Finding Students At-Risk: How to Create a Comprehensive Middle or High School-Wide Screening Plan

Schools can use screening data efficiently to identify those students who are experiencing problems with academic performance, behavior, and attendance. Providing intervention in the beginning stages of middle or high school student's academic or behavioral problems is more likely to be effective and is typically less costly than attempting to intervene when a student's problems have spiraled into full-blown crisis. The purpose of school-wide screening, therefore, is to allow buildings to proactively flag struggling students at an early point and match them to appropriate interventions.

Schools should remember that whole-group screening results are often not sufficient to map out completely what a specific student's skill deficits might be—nor are they designed to do so. Rather, screenings help schools to single out quickly and with the minimum required investment of resources those students who need more intervention assistance. Some students picked up in a screening will require additional, detailed follow-up "instructional assessment" (Hosp, 2008) in order to better understand their learning needs and select appropriate interventions.

There are three general steps to implementing a school-wide screening program in a middle or high school:

1. First, the school must decide on the range of measures or sources of data that will be used to screen their student population.
2. Next, the school must line up the required resources to conduct the screening. This step includes scheduling time for screening measures to be administered and finding personnel to administer, score, and interprets the results of those measures.
3. Finally, the school must build a process for communicating the screening results to classroom teachers and other interventionists and for using the screening data to identify students who need supplemental (Tier 2 or 3) interventions.

Selecting the Assessment Tools or Sources of Data to Be Used for School-Wide Screening

Schools can make use of several possible types of screening data: existing data on grades, behavior, and attendance; Curriculum-Based Measurement to track basic academic skills; and computerized adaptive measures that help to determine appropriate instructional placement. Those types of screening data are described in greater detail below:

- *Existing data.* Schools collect data on student academic performance (grades), behavior (office disciplinary referrals), and attendance (daily attendance report). Measures of grades, behavior, and attendance have been found to predict student drop-out status as early as grade 6 (Balfanz, Herzog, & MacIver, 2007). Existing data (sometimes called 'archival' or 'extant' data) requires limited effort to access (Chafouleas,

Riley-Tillman & Sugai, 2007) — because it has already been collected—and can be used proactively to find those students who are experiencing problems in school (Steward & Silberglit, 2008). Use of existing data would be appropriate across all middle and high school grades. See form A, *Existing Data: Creating a Screening Plan for Your Middle or High School*, that is structured to help schools to incorporate existing data into their screening plan.

Existing data screening example. A high school monitors its teacher grade reports every five weeks. Students failing at least one course are discussed at weekly instructional team meetings to brainstorm additional Tier 1 (classroom intervention) ideas. Those students are also considered for possible supplemental reading or writing lab (Tier 2) support. Students failing two or more courses are flagged and referred to the building RTI Problem-Solving Team for a comprehensive Tier 3 intervention plan.

- *Curriculum-Based Measurement (CBM).* A series of brief, timed academic tools known as Curriculum-Based Measurement (CBM) have been developed that can assess student mastery of academic skills (Hosp, Hosp, & Howell, 2007). The most widely used types of CBM in middle and high schools are Oral Reading Fluency, Maze (Reading Comprehension), Writing, Math Computation, and Math Concepts & Applications. Schools should give some thought to matching CBMs as screening tools to the demographics of their student populations (Stewart & Silberglit, 2008). A middle school with large numbers of high-performing students, for example, may decide not to screen its 7th grade for the basic academic skill of reading fluency. However, a high school with many students whose reading skills are below grade level may choose to screen its 9th grade for reading fluency. Review form B, *CBM: 'RTI-Ready' Curriculum-Based Measures for Middle and High Schools*, to browse different CBM options suitable to secondary schools, with Internet sources for obtaining these assessment materials.

  CBM screening example. A middle school (grades 5-8) decided to use DIBELS Oral Reading Fluency (ORF) CBM probes to screen its 5th and 6th grades three times per year--both to evaluate the quality of its core literacy program and to identify students who need supplemental (Tier 2) reading fluency intervention. After using the ORF probes for one year, the school decided not to extend their use to screen grades 7 and 8, because by the spring screening date in grade 6 the great majority of students were found to be at low risk for reading fluency problems.

- *Computerized Adaptive Measures.* In many middle and high schools, the majority of students have attained fluency in basic academic skills and now face the challenges of a more demanding, advanced instructional curriculum. One solution for schools is to administer adaptive computer assessments that evaluate student curriculum knowledge. Such measures can fill an information gap as students move beyond acquisition of basic academic skills and move into higher level vocabulary, concepts, text interpretation, applied problem-solving and specialized knowledge. Look at form C, *Adaptive Computerized Assessments for Middle and High Schools: Example*, to learn more about one type of computerized

academic screening tool, the Measures of Academic Progress (MAP).

Computerized adaptive measures screening example. A district housed its combined middle (grades 6-8) and high schools in one building. In addition to other sources of screening information, the school selected a computerized adaptive measure to assess general student academic-curriculum skills in reading and mathematics through the end of grade 10. This information was used to verify the effectiveness of the school's English Language Arts and Mathematics instruction, as well as to flag the handful of students needing additional supplemental (Tier 2 or 3) intervention support.

