Quantitative and qualitative research stem from different philosophical assumptions that shape the ways researchers approach problems and collect and analyze data. Positivism is often considered the traditional scientific method, which involves hypothesis testing and objective data gathering to arrive at findings that are systematic, generalizable, and open to replication by other investigators. Content analysis is sometimes quantitative, such as when one investigates middle school science textbooks to determine the extent of coverage given to the achievements of minority scientists.—Historically, the quantitative approach has dominated education research. 1.