THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA OFFICE OF THE SUPERINTENDENT

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Approved memorandum with signatures is on file.

October 5, 2005

TO: School Board Members

- FROM: Katherine Blasik, Ph.D., Associate Superintendent Research, Evaluation, Assessment & Boundaries
- VIA: Frank Till Superintendent of Schools

SUBJECT: 2005 ACT ASSESSMENT PROGRAM

Each year, Broward's high school students voluntarily participate in college entrance testing. The two most common assessments are the ACT and the SAT. The 2005 ACT High School Profile Report providing national, state, and district results was recently released by ACT, Inc. The ACT Assessment is a comprehensive, standardized college entrance exam designed to assess high school students' general educational development and their ability to complete college-level work. The ACT is a curriculum-based achievement test that measures English, Mathematics, Reading, and Science Reasoning skills deemed critical for successful college academic performance and is administered at various times throughout the year. Students elect to take the ACT based on personal preference or requirements of the college(s) of their choice.

Highlights of the report indicate:

- The highest proportional growth in Broward ACT participation occurred among Puerto Rican/Hispanic and Mexican American/Chicano students, where a 25 percent increase in the student participation rate was documented in the three-year period from 2002-03 to 2004-05.
- During the same time period, African American/Black student ACT participation increased by 21 percent and Caucasian American/White and Asian American/Pacific Islander student participation increased by eight percent.
- In 2004-05, Composite scores for Caucasian American/White and Mexican American/Chicano students in Broward County showed improvement over the previous year. Composite scores for American Indian/Alaskan Native students remained stable, while Composite scores for Puerto Rican/Hispanic, Asian American/Pacific Islander, and African American/Black students declined slightly in 2004-05.
- Broward Puerto Rican/Hispanic students' mean scores surpassed their peers across the nation **in every area**, including the Composite scores, but were below that of Puerto Rican/Hispanic students' scores in Florida in every subject area except Mathematics.

- Caucasian American/White students' mean scores, in all categories, equaled or exceeded their counterparts statewide and exceeded the scores of Caucasian American/White students nationwide in all categories with the exception of English and Science Reasoning.
- African American/Black students in Broward posted mean ACT Composite scores that equaled African American/Black Composite scores in Florida and were only slightly below the scores of African American/Black students nationally.
- Broward African American/Black students' mean scores in Mathematics and Reading surpassed the scores of their counterparts across the state and nationwide, but these students posted scores below those of their counterparts in the state and across the nation in English and Science Reasoning.
- Of the 32 Broward high school programs with ACT participation in 2003-04 and 2004-05, more than three-fifths (22 schools or 69%) of the schools posted a higher participation rate.
- Of the 29 Broward high school programs reporting ACT scores in 2003-04 and 2004-05, 17 schools (59%) posted improved scores in at least one subject area this year.
- In 2004-05, mean ACT scores at six Broward schools (College Academy @ BCC, Cooper City, Stoneman Douglas, William T. McFatter Technical, J.P. Taravella, and Western) exceeded the mean scores of the state and nationwide in every ACT subtest.

According to ACT, the most important prerequisite for optimum performance by students on college admission tests is a sound, comprehensive educational program (ACT, Inc., 2005). These most recent ACT results speak well of Broward's efforts to provide a well-rounded education to all students and increase student achievement. This memorandum and the attached report can be accessed on the Student Assessment & School Performance website located at: <u>http://www.broward.k12.fl.us/studentassessment/reports.htm</u>. If you have any questions regarding this report, please contact me at (754) 321-2470 or Kimberley Kraft, Director of Student Assessment & School Performance, at (754) 321-4257.

FJT/KAB/KEK/DG:sjm Attachment

cc: Senior Management

Area Directors Diane Carr, Executive Director, Core Curriculum Frank Vodolo, Executive Director, Educational Programs Cynthia Park, Director, Advanced Academic Programs High School Principals

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA



Research, Evaluation, Assessment & Boundaries Student Assessment & School Performance

2005 ACT ASSESSMENT PROGRAM

The ACT Assessment is a comprehensive, standardized college entrance exam designed to assess high school students' general educational development and their ability to complete college-level work. The ACT is a curriculum-based achievement test that measures English, Mathematics, Reading, and Science Reasoning skills deemed critical for successful college academic performance and is administered at various times throughout the year. Students elect to take the ACT based on personal preference or requirements of the college(s) of their choice. The ACT Assessment yields scores in four content areas: English, Mathematics, Reading, and Science, in addition to a Composite score, all of which are reported on a scale of 1 to 36, with 36 being the highest possible score on the ACT Assessment.

