Users Guide to Progress Monitoring Tools Chart

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National Center on Response to Intervention
http://www.rti4success.org

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U.S. Office of Special Education Programs

About the National Center on Response to Intervention

Through funding from the U.S. Department of Education's Office of Special Education Programs, the American Institutes for Research and researchers from Vanderbilt University and the University of Kansas have established the National Center on Response to Intervention. The Center provides technical assistance to states and districts and builds the capacity of states to assist districts in implementing proven response to intervention frameworks.

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The Basics of the Chart

What Is the Tools Chart?

The tools chart is a list of commercially available progress monitoring tools. Each tool has been reviewed by the National Center on Response to Intervention's (NCRTI's) Technical Review Committee (TRC) on progress monitoring. The chart offers information about the technical rigor, cost, and implementation requirements of the tools. The tools chart can be viewed online at http://www.rti4success.org/chart/progressMonitoring/progressmonitoringtoolschart.htm.

What Is the Purpose of the Tools Chart?

The tools chart assists educators and families in becoming informed consumers who can select progress monitoring tools that best meet their individual needs. The tools chart is not intended to endorse any of the tools or compare tools to each other. Each tool was rated against a standard set of criteria regarding the technical adequacy of the tool.

Who Rated the Tools on the Chart?

Ratings were made by the TRC on progress monitoring. The TRC on progress monitoring is a group of eight national experts on measurement and progress monitoring. To be selected to the TRC, members had to have a background in (a) measurement or strong methodological skills and (b) progress monitoring. Special attention was paid to including experts on culturally and linguistically diverse groups. A list of members on the TRC of progress monitoring can be found online at http://www.rti4success.org/index.php?option=com_content&task=view&id=513&Itemid=2.

Tips for Using the Chart

The tools chart includes a large amount of information designed to assist you in selecting a tool that is most appropriate for use in your classroom, school, or district. The "best" tool is not going to be the same for every user and is not determined by any single element on the chart. Users of the chart should review all of the different elements of the chart when making a decision.

We recommend a six-step process for using the chart:

1. Gather a team
2. Determine your needs
3. Determine your priorities
4. Familiarize yourself with the content and language of the chart
5. Review the ratings and implementation data
6. Ask for more information

1. Gather a Team

Often, decisions about appropriate progress monitoring tools will involve the input of multiple teachers and staff. When using the tools chart, a team of key constituents in your school and district should review the information together.

Before you begin, ask yourself:

- Who should be involved in selecting a progress monitoring tool?
- What types of expertise and what perspectives should be involved in selecting a tool?

2. Determine Your Needs

The most appropriate progress monitoring tool for you will depend on your specific needs.

Questions to think about, as a team, include:

- For what skills or set of skills do I need a progress monitoring tool?
- For what grades do I need a progress monitoring tool?
- Will this progress monitoring tool be used with all students or with only a specific subgroup(s) of students? Which subgroup(s)?

3. Determine Your Priorities

In addition to determining your needs for a progress monitoring tool, your team should also consider its priorities.

What is the most important thing to look for in a progress monitoring tool?

- Is it a tool that can be purchased for a reasonable cost?
- Is it a tool that does not take long to administer and score?
- Is it a tool that offers ready access to training and technical support for staff?
- Is it a tool that meets the highest standards for technical rigor?

Although you may want a tool that meets all of these criteria, such a tool may not exist. You will need to weigh your priorities carefully when making your selection.

4. Familiarize Yourself With the Content and Language of the Chart

The tools chart includes information about two types of progress monitoring tools:

- **General outcome measures** reflect overall competence in the annual curriculum.
- **Mastery measures** index a student's successive mastery of a hierarchy of objectives.

To view tools by each type, click on the tabs at the top of the chart.

For each tool, the chart provides information about technical rigor and implementation requirements.

