Core Function → District Context and Support for School Improvement

Effective Practice → Improving the school within the framework of district support

Indicator: The district ensures that key pieces of user-friendly data are available in a timely fashion at the district, school, and classroom levels. (5626)

Explanation: "Data" can mean a lot of things, including student outcomes, individual student background and histories, program evaluations, financial data, and information about patterns of professional practice. Making the information useful to the right people at the right time is the trick. Data management systems enable a district to collect, organize, and provide access to information needed by people at each level in the district system.

Questions: What information does your district manage? What systems does it use to manage the information? How does the district ensure that the data is available in useful form to people throughout the district at the time they need it?

Data-based decision was identified across studies as a key element of reform efforts, with the districts embedding data use in improvement efforts and used as an important lever for change. Decisions were no longer made on instinct, and data was required to justify decisions about programs and resources.

In addition, data was used to monitor progress and ensure attention stayed on instructional goals. In the words of a superintendent from a studied district, "If we don't maintain the focus by using the assessment data, the events of the day will take precedence over school improvement issues" (Donicht, in Cawelti & Protheroe, 2001, p. 46). In the high-achieving districts, effective use of data contributed to improvement efforts at the district, school, and classroom levels.

Districts working to increase productive use of data should take into account three important elements. First, data use should focus primarily on issues of student learning. Second, systems must be developed to ensure key pieces of *user-friendly* data are available *in a timely fashion* at the district, school, and classroom levels. Third, staff members will need training in how to use data as well as time to analyze it, discuss it, and use it on a routine basis to adjust instruction to better meet students' needs.

A district's use of data – if done well – will become qualitatively different and more sophisticated over time. While a typical first step is use of data from annual assessments, districts should move toward use of interim and diagnostic mini-assessments to monitor student progress on a continuing basis. These assessments might be developed by teacher teams at the district or school level, or obtained through an external source. The key to their value is use at the teacher, school, and district levels to identify needs of individual students, weak areas of the curriculum or instruction, or strategic efforts requiring additional resources.

Although the initial focus will be on achievement measures, additional indicators – such as attendance rates and parent satisfaction – should also become part of the data package. Districts should also consider defining data more broadly than simply numbers collected through assessments or surveys. For example, Learning Walks – in which a

team of teachers, principals, and central office staff visits classrooms and then discuss observations – could be used to monitor use of curriculum guides by teachers. Finally, districts working to increase their use of data will find they need to develop an infrastructure to collect, analyze, and ensure effective use of data.

Source: Gordon Cawelti & Nancy Protheroe, *Handbook on Restructuring and Substantial School Improvement*. Retrieved from www.adi.org. See Download ADI Publications.

Assessment results, at the classroom, school, district, or state level are established components of current federal and state accountability systems. Yet, annual assessments are a relatively blunt instrument. Furthermore, they don't provide school leaders or instructional personnel with timely information that can influence real-time school operations and classroom practice. Therefore, states and districts need to establish a systematic way of collecting and using a variety of information to inform its district and school personnel about whether positive progress is being made toward improving student learning.

In *Evaluating the Statewide System of Support with Rubrics, Explanations, and Exemplars*, the Center on Innovation & Improvement established 42 indicators to guide the development, implementation, and evaluation of each state's system of support. Examples of indicators are: 1) strong data system that district and school personnel can utilize to inform decisions that positively impact instruction and curriculum and 2) established process for using state assessment results to provide differentiated services for schools, especially those identified as continuously failing.

Source: Center on Innovation & Improvement, *Handbook on Effective Implementation of School Improvement Grants*. Retrieved from www.adi.org. See Download ADI Publications.

The *Using Student Achievement Data to Support Instructional Decision Making* practice guide published by IES defines data-based decision making as "…teachers, principals, and administrators systematically collecting and analyzing various types of data, including demographic, administrative, process, perceptual, and achievement gap, to guide a range of decisions to help improve the success of students and schools" (pp. 46). A

number of activities and decisions undertaken by schools and districts involve data-based decision making, such as screening students for placement, using progress monitoring or formative assessments to determine curricular changes, and interpreting annual performance data to identify areas of weakness for future educational focus.

Data systems allow for the collection, interpretation, and use of student data. A universal screening system can be used at the beginning and middle of the school year to identify students who are academically on-track and those who are at-risk for difficulties in key critical content areas, such as reading and mathematics (Gersten, Beckmann, Clarke, Foegan, Marsh, Star, & Witzel;. 2009; Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008). At-risk students can be selected to receive research-based interventions. Schools can then use progress monitoring data (collected on a frequent basis) to gauge the students' progress (or response to an intervention) towards critical academic outcomes (Tilly, 2008). Formative assessments can be collected in classrooms to give teachers feedback about students' understanding of the material presented and what minor adjustments to their instruction may be needed to improve students' understanding.

Employ the use of data systems in broader decision-making by utilizing annual state testing results to evaluate the effectiveness of their instructional systems. For example, a district may implement a new core reading series and analyze state testing results to determine if the new reading series is increasing student outcomes, or they may look at areas of poor performance in state testing results to determine where to allocate professional development dollars.

Action Principles

For District

1. Develop a data system or adopt an available data system that enables analysis of student outcomes at multiple levels (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).
2. Develop a district-wide plan for collecting, interpreting, and using data. Dedicate time and develop structures for district schools and teachers to use data to alter instruction (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).
3. Train teachers and principals in how to interpret and use data to change instruction (Hamilton, Hal-

verson, Jackson, Mandinach, Supovitz, & Wayman, 2009).

4. Use annual state testing performance data to evaluate the overall effectiveness of instructional services provided by the district. Conduct deep analysis to determine areas in need of improvement (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).

Source: Center on Instruction, *Handbook on Effective Implementation of School Improvement Grants*. Retrieved from www.adi.org. See Download ADI Publications.

For English Language Learners

The systematic use of data by districts is a strategy that can help to raise the achievement of ELLs. It is necessary for the district to have a data system that tracks and monitors individual ELLs' progress over time on state and district English proficiency and academic achievement assessments. Furthermore, the district should have a system (paper or electronic) that tracks and monitors individual ELL students' prior schooling, language(s) of instruction, ELL program participation, academic history, and progress in English language development as the student moves from grade to grade or across schools within the district.

Providing teachers and school leaders with accurate, timely, user-friendly student data throughout the school year, and training them on how to use it, enables educators to make sound decisions based on individual student needs. For example, data can be disaggregated to show achievement trends and areas in need of improvement for ELLs. Data can also be used to target instruction and specific academic interventions. In addition, data should be the focus of all policy decisions dealing with ELLs. By reviewing student assessment data on a regular basis, districts and schools can determine student participation rates, the value of the data for informing instruction and programs, and student dropout patterns.

Regardless of whether the data are gleaned from large-scale assessments or from classroom-based assessments, the varied learning characteristics of ELLs should be considered at the onset. When students are in the process of learning a second language for school, assessments that are normed on the general population are not a valid measure of their content knowledge. Therefore, it is important to use multiple measures and to provide appropriate accommodations. It is important to note that

ELLs should receive appropriate accommodations on the state content assessments according to state policy and the individual characteristics of learners, including level of English language proficiency and literacy.

In addition, because of differing English language proficiency levels, some ELLs are unable to demonstrate in English what they know and can do with regard to content and other ELL students may come with interrupted schooling. Therefore, ELL students with gaps in achievement need to make more than one year of progress each school year if they are to attain grade level expectations.

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