

USING DATA FROM SPECIAL EDUCATION MANAGEMENT SYSTEMS TO MAKE DISTRICTWIDE INSTRUCTIONAL IMPROVEMENTS

A PCG Education White Paper

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Special education data management systems are used by school districts to support mandated documentation and reporting requirements. However, the data generated by these systems can also be used as a powerful tool for districtwide improvement. Since districts have invested heavily in this technology, it makes sense for district leaders to maximize the use of these data to support their general and special education improvement initiatives. This PCG Education White Paper explores possible uses of these data and presents results from two districts that expanded their data use strategy from a single emphasis on compliance reporting to broader use of the data to improve instruction, communication, service delivery, and systems management.

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INTRODUCTION

Since the 1980s, districts of all sizes have looked to technology and software programs to create efficiencies in special education processes. These efforts have claimed varied levels of success. School districts tried to create and use special education software programs to improve workflow. However, many of these first generation systems actually made data management more cumbersome. This was largely because the systems did not align with the legally mandated forms that teachers used and therefore required duplicative data entry, adding more tasks to teachers' already burdened workloads (Fratt, 2005).

In the last 15 years, there have been significant advances in computer technology. The advent of web-based special education documentation systems has caused resurgence in the hope that technology will solve many issues for special educators (Edds, 2002; Margolis & Free, 2001; Wilson, Michaels, & Margolis, 2005). Some observers go so far as to say that these documentation systems can be used to improve instructional outcomes.

This white paper explores the uses of data generated by these systems. It examines how the use of special education data management systems has influenced teacher practice and program efficacy, highlighting the specific case of one urban school district. The authors of this paper contend improved instructional outcomes will become much more typical when districts use these systems to support broader instructional improvement strategies in addition to using them for compliance monitoring and to increase efficiency.

WHAT EFFECTIVE SPECIAL EDUCATION DATA MANAGEMENT SYSTEMS OFFER

There is recent evidence that effective special education data management systems help school districts increase efficiencies in special education processes. Use of these systems reduces the paperwork burden on special educators, giving them more time with students, while simultaneously helping districts meet complicated federal and state compliance regulations (Edds, 2002).

Such systems include compliance and event alerts with flexible parameters to help schools stay in compliance with the Individuals with Disabilities Education Act (IDEA) requirements and timelines. Effective systems also host secure, virtual file cabinets of each student's special education-related documents (e.g., Individualized Education Programs or "IEPs"), to ensure complete and accurate record keeping and allow central office personnel to create state reports from data stored in the system, reducing duplicate data entry. The newer systems are often web-based, allowing for provider, teacher, and administrative access to student information anywhere and at any time.

The best systems also leverage effective practices in special education information reporting to provide users with robust

report libraries. These report libraries address topics and tasks common to all special education departments, such as key headcount reports, logs of services performed, and caseload management reports. Reports are professionally formatted, allowing for polished distribution to a wide variety of special education audiences, including school building personnel, district personnel, school board members, and compliance officers.

Data in an effective special education management system allow special education administrators to quickly answer critical compliance and program management questions, such as:

- How many students receive special education or 504 services? By grade? By disability? By subgroup?
- How many students receive services in a general education setting at least 80 percent of the time? Less than 40 percent of the time?
- Is the creation of IEPs timely? Are all key dates in the IEP process being met?
- What is the student listing by district? By school? By grade? By placement? By Medicaid eligibility?

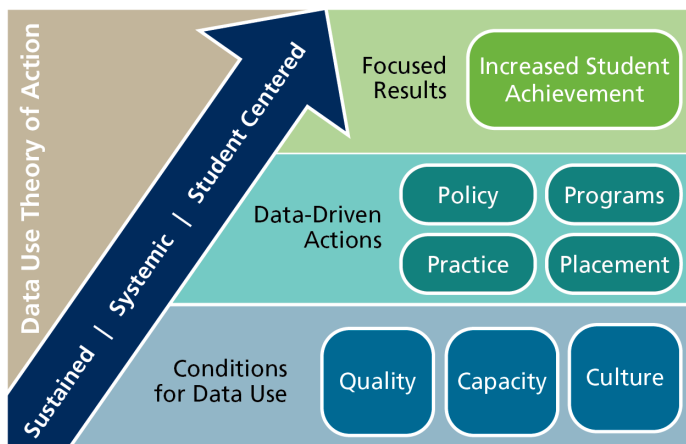
Many districts use the information in these systems to answer such questions, reduce the paperwork burden, and put controls in place that improve compliance and accuracy. These are important outcomes. However, districts should be cautioned that "computer systems and the student data stored in them... are of little value if educators fail to use the information" (Hofmeister, as quoted in Meller, 2011, p. 27). Special education data management systems collect a wealth of data. Schools and districts can use these data to inform instructional programming, make decisions about resource allocation, and to target areas for instructional improvement, thereby supporting efforts to close the achievement gap.

DATA USE AS A VEHICLE FOR CHANGE

There has been recent emphasis in helping districts to get out of the dilemma of being "data rich but information poor" (Salpeter, 2004, p. 30). Expanding the ways in which data from special education management systems are used supports this goal.