Documentation from ACT, Inc. (2005) notes that the exam was taken by nearly 1.2 million graduates in the class of 2005. The test is administered in all 50 states and the District of Columbia and is the predominant college entrance exam in 25 states. However, college-bound students who take the ACT Assessment are not necessarily representative of graduating students nationally. Students who live in the Midwest, Rocky Mountains, Plains, and the Southern regions of the country are overrepresented among ACT-tested students as compared to college-bound students nationally. Florida is among the top five states in numbers of ACT-tested high school graduates (ACT, Inc., 2005).

ACT Assessment Participation

The results profiled in this report are based on all students who took the ACT Assessment on a national test date during the 2002-03, 2003-04, or 2004-05 academic years, and who graduated from high school in the spring of 2005. For students testing more than once, their most recent test record is used (ACT, Inc., 2005).

According to ACT Inc., the ACT Assessment is designed for those students who plan to attend college and the focus is on students who completed the recommended college preparatory courses. The recommended college core courses (as defined by ACT) include:

- English (four years or more) One credit each for English 9, English 10, English 11, and English 12
- Mathematics (three years or more) One year credit each for Algebra I, Algebra II, and Geometry One-half year credit each for Trigonometry, Calculus (not Pre-calculus), and other mathematics courses beyond Algebra II, computer mathematics/computer science
- Social Sciences (three years or more) One year credit each for American History, World History, and American Government One-half year credit each for Economics, Geography, Psychology, and other history

• Natural Sciences (three years or more) One year credit each for General/Physical/Earth Science, Biology, Chemistry, and Physics

ACT Assessment Results

This year, large numbers of Broward County Public Schools' students continued to take standardized, comprehensive college entrance exams. Typically students taking college admission tests have strong academic backgrounds and are applicants to the nation's most selective colleges and scholarship programs. Therefore, in some states, a limited number of college-bound seniors take the ACT. However, in Broward, all students in the district are encouraged to take college admission tests.

Caution should be used in making comparisons between state and national results. State results may differ from national results for non-educational reasons such as the demographic make-up of a state's ACT-tested graduates compared to the nation as noted in Appendix A.

Table 1 provides ACT participation rates and test results for the district, state, and the nation. As three years of data are necessary to evaluate data trends, results are provided for 2002-03 through 2004-05. The numbers of students, as well as their overall averages for the English, Mathematics, Reading, and Science Reasoning subtests and Composite scores, are included.

As indicated in Table 1, the number of Broward students participating in ACT testing in 2004-05 (4,807 students) increased by nine percent over the previous year. This increase in Broward student participation in ACT testing surpasses the three percent increase statewide and the one percent increase in student participation across the nation as compared to 2003-04.

As displayed in Table 1, average scores in Florida and across the nation remained relatively stable over the three-year period. In Broward, 2004-05 mean scores in all areas were below those of the previous year and trailed scores across Florida and the nation.

	Table 1: Broward, Florida, and National Average ACT Scores, 2003-2005											
Year	Number Tested	English	Mathematics	Reading	Science Reasoning	Composite						
	Broward											
2003	4,169	18.8	20.0	20.1	19.4	19.7						
2004	4,418	18.8	20.1	20.2	19.5	19.8						
2005	4,807	18.6	19.9	19.9	19.2	19.5						
			Florida									
2003	55,784	19.8	20.3	21.0	20.2	20.5						
2004	56,431	19.9	20.4	21.0	20.2	20.5						
2005	58,302	19.8	20.4	20.9	20.1	20.4						
			Nation									
2003	1,175,059	20.3	20.6	21.2	20.8	20.8						
2004	1,171,460	20.4	20.7	21.3	20.9	20.9						
2005	1,186,251	20.4	20.7	21.3	20.9	20.9						