Expert Guidance in Evaluating Screening/Progress-Monitoring Tools

The National Center on Response to Intervention rates the 'technical adequacy' of commercially available academic screening and progress-monitoring tools. To review their findings, go to:

http://www.rti4success.org/chart/progressMonitoring/progressmonitoringtoolschart.htm

References

Balfanz, R., Herzog, L., MacIver, D. J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle grades schools: Early identification and effective interventions. *Educational Psychologist,42*, 223–235. .

Chafouleas, S., Riley-Tillman, T.C., & Sugai, G. (2007). *School-based behavioral assessment: Informing intervention and instruction*. New York: Guilford Press.

Hosp, J. L. (2008). Best practices in aligning academic assessment with instruction. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp.363-376). Bethesda, MD: National Association of School Psychologists.

Hosp, M. K., Hosp, J. L., & Howell, K. W. (2007). *The ABCs of CBM*. New York: Guilford Press.

Stewart, L. H. & Silberglit, B. (2008). Best practices in developing academic local norms. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 225-242). Bethesda, MD: National Association of School Psychologists.

A. Existing Data: Creating a Screening Plan for Your Middle or High School

Directions. Existing school information on grades, attendance, and behavior can be used as one source of student screening data (Stewart & Silberglit, 2008). Use this form to select sources of existing data and to decide how that information will be organized for use in screening students.

❑ **Grades**. Teachers focus closely on student grades as indicators of academic success and curriculum mastery.	❑ **Attendance**. Problems with school attendance are strongly predictive of academic problems and drop-out.	❑ **Behavior**. Office disciplinary referrals provide relevant information about problem school behaviors..
Grades: What Grade Levels? At what grade level(s) will this information be collected? _____	*Attendance: What Grade Levels?* At what grade level(s) will this information be collected? _____	*Behavior: What Grade Levels?* At what grade level(s) will this information be collected? _____
Grades Screening Schedule. On what schedule will grades be monitored building-wide? (e.g., at 5-week intervals): _____	*Attendance Screening Schedule.* On what schedule will attendance be monitored building-wide? (e.g., at 5-week intervals): _____	*Behavior Screening Schedule.* On what schedule will office disciplinary referrals be monitored building-wide? (e.g., at 5-week intervals): _____
Grade Risk Threshold. What is the threshold at which a grade report will identify a student as being at-risk? (e.g., failing two or more subjects)? _____	*Attendance Risk Threshold.* What is the threshold at which an attendance report will identify a student as being at-risk? (e.g., missing an average of three or more school days per month with unexcused absence)? _____	*Behavior Risk Threshold.* What is the threshold at which frequency or type of disciplinary referrals will identify a student as being at-risk? (e.g., 2 or more disciplinary referrals of any kind per month)? _____
Grades--Person(s) Responsible. Who is responsible for periodically reviewing grades to flag students who fall within the at risk range? _____	*Attendance--Person(s) Responsible.* Who is responsible for periodically reviewing attendance data to flag students who fall within the at risk range? _____	*Behavior--Person(s) Responsible.* Who is responsible for periodically reviewing disciplinary data to flag students who fall within the at risk range? _____
Grades--RTI Actions. What action(s) will be taken for any students identified as at risk because of grades? • _____ • _____ • _____	*Attendance--RTI Actions.* What action(s) will be taken for any students identified as at risk because of attendance? • _____ • _____ • _____	*Behavior--RTI Actions.* What action(s) will be taken for any students identified as at risk because of discipline? • _____ • _____ • _____

Stewart, L. H. & Silberglit, B. (2008). Best practices in developing academic local norms. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 225-242). Bethesda, MD: National Association of School Psychologists.

B. CBM: 'RTI-Ready' Curriculum-Based Measures for Middle and High Schools

Directions: Select those CBM measures below to be used in your school-wide screening. Select also the grades and screening points during the school year when each selected measure will be administered. ('F'= Fall, 'W' = Winter, 'S' = Spring).

☐ CBM Oral Reading Fluency

GR	5			6			7			8			9			10			11			12		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

⧗: 1 minute **Administration**: 1:1

Description: The student reads aloud from a passage and is scored for fluency and accuracy. Passages are controlled for level of reading difficulty.

Online Sources for This Measure

- AimsWeb (http://www.aimsweb.com/). [Pay]. Site has both English and Spanish reading probes.
- DIBELS (https://dibels.org/next/index.php).[Free].
- Easy CBM (http://www.easycbm.com/).[Free for individual teachers; subscription pricing available to school districts].
- EdCheckup (http://www.edcheckup.com/). [Pay].
- iSteep (http://www.isteep.com/). [Pay].
- Intervention Central (http://www.rti2.org/rti2/oralReadings).[Free]. Application that creates an oral reading fluency probe based on text supplied by the user.

