What Is Student Progress Monitoring and How Will It Help Me?

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As an educator, you’re probably used to administering traditional standardized tests at your school. These often-lengthy tests are given annually or at irregular intervals, and although the tests may very well be an accurate reflection of whether or not a student has mastered the subject material, it may take months until you receive the feedback on your students’ performance. By the time you do receive the results, it may be too late in the year to make changes that might improve your students’ achievement.

Student Progress Monitoring (SPM) offers an effective and time-efficient way for teachers and administrators to make informed instructional decisions and quantify students’ rate of progress. SPM differs significantly from traditional standardized tests in that it involves administering short tests (typically one to five minutes) frequently, usually one or more times per week. From these tests, you can identify each student’s rate of progress toward the instructional goal for the academic year. And you know immediately how well your students are performing. In this way, SPM also tells you how the student has responded to instruction, and whether or not instructional changes are needed. You can see from the SPM data points -- when plotted on a graph with an aim line -- the student’s rate of improvement and the amount of time it will take the student to reach the goal.

To look at this information in another way, SPM tells you when you need to make an instructional change. As you make instructional changes and continue to administer the frequent, short tests, you can evaluate the success of different teaching methods. In this way, SPM enables you to achieve two types of goals that are both essential for improving student achievement. The first is to determine the effectiveness of the teaching methods you use. The second is to help your school raise student achievement and demonstrate its success. This is critical under the provisions of the federal education legislation, No Child Left Behind.

Student Progress Monitoring Method

One method of SPM is Curriculum-Based Measurement (CBM). CBM has over 30 years of research demonstrating its validity and effectiveness. It is used in basic academic areas, such as math, reading, writing, and spelling. CBM is aligned with the curriculum content and the performance goals for the year. For example, in reading, an annual goal might be to read aloud 75 words in one minute from a second-grade passage. The CBM tests for this goal utilize passages at grade-level difficulty and show the student’s rate of progress toward the goal. When plotted on a graph for the academic year, the student’s scores illustrate whether the student is on target to reach the annual goal. See the figure below for an illustration of a CBM graph for one student. In this graph, the scores obtained from November through January are baseline scores, taken before an
intervention occurred. The vertical line that appears between January and February depicts where an instructional change took place. You can see that Kyle was below benchmark (75 words per minute) when his teacher began graphing his scores in November, but that Kyle reached his benchmark by the end of the school year.

How Does CBM Work?

To illustrate the way CBM works, let’s say you are a second-grade teacher using CBM to track the progress of your students in reading. You ask students to read aloud from a different passage each week, each time for one minute. The reading passages all represent the level of difficulty you expect your students to read well by the end of second grade. As the student reads aloud for one minute, you mark errors on a separate copy of the passage. Afterward, you count the number of words read correctly, and record the student’s score on a graph and compare the scores on the graph to the expected performance in reading fluency for that year. The graph allows you to see quickly how the child’s performance compares to expectations.

After the scores are drawn on the graphs, you decide whether to continue instruction in the same way (because the child’s progress toward achieving the year-end goal looks good) or to change the instructional program in some way (because the child’s rate of improvement is too low to meet the goal for the year). A number of data points should be collected before changing an intervention. Although there is not solid research on the number of data points to be collected, there should be a minimum of three (more reasonable is 5 to 8) to provide sufficient data on the effects of instructional changes.

You might change instruction in any way you deem potentially effective for the student. For example, you might increase instructional time, change a teaching technique or way of presenting the material, or change the grouping arrangement from small group to one-
to-one. After implementing the instructional change for several weeks, you can see from
the weekly graphed CBM scores whether that instructional change is helping the student.
If not, then you experiment with a different instructional change, and its effects will be
tracked with weekly CBM.

CBM and Response to Intervention

CBM also plays a critical role in a Response to Intervention (RTI) approach. With RTI,
progress monitoring (like CBM) provides teachers and administrators with a tool for
accurately assessing the success of an intervention. As changes are made in interventions
and their effectiveness assessed, CBM provides ongoing guidance regarding the
interventions and students’ performance and instructional needs. Moreover, progress
monitoring is used to determine whether “response” in a Response to Intervention
approach occurred or whether a more intensive form of intervention is required.
Ultimately, RTI helps us to answer the question, “What does each child need in order to
learn?”

When a three-tier model of RTI is used, progress monitoring is needed in all levels of
prevention. For primary prevention (i.e., the general education classroom), progress
monitoring is used to assess response to the core instructional program. So, CBM data
are used to identify students who require more intensive intervention. At secondary
prevention (usually small-group tutoring using a research-based tutoring program), CBM
is used to determine whether adequate response to the secondary prevention program
occurred. If not, then tertiary prevention is implemented. In many – but not all – models,
the third tier represents special education. In those models, CBM is used to formulate
individualized instructional programs (IEPs) and to set IEP goals. However, no matter
what model is used, and whether or not a child is found to have a disability and therefore,
needs special education services, progress monitoring helps to determine when a
student’s response in an upper tier is sufficient to permit successful re-entry to a lower
tier (e.g., secondary or primary prevention).

Other Ways CBM Can Help You

When CBM is implemented on a school wide basis, it can be used to determine the
success of classrooms, programs, and the school as a whole, and can be a critical source
of information to support instructional and administrative success. However, even if
CBM is not used throughout the school, it can help you become a more effective teacher
– more effective at making timely instructional decisions and at communicating about the
student’s progress more easily. CBM graphs make the goals and the student’s progress
clear to everyone concerned with the student – teachers, administrators, parents, and the
student. You can use the CBM graph in parent conferences and IEP meetings, because it
gives you specific information that can help in changing the child’s instructional plan as
necessary.
Resources

If you are interested in more detailed and technical information about using CBM, see the articles, parent briefs, and other materials on this web site, www.studentprogress.org, including:

_Monitoring Student Progress in Individualized Educational Programs Using Curriculum-Based Measurement_, by Pamela M. Stecker.

_Progress Monitoring in the Context of Responsiveness-to-Intervention_, Lynn Fuchs and Douglas Fuchs. 2006 Summer Institute on Student Progress Monitoring.

_Using Curriculum-Based Measurement for Progress Monitoring_, by Lynn S. Fuchs and Douglas Fuchs, Tracy Hall, John Hintze, Michelle Hosp, Erica Lembke, Laura Saenz, and Pamela Stecker, 2005 Summer Institute on Student Progress Monitoring.

In addition, upcoming briefs in this Practitioner Brief Series will provide more information about the use of CBM.