The Roles and Practices of Student Services Staff as Data-Driven Instructional Leaders

Richard Halverson
Department of Educational Leadership & Policy Analysis/
Wisconsin Center for Education Research
University of Wisconsin–Madison
halverson@education.wisc.edu

Christopher N. Thomas
Department of Educational Leadership & Policy Analysis/
Wisconsin Center for Education Research
University of Wisconsin–Madison
cnthomas@wisc.edu

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The Roles and Practices of Student Services Staff as Data-Driven Instructional Leaders[1]

Richard Halverson and Christopher N. Thomas

The idea of accountability is not new in educational institutions, but the emphasis on using student achievement data to hold schools accountable is a recently emergent phenomenon. The No Child Left Behind Act (NCLB; 2002) reflects many of the same aspirations as previous initiatives, such as the Goals 2000: Educate America Act (1994), but with demands for local schools and districts to measure performance with student achievement data. For many of us in education, NCLB represented the first time that student data had been presented to us in such a way. Meeting adequate yearly progress (AYP) goals forces school leaders to understand how to develop local systems to translate summative testing data into the kinds of information teachers and staff can use to improve student learning. This change has pushed school leaders into the new data-driven paradigm, which calls on schools to understand and use this new data to inform instruction. This is not an easy transition, considering that most educators are only now beginning to receive training in the use of data in schools.

The press to use assessment data has led school leaders to seek out data analysis and implementation expertise. Some of this expertise, to be sure, has been provided by district assessment specialists and external consultants. However, student services staff, such as special educators, school psychologists, and social workers, were trained in using achievement data for years before NCLB. Since the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA), educators have been trained to write measurable annual achievement goals for individual students on their federally mandated individualized education programs (IEPs). IEP goals must address both academic and functional needs of the child to measure progress through the general school curriculum. Special education teachers and school psychologists are typically responsible for the assessment activities that contribute to developing IEPs. Student services staff have often received training in the use of assessments and data collection as a part of their professional training programs, which is not the case for many teachers and administrators receiving their general education license. Student services support staff have also acquired additional data analysis expertise as a result of the IDEA and NCLB mandates that all students participate in state and district-wide assessments. In the past, students with special needs were often tested out of grade level when taking state achievement tests. Now NCLB requires that all students be assessed on grade-level achievement tests. Independent of the 1% of students with the most significant cognitive disabilities, all special education students are expected to take grade-level achievement tests (Huefner, 2006). While IDEA 1997 required state-level testing for special education students, it was not until the enactment of NCLB that testing of special education students truly became a schoolwide concern.

This paper explores the ways in which school leaders are turning to student services staff as local experts in data analysis and use to meet the demands of high-stakes accountability. We have been collecting data, as part of a 5-year National Science Foundation–funded study, on how school leaders create data-driven systems to improve instruction at their schools. In this research,

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it has become apparent that school leaders have turned to the practices and expertise of student services personnel in their efforts to develop schools that use data effectively. We found that while schools already had significant capacity to design *curriculum-level* interventions to address the needs of groups of students, leaders in our schools turned to special education practices and professionals to provide the in-house expertise necessary to create a variety of *student-level* interventions. This paper provides a picture of the increased role that student services staff have had in developing and maintaining program- and student-level support programs. Specifically, we investigate two central issues:

1. *The practices of student services staff provide a precedent for student-level intervention design.* School leaders are reshaping special education practices to help all students and teachers meet the demands of high-stakes accountability. The emergence of problem-solving teams (PSTs) provides a good example of how special education practices, and specifically the IEP process, are being adapted to address general education issues with individual students (see Problem-Solving Teams section, below).

2. *Student services staff play new roles as data-savvy instructional leaders.* Student services staff are trained in using data to diagnose and guide learning plans for individual students. The need for data-driven student-level interventions invites a new range of staff, including social workers and school psychologists, to play key leadership roles in revising core instructional practices of schools.

In addition to showing how schools utilize available expertise to build data-driven instructional systems, our findings provide insight into how schools might integrate internal instructional resources, such as instructional and student services staff, that have been historically separated. This new melding of practices promises to reshape both instructional leadership and special education. As school leaders draw data-driven special education practices into the core instructional program, student services staff offer children access to a broader range of services. The capacity to identify and help students before they fail not only fulfills accountability demands but also changes how schools view teaching and learning.

Methods

This paper presents data collected during a National Science Foundation–funded research project designed to study how leaders create social and technical systems to help teachers use achievement data in their instruction. Our study was designed to investigate the practices of schools with strong reputations for improving student achievement scores and using data effectively. We focused our site selection on the practices of elementary and middle school leaders in a Midwestern state. We also collected information on data-based practices at the district level for each school. We began site selection by consulting education leaders at universities and at state and district levels. We generated a list of elementary and middle schools with improving test scores and a list of school leaders with a reputation for effectively helping teachers to use data.

Our data analysis here draws on data sets collected at each school and used as the basis for individual school case studies. Yin (1994) proposed that a variety of data be collected to ensure the accuracy of case study representation. We conducted 52 structured interviews with

formal and informal leaders at school and district levels. We also recorded 53 observations of faculty meetings, professional development sessions, data retreats, and other events identified as important by the staff, and collected a variety of artifacts from every school, such as school improvement plans, staffing charts, budgetary information, and parent/community handouts. To make sense of the over 1,000 pages of field notes and artifacts collected, we used a qualitative data analysis program (NVivo 7.0) to code our data.

