



Research Note

RN1201
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Topic: Updated Procedures for Determining Gifted Eligibility for Underrepresented Students.

Focus: Using FCAT 2.0 and EOC Data in the Gifted Plan B Matrix Scoring System.

Purpose: To suggest the specific application of FCAT 2.0 and EOC cutoff scores for use in the Plan B Gifted Eligibility Determination Form.

There are a number of detailed requirements for gifted screening, referral and eligibility specified under State Board Rules and School Board Rules. In all of these areas, explicit mention is made of the Florida Comprehensive Assessment Test (FCAT) scores as being integral components. The FCAT scores used for these purposes prior to 2008 were percentiles as reported in the Norm Referenced Test (NRT) result reports. The Florida DOE discontinued administration of the NRT starting in 2008. With NRT scores no longer available, screening, referral, and eligibility specifications were modified and provisions made for using FCAT Sunshine State Standards (SSS) data as a substitute measurement of academic achievement. With the advent of FCAT 2.0 specifications, the scoring scales have changed and the references to cutoff scores need to be adjusted.

In anticipation of these needs, members of the Division of Advanced Academic Programs and Assessment, Research and Data Analysis collaborated on the suggestion proposed in this Research Note. (It should be noted that the changes in FCAT 2.0 testing impinges on many other areas of operation for M-DCPS and other school districts. Subsequent policy decisions by the Board and possible Legislative actions may affect the ultimate revision of indicators of giftedness.)

Current Procedures

This investigation focuses on the Gifted Eligibility Determination Form for Use with Underrepresented Students in Kindergarten through Twelfth Grades (Plan B Matrix) currently being utilized by the Division of Advanced Academic Programs as per Part B of State Board Rule 6A-6.03019, F.A.C. On this form each student collects a certain number of points tallied in a Matrix Scoring System. In this Matrix, students are awarded from 0 to 4 points in specified categories in each of the following areas: Gifted Characteristic Checklist, Achievement Percentile Score, Intelligence Test Quotient, and Creativity Measure Score.

The Achievement Percentile Score applied to the matrix are cutoff points for the FCAT SSS for either the Reading or the Mathematics Test. The cutoff scores were determined in an effort to provide an equi-percentile distribution of the points which had been awarded using the earlier FCAT NRT system. The points for the Achievement Percentile Score are added to the points awarded in the other three categories and the total referred to a predetermined threshold for eligibility.

With the transition to FCAT 2.0 standards, different score scales are used and the score cutoffs for determining achievement points need to be recalculated.

FCAT 2.0 Implementation Proposal

The target percentages for the academic achievement points are based on those exhibited with the NRT implementation of 2008.

Target Percentages Based on NRT

Points	Reading	Math
0	68.0	67.0
1	7.9	7.4
2	6.0	7.5
3	9.8	8.5
4	8.4	9.6

The FCAT 2.0 uses a vertically-aligned scale that has a different range and distribution for each grade level. Moreover, the End-of-Course (EOC) tests for Algebra and Geometry supersede the Mathematics components of FCAT 2.0 for grades 9 and 10, respectively. Each test distribution was considered separately to determine the score cutoffs providing the optimal match to existing percentages. Because of the discrete nature of the scales, the target proportions cannot be matched exactly. The following table presents the best-fit score cutoffs for each of the grade levels within the content areas.

Although the percentage of students receiving each point designation varies somewhat by grade level, on the whole the correspondence is deemed within acceptable ranges. Using the FCAT 2.0 scores in the Matrix Scoring System in this manner should ultimately result in the same percentage of students being deemed Gifted Eligible through the M-DCPS Plan B Matrix.

Reading

Grade	Points	Percent	Minimum	Maximum
03	0	67.3	140	208
	1	8.1	209	213
	2	6.6	214	218
	3	9.5	219	228
	4	8.4	229	260
04	0	67.9	154	221
	1	8.6	222	226
	2	6.0	227	230
	3	9.4	231	239
	4	8.2	240	269
05	0	67.7	161	230
	1	7.9	231	235
	2	6.1	236	239
	3	10.1	240	249
	4	8.2	250	277
06	0	68.3	167	232
	1	8.0	233	237
	2	5.6	238	241
	3	9.7	242	251
	4	8.4	252	283
07	0	67.5	171	238
	1	8.3	239	243
	2	5.5	244	247
	3	10.7	248	258
	4	8.0	259	289
08	0	67.7	175	245
	1	7.6	246	250
	2	6.7	251	255
	3	9.5	256	266
	4	8.4	267	296
09	0	68.3	178	247
	1	7.1	248	251
	2	6.0	252	255
	3	10.6	256	265
	4	8.0	266	302
10	0	68.4	100	251
	1	8.3	252	256
	2	5.4	257	260
	3	9.7	261	270
	4	8.3	271	341

Math

Grade	Points	Percent	Minimum	Maximum
03	0	67.3	140	211
	1	6.8	212	215
	2	7.3	216	220
	3	8.8	221	229
	4	9.8	230	260
04	0	67.4	155	224
	1	6.7	225	228
	2	7.9	229	234
	3	8.6	235	243
	4	9.5	244	271
05	0	66.6	163	231
	1	7.3	232	235
	2	7.6	236	240
	3	9.0	241	248
	4	9.4	249	279
06	0	67.2	170	235
	1	7.2	236	239
	2	7.9	240	244
	3	8.3	245	251
	4	9.4	252	284
07	0	67.5	179	243
	1	7.1	244	247
	2	7.7	248	252
	3	8.4	253	259
	4	9.3	260	292
08	0	67.3	187	251
	1	7.8	252	255
	2	6.2	256	259
	3	9.3	260	267
	4	9.4	268	298
Algebra 09	0	67.3	325	406
	1	6.1	407	410
	2	7.4	411	415
	3	8.9	416	424
	4	9.6	425	475
Geometry 10	0	68.4	20	49
	1	6.2	50	51
	2	8.3	52	54
	3	6.7	55	57
	4	10.3	58	80