North Dakota Department of Public Instruction
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Analysis of Mathematics Assessment Measures

When deciding on which assessment(s) to use in your classroom, there are numerous things to consider. It is highly recommended that when reviewing assessments, the school/district make sure a person who is highly trained with assessments is involved, such as a school psychologist. It is also recommended that consortiums and/or REAs work together in decision making and training. A good assessment plan provides accurate estimates of student performance and enables teachers or other decision makers to make appropriate decisions based on the results. The results of an assessment plan should help in explaining which skills a student has, which skills the students needs, and what direction the instruction should take.

The information below is only a starting point for discussion on possible assessments. There are so many other things to consider when making an assessment plan, such as: what assessments are needed in your school, when should the assessments be administered, and who will administer them.

A. Measure

Name: _____ Cost: _____

Developer: _____

Publisher: _____

Publication Date: _____

B. Descriptive Information of Instrument

This assessment is intended for use in grade(s):

☐ Kindergarten
☐ First Grade
☐ Second Grade
☐ Third Grade
☐ Fourth Grade
☐ Fifth Grade
☐ Sixth Grade
☐ Seventh Grade
☐ Eighth Grade
☐ Ninth Grade
☐ Tenth Grade
☐ Eleventh Grade
☐ Twelfth Grade

This instrument assesses one or more of the following dimensions in reading:

☐ North Dakota Standard 1: Students understand and use basic and advanced concepts of number and number systems.

☐ North Dakota Standard 2: Students understand and apply geometric concepts and spatial relationships to represent and solve problems in mathematical and nonmathematical situations.

☐ North Dakota Standard 3: Students use data collection and analysis techniques, statistical methods, and probability to solve problems.

☐ North Dakota Standard 4: Students use concepts and tools of measurement to describe and quantify the world.

☐ North Dakota Standard 5: Students use algebraic concepts, functions, patterns, and relationships to solve problems.

C. Descriptive Information of Instrument

This instrument provides the following types of information: (check all that apply)

- ☐ Screening
- ☐ Diagnostic
- ☐ Progress Monitoring
- ☐ Outcome

Screening Measure: Brief assessment that focuses on critical reading skills strongly predictive of future reading growth and development. Conducted at the beginning of the school year with all students to identify students likely to need extra or alternative forms of instruction.

Diagnostic Measure: Assessment conducted at any time during the school year when more in-depth analysis of a student's strengths and weaknesses is needed to guide instruction.

Progress Monitoring Measure: Assessment conducted a minimum of three times a year or on a routine basis (i.e., weekly, monthly, or quarterly) using comparable and multiple test forms to (a) estimate rates of reading improvement; (b) identify children who are not demonstrating adequate progress, and therefore, require additional or different forms of instruction; and/or (c) compare the efficacy of different forms of instruction for struggling readers, and thereby design more effective, individualized instructional programs for those at-risk learners.

Outcome Measure: Assessment for the purpose of classifying students in terms of whether or not they achieved grade level performance or improved performance.

D. Validity and Reliability

Have an expert in assessments, such as a school psychologist, determine the validity and reliability of the assessment.

E. Time, Administration, and Frequency

This assessment can be administered:

- ☐ Individually
- ☐ Group
- ☐ Both

Minutes needed to administer assessment _____

There are discontinue rules ☐ Yes ☐ No

There are alternative forms available ☐ Yes ☐ No # of forms _____

Cost for training _____

F. Training Needed to Administer

Time required for training teacher or other professional responsible for administration:

- ☐ Less than 1 hour of training
- ☐ 1-4 hours of training
- ☐ 4-8 hours of training

Qualifications of the examiner:

- ☐ Professional
- ☐ Paraprofessional
- ☐ Information not available

G. Scoring Structure

Types of scores available:

- ☐ Raw score
- ☐ Percentile score
- ☐ IRT-based score
- ☐ Stanines
- ☐ Developmental benchmarks: _____
- ☐ Error analysis
- ☐ Standard score
- ☐ Grade equivalents
- ☐ Normal curve equivalents
- ☐ Composite scores
- ☐ Other: _____

Does assessment indicate what score is considered proficient and non-proficient?

☐ Yes ☐ No

This form is a modified version of the "Analysis of Reading Assessment Measures Coding Form" developed by the Institute for the Development of Educational Achievement (IDEA) at http://idea.uoregon.edu/.