We created a coding system based on the data-driven instructional systems (DDIS) framework (Figure 1; Halverson, Grigg, Pritchett, & Thomas, 2005) we developed to trace the structures and practices school leaders establish to achieve data-driven organizational functions. These functions include:

1. *Data acquisition*: How schools collect, store, and represent the variety of information used to guide student learning;

2. *Data reflection*: How schools make sense of the data collected and set instructional goals;

3. *Program alignment*: How schools use data to determine instructional program adequacy and coherence;

4. *Program design*: How schools develop new program initiatives based on data-driven discussions;

5. *Formative feedback*: How schools develop processes to measure the success of program design in terms of student progress;

6. *Test preparation*: How schools prepare students to generate new achievement results.

Figure 1. **The Data-Driven Instructional Systems model.**
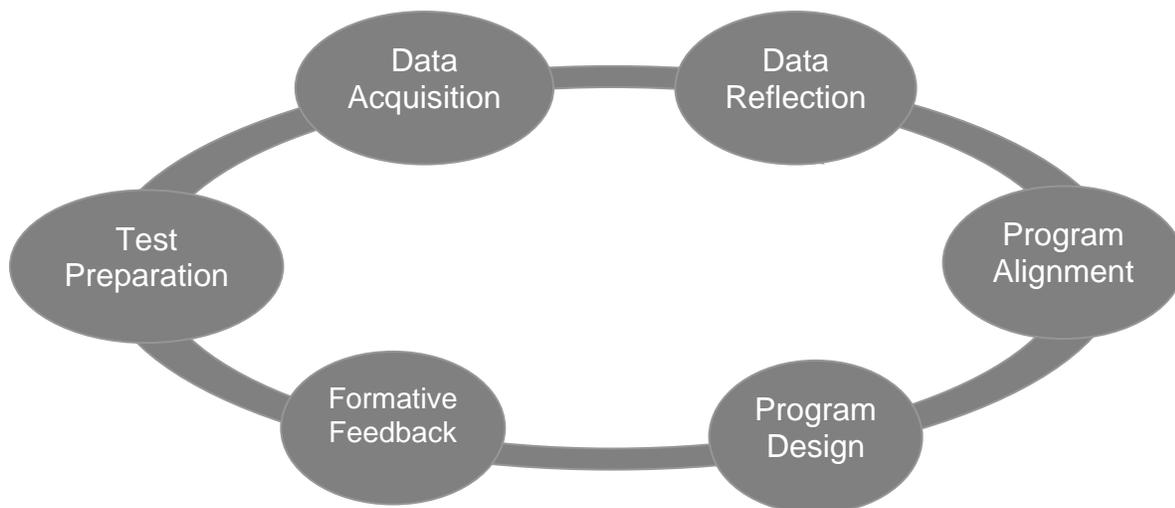
The DDIS framework acted as a selective coding filter to help us organize narratives that described the data-related practices present in each school (Glaser, 1998). The data we present

here reflect the practices of formal and informal leaders and staff who took on key roles in facilitating data-driven conversations, reflections, or redesign efforts in their schools.

Findings

Data-Driven Instructional Leadership: Two Schools

Our DDIS study revealed several kinds of social and technical systems school leaders developed for using data to improve learning. The student services staff appeared to play important roles in the program design and formative feedback DDIS functions. This paper highlights two schools, Malcolm and Harrison,[2] to understand how the roles and practices of student services staff shifted to help use data to improve learning. The following short descriptions of the schools' contexts are distilled from case-study site reports developed as a result of our data analysis.

Malcolm School is an urban K–5 school with a highly mobile population of 220 children. In the past several years, 70% of Malcolm's students have qualified for free or reduced-price lunch. The school's proportion of minority students is among the highest in the district. Malcolm is considered a schoolwide Title I school, and it is eligible for state class-size reduction funding. In spite of the challenging population, Malcolm has improved student standardized test scores to the point that they now rival those of any other school in the district. Our research at Malcolm revealed that school leaders and teachers had developed several core data-driven instructional practices to guide teaching and learning. While we expected to find a focus on literacy and curriculum, we also found a highly developed data-driven support system for student behavior. Malcolm's support system addressed both program-level and student-level concerns at the school. The student services staff—including school psychologists, the Title I teacher, special educators, and social workers—facilitated these supports and played an integral role in making sense of data collected on program- and student-level interventions. Malcolm leaders saw these support staff as critical to the success of the school's instructional initiatives. Student services staff were part of the school's decision-making body and contributed to the integration of the school's academic and behavioral components, which are often seen as separate entities at schools.

Harrison School is a K–8 school serving more than 500 students in a large, urban, Midwestern city. Harrison serves a diverse population, with nearly 30% Asian, 10% African American, 20% Hispanic, and 40% White students. At Harrison, 70% of students qualify for free or reduced-price lunch, and 30% have English as a second language. Once identified as a "school in need of improvement" under NCLB, Harrison has more recently received a U.S. Department of Education Comprehensive School Reform grant to reorganize the school around the Direct Instruction curriculum. The transformation of Harrison, like that of Malcolm, began with a focus on literacy and curriculum alignment, then expanded into the development of an elaborate academic and behavioral support system that used data to help determine program- and student-level intervention needs. In Harrison's case, the school piloted a district-wide initiative to use the problem-solving method (see Problem-Solving Teams section, below) to provide schoolwide support for struggling children. Harrison's use of the problem-solving method provides insight

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[2] All names are pseudonyms.

into how special education practices can be used to support schoolwide, data-driven decision making. In Harrison's case, the student services staff, especially the school psychologist, have helped the school make progress in implementing its data-driven model.