Technical rigor

For general outcome measures, the TRC has established nine standards for technical rigor of progress monitoring tools:

Reliability of the Performance Level Score	Reliability of the Slope	Validity of the Performance Level Score	Predictive Validity of the Slope of Improvement	Alternate Forms	Sensitive to Student Improvement	End-of-Year Benchmarks	Rates of Improvement Specified	Norms Disaggregated for Diverse Groups	Disaggregated Reliability and Validity Data

- **Reliability of the performance level score:** The extent to which the score (or average/median of 2 or 3 scores) is accurate and consistent.
- **Reliability of the slope:** An indicator of how well individual differences in growth trajectories can be detected using a particular measure.
- **Validity level of the performance level score:** The extent to which the score (or average/median of 2 or 3 scores) represents the underlying construct.
- **Predictive validity of the slope of improvement:** The extent to which the slope of improvement corresponds with end-level performance on highly valued outcomes.

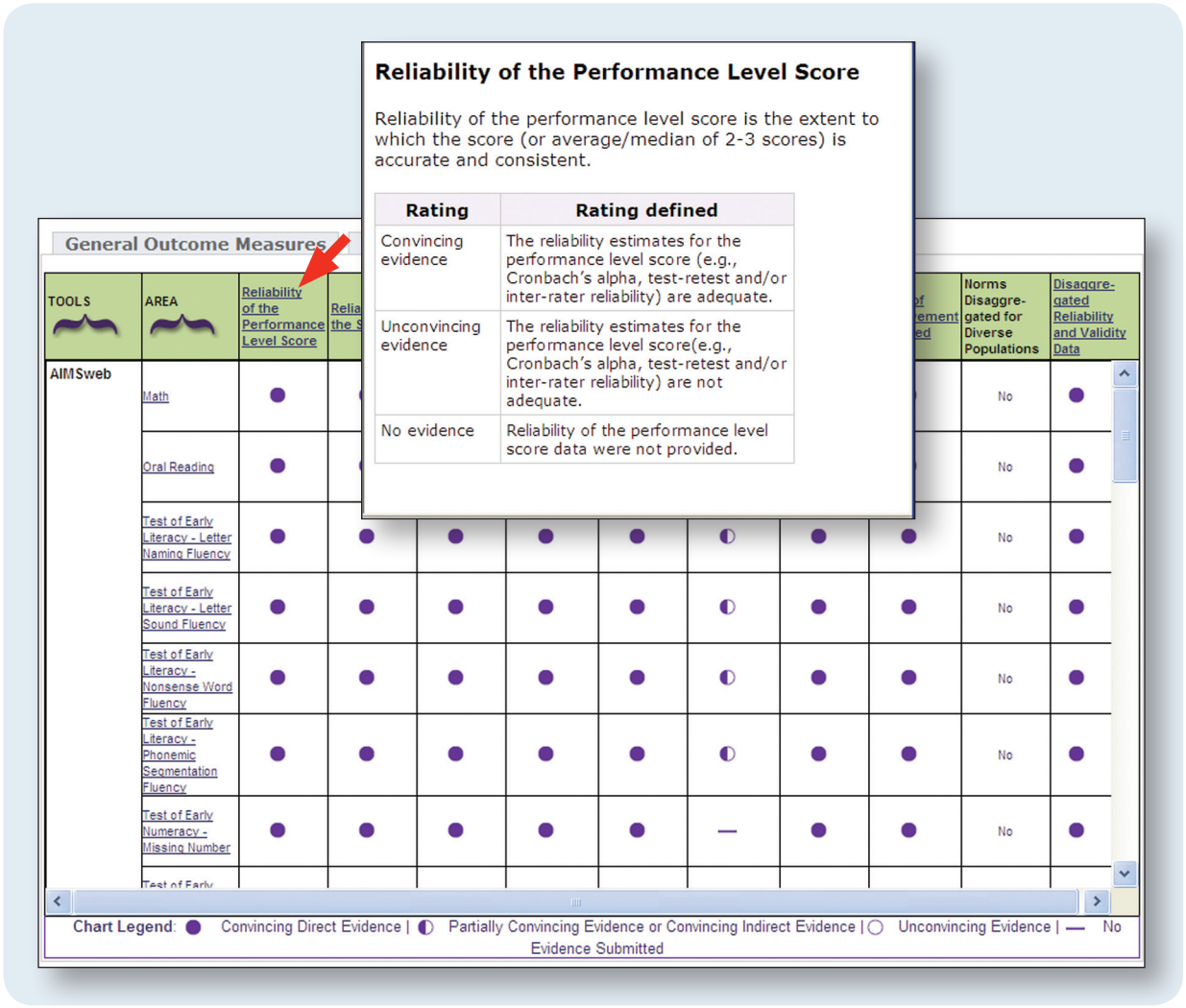
- **Alternate forms:** Parallel versions of the measure of comparable difficulty (or with Item Response Theory based or with item or ability invariance) within a grade level.
- **Sensitive to student improvement:** The extent to which a measure reveals improvement over time, when improvement actually occurs.
- **End-of-year benchmarks:** The level of performance expected at the end of the grade, by grade level.
- **Rates of improvement specified:** The expected slopes of improvement or average weekly increases, based on a line of best fit through the student's scores.
- **Disaggregated reliability and validity data:** Scores that are calculated and reported separately for specific subgroups (e.g., race, economic status, special education status, etc.).

