

What AEPS® Users Should Know About Reliability, Validity, and Utility

The developers of AEPS have conducted research to examine the reliability, validity, and utility of the system's assessment component, the AEPS Test. Although this research may seem academic, there are important reasons why the wide range of professionals who work with young children should be concerned with the technical properties of the assessment/evaluation measures they use. The purpose of this AEPS brief is to familiarize AEPS users with the concepts of reliability, validity, and utility and their relevance and importance to using AEPS with confidence.

Reliability

Reliability refers to the stability and accuracy of assessment results. Although all assessment involves some degree of error, overall, the higher the reliability, the more confidence users can have in the accuracy of the scores. As long as the AEPS Test is administered according to the flexible guidelines outlined in the Administration Guide, AEPS users can be confident that:

1. AEPS Test scores that show change over time provide an accurate measure of actual changes in a child's performance. This is important for teaching because increases in AEPS Test scores mean a child has learned specific new skills and behaviors, an indication of effective interventions. Conversely, if AEPS Test scores do not increase, interventionists have evidence that interventions are not producing desired outcomes and need to be revised.

You can be sure that AEPS Test scores are accurate reflections of a child's performance, whether you are assessing at home, in a classroom, or in community settings; observing individuals or groups; and even when direct testing.

2. AEPS Test items have been written to ensure consistent interpretation across observers. This is important because it is common and desirable for a variety of people to assess young children at different points in time and in different developmental areas. Assessment teams can be secure that different people will interpret test items similarly, without needing time to reach consensus on specific item content and criteria.

Research shows that AEPS Test results are stable across different observers and stable over time. Teams can feel secure assigning specific developmental areas to different team members, and having different people score the assessment over time. Teachers and specialists can collaborate on scoring within and across developmental areas.

Validity

Validity refers the degree to which an assessment measures what it is designed to measure. The AEPS Test is designed to measure young children's performance in specific developmental areas. Implications for AEPS Test users are:

1. Children’s scores on the AEPS Test and their scores on other well-accepted assessment instruments show similar patterns. This means that children who score low on the AEPS Test are likely to have low scores on another test, and those who perform well on the AEPS Test will have high scores on another test. This is important for interventionists who want to supplement or replace lengthy, standardized tests with the AEPS for instructional planning and monitoring.

Many school psychologists and specialists who make decisions about assessment instruments for early childhood programs are experienced in the use of norm-referenced tests and less familiar with curriculum-based, authentic assessments such as AEPS. The agreement between AEPS and norm-referenced tests should provide assurance about the validity of using an observational assessment for program planning and monitoring.

2. The AEPS Test has been validated as an alternative to norm-referenced, standardized tests for purposes of eligibility determination. The AEPS Test has been shown to do as well or better than traditional measures at identifying young children who require special services.

This means that, in states that allow the use of criterion-referenced tests to evaluate eligibility, the AEPS Test can be used in place of more traditional tests. In states that require criteria of percent delay or standard deviations below the mean, the AEPS Test can be used with confidence to corroborate areas of eligibility.

Utility

Utility refers to the usefulness of an assessment for different purposes. The AEPS Test is used to determine present levels of performance, develop individualized programs, monitor progress, and establish program accountability. AEPS Test users should know that:

1. AEPS Test and Curriculum items have been aligned with state standards for early childhood in a number of states. This is an indication that the content of the AEPS Test includes functional and generative skills important for all young children to learn, supporting use of the AEPS Test in natural environments and inclusive preschool settings. The AEPS Test assesses what all young children should know and be able to do.

2. AEPS Test results can be directly translated into functional and measurable goals and objectives for young children. Because the AEPS Test assesses observable and measurable skills that are important for young children to learn, the content of assessment items is also appropriate for IEP/IFSP goals, objectives, and outcomes.

3. AEPS was designed to support partnerships with families and collaboration among professionals. AEPS components include instruments and procedures for family

involvement and for teams of professionals to coordinate assessment, program planning, and monitoring progress toward child outcomes.

4. AEPS Test results are useful in meeting OSEP requirements for reporting child progress. AEPS Test items have been “crosswalked” with OSEP’s three general child outcomes, and changes in assessment results over time can be used to rate child progress for reporting directly in OSEP categories, or on the ECO Center’s COSF form.

For further information on AEPS, please visit www.aepslinkedsystem.com and www.aepsinteractive.com.