Our research in both of these schools illustrated how student services staff are relied on to provide data-driven instructional leadership services beyond their traditional job descriptions. To be sure, much of the traditional work of school psychologists and social workers in each school has persisted. However, we found that staff members in each of these areas—staff with expertise in using data to help customize and implement student learning plans—were acting as instructional leaders in the schools. In the next sections of the paper, we describe how first the *practices*, then the *roles*, of student services staff were transformed by the need to develop the schools' capacity for data-driven instructional practices. We then describe the implications of these changes for the instructional practices of the schools.

IEPs as a Precedent for Schoolwide Initiatives

Special education's individualized education program (IEP) served as a powerful precedent for organizing student-level, data-driven instructional practices in each school. IEPs have served as core practices for providing special education services since the enactment of the Education for All Handicapped Children Act in 1975. An IEP describes the services customized to meet the special needs of a student. Broadly speaking, prior to the advent of the IEP, school instructional interventions were primarily assembled at the curricular level. Student support staff, such as guidance counselors, helped students meet the demands of the instructional program. If students struggled with their courses, they were tracked into remedial classrooms, moved to another school, or simply failed. The IEP in particular, and special education in general, constituted an important, data-driven precedent for individual student program planning. With the IEP, schools could legitimately pursue a student-centered path to instructional interventions by customizing existing (and new) resources to meet the needs of individual students.

The aspects of the IEP process we wish to highlight here are its mandatory, data-driven components: (a) identification and evaluation, (b) staffing, (c) plan construction, and (d) plan review. In the *identification and evaluation* processes, teachers or school staff members use classroom assessment data and informal observational data to determine whether students struggling in the general education program are eligible to receive a more comprehensive evaluation, often in the form of specialized assessments. The assessment results are then referred to a *staffing* team. IDEA requires that each such team include parents, regular education teachers, special education teachers or service providers, and a school representative—often a school leader—who is qualified to provide or supervise instruction that is specially designed to meet the unique needs of children. Often school psychologists or social workers serve as the members of the team responsible for communicating evaluation results. The team reflects on the data and the perceived needs of the student to determine the student's eligibility for special education services, and to develop an *action plan* that includes (a) a statement of the student's present levels of performance; (b) annual achievement goals; (c) a description of services; (d) the setting in which services will be provided; and (e) the dates by which services will be provided. The team then agrees to a means of evaluation and a process for revisiting the goals and services specified in the IEP.

To be sure, the IEP as implemented in many schools is far from a model practice. For example, IEPs have been used to overidentify students of color as qualifying for special education services (see, e.g., Losen & Orfield, 2002; Zhang & Katsiyannis, 2002; Blanchett, 2006). In practice, the IEP process has been seen at times merely as step toward assigning a student to special education. This reactive model is often referred to as the *wait-to-fail* model of special education: if classroom interventions did not change academic outcomes for a student, then the next step was to wait for the child to fall far enough behind his or her peers to qualify for special education. Even when used effectively to identify students, IEPs have often resulted in the marginalization of students in pullout programs that cut off access to general education classrooms (Capper, Frattura, & Keyes, 2000). For the purposes of this paper, we are less interested in the history of IEP usage than in the precedent IEPs provide for using data to address student-level learning issues. The now commonplace IEP process serves as a powerful prototype for how school staff use data to design learning plans for individual students. In our research, we found two examples of how schools extended quasi-IEP processes into schoolwide programs designed to use data to identify, design, and evaluate new kinds of student-level interventions: the Problem-Solving Team at Harrison and the Respect and Responsibility Team at Malcolm.

Problem-Solving Teams: Taking the IEP Schoolwide

The problem-solving process. Problem-solving teams extend the IEP process to address learning issues for students across the school. Reschly, Tilly, and Grimes (1999) described problem solving as a systemic, non-categorical approach to delivering special education services. In a traditional special education model, students need to be assigned to disability categories in order to receive services. Problem-solving processes allow schools to diagnose learning issues with the assessment tools used with all students and to customize learning plans for students based on the existing instructional program (Jankowski, 2003; Yssledyke & Marston, 1999). Although problem solving, like the IEP process, is rooted in special education, many districts have extended the scope of problem-solving activities to address planning and student learning activities across the school.

Harrison's Easton School District, for example, described its approach to problem solving as "a school improvement initiative based on the problem-solving process." Problem solving in the Easton District was characterized by a school leader as "a collaborative, outcome-based intervention process that utilizes continuous progress monitoring to drive instructional decision making and resource allocation based on student needs." The advent of NCLB moved Easton's problem-solving process from a special education intervention to a schoolwide, data-driven, decision-making model that integrated school improvement planning, the alignment of resources with standards and instructional priorities, and the development of professional learning communities. One Easton district leader noted:

> I think that data use is something that's evolving in a positive way. I think that the No Child Left Behind with all of its weaknesses, one of the really positive things that it has fostered is an increased awareness of . . . data in general. [I]t fostered an increased awareness of and appreciation for accuracy in data.

NCLB has pushed the district schools to take data seriously and to understand how measures of student achievement are linked to core instructional processes. The district leader explained:

> Understanding how [data use] fits into the whole strategic planning process for the school, I really think that this is a result of No Child Left Behind . . . . We really wouldn't have been able to create that kind of urgency for schools to pay attention to it if it weren't for No Child Left Behind.

NCLB motivated the district to develop a model to integrate problem identification, planning, solution development, and assessment into a schoolwide process. The urgent need to meet the demands of high-stakes accountability required an enhancement in schools' capacity to modify instructional practices in accordance with the legislation (Abelmann & Elmore, 1999). Adapting the problem-solving model from a student-level to a school-level intervention pointed to how these processes might be integrated across schools.