☐ CBM Maze (Reading Comprehension)

GR	5			6			7			8			9			10			11			12		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

⧗: 1-3 minutes
Administration: Group

Description: The student is given a passage in which every 7th word has been removed. The student reads the passage silently. Each time the student comes to a removed word, the student chooses from among 3 replacement words: the correct word and two distractors. The student circles the replacement word that he or she believes best restores the meaning of the text.

Online Sources for This Measure

- AimsWeb (http://www.aimsweb.com/). [Pay].
- EdCheckup (http://www.edcheckup.com/). [Pay].
- iSteep (http://www.isteep.com/). [Pay].
- Intervention Central (http://www.rti2.org/rti2/mazes).[Free]. Application that creates a maze passage probe based on text typed in by the user.
- Yearly ProgressPro (http://www.ctb.com/yearlyprogresspro). [Pay]. Computer-delivered Maze passages.

□ CBM Writing

⏳: 4 minutes
Administration: Group

GR	5			6			7			8			9			10			11			12		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

Description: The student is given a story starter as a writing prompt. The student spends one minute thinking about the story starter topic, then has 3 minutes to write the story. The CBM writing probe offers three scoring options: Total Number of Words Written, Correctly Spelled Words, and Correct Writing Sequences (a scoring approach that takes into account the mechanics and conventions of writing such as punctuation, spelling, capitalization, and correct semantic and syntactic usage).

Online Sources for This Measure
- AimsWeb (http://www.aimsweb.com/). [Pay].
- EdCheckup (http://www.edcheckup.com/). [Pay].
- Intervention Central (http://www.rti2.org/rti2/writtenExpressions).[Free]. Application that creates a writing probe using pre-entered story starters or text typed in by the user.

□ CBM Math Computation

⏳: 2minutes
Administration: Group

GR	5			6			7			8			9			10			11			12		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

Description: The student is given a worksheet with math computation problems. The worksheet may be a single-skill probe (all problems of a single type) or a mixed-skill probe (several different problem types). The completed worksheet is scored for the number of Correct Digits (digits in student answers that are of the correct value and appear in the correct place-value location).

Online Sources for This Measure
- AimsWeb (http://www.aimsweb.com/). [Pay].
- EdCheckup (http://www.edcheckup.com/). [Pay].
- iSteep (http://www.isteep.com/). [Pay].
- Intervention Central (http://www.interventioncentral.org/htmdocs/tools/mathprobe/allmult.php) . [Free]. Application that single- and mixed skill math computation probes based on user-selected criteria.
- Yearly ProgressPro (http://www.ctb.com/yearlyprogresspro). [Pay].

☐ **CBM Math Concepts & Applications**

GR	5			6			7			8			9			10			11			12		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

⏳: 8-10 minutes
Administration: Group

Description: The student is given a worksheet (or completes an online assessment) that contains a mix of applied math problems that are tied to larger concepts (e.g., to the Math Focal Points from the National Council of Teachers of Mathematics.

Online Sources for This Measure
- AimsWeb (http://www.aimsweb.com/). [Pay].
- Easy CBM (http://www.easycbm.com/).[Free for individual teachers; subscription pricing available to school districts]. Student probes can be completed online.
- iSteep (http://www.isteep.com/). [Pay].
- Yearly ProgressPro (http://www.ctb.com/yearlyprogresspro). [Pay]. Computer-delivered assessments.

C. Adaptive Computerized Assessments for Middle and High Schools: Example

A screening approach that is becoming increasingly popular for middle and high schools is to assess students' academic skills relative to curriculum expectations. Such measures can fill an information gap as students move beyond acquisition of basic academic skills and move into higher level vocabulary, concepts, text interpretation, applied problem-solving and specialized knowledge. An example of a computerized, adaptive curriculum-skills assessment is the Measures of Academic Progress (MAP) system (http://www.nwea.org), described below.

Directions: Select when a measure like the MAP would be used in your school-wide screening. Select also the grades and screening points during the school year when each selected measure will be administered. ('F'= Fall, 'W' = Winter, 'S' = Spring).

☐ **Measures of Academic Progress (MAP)**
⌛: Untimed
Administration:
Computer-administered

GR	5			6			7			8			9			10			11			12		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

Description (taken from MAP basics overview, 2009): The student can complete any one of four computer assessment modules: Reading, Language Usage, Mathematics, or Science. The assessments are untimed. The MAP program is adaptive: students are dynamically presented with new assessment items based on their previous responses. The purpose of MAP is to find students' optimal 'instructional level' rather than to demonstrate content mastery. MAP assessments can be administered 3-4 times per year. The MAP system also provides expected growth rates for students and can predict student performance on state tests based on MAP scores.

Online Source for This Measure
- Northwest Evaluation Association (http://www.nwea.org)

Reference
*Measures of Academic Progress™ (MAP) basics overview (*2009). Lake Oswego, OR: Northwest Evaluation Association. Retrieved from http://www.nwea.org/sites/www.nwea.org/files/resources/MAP%20Basics_Overview.pdf