



RESEARCH BRIEF

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Trends in High School Graduation Rates

This Research Brief addresses an outcome measure that is of paramount importance to senior high schools - graduation rate. Nationwide a student drops out of school approximately every nine seconds. The significance of this issue locally is exemplified by a recent American Civil Liberties Union filing of a class action law suit against the Palm Beach County Public Schools claiming the district's low graduation rate violated the Florida Constitution. Data will be presented indicating that four-year graduation rates for M-DCPS students in grades 9 -12 have increased for all three of the major racial/ethnic groups for the past three cohorts. The seven most frequently used methods to calculate graduation rate are also presented.

The purpose of this Research Brief is to provide current information about an educational topic that has recently received considerable local and national media attention. The topic concerns high school graduation rates and student characteristics that are associated with leaving school early. Research Services has prepared a series of three research reports concerning high school graduation. These reports address the interrelated areas of graduation rate, dropout rate, and grade retention. This particular Research Brief examines trends in graduation rate over the past six years.

The most important student outcome measure for senior high schools is graduation rate. The harsh reality is that a student drops out of school in America every nine seconds (Halperin 2006). The National Center for Research on the Education of Students Placed at Risk (CRESPAR) has estimated that approximately one-half of Black, 40 percent of Hispanic, and 11 percent of White students attend high schools where graduation is not the customary outcome (Balfanz and Legters 2004). In fact, CRESPAR has reported that approximately 80 percent of the country's high schools with the lowest graduation rates or conversely the highest high school dropout rates, are found in only 15 states with five southern states (Georgia, South Carolina, North Carolina, Florida, and Texas) collectively leading the nation in the number of high schools with the lowest graduation rates.

Most current national estimates place the high school graduation rate at approximately 70 percent with lower rates occurring in inner city schools attended by predominantly minority student populations (Swanson 2008). The fact that a relatively large proportion of students fail to graduate from high school within four years is not a new concern but rather has been discussed at the national level since the early 1900s. This in no way reduces the magnitude or seriousness of the problem but rather implies solutions have not been forthcoming despite addressing the issue for a very long time.

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The significance of the issue locally is highlighted by recent events including the American Civil Liberties Union filing of a class action law suit against the Palm Beach County Public Schools claiming the district's low graduation rate violated the Florida Constitution (McGrory, 2008). In addition, an April 2, 2008 Miami Herald article entitled, "Miami-Dade Graduation Rates Among the Worst," reported Miami-Dade County Public Schools (M-DCPS) had the 16th lowest graduation rate among 50 of the largest districts in the nation. The source of this information was a report from Swanson (2008) entitled "Cities in Crisis: A Special Analytic Report of High School Graduation." The Miami Herald article also indicated that the recent graduation rate calculated by the Florida Department of Education for M-DCPS was approximately 15 percentage points higher than the rate Swanson (2008) calculated using a method called the Cumulative Promotion Index (CPI). The CPI and other calculation methods which have garnered considerable debate for some time will be discussed in the next section of this report.

This Research Brief will address two issues related to graduation rates including calculation methods and trends in M-DCPS graduation rates.

Calculation Methods

Research Services calculates graduation rates for M-DCPS using procedures prescribed by the State of Florida Department of Education. This process requires tracking individual students by student identification numbers from the time they enter 9th grade to the time they leave the system, by graduation or otherwise. The accuracy of this methodology which uses student-level data is dependent upon the accuracy of the exit codes applied by school-level staff.

Numerous researchers outside of the district have calculated their own graduation rates for various districts across the country. They tend to use some common metric which is claimed to allow comparisons across districts. Since they do not have access to the student-level data from these districts, they rely on published summary data which at best merely serve to approximate graduation rates. These approaches characteristically infer promotion rates between grade levels from changes in student counts over different years. While this methodology is advertised as more trustworthy, it compounds doubtful estimates into highly uncertain and typically overly pessimistic estimates of true graduation rates. This is especially true in the State

of Florida, where changes in promotion requirements over the years have led to erratic variations in grade-level memberships.