Results by Ethnicity

Table 2 provides the participation rate of students in Broward County in the ACT Assessment by ethnicity, as well as the average ACT Assessment Composite scores by ethnicity for 2002-03 through 2004-05. The national ethnic categories listed in the table are those identified by ACT, Inc. As the data reflect, an increase in participation rates for most ethnic groups was demonstrated in Broward County in 2004-05. The highest proportional growth in Broward ACT participation occurred among Puerto Rican/Hispanic and Mexican American/Chicano students, where a 25 percent increase in student participation rate was documented in the period from 2002-03 to 2004-05. During the same time period, African American/Black student ACT participation increased by 21 percent and Caucasian American/White and Asian American/Pacific Islander student participation increased by eight percent.

As seen in Table 2, the 2004-05 Composite scores for Caucasian American/White and Mexican American/Chicano students in Broward County showed improvement over the previous year. Composite scores for American Indian/Alaskan Native students remained stable, while Composite scores for Puerto Rican/Hispanic, Asian American/Pacific Islander, and African American/Black students declined in 2004-05. Caution must be used when reviewing results for groups with small numbers of participating students.

Table 2: Broward Average ACT Composite Scores by Ethnicity 2002-2005										
	200	3	2004		200)5				
Ethnicity	Number	Score	Number	Score	Number	Score				
	Tested		Tested		Tested					
African American/Black	1,430	17.0	1,458	17.4	1,730	16.9				
American Indian/Alaskan Native	8	19.1	9	20.1	7	20.1				
Caucasian American/White	1,369	22.0	1,365	21.9	1,474	22.0				
Mexican American/Chicano	53	19.7	62	20.1	66	20.4				
Asian American/Pacific Islander	183	21.8	212	21.8	198	21.5				
Puerto Rican/Hispanic	605	19.8	720	19.7	757	19.6				

While Table 2 illustrates three years of Broward data by ethnicity, Appendix A presents the percent of test takers and the average scores by ethnicity for the district, state, and the nation in 2004-05 and differences in Broward ACT Composite scores by the major ethnic groups for the three year period 2002-03 through 2004-05. As indicated in Table A1, Broward student demographics by ethnicity differ somewhat from the state and the nation. Specifically, African American/Black students comprise more than two-fifths (41%) of the ACT test-takers in Broward compared to 21% in Florida and 13% across the nation and Puerto Rican/Hispanic students represent 18% of ACT participants in Broward versus 15% statewide and only 3% nationally. In contrast, Caucasian American/White students account for approximately one-third (35%) of the ACT test-takers in Broward compared to 57% in Florida and 74% nationwide.

As shown in Table A1, in 2004-05, Broward students outperformed their counterparts in most areas in the state and nationwide.

• Broward Puerto Rican/Hispanic students' mean scores surpassed their peers across the nation in every area, including the Composite scores, but were below that of Puerto Rican/Hispanic students' scores in Florida in every subject area except Mathematics.

- Caucasian American/White students' mean scores, in all categories, equaled or exceeded their counterparts statewide and exceeded the scores of Caucasian American/White students nationwide in all categories with the exception of English and Science Reasoning.
- African American/Black students in Broward posted mean ACT Composite scores that equaled African American/Black Composite scores in Florida and were only slightly below the scores of African American/Black students nationally.
- Broward African American/Black students' mean scores in Mathematics and Reading surpassed the scores of their counterparts across the state and nationwide, but these students posted scores below those of their counterparts in the state and across the nation in English and Science Reasoning.

Table A2 depicts the differences between Caucasian American/White students and the two other major ethnic groups in Broward: African American/Black and Puerto Rican/Hispanic students. As seen in the table, differences still remain evident when comparing the ACT Composite scores of Caucasian American/White students and the other major ethnic groups. While the gap between African American/Black students and Caucasian American/White students decreased from 2002-03 to 2003-04 (from 5.0 to 4.5), the gap increased this year from the previous year by slightly more than one-half point (to 5.1). This appears to be due in large part to a one-half point decline in the performance of African American/Black students this year. However, the cumulative change in the achievement gap over the three-year period from 2002-03 through 2004-05 is an increase of only one-tenth of a point. The gap between Puerto Rican/Hispanic and Caucasian American/White students increased slightly this year by two-tenths of a point, but has remained relatively consistent over the three year period (2.2 to 2.2 to 2.4).