Harrison's implementation of its problem-solving process demonstrates the link between current practices in special education and a possible future for the organization of public schools. While the district model uses problem solving to describe a more general, schoolwide intervention strategy, the Harrison Problem-Solving Team (PST) is more firmly rooted in the special education model. Starting with the 1997 reauthorization of IDEA, schools were required to collect data on students before placing them in special education. Many schools responded by developing school-based teams, modeled on IEP staffing teams, that were composed of the classroom teachers and student services staff members such as the school psychologist and special education teachers (Reschly et al., 1999). Harrison's version of problem solving echoed the IEP process of *identification and evaluation*, *staffing, plan construction* and *review* that includes data-based criteria for success. The following narrative synthesizes our experience with the PST process at Harrison.

According to the school psychologist, "anyone in the school can make a PST referral . . . based on either [student] learning or behavior." When teachers observe academic or behavioral problems with a student, a referral is made to the school psychologist. The psychologist uses available information to assess the condition and specific needs of the child and then decides who should be present at the PST meeting and when the problem will be discussed. A staffing team composed of the school psychologist, special education teachers, classroom teachers, and the parent then meets to determine which kinds of data will help to construct a learning plan for the student.

The school psychologist begins the meeting by providing a summary information packet for each student referred to the team. As a Direct Instruction (DI) school, Harrison uses a variety of formative assessment tools to assess student learning and determine student learning goals. This data-rich environment allows the school psychologist to develop a sophisticated data profile of how a student is learning the DI curriculum. The discussion is further strengthened by district and promotion data readily available from district data warehouses. This data is often used to look for correlations between the student's current problems and his or her past attendance, standardized testing, and so on. This information supplements the PST's experiential knowledge of the student. The team then reviews the information packet compiled by the school

psychologist and discusses whether anyone has observed anything different in the student's recent behavior. The classroom teacher reports whether there are any behavioral disturbances recorded through the DI reporting process. The social worker describes the student's behavioral record, and the parent, if present, is asked about issues at home. The psychologist then homes in on the behavioral problem in relation to academic achievement by comparing current DI measures with other assessments, such as DIBELS[3] testing. These measures are checked against the perspectives of classroom teachers. The PST develops a series of measurable academic and behavioral goals and interventions for the student. Because the PST works in the data-rich DI environment, many of these goals can be measured using the school's existing assessment tools. The PST then sets up a follow-up meeting to monitor the student's progress toward his or her learning or behavioral goals. If the goals are met, the student is released from the PST plan. If the student does not make adequate progress toward the PST plan goals, the PST develops further interventions, including the possibility of a special education placement.

The PST thus acts as an intermediate structure intended to provide a non-categorical customization of the school instructional resources to meet the needs of students. The PST serves as an intermediate adaptation of the IEP that allows the school to develop data-based interventions to address emergent student behavioral and learning issues. One teacher commented that "certainly anyone involved in a PST is discussing data on some level because you have to keep track of some kind of data." The central role of the PST is evident in both the manner in which a student is discussed and the data used to look at the student. The school's social worker discussed how problem solving

> brings it all down to the individual student level . . . . [E]very problem-solving team meeting involves deciding what kind of data we're going to collect on that particular issue, and then usually in 3 or 4 weeks we all meet back together to look at it and figure out what to do with it.

In the past, school staff might have assumed that something was wrong with a student when meetings such as these were held. However, the data-based PST meetings have started to change perceptions of the supports students need to be successful. A Harrison kindergarten teacher summarized the influence of problem solving at Harrison: "Problem solving is the overall way to approach everything in the building."

The transition to problem solving at Harrison has highlighted the difficulties of bringing together the previously separated roles of teachers, special educators, and school psychologists to create student learning plans in the PST. The psychologist acknowledged that many teachers continued to struggle with the transition from reading achievement data to diagnosing student learning issues. "Even though my brain works that way, I find it very confusing that other people don't get the sort of logical connections between it, but everyone's different." The psychologist described the difficulty of getting teachers to integrate data into the student evaluation process:

> [I] try to keep people on track of "why do you think that we're getting this particular data?" and "what do you want to be different?" and then "what is our plan?" and "how are we going to make it different?" So, any discussion that I'm involved in, I try to focus it back to data because it leads

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[3] DIBELS, or Dynamic Indicators of Basic Early Literacy Skills (http://dibels.uoregon.edu/), are a set of standardized, individually administered measures of early literacy development. They are designed to be short (one-minute) measures of pre-reading and early reading skills.

us beyond just admiring the kids or [saying] "we're working really hard and yet it's not coming out" to focusing on who didn't do well.

Another problem in using data to address student learning issues across the Harrison School related to the organization of data into role-bound silos. A PST member described how "trying to get the data . . . out from pockets of people to the broader staff . . . continues to be a big problem because some people really get it now and really know how to use it, but it is often times not the classroom teachers." Reconciling the tension between traditional instructional practices and the data-driven problem-solving process is a continuous aspect of the school psychologist's work at Harrison. "It's not so much that people aren't capable of analysis," she explains, "but a lot of times they just want to jump to, okay, what are we going to do and how are we going to fix it, and this, unfortunately, leads to lousy solutions."

Part of her difficulty was helping teachers shift from the traditional, informal approach to assessing students to the more data-informed approach characteristic of special education. Here, the gap between special education and general education training became apparent. As one teacher commented:

> When we were first trained in problem solving, we were unfortunately trained from more of a special education point of view instead of the overall school thing, and . . . there's still people who think that it's about special ed—it's not a way of how *we* work in the school—so it's something that we're still learning how to do.

