



**Review of
*Criterion Validity of
A+nyWhere Learning
System® Reading Assessment:
Grade 8***

Kristine L. Chadwick, Ph.D.

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Review of Thompson and McDonald

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P.O. Box 1348, Charleston, WV 25325 • 304.347.0400 • 800.624.912 • fax 304.347.0487
One Vantage Way, Suite D-210, Nashville, TN 37228 • 615.565.0101 • fax 615.565.0112
info@edvantia.org • www.edvantia.org

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**Review of
Criterion Validity of *A+nywhere Learning System*® Reading Assessment:
Grade 8**

**Lynette Thompson
Western Oaks Middle School
Putnam City School District, Oklahoma**

**Nicholas B. McDonald
The American Education Corporation
Oklahoma City, Oklahoma**

Abstract

This report summarizes a study of the concurrent/criterion validity of the eighth-grade *A+nyWhere Learning System (A+LS)* reading assessment. In the fall of 2006, 218 eighth-grade students from one middle school in Oklahoma took the *A+LS* Reading Assessment 8 (Form B). These students also completed the Oklahoma Core Curriculum Tests (OCCTs), including the OCCT in reading. Scaled scores known as the Oklahoma Performance Index (OPI) are computed from the OCCT Reading raw scores. Pearson correlation coefficients were computed to show the relationship between *A+LS* reading assessment and the OPI Reading scores within the main sample (excluding English Language Learners and Special Education students, $n = 143$), English Language Learners ($n = 30$), and Special Education students ($n = 45$). The results indicate moderate to strong relationships between *A+LS* reading and OPI Reading scores within all three samples. *A+LS* reading scores appeared to be most predictive of OPI Reading scores among the ELL and Special Education subgroups, accounting for 70% and 64%, respectively, of the variance in state standardized test scores. In the main sample of students, which did not include the ELL or Special Education students, the *A+LS* scores accounted for slightly less than half (47%) of the variance in OPI Reading scores. The authors note that the correlation between test scores in the main sample is of a smaller magnitude than in a previous study of seventh-grade students, but of similar magnitude to the results of a study conducted with a sample with a similar racial composition. The authors conclude the *A+LS* reading assessment can help educators allocate resources effectively to raise student achievement on the state standardized reading test. Appropriate cautions and limitations are addressed.

Reviewer Comments

Relevance

Does the evidence provided by the authors address a question that is relevant?

The authors present data relating to the criterion validity of a computer-based classroom reading assessment that can help teachers identify student strengths and weaknesses prior to the annual

administration the state standardized tests. Given the importance placed on standardized test scores, the authors are addressing an issue that is relevant to educators.

Rigor

Does the research design follow established procedures in the educational research field for addressing the type of question or issue posed?

The validation study used standard methods for assessing the relationship between the predictor (*A+LS* Reading Assessment Form 8 scores) and the criterion measure (OPI Reading scores). Both the validity coefficients (i.e., correlation coefficients) and the coefficients of determination (i.e., percentages of variance accounted for) are provided.

Is sufficient information provided to determine whether the instruments and/or procedures are appropriate for answering the research questions posed by the authors?

The report provides sufficient detail on the measures, samples, and procedures used in the analysis.

Systematic Approach

Was the study conducted using carefully planned, logical steps?

The study was carried out in a systematic manner to provide an estimate of the criterion validity of the eighth-grade version of the *A+LS* assessment with the state's standardized reading measure.

Were the instruments and/or procedures applied with consistency and accuracy?

From the detail provided in the report, the procedures for establishing criterion validity appear to have been applied consistently and accurately across the three samples studied.

Objectivity

Did someone other than the publisher or developer conduct the research?

The first author of the study is not associated with American Education Corporation, and there is no reason to doubt the objectivity of her involvement. The second author is associated with the publisher; however, the procedures and results described appear to be free from bias.

Replicability

With the information provided, could the same or different researchers likely repeat the study and obtain the same or highly similar results?

Provided with the study data set and the procedures described in the report, it is highly likely another researcher (or the same researchers) would obtain the same or similar results. If a similar study was undertaken, it is likely that the estimates would not differ greatly for the main sample of students of similar demographics. However, given the small sizes of the samples of ELL and Special Education students, it is not certain that another researcher (or the same researchers in a different setting) would obtain the same or highly similar results if the study were replicated.

Data Analyses and Interpretation

Are the analyses appropriate given the type of methodology used and the research questions posed?

The authors computed both the correlation coefficient (i.e., validity coefficient) and the amount of variance accounted for (i.e., coefficient of determination) in the OPI Reading scores (criterion) by the *A+LS* reading assessment (predictor). This is an appropriate methodology for establishing the criterion validity of the *A+LS* assessment.

Are data or data summaries included?

The report includes the validity coefficients and coefficients of determination along with graphical displays of the regression lines and scatter plots to allow the reader to see the relationships between the predictor and criterion measures in the main sample, and in the ELL and Special Education samples.

Are the conclusions drawn by the researchers/developers clearly supported by the data?

The authors conclude that the eighth-grade form of the *A+LS* reading assessment has good criterion validity based on the moderately strong correlation coefficients with the OPI Reading scores. They note that caution must be used in interpreting the results from the ELL and Special Education samples due to relatively small sample sizes. Additional studies also would help to clarify the possible influence of race on the magnitude of correlation coefficients.