Improving Literacy Brief

CORE CONSIDERATIONS FOR SELECTING A LITERACY SCREENER

Screening is an important part of systems for early identification of students who are at risk for poor educational outcomes. Screening is an important step in providing an evidence-based intervention to learners who need additional educational supports.

Screening processes typically include brief, reliable, and valid assessments that are administered to whole classrooms of students. Students are then typically classified into one of three groups based on their scores:

- **those who are low risk –** *typically greater than an 80% chance of meeting expectations on a later assessment*
- **those who are moderate risk –** *typically a 50% chance of meeting expectations on a later assessment*
- **those who are high risk –** *typically less than a 20% chance of meeting expectations on a later assessment*

There are many available screeners for reading and other education or social-emotional outcomes. What are the important things to consider when choosing and using a screener?

CHOOSING A SCREENER

The following technical and usability characteristics are important to consider when selecting a screener.

Population of Interest

It is important that the screener was designed for a population of students that is similar to yours. A well-defined population of interest is the critical foundation for evaluating whether a screener is appropriate for your students and setting.

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CONSIDERATIONS FOR SCREENING AND IDENTIFICATION

The description of the population of interest in the assessment manual should be specific enough to tell you:

- Whether the sample that the screener was normed on reflects your intended population.
- The outcome that the screener is designed to identify. For example, the intended outcome may be to identify students with dyslexia or students with language disorders.
- The intended age range for the screener.

Scope of Assessment

It is important to think about the alignment between the outcome that the screener is designed to identify and the content measured by the screener. It is also important to consider if the screener is a timed assessment, such as curriculum-based measurements that measure speed and accuracy, or a skill-based assessment, such as computer-adaptive assessments. There are trade-offs between the two types of screeners that need to be considered, such as administration time and information provided. Finally, it is important to consider if the screener is univariate and measures one skill or multivariate and measures multiple skills.

STATISTICAL CONSIDERATIONS:

Reliability

The most basic definition of reliability is the consistency of a set of scores for a measure. Different forms of reliability that are reported in technical manuals for screeners include internal consistency, alternate-form, test-retest, split-half, inter-rater. A careful evaluation of each type of reliability will allow you to determine how consistent the scores from the screener are.

Validity

It is important to look at the different types of validity that are reported in technical manuals for screeners because they tell you the extent to which the assessment measures what it intends to measure. For example, a word reading screener should measure word reading and not receptive vocabulary. Evidence of validity might include predictive correlations with another measure.

CONSIDERATIONS FOR SCREENING AND IDENTIFICATION

Classification Accuracy

The correct identification of students who are at risk and not at risk for poor outcomes is a critical consideration in evaluating the quality of a screener. When looking at the classification accuracy of a screener, such statistics include:

- **the sensitivity of scores –** the ability of the screener to correctly identify those who will *not* meet an expected threshold of performance on a later assessment. For a reading screener, sensitivity is the ability to identify students who are at risk for reading difficulties (true positives).
- **the specificity of scores –** the ability of the screener to correctly identify those who will meet or exceed an expected threshold of performance on a later assessment. For a reading screener, specificity is the ability to identify students who are not at risk for reading difficulties (true negatives).
- **the false positive rates –** how many children are identified as being at risk but are not actually at risk, and
- **the false negative rates –** how many children are actually at risk but are not detected by the screener

BARRIERS AND ACCESS FOR SCREENERS

When selecting a screener for your school or district, it is also important to think about administrative and environmental considerations for use. For example, the administration format may be a barrier in choosing a particular type of assessment based on whether the screener is given on an individual or group basis, or whether it requires the use of certain technology, like computers. The choice of a screener should also be informed by the administration and scoring time and the scoring format (i.e., scoring done by school personnel or scoring done by a computer).

MAKING A DECISION

The components above should all be considered when choosing a screener. The number of considerations when evaluating, choosing, or using a screener can seem overwhelming. When reviewing a screener's technical report, tool chart, or summary of the assessment, we recommend examining each of these core considerations to guide your discussions. Screeners lacking essential characteristics can be eliminated from consideration for use, making screener selection easier.

CONSIDERATIONS FOR
SCREENING AND IDENTIFICATION

REFERENCES

Petscher, Y., & Suhr, M. P. (2022). Considerations for choosing and using screeners for students with disabilities. In C. Lemons, S. Powell, K. Lane, & T. Aceves (Eds.), Handbook of special education research (2nd ed.). Routledge.

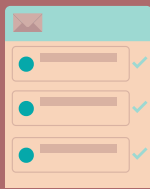# Core Considerations for Selecting a Screener

Decision-Making

All of these components should be considered in the decision-making process

Classification

Tells you how well the screener correctly classifies individuals. What percentage of students were:
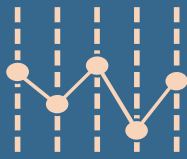- Correctly classified as at risk?
- Correctly classified as not at risk?
- Incorrectly classified?

Validity

Tells you how well a screener measures what it intends to measure.
- Is the screener correlated with similar assessments?
- Is the screener correlated with future performance?

Reliability

Tells you how consistent a set of scores are for a measure.
- What types of reliability are reported?
- Is the reliability at an appropriate level?

Scope of Assessment

Tells you what and how content is measured.
- Does the assessment measure accuracy or fluency?
- Does the assessment cover multiple reading skills?
- What outcome is the screener predicting?
- How is risk defined on the outcome the screener is predicting?

Population of Interest

Tells you for whom a screener is intended to be used.
- What is the intended age range?
- Who is the intended individual you want to identify?