. This format is a convenient way to accumulate the individual knowledge of the members and to inspire insights and solutions that are difficult to achieve with other interview methods. A distinct advan-tage of focus groups is that they allow respondents to react to and build on responses. The result can be a synergistic and dynamic effect on group behavior, often resulting in data or ideas that might not have been collected in individual interviews(Stewart & Shamdasani, 1998). Moreover, because focus groups tend to provide checks and bal-ances among group members to eliminate false or extreme views, it is fairly easy for the researcher to assess the extent of consistent and shared views (Patton, 1990). Given these advantages, according to Glesne and Peskin (1992), interviewing a group of peo-ple on a focused topic can be a powerful way to collect data. However, it should be stressed that focus groups do not represent feedback from a randomly selected popu-lation, but from purposely selected individuals. As such, the results from focus group interviews should not be generalized to other, larger populations.

Finally, Net-based focus groups are usually selected over face-to-face fo-

cus groups because of the need to involve individuals from several different geographic areas. The travel time and expense of bringing geographically dispersed individuals together is often prohibitive. The Net provides an environment whereby the researcher can conduct a focus group cost-effectively.

THE DIFFERENT KINDS OF NET-BASED FOCUS GROUPS

Net-based focus groups can be conducted on the Internet either synchronously or asynchronously and with text-based software and/or audio and video software.Table 8.1 provides examples of various kinds of Net-based focus groups classified by asynchronous, asynchronous, text-based, and non-text-based distinctions. As this table illustrates, there are four kinds of Net-based focus groups: synchronous and text-based; synchronous and audio- and/or video-based; asynchronous and text-based; asynchro-nous and audio- and/or video-based.

TABLE 8.1 Samples of Net-Based Systems to Support Focus Groups

	SYNHRONOUS	ASYNCHRONOUS
TEXT-BASED	NetMeeting	Majordomo
	ICQ	FirstClass
	FirstClass	WebCT
	WebCT	Email groups
AUDIO-AND/OR VIDEO-BASED	Centra	Centra
	Latitude	Latitude
	NetMeeting	Wimba

The combination of media used in the focus group process makes it difficult to generalize about the characteristics of all focus. Nevertheless, what uniquely differentiates a focus group from an interview is the capacity of participants to share and build on the comments and concerns of other participants. Prior the Internet, there was no such thing as asynchronous focus group, although one could conceive of mail-based focus groups, researchers did not actively use the technique. The pre-dominant forms of asynchronous communication on the Internet have been text-based email and computer conferencing. Currently we are seeing a rapidly evolving selection of more media-rich forms of asynchronous communication to conduct Net-based focus groups (e.g., www.wimba.com). On the synchronous side, text-based chats are the most comment and accessible way to conduct real-time focus groups. This mode of interaction uses software such as ICQ, Net Meeting, or one the numerous Java-based Web chat software programs to share the comments of participants as they type. Text can be enhanced by viewing objects, sharing applications, or sharing a common space through text-based virtual reality (VR) systems such as MOO or MUP (for frequently asked questions about MUDs and MOOs seen: http://www.faqs/games/mud-faq/part/) or through two- or three-dimensional VR environments such as Palace (e.g., www.thepalace.com) or virtual worlds

(e.g., www.worlds.net). Finally, focus groups can be conducted using audio or video conferencing. Until recently, the required software, end-user hardware, and bandwidth have prevented use of these richer and more natural forms of communication on the Net. However, the develop-ment of multisite audio and video conferencing systems (see www.microsoft.com/windows/netmeeting/ and www.centra.com) and the availability of high-speed con-nections at home and in the workplace promise increased use of media-rich, synchro-nous forms of Net-based focus groups.

Currently, most Net-based focus groups are conducted using text-based asyn-chronous or synchronous software. Accordingly, this chapter focuses on Net-based textual focus groups. As broadband services proliferate and become more widely avail-able and affordable, we will likely see an increase in syn-chronous and asynchronous Net-based video and/or audio focus groups. As these multimedia services areadded to

Net-based focus groups, they will tend to be more like face-to-face focus groups. Con-sequently, conducting face-to-face focus groups will become increasingly relevant and useful to e-researchers who use video- and audio-conferencing focus groups.

ADVANTAGES AND DISADVANTAGES OF FACE-TO-FACE VERSUS NET-BASED FOCUS GROUPS

Only recently have researchers been able to use the Internet to conduct educationally related focus groups. Net-based focus groups offer both speed and reduced cost (Van Nuys, 1999). While Net-based focus groups are currently in the exploration and development stage, they appear to be eapecially effective at removing certain barriers that many researchers experience when conducting face-to-face focus groups. In particular,they can reduce or eliminate participation and cost barriers. For example, if the e-researcher and the participants are geographically dispersed, Net-based focus groups allow them to participate from their homes and/or offices, thus travel expenses are eliminated. Van Nuys's cost analysis indicates that, in addition to travel savings, there is also about a 20 percent cost savings in conducting the focus group, compared to face-to-face focus groups. For example, such costs as food, beverages, and room rental would not be incurred in a Net-based focus group. In addition to this benefit, online discussions can be automatically archived, eliminating the transcription process and tran-

scriber interpretation error.

Finally, Net-based focus groups may also reduce power struggles that often occur in face-to-face focus groups as a result of conflicting opinions when there are perceived status differences among participants (Patton,1990). However, it is not necessary for Net-based focus group participants to reveal their real identities to other members of the group, Given this ability to provide an alias for each participant (depending on the medium) and that Net-based focus groups have the ability to join geographically dis-persed participants(thus reducing the likelihood of participants knowing each other), power struggles and confidentiality problems can be reduced if not eliminated.

Notwithstanding these advantages, early explorations with Net-based focus groups have met with mixed results with respect to the quality of the data collected. Van Nuys (1999) has observed, for example, that a drawback of text-based asynchro-nous focus groups is that quite often there is less depyh in the participants; responses as well as a loss of paralinguistic cues (e.g., facial expression, body posture, gesture, physical distance from the interlocutor, intonation pattern, and volume). Paralinguis-tic cues, in particular, are considered to be a very valuable source of data in face-to-face groups–in addition to what is said. Furthermore, Van Nuys notes that Net-based focus groups tend not to be effective for exploring complex concepts. Alterna-tivey, Van Nuys has also observed that in text-based asynchronous focus groups, participants tend to speak more freely, since they cannot see others. In particular, the responses may be more objective, as participants tend to get straight to the point and not to "beat around the bush" when they are not face-to-face, since responses are typed, rather than spoken.