“Data-driven decisionmaking” is critical to many organizations across the nation, including schools, school districts, and state education agencies. In an education setting, it means that pedagogical and operational choices are to be informed by accurate, relevant information available in time to influence decisionmaking. To do this, however, raw data from disparate sources must be accessed, integrated, compiled, and distilled into useful information in a timely manner. This task may best be accomplished by a specific class of computer information systems called “decision support systems.”

A decision support system is a cohesive, integrated system of hardware and software designed specifically to manipulate data and enable users to support problem solving and decisionmaking by drawing useful information from disparate sources of data. Generally, decision support systems incorporate the full spectrum of information management practices and components—data collections; hardware, networks, and operating systems; underlying data sources; extract, transform, and load (ETL) processes; a data warehouse or data aggregator; analysis and reporting tools; and a user dashboard.

Due to the natural complexity of these systems and for various other reasons, however, many decisionmakers in education organizations (who are educators rather than technology specialists) may find it difficult to obtain the reliable and objective information they need to better understand decision support systems and determine how they might be used most effectively in education organizations.

The Forum Guide to Decision Support Systems: A Resource for Educators was developed by educators for educators to remedy this lack of reliable, objective information available to the education community about decision support systems. The authors hope it will help readers better understand what decision support systems are, how they are configured, how they operate, and how they might be implemented in an education institution.

This publication is available electronically at http://nces.ed.gov/forum/pub_2006807.asp. Instructions for ordering print copies are also available on the National Forum on Education Statistics website.