Reforms are characteristic of American education. Sparked by the publication of A Nation at Risk in 1983, America embarked on a series of reforms that have led to the standards movement and high-stakes testing in public schools. The state of Missouri was quick to attack the requirements of each new piece of legislation. The current Missouri Assessment Program addresses state standards, assessment, and professional development. Criticisms of this program have included: the four month time to report scores from the assessment, and the reported achievement levels. To address these criticisms, the Northwest Evaluation Association has developed the Measures of Academic Progress computer-adaptive test to be used in tandem with the MO MAP. The MO MAP required yearly assessment was compared with the NWEA MAP test to determine if the NWEA MAP was a good predictor of the MO MAP assessment. Subtest Rasch unit (RIT) scores of the NWEA MAP, as well as the overall RIT scores of the mathematics, language usage, and reading tests were compared with mathematics and communication arts assessments of the MO MAP. Bivariate and multiple regressions suggested that both the subtests and overall RIT scores were good predictors of the MO MAP communication arts and mathematics assessment. Of the NWEA MAP subtests, data and probability was the best predictor of the MO MAP mathematics assessment, strategies of reading preocess of the NWEA MAP reading test was the best predictor of the MO MAP communication arts assessment, and forms and types of writing of the language usage was the best predictor of the MO MAP communication arts assessment. The research was conducted on data from a middle sized, rural Missouri school district, population of 6th, 7th, and 8th graders for the years 2005-2007. The findings, although confined to a small population, should prove useful in the decision on whether ot employ the NWEA MAP in other Missouri districts.