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**Chapter XI** 

# Building New Systems for Decision Support in Education: Was There a Baby in That Bathwater?

Christopher A. Thorn University of Wisconsin-Madison, USA

## Abstract

Decision support is one of the promises held out by proponents of portal technologies. Role-based access to underlying knowledge management systems is touted as a method for bringing decision makers closer to the relevant data necessary for production and delivery processes. This assumes that successful implementation of knowledge management systems is actually common. Davenport suggests that only a handful of types of knowledge management approaches have been tried with any success by large enterprises (Davenport, De Long, & Beers, 1998; Davenport & Marchand, 1999). Repositories and business analytics systems are two of the most common types of knowledge management systems that school districts have attempted to build. This article argues that efforts to build portals are inseparably tied to district knowledge management system

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development. Educational organizations are often resource poor and exposed to many conflicting demands on their IT capabilities. The combination of low resources and high demand increases the risk associated with developing new, complex systems. Moreover, complex information systems have failed to deliver much of their promise across any sectors of the economy (Waters, 2003). Such systems have been proposed by school districts across the United States as part of the solution for improving low-performing schools (Trefny, 2002). Portal technology will be crucial to any effort to use information (and information technology) effectively to support good decision-making in educational organizations.

## Introduction

A portal is a Web site that aggregates information from multiple sources and makes that information available to various users. Many portals use individual identification (user log-on) and role-based models (knowledge of a user's membership in one or more categories) to present semi-customized access to and organization of centrally managed data.<sup>1</sup> There are many sub-types of portals in educational organizations, ranging from highly customized systems—such as distance education systems that support flexible, online collaboration between teachers and students—to sites that push prepackaged content and allow virtually no user customization—such as intranet publishing systems that provide staff with access to detailed information on policies and procedures. There are even special cases of voice portals that help parents and district staff to communicate by telephone by providing a single number that parents can call to get information about and respond to questions about homework, discipline, after school activities, etc.

Many state- and district-level research and assessment offices in the United States now offer online access to question-driven school report card sites that provide graphical and numeric reporting on the results of standardized tests, broken down by gender, ethnicity, grade, poverty level, etc. While these sites may be identified by the sponsoring agencies as "portals" for school accountability, this model is one step below the level of portal because it does not know the role or identity of the individual performing the query. Likewise, many districts have purchased or are building curriculum resource archives that are indexed by some preexisting taxonomy. Teachers with particular curriculum

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