For mastery measures, the TRC has established six standards for technical rigor:

Skill Sequence	Sensitive to Student Improvement	Reliability	Validity	Pass/Fail Decision	Disaggregated Reliability and Validity Data

- **Skill sequence:** The series of objectives that corresponds to the instructional hierarchy through which mastery is assessed.
- **Sensitive to student improvement:** The extent to which a measure reveals improvement over time, when improvement actually occurs.
- **Reliability:** The extent to which scores are accurate and consistent.
- **Validity:** The extent to which scores represent the underlying construct.
- **Pass/fail decision:** The metric in which mastery measurement scores are reported.
- **Disaggregated reliability and validity data:** Scores that are calculated and reported separately for specific subgroups (e.g., race, economic status, special education status, etc.).

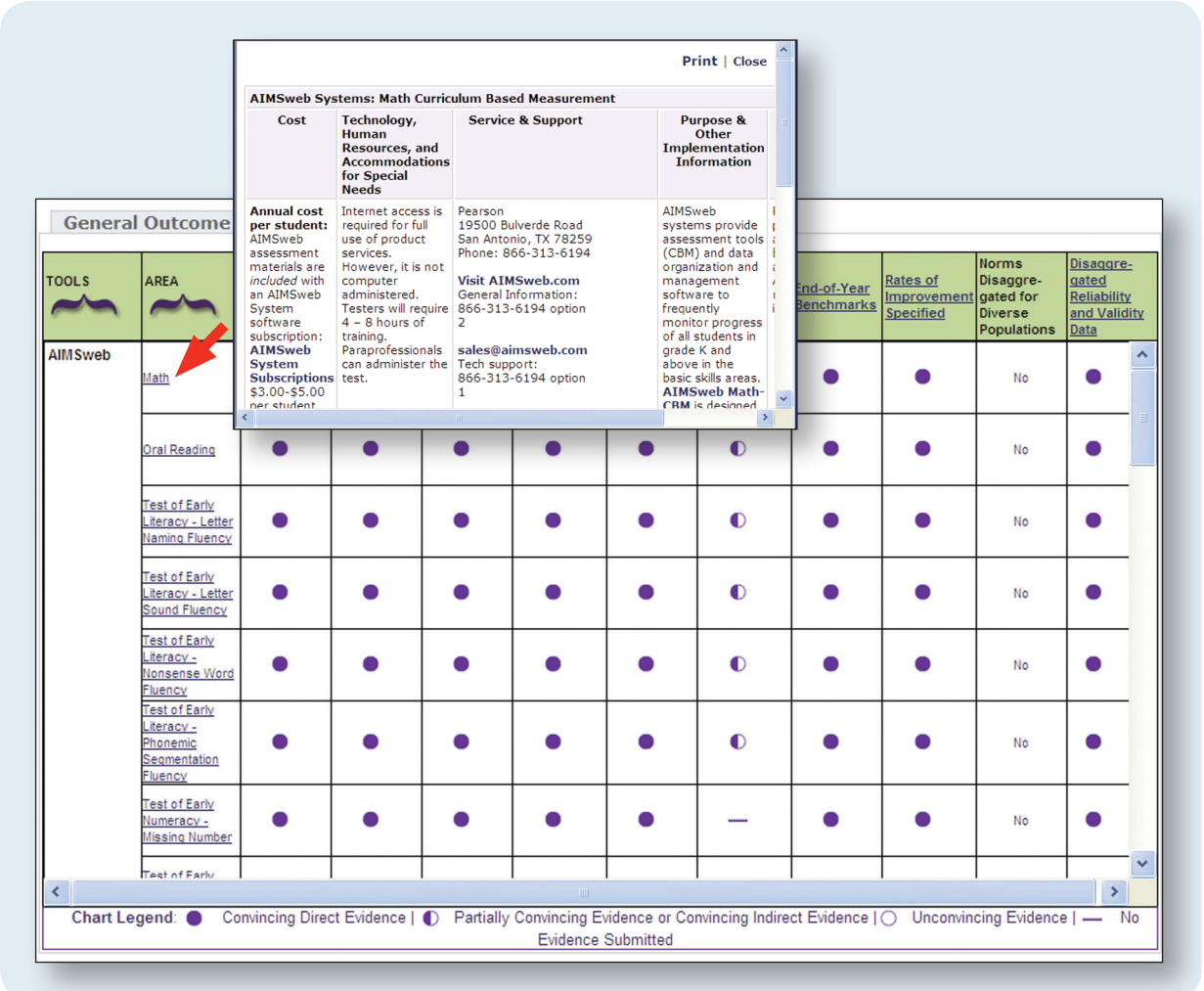
For each of these standards, the TRC reviewed data submitted by developers of the tools and gave a rating of “convincing,” “partially convincing,” “unconvincing,” or “no evidence.” Click on the name of the standard in the column heads of the chart to view a definition of the standard and a rubric describing the specific criteria used by the TRC to rate tools on that standard.