PCG Education has articulated a theory of action for how using data can lead to improved outcomes for students (Ronka, Geier, & Marciniak, 2010): When the necessary conditions for data use (data quality, data capacity, and data culture) are in place, and when data are being used to formulate policy, evaluate and design programs, guide practice, and place students in appropriate instructional settings, then increased student achievement will result (see the figure *PCG's Data Use Theory of Action*). A modern special education data management system can provide the quality data necessary to make these decisions. Realizing the full benefit of these data requires that a district focus attention on developing the capacity of educators to use the data and growing a culture of data use in the district.

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PCG's Data Use Theory of Action

As noted earlier, many districts currently use special education data systems to answer compliance questions such as “Are all of our students’ IEPs being completed on time with appropriate goals and interventions?” Or “Given their learning needs and specific disabilities, are our students in appropriate settings?”

However, districts can use data generated by the same system to gain insight into important areas about program efficacy. “Do the interventions we provide have the desired effect for specific groups of students?” “What factors contribute to a student’s success in particular settings or placements?” “How have services for particular students changed over time and what progress have they made?” Such questions get to the heart of understanding what is working and what can be improved in order for students to achieve their learning goals.

To improve data analysis focused on instructional outcomes, members of a district leadership team must first begin asking questions themselves. The team can identify significant issues raised by the data and prepare relevant data in easy formats for educators to analyze and use. Then district leaders and educators at the school level can discuss the implications of the data and problem-solve together.

For example, in one district, the special education leadership team chose to investigate an issue related to No Child Left Behind (NCLB) accountability rules: “Why had twelve of their middle schools exceeded the limits on the percentage of students participating in an alternative assessment?” After investigating this compliance-related issue using data from their special education data management system, the team determined that some students taking the alternate assessment could have possibly taken the standard state assessment.

To engage middle school staff across the district with this issue, the district leadership team developed a report for each middle school comparing student assessment choices to the courses and settings the students were enrolled in, and to the modification

instructions as documented in the IEP plans. This roster-based report allowed teachers and administrators to observe data in aggregate about how many students were being recommended for the alternate assessment and how few were actually receiving services that would typically warrant that choice.

Digging deeper, the school teams were able to identify students they felt may have the skills necessary to take the state’s standard test with accommodations. This led many schools to examine more data to understand each student’s needs and resulted in changes to some IEPs and placements. The following year no middle schools missed Adequate Yearly Progress (AYP) due to exceeding the limits on special education students taking the alternate assessment, and many schools saw the special education subgroup meet AYP in some subjects.

Collaboration between leaders and teachers is essential because it sets the stage for educators to rethink the way things have been done in the past and grants them the authority to change. Such use of the data as part of a continuous improvement process can have dramatic effects for student achievement.

ONE DISTRICT’S STORY

A study of how one urban district used its special education data management system (Meller, 2011) found that use of the system generated a variety of shifts in teacher behavior. Some of the findings were compliance related and had significance for broader accountability. Others detailed how the data system facilitated greater collaboration around the specific needs of students, thereby raising the quality of both the IEP document and the actual services students received. Most importantly, the system appeared to play a key role in supporting the development of a collaborative data-informed culture by providing the ability to create, store, and organize information in ways that encouraged educators to make data-informed decisions about their students.

The system enabled special education teachers to better plan instruction

Special education teachers in this urban district reported that the movement to an online system assisted them with making instructional decisions about their students. Teachers reported that this was because more data were available to them through the system (e.g., IEPs and progress monitoring documents from the student’s previous teachers). Teachers also mentioned how helpful it was to have best practices and resources shared across grades and schools. One teacher said that the system provided good ideas for goals and objectives, while another teacher commented: “I don’t have to hunt through books anymore to create what I would consider an effective goal that a child can use. I can go into the system, and from first grade all the way up, it’s there” (Meller, 2011, p. 85).

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By eliminating the time needed to sort through paper files or to retype or handwrite information, special education teachers were better able to concentrate their efforts on implementing instructional best practices and developing new or refined lessons for their students.

Use of the system enhanced communication between special education and general education teachers

The system influenced the way that special education teachers talked about, thought about, and discussed data with their general education peers. Discussions about student data began to occur regularly—in formal forums, such as during schoolwide and citywide professional development sessions, and in less structured conversations, such as grade level meetings. Conversations also occurred in hallways and during after school get-togethers when teachers had a few minutes to catch up with one another about specific students' challenges.

One principal explained that, due to the data system, special education teachers were “considered teachers instead of IEP writers, and therefore they began working together as a team with the ‘regular ed’ teachers” (Meller, 2011). The data system supported teachers to move toward a more student-centered culture. There was clear evidence that more teachers were using data, such as formative assessment and progress monitoring results, to make joint decisions about their students. Having easily accessible data from a system enhanced communication between teachers.