Individual School Results

Appendix B provides school-by-school average ACT results for 2002-03, 2003-04, and 2004-05. Again, when reviewing the school-by-school results, note that students with a wide range of academic backgrounds are encouraged to take college entrance exams such as the ACT in Broward County.

A review of individual school results finds that:

- Of the 32 Broward high school programs with ACT participation in 2003-04 and 2004-05, more than three-fifths (22 schools or 69%) of the schools posted a higher participation rate.
- Of the 29 Broward high school programs reporting ACT scores in 2003-04 and 2004-05, 17 schools (59%) posted improved scores in at least one subject area this year.
- In 2004-05, mean ACT scores at six Broward schools (College Academy @ BCC, Cooper City, Stoneman Douglas, William T. McFatter Technical, J.P. Taravella, and Western) exceeded the mean scores of the state and nationwide in every ACT subtest.

Data contained in *The High School Profile Report*, which is sent to every high school, must be interpreted and shared with students and their parents so that students may better understand what is required to make a successful transition to college and to further training.

References

ACT, Inc. (2005). <u>The High School Profile Report, A Description of the Academic Abilities and Nonacademic Characteristics of Your ACT Tested 2005 Graduates</u>, Iowa City, IA: ACT, Inc.

ACT, Inc. (2005). www.act.org

Table A1: Broward, Florida, and National ACT Results by Ethnicity:Percent of Test-Takers and Mean Scores, 2005							
Ethnic Group	Percent	English	and Mean Scol Mathematics	Reading	Science Reasoning	Composite	
		Brow	vard			•	
African American/Black	41%	15.7	17.4	17.2	16.9	16.9	
American Indian/Alaskan Native	<1%	18.4	20.6	20.6	20.3	20.1	
Caucasian American/White	35%	21.4	22.3	22.6	21.3	22.0	
Mexican American/Chicano	2%	19.8	20.7	20.8	20.0	20.4	
Asian American/Pacific Islander	5%	20.0	22.9	21.7	20.8	21.5	
Puerto Rican/Hispanic	18%	18.8	19.9	19.9	19.3	19.6	
		Flor	rida				
African American/Black	21%	15.8	17.2	17.1	17.1	16.9	
American Indian/Alaskan Native	<1%	20.0	20.5	21.6	20.7	20.8	
Caucasian American/White	57%	21.4	21.5	22.4	21.3	21.8	
Mexican American/Chicano	2%	18.5	19.7	19.9	19.5	19.5	
Asian American/Pacific Islander	4%	21.0	22.8	22.0	21.5	22.0	
Puerto Rican/Hispanic	15%	19.0	19.8	20.1	19.5	19.7	
		Nat	ion	-			
African American/Black	13%	16.2	16.8	17.0	17.3	17.0	
American Indian/Alaskan Native	1%	17.6	18.4	19.1	19.1	18.7	
Caucasian American/White	74%	21.5	21.5	22.3	21.7	21.9	
Mexican American/Chicano	5%	17.3	18.6	18.5	18.6	18.4	
Asian American/Pacific Islander	4%	21.3	23.1	21.8	21.8	22.1	
Puerto Rican/Hispanic	3%	18.0	19.0	19.1	19.0	18.9	
Note: Percentages are based on the total number of test-takers who identified their ethnicity and, due to rounding, may not sum to 100%.							