Implementation requirements

The tools chart offers an "implementation table" for each tool. The implementation table can be accessed by clicking on the name of the tool. The implementation table includes the following Information:

- Cost of the tool
- Training required to implement the tool
- Level of staff expertise required to administer the tool
- Where to go for training and technical support
- How scores are reported



5. Review the Ratings and Implementation Data

Using the results of your needs and priority assessments, identify tools on the chart that could potentially be appropriate for you. For example, if you are interested in a tool that measures progress in oral reading for use in Grades 4–6, use the implementation tables to identify which tools meet those criteria.

Next, review the technical ratings for the subset of tools in which you interested. Work with a technical expert to understand how each standard is relevant to your needs and the relative importance of a "convincing" rating for each standard. For example, reliability and validity of the performance score are foundational psychometric standards. Therefore, you may be interested in a tool that excels in these two areas. Reliability of the slope and predictive validity of the slope of improvement, which also measure key aspects of psychometric quality, may not be as important to you as the reliability and validity standards.

Alternatively, you may have a stronger interest in tools that specify clearly the rates of improvement and/or end-of-year benchmarks than you do in tools that have high ratings for reliability and validity. When selecting a tool, you should carefully consider the unique and specific needs of your situation.

6. Ask for More Information

You may find that the tools chart does not provide you with all the information you need. For example, what if a tool in which you are interested does not have disaggregated data for a particular subgroup that is important to you? Ask the vendor or developer. Developers who have chosen to submit their tools for review and publish them on the chart are interested in meeting the needs of their customers. As such, they are interested in doing more research to provide the data that you need.

Similarly, if a tool that you currently use or are interested in learning about is not on the chart, call the developer of that tool. Let them know about the TRC review process and the tools chart, and ask them to consider submitting the tool for review.

Finally, if you are unsure about what a technical standard means or how to interpret any of the information on the chart, contact the National Center on Response to Intervention at 877-RTI-4ALL or rticenter@air.org.

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