

"Data" Need Not Be a Four-Letter Word:

Using Data to Improve Schoolwide Discipline

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Making decisions from reliable data is an important part of creating a safe and effective school environment (Lewis & Sugai, 1999; Sugai, Sprague, Horner, & Walker, 2000). For too many teachers and school administrators, however, "data" has become a four-letter word. Collecting data can be time-consuming and cumbersome. The data may be used at a district or state level, unrelated to the daily activities of those who collect the data. And most damning, data collected in and about schools are often used in a punishing manner (e.g., to identify those who fail to meet some external criterion) rather than as a way to reward and promote excellence.

We are enthusiastic about the use of data in schools based on our experience over the past decade as we have worked with school teams focused on improving behavior support systems in their schools. In each case, the team's efficiency, precision, and effectiveness improved when members began using data to monitor the patterns of problem behavior in their schools. This article is about a different way of gathering and using data for local decision making. Although our focus is on data-based decision making to improve schoolwide discipline systems, the basic data-management principles apply to data collected throughout a school (or district). Specifically, we describe four key messages about data systems that we have learned from our experiences.

Successful Use of Data

Four guiding principles make a data system useful to educators. These are principles that apply regardless of the content focus (e.g., academic, behavior support) or the level of decision making (e.g., classroom, school building, district).

1. Use the data for decision making. The single most compelling message when considering data collection is that decision making should drive the data system — not the other way around. Data are pieces of information. The value of this information is to inform effective decision making. We should collect data to improve the quality and efficiency with which important decisions are made. Therefore, before any data are collected, we need a clear understanding about (a) what decisions will be influenced, (b) who will make those decisions, and (c) how often (when) data are needed to be useful for decision making.

Guiding Principles for Making Data Useful

1. Use the data for decision making
2. Emphasize simplicity and efficiency
3. Use data locally
4. Design repeating cycles of data use

This information may be used by individual teachers, the school psychologist, counselor or social worker, the school administrators, and/or decision makers at the district and state level. The information will be used by personnel in the local school to design programs of behavior support (for individual students, or the whole student body), and to evaluate if programs of support are effective.

If the collection of data becomes an end in itself, the system is in error. The purpose, focus, and structure of data systems should be to facilitate and improve decision making.

2. Emphasize simplicity and efficiency. The second most important message in designing or using a data system is to strive for excruciating simplicity. The

amount of time needed to learn the system, gather the information, summarize the information, and use the information for decision making should be minimized. There is a seductive tendency when building a data-collection plan to add a bit here and elaborate a bit there. Each of those decisions has individual merit, but together they often result in a system that becomes more complicated, cumbersome, or time-consuming than can be sustained in most schools. School environments today are "minute rare." There is no time for new tasks. Data collection in schools must be viewed as an investment. That is, the minutes invested in data management need to save time in the future. Good decision making can save time. To meet this investment criterion, however, the data system must be accurate, timely, and excruciatingly efficient.

3. Use data locally. The people who gather data in schools should use those data, or see them used, on a regular basis. Information that is gathered and sent into the ether space of higher authority seldom has pristine accuracy or practical value. The field of education is replete with systems that gather complex numbers used only by others outside the school. Under these conditions, the quality and accuracy of the information may suffer. It is appropriate for state and district administrators to request information about local schools. Indeed, decision making at the state and district level should be based on local information. However, that information should also be of direct value at the local level, and should be used locally before (or while) it leaves the school.

4. Design repeating cycles of data use. Most decision making in schools occurs in regular cycles. For example, decisions about curriculum, staffing, schoolwide behavior systems, individual student behavior support, and individual



academic support occur within daily, weekly, monthly, and quarterly cycles. A critical feature of effective data systems is that the right information is delivered at the right time. If, for example, a teacher support team meets weekly to review the status of behavior support efforts, then the team needs data that are current each week. For this team, the "cycle" of data collection and summarization needs to be weekly. If, on the other hand, a curriculum team meets quarterly to review curriculum decisions, then their data cycle needs to be at least quarterly. Problems arise if data are collected regularly, but summarized infrequently. For example, the teacher support team that meets weekly does not benefit from information that is six months old. In brief, the basic message is (a) collect and report data regularly, (b) adjust the cycle of data reporting to fit the decision making cycle, and (c) if there are multiple users of the data, adjust the reporting to fit the needs of each user group.

Using Data to Improve Schoolwide Discipline

The proliferation of database software in recent years provides schools with an array of enticing opportunities to build or implement local data systems. We strongly recommend that any school serious about building schoolwide behavior support consider adopting of an information system focused on student problem behavior patterns (Sugai et al., 2000; Tobin, Sugai, & Colvin, 1996). Such a system should include more than a computer program. In particular, care is needed to attend to (a) the process by which data are gathered, (b) the computer system for data entry and summary, and (c) the process for using the data for decision making. The process of adopting or building a data system benefits from three key steps.

1. Begin with a local decision making team. A faculty team, with direct administrator involvement, typically meets weekly or bimonthly to review behavioral challenges in a school. This team is a logical focus for schoolwide behavior support efforts. The team is responsible for decisions about the design, development and implementation of schoolwide discipline systems, and the structure and allocation of systems for individual student support. The

team also works to ensure that all faculty are familiar with the schoolwide discipline procedures such as office discipline referrals, and systems for acknowledging appropriate student behavior.