Use of the system increased compliance

While a special education technology system cannot be a substitute for learning the fundamentals of special education law, it can serve as a tool to assist teachers with expanding their knowledge base. Prior to the district's system implementation, a typical school building had one special education teacher on the second floor of a building writing an IEP one way while another teacher on the first floor was writing one in a completely different way, opening up the district to legal and audit issues.

The data system's compliance checks provided assurance that information on IEPs districtwide was consistently completed and procedurally compliant. More than half of the teachers who participated in a survey indicated that using the data management system helped them to better understand the special education process, including their understanding of procedural requirements.

Since the system monitored for quality assurance, special education teachers could feel confident they were avoiding procedural mistakes before they developed into major issues. In conclusion, the study's findings showed that, for this district, use of the special education data management system contributed to improved instructional planning, communication between educators, and compliance rates.

GETTING THE MOST OUT OF YOUR SPECIAL EDUCATION DATA MANAGEMENT SYSTEM

The results described above do not happen automatically upon installing a special education data management system and training teachers how to use it. While software does force changes in some procedures and processes for completing work, technology by itself does not change the way teachers collaborate and work to meet the needs of students. Having the special education data management system up and running with training completed is only the first step to getting the types of outcomes described in this paper.

The recommendations below suggest actions that districts can take to ensure that a data-driven systems approach takes hold and improves the quality of services that special education students receive.

Establish a vision for data use

To obtain these outcomes and maximize the benefits to students and the adults who work with them, districts must be purposeful in putting in place a broader implementation strategy supported by ongoing monitoring of progress, such as annual surveys or stakeholder meetings. Formulating that strategy requires leadership to envision how using the data available in the system can support collaborative decision making that results in positive outcomes for students. Such a vision may describe the expectation that

- Special and general education teachers collaborate and share information when making data driven decisions that affect student programming and placements.
- Collaboration and shared data use between general and special education teachers will positively impact instruction in all classrooms, e.g., through efforts to make lessons accessible in the most appropriate setting rather than differentiation through marginalization.
- Data should be reflected upon to support changes and updates in IEPs to address students' current needs. This approach emphasizes the use of data to support changes to services as students develop and grow over time.

Once the vision is developed, it can be shared with leadership at the district and school levels who can take action steps to support teachers to enact the vision.

Collaboratively develop a robust special education technology system

Many school districts are burdened with outdated information systems that prevent them from accessing and analyzing student information. Moreover, some districts still use paper special education forms, which prevent administrators from planning, tracking, and understanding emerging trends across schools and classrooms. Many tasks that are still performed by hand can be

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automated, thereby minimizing inconsistencies and preventing mistakes. The development and integration of systems can assist districts with mandated reporting requirements and have the added benefit of providing critical information that can be used to assess program and placement effectiveness, monitor policy implementation, and improve teaching and learning.

Improve training of all teachers and leaders in special education best practices, data analysis, and technology use

Professional development sessions can be intentionally conducted to address the needs of both new and veteran teachers. Training session can be integrated in content from the outset, showing teachers how to use the system and how to develop a quality IEP. Use of these strategies in tandem can greatly improve uptake and use of the system. One central finding of the study described earlier was an emergent two-way training model between young and veteran special education teachers. Experienced teachers shared special education content and procedures with new teachers, while the newer teachers were key to making technology use an integral part of the veteran teachers' work. Once the system is being used regularly, then special and general educators can participate in professional development that shows how the data from the system can be used to improve teaching and learning for individual students and groups of students with similar needs.

Answer questions about program improvement beyond compliance and legal requirements

Districts and schools can use data contained in special education data management systems to better understand the impact of programs, placements, and interventions.

The data collected within the IEP process are a rich source of information that can be harnessed to understand how student needs are being met. Data, such as information contained in progress monitoring logs and reports, can also be useful in identifying systemic improvements that can help meet the needs of students and the adults who work with them. For example, the systems can be used not only to track assessment accommodations for AYP but also to monitor the efficacy of interventions. Special education and general education teachers should be encouraged to rethink how they can collaborate to change practices to meet the needs of all students to prepare them for career and college. Leadership can support this work by creating a safe environment that encourages inquiry and risk taking.

CONCLUSION

Technology has transformed the way special educators can archive, access, and use information. Technology-based special education data management systems now provide educators with the ability to efficiently manage compliance processes and speed the flow of information. As a result, compliance in many districts has improved. This is a reflection of improved data quality and the expansion of tools that improve educators' capacity to access and use data.

Significantly more value can be gained by using the data generated by the system as support for rethinking and improving current ways of doing things to better meet student needs. This is a cultural shift for many districts but can be accomplished through purposeful and strategic leadership at the school and district level. Principals can support general and special education teachers to better serve students by analyzing data together. District leadership can leverage the rich data stored in these systems by modeling results-driven decision making at the central office level and by providing structured forums for educators across schools and grade levels to examine the data and discuss how to meet student needs and support increased student achievement.

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We always like to hear from readers. If you would like to provide feedback on this White Paper, please email your feedback to jmeltzer@pcgus.com. Please include your name, title, organization/district and state. Thank you.

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