

relates to a particular environment (e.g., What types of personal and school characteristics serve to motivate teachers?). Finally, **case studies** are in-depth studies of individual programs, activities, people, or groups (e.g., What is the nature of the school culture at Washington Middle School?).

Data collected during a qualitative research study may be quite diverse. Recall that qualitative data are typically narrative and consist primarily of observations, interviews, and existing documents and reports (McMillan, 2004). Resulting qualitative data are analyzed by means of a process known as **logico-inductive analysis**, a thought process that uses logic to make sense of patterns and trends in the data (Mertler & Charles, 2011).

Although quantitative and qualitative approaches to conducting research are quite different on a variety of levels, they need not be considered mutually exclusive. It is not uncommon to see research studies that employ both types of research data. These types of studies are often referred to as **mixed-methods research designs**. The combination of both types of data tends to provide a better understanding of a research problem than one type of data in isolation. In other words, these types of studies capitalize on the relative strengths of both quantitative and qualitative data. Creswell (2005) considers action research studies to be most similar to mixed-methods designs, since they often utilize both quantitative and qualitative data. The only real difference between the two is the underlying purpose for the research. The main goal of mixed-methods studies is more traditional (i.e., to better understand and explain a research problem); the main goal of action research is to address local-level problems with the anticipation of finding immediate solutions.