Chapter 9

Empowering Educators to Make Data–Informed Decisions: A District’s Journey of Effective Data Use

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ABSTRACT

With increased accountability in education, resources are being invested to ensure educators have access to a computerized data system. Data access is one component of data-informed decision making. This chapter shares one district’s journey toward developing and implementing the data-informed decision-making ecosystem as a guide for empowering one school district’s educators to use data, no matter the source, for making informed decisions. Not only might leaders benefit from the implementation lessons learned, but they may also benefit from the implementation tools, such as the teacher data use survey (TDUS) and the school district’s innovations configurations map (IC Map) for collaborative inquiry, which supported the work.

INTRODUCTION

Educational reformers challenge schools to improve the academic achievement of all students, especially by closing the achievement gaps among diverse student populations (U.S. Department of Education, 2011). This increased focus on school accountability has escalated the expectations for educators to use data as a lever for improving schools (Jimerson & Wayman, 2015; Love, Stiles, Mundry, & DiRanna, 2008; Means, Padilla, DeBarger, & Bakia, 2009). Therefore, districts have been investing resources to enhance educators’ abilities to access and use data for supporting student outcomes.

Educators have always used data, but oftentimes in disparate locations, or data silos. Districts experience difficulty in making informed decisions when data are stored in different places (Mandinach & Jackson, 2012). Therefore, a first step toward empowering educators with making informed decisions is to build or purchase a centralized, computerized data system (Hamilton et al., 2009).

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Centralized data access is one component of making informed decisions. Another aspect is building the capacity of educators to use data for making informed decisions. The Metropolitan Nashville Public Schools (MNPS) hired a Business Intelligence Coordinator for this role. The purpose of the chapter is to provide an overview of the district’s journey toward developing and implementing the Data-Informed Decision Making Ecosystem as a guide for empowering MNPS’ educators to use data, no matter the source, for making informed decisions. The following information is covered in the chapter:

- Background information that led to the development of the data-informed decision making ecosystem;
- Aspects of fostering a data use culture, including conducting a needs assessment, development of the data ecosystem, and balancing and implementing the ecosystem; and,
- Practical application regarding the implementation of the ecosystem.

Background

In 1965, President Lyndon B. Johnson authorized the Elementary and Secondary Education Act (ESEA), which initiated the federal government’s role in education to provide equal access for all students to high academic standards (U.S. Department of Education, 2015). In 1981, the National Commission on Excellence in Education (NCEE) was formed, and members were charged with conducting a thorough investigation of the current state of the American education system. After 18 months of investigating U.S. students’ achievement on the Scholastic Aptitude Test and national assessments, the NCEE released A Nation at Risk (National Commission of Excellence in Education, 1983). A Nation at Risk resulted in the initiation of major educational reform in America, including No Child Left Behind (NCLB), which focused on improving schools by moving toward a national standards-based curriculum and student achievement testing system (Jorgensen & Hoffman, 2003).

The No Child Left Behind Act (NCLB) of 2001 established federal mandates of high academic achievement standards for all students in math and reading and for closing the achievement gap among subgroup populations, including students with disabilities, English language learners, economically disadvantaged, and ethnic groups (U.S. Department of Education, 2002).

With increased accountability, American schools and the people who work in them are being asked to do something new—to engage in systematic, continuous improvement in the quality of the educational experience of students to subject themselves to the discipline of measuring their success by the metric of students’ academic performance. Most people who currently work in public schools weren’t hired to do this work, nor have they been adequately prepared to do it either by their professional education or their prior experiences in schools (Elmore, 2002, p. 3).

Educators are being asked to do so much for so many (DuFour & Marzano, 2011). To meet the challenge, educational administrators can support teachers facing these challenges by empowering them to use data for making decisions that support student success (Fullan, 2007).

In order to empower teachers to make data-informed decisions, the Metropolitan Nashville Public Schools (MNPS) invested 2009 Race to the Top funding to create the MNPS Data Warehouse. The MNPS Data Warehouse is a computerized data system that consolidated student data for approximately

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