Emphasizing data-driven practices both in DI and in other aspects of the curriculum has helped teachers to make the transition to the special education model. Teachers have used several kinds of formative assessments to gauge the success of reading interventions. The principal described how:

> [O]ur problem-solving model [gives us] a bigger picture of a kid. Rather than just saying "the kid can't read," we can ask, "what are we going to do?" Now we have a couple [of] snapshots of how kids are doing: maybe it's a grade-level thing, or maybe a classroom-level thing. Maybe it's a schoolwide-level thing.

Situating the PST process in this data-rich environment has helped teachers and staff see how assessment data can be used across the instructional program to shape plans for student learning.

Leadership roles for Harrison student services staff. The new PST leadership roles put additional pressure on Harrison student services staff. Behavioral and learning problems that were once dealt with through informal processes are now subject to PST interventions. The PST structure allows for a small group of teachers and parents to work together in developing a data-driven plan with the assistance of student services staff with extensive training in working with data. The Harrison student services staff have taken on these roles. However, the school psychologist and social worker are stretched thin by efforts to evaluate the learning of all students in terms of achievement data. The school social worker, for example, stated that, as a result of the PST, "there's not a real clear line between psychologist and social worker." While the psychologist "provides guidance [and] does IQ tests" and the social worker continues to do "home visits for attendance," when it comes to working with assessing student learning, "both of us are involved." This emphasis on using data and the PST has meant that some student support

service responsibilities have been pushed to the margins: "If you mean clinical therapy . . . [then], no, that doesn't happen here because neither of us has the time that we could commit."

Student services staff have also taken on more formal leadership roles in the school. Another Easton district initiative calls for the establishment of learning teams at each school. The learning team is organized to use data to improve student learning by developing the school education plan, organizing professional learning for teachers, and cultivating a safe learning environment. Learning teams must include the principal, the literacy coach, and at least six teachers. The Harrison Learning Team also includes the school psychologist, the social worker, and a special education teacher. The Learning Team plays a central role in coordinating the use of data to support learning. As the school principal explained:

> I know our Learning Team is really key [for] looking at data. . . . They're the ones who develop the planning for the school. The people on the Learning Team . . . are familiar with it, are trained in data collection and analysis, and [they] can help to move the others along.

The student services staff play central leadership roles in the Learning Team. A part of this formal leadership role has been to help colleagues learn to use data effectively to develop and analyze the school educational plans. The school psychologist, for example, sees her role as helping the Learning Team become more data-focused:

> We do a pretty good job of using data in problem-solving teams . . . . We're now using it a little bit more in the Learning Team. That has been a bit of a challenge, to tell you the truth, despite the fact that that's really what [the Learning Team] is trying to do—problem-solve all the time and use the data and what the data tells us [to do]. It's coming, but that's been kind of a slow process.

Although she served in a leadership role to help the Learning Team use data effectively, the school psychologist was still limited in her ability to do anything about the ways other committees—primarily the teacher-driven grade-level teams—used data to inform their practices. Part of the problem in using data at this level was the gulf between the data expertise of the student services staff and that of the teachers. The school psychologist explained:

> It was very frustrating because I think, "Here's this great data and we're not using it." I said, "Let's look at where the kids are falling apart on the test. . . . " There was a small [teacher] committee that looked at it [last year]. They looked at the math test . . . they discovered a pattern which I had been aware of for a number of years.

Fortunately, the school principal has been able to build links between the support staff and the teachers. As the school literacy coach commented, "I'd say the principal always gives the direction . . . . She's a great thinker who always sees the big picture."

The PST process at Harrison has made student service practices and student services staff central to the school instructional program. The need to meet accountability challenges pushed school leaders to develop instructional programs that could yield predictable student learning results. Analyzing the role and function of the PST demonstrated how the school relied upon the IEP precedent and student services expertise as critical resources for developing the school's capacity to diagnose and address student learning issues. The school principal emphasized how Harrison worked to develop a program to serve all children:

It depends on what the PST figures out [about] where we're really struggling. Is it just looking at the data and trying to figure out what's going on with this child and then figuring out different strategies and interventions? Are we effective with every single strategy? No, but I've never seen a school that tries so hard. We don't give up because [a student] doesn't qualify for special ed. When I was a teacher in another school, there were these "grey area" kids, and they would just say, "sorry, we can't help you there, they don't qualify for special ed, so just deal with it." We don't do that here. We work through the process and all of the kids get supported.

The Respect and Responsibility Program:
The IEP as a Precedent for Student Behavior Intervention

   Development of a student intervention process. Malcolm School developed an intervention structure similar to the PST with their Building Consultation Team (BCT). Student academic, social, and behavioral challenges are referred to the BCT, which brings together the classroom teacher, administrative staff, and parents to develop an action plan. The BCT and the PST are both built on an IEP model. Both develop individual learning plans for students to prevent them from needing special education, and both stress the use of data-based decision making. The Malcolm school social worker, who attends all of these meetings, described how the BCT works:

   The BCT meets once a week for about 45 minutes per child. The format [is] usually [to discuss] strengths and weaknesses, what are the issues, . . . what's been tried, what hasn't. And then as a group, we define what are we going to try next and when are we going to get it done by.

   The evolution of the Malcolm BCT was similar to that of the Harrison PST. Students had to be categorized to receive special education services at Malcolm, and the staff looked to the BCT to accommodate a more flexible program that could serve students without categorization. Also, the BCT was designed to provide continuous monitoring of the resulting learning plan:

   [O]ne of the glitches in [the special education] system is you create a plan and you know who's supposed to implement it, but you don't say when it's going to be done by. So we include when you're going to get that done by and then periodically—I would say once every . . . quarter, if not month—we go through the previous interventions . . . list, and we say "who did it?" and "have you really done it?" or "do you still need to do it?"

