(SDi)

DEPARTMENT OF PUBLIC INSTRUCTION

Chapter PI 11

APPENDIX A

Regression Formula for Calculating Significant Discrepancy Scores

SD of IO/Cognitive Test =

Information needed for Calculation:

IO/Ability Score

	52 011Q, Cog.mar, C 1650		_(021)
Achievement Score =	SD of Achievement Test =		(SDa)
	Correlation between tests =	<u>0.</u>	_(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			

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).

^{*} If correlation between tests is unknown, use .62