ABSTRACT

DISSERTATION: Can Reading Fluency Scores on DIBELS ORF Predict ISTEP Performance:

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The focus of this study was to assess the ability to predict performance on the Indiana Statewide Test for Educational Progress (ISTEP) from oral reading fluency scores on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Oral Reading Fluency Test (ORF). The scores of both assessments from 306 Indiana students from four different elementary schools were examined. Results of these students’ end of year (EOY) ORF scores were compared to their ISTEP scores in third grade in 2008-2009. During that school year ISTEP was administered twice, once in the Fall and once in the Spring. Results from both tests were analyzed using linear, multiple, and logistic regression models. The results showed $r$ values between the ORF scores and the English/Language Arts portion of ISTEP to be .76 (Fall) and .72 (Spring). The correlations between ORF and ISTEP Math were .54 (Fall) and .61 (Spring). Regression coefficients ranged from 1.30 – 1.13 indicating a positive linear relationship between the results of the two assessments. The scores from demographic subgroups were also examined and some differences in the strength of the relationships were found among the groups. The oral reading fluency test was a better predictor for students generally considered at-risk (non-white, disabled, and non-English speaking). Logistic regression results showed a moderate to strong ability to predict whether or not students would pass ISTEP based on DIBELS scores. After
using Beta values to calculate probabilities, it was found a DIBELS ORF score of 100 would provide a strong probability a student would pass ISTEP, both in English/Language Arts and Math. The results imply the need to monitor students’ oral reading and provide timely interventions when they struggle, and to focus more on helping children learn to read and less on preparing for ISTEP.