The problem-solving approach to continuous monitoring gives the BCT a schoolwide perspective on how students are progressing through the system. The school social worker continued:

   And we usually schedule kids for a review check-in with the parents, so kids that we saw in September, we review right around January—say "how's it going, what's happening, what needs to be done, if anything, or what were the results of the interventions?" And we always set up in the spring of every year what we would call an at-risk list or a watch list—kids who we don't want to have slipped through the cracks next fall when we're busy with life and new staff people working with them.

   The BCT was designed, like the PST, to provide a student-level intervention strategy that would supplement the strong district program-level curricular interventions. Getting to the point of individual student interventions was a result of a long process to revamp the school

instructional program. When the principal arrived at the school in the late 1990s, Malcolm had the lowest literacy scores in the city. The needs assessment completed as part of the school improvement process set the instructional improvement agenda for the next decade.

> There were 136 problems identified at that time. So we focused on the top four challenges for the school. . . . We created four action teams to focus on the top four issues of the school, and they still exist today. They really are the wheels that drive the school.

These four action teams became the Literacy Team, the Curriculum Continuity Team, the Home-School Community Team, and the Climate and Order Team. Nearly all of the school's initiatives flow from these four teams.

The first three action teams benefited greatly from the quality of the programs provided by Malcolm's Weston School District. In literacy, for example, the school embraced the district's Balanced Literacy program, and Malcolm teachers received extensive training in the district approach to literacy. This training included using formative assessments to determine whether students were making progress and outlines to determine how effective literacy interventions could be constructed. Once the faculty began to feel comfortable and the students began to make gains in the literacy program, the school turned its attention to improving writing achievement. Again, the district provided a great deal of assistance in revamping the school's approach to teaching writing and offered staff training in the district writing program. Scores began to improve in writing as well, and the principal continued her instructional leadership efforts to acquire district resources for ongoing professional development. The district had also established a framework, and sets of resources, to aid schools in developing their capacity for student engagement (the commitment students have to school), student learning (academic progress), and student relationships (the personal connections between staff and students). These initiatives informed the school's efforts in the Curriculum Continuity and Home-School Community Teams.

The Climate and Order Team, however, did not find such strong district precedents. The fact that Malcolm had the highest poverty and mobility rates for any school in the district made ensuring a quality learning environment for students an ongoing struggle. Many behavioral issues were rooted in students' coming to school with inadequate food or clothing. Children were coming to school hungry, and teachers were spending valuable instructional time feeding students in the classroom. The team felt something proactive was needed to identify the students who needed help before they acted out in the classroom. One team member commented: "Our focal point at the time was, let's make it positive, so we said, 'What are our goals for this activity?' and it's to have the kid learn respect and be responsible for what they did."

Simply pulling students out of class for behavioral issues would force the school to rely on old models of exclusion. In the context of NCLB, however, schools were pressured to move beyond exclusion to make sure students were in class and getting the instruction they needed to do well on assessments. Exclusion would not help the students learn and would not address the underlying issues for behavior. Something else was needed.

The Respect and Responsibility (R&R) Program was designed to provide data and structure for proactive intervention. The Climate and Order Team designed R&R to collect a

variety of data on student behavior and to structure interventions proactively to keep students in the classroom. A team member described the program as follows: "R&R has to focus on being a social problem-solving tool, not a discipline tool. We might hand out a little discipline, a little consequence for the social problem-solving issue, but discipline comes from the principal."

Creating a program to proactively to help students with classroom behavior required a sensitive balance between care and consequences:

> Sometimes you're talking about the hard stuff about what happened this weekend, and other times you're saying that this behavior is unacceptable and therefore, you're going to come in and chat with me at lunch recess about it because I don't know if you're so safe on the playground anyway, so let's talk about that at lunch recess. And so—and this is one thing that we revisit all the time in the building—it's one of those chaotic things.

The R&R process has two central phases that roughly parallel the IEP process. First, in the *referral* stage, teachers complete a referral form, and the student is sent to the office of the school facilitator. The facilitator, a combination of Title I teacher and assistant principal, talks with the student to determine if he or she needs a time-out or more substantial help. This process is typical of student disciplinary processes in many schools. Malcolm School has recently developed a protocol for responding to R&R referrals: three referrals result in an automatic call home. If a student continues the pattern of behavior, the BCT is assembled to develop an intervention plan. The R&R program kicks in during the BCT meetings to provide the kinds of nuanced behavioral information that the district assessments provide for academic achievement. The school facilitator compiles R&R referral data into a spreadsheet that tracks how many times a student is referred, by whom, and for what reasons. The R&R team—composed of the school facilitator, the social worker, and the principal—meets weekly to track patterns in referrals (e.g., time of day and originating classroom) and types of action taken for students with a large number of referrals. An R&R team member described how the data are used to help teachers and to identify students in need of support:

> I look at which teachers have been referring a lot of children, and why. Is there a dynamic going on between two or three kids that is causing tension? Are the teachers having problems coping with the stress level caused by the students? What supports should we put in place to help that teacher cope more effectively?

As a result of their reflection, the team creates reports about individual student issues and schoolwide trends to determine more subtle patterns in student behavior. The reports are then reviewed weekly by the Principal Advisory Committee (Malcolm's version of the Harrison Learning Team) and monthly in faculty meetings. In the faculty meetings, teachers appeared to be very interested in these data, in regard to both their own students and the school as a whole. The R&R data helped teachers to address student behavioral problems in the classroom so that children could improve their relationships by spending more time with teachers and peers.