APPENDIX A

Table A2: Differences in Broward Average ACT Composite Scores by Major Ethnic Groups,									
2003-2005									
	2002-03	2003-04	2004-05	Change in Gap 2002-03 through 2004-05					
African American/Black	17.0	17.4	16.9						
Gap between African American/Black and Caucasian American/White	5.0	4.5	5.1	0.1					
Caucasian American/White	22.0	21.9	22.0						
Gap between Puerto Rican/Hispanic and Caucasian American/White	2.2	2.2	2.4	0.2					
Puerto Rican/Hispanic	19.8	19.7	19.6						

APPENDIX B

Table B1: School-by-School Average ACT Test Results for North Area, 2003-2005										
School	Year	Number Tested	English	Mathematics	Reading	Science Reasoning	Composite			
	2003	159	16.4	17.4	17.9	17.7	17.5			
Coconut Creek	2004	114	17.7	18.6	18.7	18.5	18.5			
	2005	132	15.7	17.3	16.8	17.0	16.8			
	2003	214	19.3	21.1	20.9	20.2	20.5			
Coral Springs	2004	238	20.1	21.7	21.4	20.6	21.1			
	2005	213	19.3	21.0	21.0	19.5	20.3			
	2003	172	19.8	20.8	20.9	19.8	20.5			
Deerfield Beach	2004	123	18.0	19.8	19.7	19.4	19.3			
	2005	124	18.5	20.0	19.4	18.9	19.3			
	2003	225	15.4	17.2	17.3	16.9	16.8			
Blanche Ely	2004	244	16.5	17.7	18.2	17.7	17.7			
	2005	201	15.4	17.7	17.2	17.1	17.0			
Monarch **	2005	40	17.5	18.9	18.4	18.3	18.5			
	2003	39	19.0	18.3	20.9	18.7	19.3			
Pompano Beach	2004	80	18.6	18.5	20.2	18.8	19.1			
	2005	70	20.7	19.9	21.7	19.5	20.6			
	2003	243	21.7	22.8	23.0	21.4	22.4			
Stoneman Douglas	2004	232	21.4	23.1	22.3	21.4	22.2			
	2005	281	21.2	22.9	22.0	21.2	22.0			
	2003	240	21.3	22.9	22.3	21.5	22.1			
Taravella	2004	225	21.7	23.0	22.8	21.5	22.4			
	2005	255	20.8	22.4	21.8	21.0	21.6			
**First year of partic	ipation.									

Table B2: School-by-School Average ACT Test Results for North Central Area, 2003-2005									
School	Year	Number Tested	English	Mathematics	Reading	Science Reasoning	Composite		
	2003	192	17.2	18.5	18.8	18.1	18.3		
Boyd Anderson	2004	160	15.7	18.1	17.4	17.7	17.3		
	2005	205	16.0	18.0	17.7	17.1	17.3		
College Academy @	2003	55	22.8	23.7	23.4	22.2	23.1		
BCC	2004	70	23.5	24.6	25.4	22.6	24.2		
bee	2005	67	26.4	26.3	26.5	24.5	26.1		
William T. McFatter	2003	37	19.2	20.8	20.6	19.8	20.3		
Technical	2004	52	20.6	22.4	22.2	21.0	21.7		
rechinear	2005	71	20.8	22.1	23.3	21.5	22.1		
	2003	164	17.9	18.7	19.5	18.9	18.9		
Northeast	2004	178	17.9	19.2	19.4	18.6	18.9		
	2005	180	18.1	18.8	19.3	18.8	18.9		
	2003	152	20.7	22.7	21.5	21.2	21.6		
Nova	2004	146	20.6	22.1	21.8	20.9	21.5		
	2005	152	20.2	22.3	21.4	20.5	21.2		
	2003	263	17.6	18.4	18.6	18.4	18.4		
Piper	2004	273	17.4	18.4	18.9	18.3	18.3		
	2005	269	17.1	18.6	18.9	18.2	18.3		

