Chapter PI 11

APPENDIX A

Regression Formula for Calculating Significant Discrepancy Scores

Information needed for Calculation:

IQ/Ability Score = _____ SD of IQ/Cognitive Test = _____(SDi)

Achievement Score = _____ SD of Achievement Test = _____(SDa)

Correlation between tests = ____0.____(r)*

Formula:

Expected Achievement = (SDa/SDi)r(IQ−100)+100 = _____

Discrepancy = Expected Achievement − Obtained Achievement Score = ☐

SD Discrepancy = SDa $\sqrt{1-r^2}$ = ☐

Cut−off:

Discrepancy / SD Discrepancy = ☐

If number is greater than 1.75, there is a significant discrepancy between achievement and ability scores

* If correlation between tests is unknown, use .62

When the test publisher provides tables for significant differences between ability and achievement scores (such as with the Weschler Intelligence Scale for Children− 3 and the Weschler Individual Achievement Test), these tables may be used in lieu of this formula. Cut−offs should be derived using a 1.75 Standard Error of Estimate (SEe) criterion so that the difference between expected and obtained scores in the bottom 4% of the distribution meet the standard for a significant discrepancy (i.e. 1.75 SEe units below the expected score).