Leadership roles for Malcolm student services staff. The Malcolm student services staff played a central role in designing the BCT and R&R. A small school with a challenging school population, Malcolm needs to make creative use of personnel and resources to achieve its goals. The Malcolm student services staff, like the staff at Harrison, have taken on multiple leadership responsibilities at the school. In addition to their service on the BCT and R&R, the school

facilitator and social worker both serve on the Principal Advisory Committee (PAC), the core school leadership team. This multilevel involvement allows them to see how student-level data from the BCT and R&R are used by the PAC to make program and schoolwide decisions. Understanding how to manage and use this data at a schoolwide level has allowed the student services staff to develop their skills in response to a particular responsibility. For example, when attendance data became a key part of the social worker's job, she learned the district system for managing the data and made sure to establish a link with the BCT and R&R. The social worker commented on this process:

> As a social worker, I utilize the [district instructional] framework model and keep [the data] kid by kid. This helps us do early intervention for engagement, early intervention for academics—we analyze it in how many minutes or how many times of day. And so, when I ask, "are my interventions working?" [I can] get in touch with what's going on here.

The expertise and involvement that the student services staff have at Malcolm make them necessary participants in schoolwide decision-making conversations.

This level of involvement by student services staff has created personal and financial costs for the school. In terms of personal costs, our observations of Malcolm's social worker made it apparent that she was committed to go above and beyond the call of duty without monetary compensation. The social worker's dedication is beneficial to the school, but such devotion cannot be expected of everyone in the same position. While Malcolm's social worker said nothing about issues such as burnout or unmanageable workloads, it is important to understand that as roles begin to shift, leaders need to be aware of the personal costs for staff. With regard to financial costs, Malcolm's principal found it important to dedicate financial resources to maintain the school facilitator position. As mentioned earlier, the facilitator position was originally funded out of Title I money to help the school make the transition to a schoolwide Title I program. The principal has since worked to redefine the position into a quasi–assistant principal position, with responsibility for monitoring the R&R program as well as providing schoolwide Title I services. Based on the school needs assessment, the principal determined that such a position was necessary for the school to make needed changes and worked the system to ensure she could fund the position. Her creativity helped to establish the roles the school needed to maintain adequate intervention services for struggling students.

Discussion

The Malcolm and Harrison case studies illustrate how formal leaders in schools rely on student services personnel and practices to create data-driven instructional systems in their schools. The pressure to use data effectively means that schools must not only acquire reliable student achievement data, but also develop the capacity to intentionally adjust instructional practices in order to reach accountability goals. Some researchers have characterized this leadership work as a matter of "gaming the system" through strategies such as using categorization to evade the demands of accountability, spending exorbitant time drilling students on sample test items, or simply cheating by falsifying test scores or improperly holding back or promoting students (Jones, Jones & Hargrove, 2003; Ryan, 2004; Noddings, 2001; Leavitt & Dubner, 2005). In contrast, our research on how leaders build data-driven instructional systems revealed that in some schools, leaders and teachers work to create socio-technical practices for

generating and acting on formative data about student learning and behavior (Halverson et al., 2005). We found that school leaders did not create these new practices from scratch; rather, they turned to the local expertise of student services staff, and to the powerful precedent for organizing student-level interventions, the special education IEP.

In light of these examples, we would like to make several observations about how IEP-like structures are framing data-driven practices in schools:

1. School leaders are drawing on the expertise of student services staff to provide a common solution to an NCLB policy problem.

2. Schools are reallocating internal resources—both human and material capital—to implement student-centered assessment practices.

3. Schools are changing the roles of school psychologists and social workers, but not necessarily those of special educators.

Common solution to a new NCLB policy problem. The 1997 IDEA required schools to describe prior interventions put into place to aid student learning as a part of the referral/evaluation process. This need pressed the student services staff to develop practices for documenting the interventions used to support students. Schools throughout the country created team structures to evaluate and discuss whether these interventions were successful. These types of programs were called, for example, Teachers Helping Teachers, Student Study Teams, Building Consultation Teams (as at Malcolm School), or Problem-Solving Teams (as at Harrison School). However, since special education continued to serve as a method of pulling students out of schoolwide assessments, these team conversations remained largely in the realm of special education and did not affect the general education program (Frattura & Capper, in press).

NCLB changed the function of these team conversations about intervention success. Previously, teams may have engaged in perfunctory conversations about the adequacy of the school's interventions as a preliminary step toward special education assignment. Now, with NCLB, simply assigning students to special education does not help evade the school-level accountability requirements. IDEA 1997 required that all students with disabilities be tested, and with NCLB, schools were required to have at least 95% of the total school population take the state exam. With many schools assigning between 10% and 20% of students to special education, the new requirements meant most students assigned to special education would have to take the state exam. The quality of the interventions implemented to improve learning for students who struggled now mattered at the school level, and those responsible for designing and measuring the success of these interventions took on a new schoolwide leadership prominence. In fact, the very students who may have been written off before as special education students are now the group the school receives the most attention for moving toward proficiency. Schools are judged by their ability to move as many of these "bubble students"—those on the threshold of passing the test (Booher-Jennings, 2005)—across the line from basic to proficient performance on the exams. While researchers debate whether this form of "educational triage" offers an effective model for organizing school practice, at Harrison and Malcolm we have seen how the social workers and school psychologists played a central role in developing these quasi-IEP student assessment processes to build learning plans for students who struggle. We suggest that as

schools continue to develop new capacities for using data to improve teaching and learning, structures like the PST and R&R, and positions like school psychologists and social workers, will become more prominent aspects of the general education program.