2. Focus on a few key outcomes. Most schools collect many different kinds of information about student behavior. But more is not better. The goal is to collect information on the most important indicators of behavioral success using the smallest number of data sources. One common data source used in many schools is the number of office discipline referrals. A good information system ensures that all faculty and staff are using the same rules, definitions and materials for assigning office discipline referrals. However, formal staff development efforts are needed to ensure that all faculty and staff use the office discipline referral forms and materials the same way. By limiting the number of measures and ensuring that the numbers are valid, a solid foundation for decision making can be established.

3. Summarize the data for decision makers. The summary of data is where new software technology becomes a consideration. A school needs a standard system for entering and summarizing data. Teams do not need four-inch thick data reports: They need clear pictures that define patterns of student behavior. The set of charts in Figure 1 depict one data summary that is being used in over 100 schools (Sugai et al., 2000; Sugai, Horner, & Sprague, 1999; Tobin & Sugai, 1999a, 1999b). The charts report the office discipline referral data for a middle school of 550 students (grades 6-8). While the data are simulated, they are based on actual experience from two middle schools in two different western states. The same office discipline referral data are displayed in several formats to facilitate decision making: Chart A depicts the mean number of referrals per day per month; Chart B indicates the number of referrals per location in the school; Chart C displays the number of referrals per type of problem

behavior; Chart D shows the number of referrals per student for students who have at least one referral; and Chart E pictures the number of referrals per time of day when a problem behavior occurred. Because the office referrals are entered daily, the charts provide current data for decision making. This system is useful for an array of decision makers within the school. Of special value is the ability to examine the information either for the entire student body or for an individual student.

Consider what it would be like to participate on the schoolwide discipline team for the school represented in Charts A-E. You are meeting in the first week of February and are noticing an alarming trend in the frequency of office discipline referrals per day across months. In January the school experienced an average of over 13 office discipline referrals per day. Faced with this information, many schools would instantly adopt more stern consequences for

problem behavior. However, your team has learned to use data for problem solving and decision making. Consequently, the team examines the type of problem behaviors (Chart B) being recorded, and notes that inappropriate language, defiance, disruption and harassment are the major behaviors of concern. From Chart C the team notes that the cafeteria, commons area and halls are the locations where problems are most likely. Further, from Chart D the team notes that while two students are ongoing challenges (one with 16 referrals, the other with 9), the problem appears to be more general. A large number of students have one or two referrals. The information in Chart E completes the picture. While there are some problems at the end of the school day, and during one of the morning passing periods, the vast majority of problems occur during the lunch periods. From this information, the team targeted its energy on simple redesigns of the lunch schedule, line process, and internal space for eating. In addition, the team spent one lunch period teaching the students new procedures and expectations. In brief, the use of the data allowed the team to target the smallest effort

Steps to Building Data Systems

1. Begin with a local decision-making team
2. Focus on a few key outcomes
3. Summarize the data for decision makers

needed to produce the biggest impact on school discipline. The gain was achieved with collaboration and instruction, rather than reliance on strictly punitive procedures.

Teams using office referral data, such as those described above, have successfully established and maintained schoolwide discipline systems that resulted in 50-60% reduction in rates of office discipline referrals. The point is that information about behavior patterns is an important element of effective behavior support in schools. As administrators and school teams plan for staff development to improve school discipline, a special focus should be given to the procedures that will be used to assist staff to make effective school discipline decisions.

An example of one system for data-management is described at the internet site <http://SWIS.org>.

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CHART A
Office Referrals per Day per Month
This Year

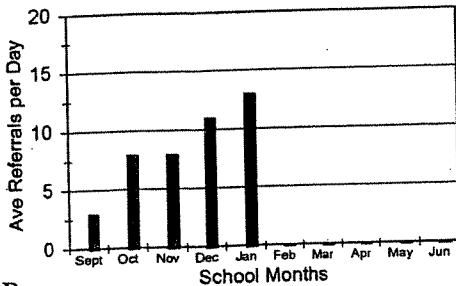


CHART B
Referrals by Location

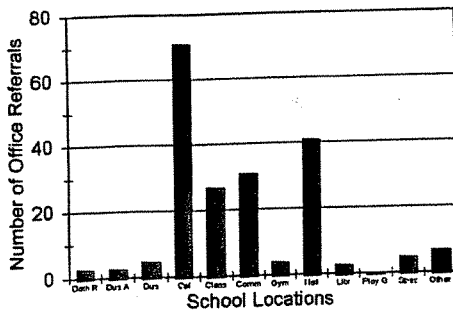


CHART C
Referrals per Prob Behavior

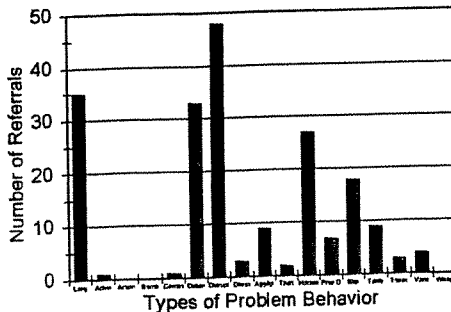


CHART D
Students per Number of Referrals

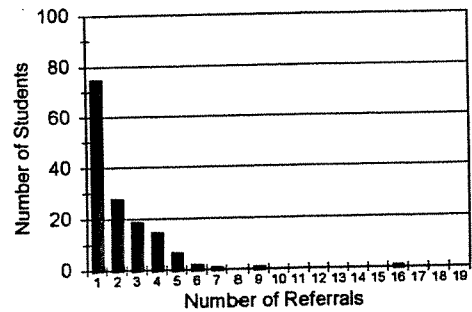


CHART E
Referrals by Time of Day