APPENDIX B, Continued

Table B3: School-by-School Average Test ACT Results for South Central Area, 2003-2005										
School	Year	Number Tested	English	Mathematics	Reading	Science Reasoning	Composite			
	2003	2	*	*	*	*	*			
Cypress Bay	2004	185	20.4	21.7	21.7	20.7	21.3			
	2005	288	20.5	21.6	21.3	20.3	21.1			
	2003	154	15.4	16.8	17.2	16.8	16.7			
Dillard	2004	137	15.9	17.4	17.1	17.3	17.1			
	2005	128	15.5	16.8	16.7	16.5	16.5			
	2003	87	18.4	18.6	19.9	18.3	19.0			
Fort Lauderdale	2004	101	17.3	18.7	18.6	17.9	18.3			
	2005	127	17.0	18.1	18.6	17.4	17.9			
	2003	158	18.4	19.5	19.5	19.4	19.3			
Plantation	2004	137	18.3	19.9	19.9	19.3	19.5			
	2005	164	17.4	18.8	18.9	18.0	18.4			
	2003	127	18.2	18.9	19.5	18.1	18.8			
South Plantation	2004	125	18.3	19.4	19.4	19.5	19.3			
	2005	138	18.1	19.7	20.2	18.9	19.3			
	2003	135	17.5	18.6	18.2	18.3	18.2			
Stranahan	2004	197	17.7	19.0	19.2	19.0	18.9			
	2005	137	18.0	19.1	19.1	18.9	18.9			
	2003	199	20.8	22.2	22.2	21.3	21.7			
Western	2004	93	20.6	21.4	22.2	20.7	21.4			
	2005	94	21.4	21.8	22.4	21.7	21.9			
*No data are repor	ted when	fewer than	30 student	s tested.						

Table B4: School-by-School Average ACT Test Results for South Area, 2003-2005									
School	Year	Number Tested	English	Mathematics	Reading	Science Reasoning	Composite		
	2003	208	21.3	22.8	22.8	21.6	22.3		
Cooper City	2004	221	20.4	21.7	21.5	20.8	21.2		
	2005	241	21.4	22.4	22.9	21.0	22.0		
Everglades**	2004	3	*	*	*	*	*		
Everglades	2005	166	19.4	19.9	20.6	19.2	19.9		
	2003	340	20.2	21.3	21.0	20.2	20.8		
Flanagan, Charles W.	2004	391	19.5	21.0	20.9	20.3	20.5		
	2005	247	19.0	20.1	20.5	19.5	19.9		
	2003	58	16.5	17.0	16.6	17.2	17.0		
Hallandale	2004	56	16.8	18.0	18.5	18.1	18.0		
	2005	101	14.9	17.2	16.8	17.2	16.7		
	2003	84	18.6	19.9	20.2	19.5	19.5		
Hollywood Hills	2004	111	18.9	20.6	20.1	20.1	20.0		
	2005	64	19.1	20.4	20.1	19.5	19.9		
	2003	101	17.6	19.3	19.3	18.5	18.8		
McArthur	2004	103	16.9	18.7	18.4	18.3	18.2		
	2005	110	16.8	19.0	18.6	17.9	18.2		
	2003	141	15.9	16.9	17.5	17.3	17.0		
Miramar	2004	151	17.4	18.5	19.3	18.1	18.4		
	2005	192	16.5	17.6	17.9	17.5	17.5		
	2003	49	18.8	19.6	20.4	19.4	19.7		
South Broward	2004	69	16.8	17.6	18.3	18.0	17.8		
	2005	88	17.5	19.0	20.0	18.8	18.9		
*No data reported when fewer than 30 students tested. **First year of participation.									

APPENDIX B, Continued

Table B5: School-by-School Average ACT Test Results for Charter Schools, 2003-2005									
Charter School	Year	Number Tested	English	Mathematics	Reading	Science Reasoning	Composite		
	2003	24	19.1	19.0	19.3	19.2	19.3		
City of Coral Springs	2004	39	20.4	18.9	21.1	20.0	20.2		
	2005	52	19.1	19.9	20.9	20.7	20.3		
	2003	93	19.4	20.2	20.5	19.7	20.0		
City of Pembroke Pines	2004	109	20.0	20.1	21.6	20.1	20.6		
	2005	135	19.6	19.6	20.3	19.7	19.9		
North Lauderdale	2003	33	15.5	15.9	17.4	16.0	16.3		
Academy	2004	32	15.3	16.8	17.4	17.7	16.9		
Academy	2005	22	*	*	*	*	*		
	2003	6	*	*	*	*	*		
Parkway Academy	2004	16	*	*	*	*	*		
	2005	37	15.5	15.6	16.4	16.8	16.2		
*No data are reported whe	n fewer	than 30 stu	udents test	ed.					