>   ***Reallocation of internal resources.*** The cost estimates of NCLB are often modestly calculated because they focus mainly on standardized testing, and storing and distributing the data (see, for example, Hoxby, 2002). For local school leaders, however, accountability costs need to include resources for repurposing existing assessment and instructional expertise. Allan Odden's work on resource reallocation (Odden & Archibald, 2001; Odden, 2004) suggests schools may already have the resources necessary for making this transition. Odden and Archibald (2001) described how schools create several kinds of specialist positions to deliver services to students who traditionally struggle, including (a) *categorical* specialists, such as special educators, to provide remedial instructional services directly to students, and (b) *pupil support* specialists, such as school psychologists, social workers, and assistant principals, to address student non-academic issues. In Harrison and Malcolm, leaders repurposed the *practices* of categorical specialists, and the *roles* of pupil support specialists, to create new forms of data-driven student interventions. Instead of focusing only on students designated for special education, the IEP process in both schools was adapted to serve as an intervention strategy for proactively developing learning plans before students were assigned to special education. In our schools, psychologists and social workers adapted their assessment expertise to provide critical instructional assessment support for students in need *before* they were placed into special education, rather than non-instructional assessment services *after* students had already received special education services.

>   No gain in organizational capacity comes for free. At Harrison, for example, the social worker commented that her time for individual student counseling had disappeared, and she did not say whether anyone had stepped in to provide this vital service. The student support staff we interviewed appeared to have high levels of dedication and a commitment to reframe their practices. Still, the principals in both schools pursued and received comprehensive school reform funding to train teachers and staff in new practices, and both principals were able to repurpose certain positions, such as Title I and district support staff, to engage in the quasi-IEP initiatives. Since the previously existing resources, in the form of faculty and staff positions, were already encumbered and embedded in existing school cultures, resource reallocation at Harrison and Malcolm were as much about changing professional culture as drafting a new budget. The ability to reallocate (and redeploy) existing staff resources to provide a critical instructional support system for all students pointed toward a significant aspect of principal leadership expertise at both schools in our study (Halverson, 2004; Halverson & Rah, 2005). The costs, here, can be figured in terms of the human capital—the expertise—of the school leadership team to recognize which staff members would be able and willing to step into new instructional leadership roles in the school. As with other examples of leadership expertise, it is difficult to translate this ability into a cost estimate or to construct a model that could be used to effect similar practices in other schools.

>   ***Special education practices, but not special educators?*** We began our study with the hypothesis that special educators, as well as special education practices, would play a key role in these new data-driven, student instructional support systems. Instead, we found that categorical staff played a surprisingly small leadership role in the PST and R&R programs. We suggest that

this fact says more about the current job responsibilities of special educators than about their willingness to engage in schoolwide leadership. Like classroom teachers, the special educators in our case schools defined their job responsibilities in terms of time spent with the specific students in their care. Some of this time was spent working with students in inclusive classrooms, and some of it was spent serving students in resource rooms and keeping up with the considerable paperwork required to deliver special education services. The special educators at both Harrison and Malcolm found little discretionary time to participate in schoolwide leadership activities.

In contrast, the job responsibilities of school psychologists and social workers were framed in terms of providing services to students as needed. Psychologists and social workers often treated acute student needs on a day-to-day basis. Students who needed more intensive services were referred to the PST or BCT processes, largely conducted by the student services staff, and if necessary, assigned to special education. In the IEP process, student services staff, especially the school psychologist, already provided diagnosis and assessment expertise in identifying students for special education. By intervening in classrooms across the school with a wider variety of students than the special education staff, student services staff were able to develop a schoolwide perspective on the strengths and weaknesses of the instructional program. And since the student services staff in Harrison and Malcolm had already served in leadership roles by creating schoolwide learning and behavioral reports and helping staff interpret the results of standardized tests, it appeared to be a relatively small step for them to take the new schoolwide role of developing learning plans for struggling students.

Conclusion

Schools and districts have faced growing pressure to use data for improving student learning. These pressures have come from the high-stakes accountability requirements of NCLB as well as from research supporting the use of data-based decision making. This shift toward data use has brought student services staff to the forefront because of their expertise in working with data. Understanding data and its use has become a part of the way schools are doing or being required to do business. This shift toward data has pushed school leaders to rely on data-savvy staff members. Certain members of a school community, such as social workers and school psychologists, typically have considerable experience generating data to measure and improve student learning. The practices of special education, for example, are framed by the assessment and diagnostic processes of the IEP. School psychologists and social workers, typically trained in both psychology and education, help students through counseling, evaluation, and the design of interventions for academic and non-academic issues. These practices and positions constitute significant resources school leaders can mobilize to design systems for using data to improve student learning.

This new melding of practices promises to reshape both instructional leadership and special education. As school leaders draw data-driven special education practices into the core instructional program, student services staff gain intermediate structures that can provide a better range of services to children. The capacity to identify and help students before they fail not only fulfills accountability demands but also changes how schools view teaching and learning.

A new wrinkle—the response-to-intervention (RtI) model—was added to these challenges with the 2004 reauthorization of IDEA. The pertinent part of the revised statute reads:

> In determining whether a child has a specific learning disability, a local educational agency may use a process that determines if the child responds to *scientific, research-based intervention* [italics added]. (20 U.S.C. § 1414(b)(6)(B))

The RtI model suggests a continuum of services that serve all students based on their current needs. The move to RtI represents a major shift in how we will view the role of special education in schools today. School leaders must recognize the possibilities that exist for change through this model because they will be expected to build RtI-like structures at their schools. RtI is a proactive model that works to identify students in need of interventions from the time they enter school and determines the instructional or behavioral interventions a student needs to be successful in the general education classroom. We suggest that the cases we describe provide examples of programs that anticipate how schools might change to meet the demands of RtI and of practices of special education diagnosis, assessment, and intervention that might come to characterize the general education program in schools.

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