At first glance, calculating graduation rates appears to be a simple mathematical operation. Merely divide the number of students who receive a diploma by the total number of students in the prospective graduating class. However, there are a number of factors to account for in such calculations some of which are listed below.

- Should the calculation include students who move into the district late in their high school careers?
- Should the calculation include students who leave the district after spending most of their high schools careers in the district?
- Should the system track students who drop out one year only to return the next?
- How to account for students who transfer to adult education programs?
- Should GED recipients be treated differently than those receiving standard diplomas?
- How to deal with students requiring more than four years to graduate?
- What is the reliability of the exit codes applied to students by school staff?

The variety of responses to these and to other similar issues leads to a number of reasonable formulas for calculating graduation rates. The following list of seven methodologies can address these issues in varying degrees. This list was taken directly from an article published on June 22, 2006 in *Education Week* ("Diplomas Count: An Essential Guide to Graduation Policy and Rates").

Cohort Rate: Percent of students from an entering 9th grade cohort who graduate with a standard diploma within four years. Method can account for transfers and students retained in grade. Student data may be tracked on a statewide or local basis.

Leaver Rate: Percent of students leaving high school with a standard high school diploma, expressed as a proportion of all those documented leaving with a diploma or other completion credential or as a dropout. This

method is sometimes referred to as a departure-classification index.

Completion Ratio: Number of diploma recipients divided by an approximation of the starting 9th grade class. Method cannot fully account for entering cohort membership, net transfer, and grade retention.

Dropout Rate: Percent of students enrolled in grades 9 through 12 who drop out during a given school year. High school completion is not measured.

Persistence Rate: Percent of students who remain in school from grade 9 through grade 12. Rate is calculated using information on (1) the percent of students not dropping out at specific grade levels or (2) the percent of students estimated to be promoted from grade to grade. This method does not measure high school completion.

On-Time Rate: Proportion of all high school graduates in a given year who have received a standard diploma on time. This method compares on-time graduates with those taking longer than four years to earn a diploma.

Composite Rate: Proportion of students estimated to remain in high school until grade 12 and receive a diploma. The rate for a given year is calculated by multiplying (1) the rate of persistence between grades 9 and 12 and (2) the percent of completers who receive a diploma rather than another credential.

The authors of this Research Brief take the position that, in the spirit of accountability, the most effective methodology to calculate graduation rates is to actually track individual students as cohort groups over their academic history. Since this kind of calculation requires direct access to individually identified student records, only researchers within school districts can possibly produce this kind of longitudinal graduation rate. The methodological flaws and gross generalizations which almost always lead outside researchers to more pessimistic estimates of graduation rates incite a predictably defensive stance from the districts to which they are applied.

The specific calculation method used may become inconsequential as the U. S. Secretary of Education Margaret Spellings has set in motion federal regulations to ensure that all states use the same

formula to calculate how many students graduate from high school on time (Hoff, 2008). Districts will be required to have the “new” method in place by the 2012-2013 school year. A perusal of the proposed regulations reveal a very similar cohort method to that presently used in Florida and in M-DCPS. However, the new law may require schools to provide documentation when a student leaves one school and enrolls in another outside of the home district. Proposed regulations mandate the originating district to verify the student enrolled in a school or program that leads to high school graduation. It is anticipated that such verification should prove exceedingly difficult to secure.

Trends in M-DCPS Graduation Rates

As stated above, Florida’s cohort graduation rate measures the percentage of students who graduate within four years of their first enrollment in 9th grade. As students enter or leave the system they are added or deleted from the cohort. Florida’s graduation rate has remained relatively stable during the past five years, fluctuating from a low of 69.0 percent in 2002-03 to a high of 72.4 percent in 2006-07 (Florida Department of Education, 2008).

During the seven-year period 2000-01 to 2006-07, the M-DCPS four-year cohort graduation rate has averaged approximately 10 to 12 percentage points lower than the rate for the State of Florida (Table 1). Given a yearly average of approximately 21,500 twelfth-grade students, this could translate into approximately 2,350 fewer students graduating in Miami-Dade County per year. In addition, the M-DCPS yearly cohort rate averaged nearly seven percentage points lower over the same time span when compared to the rate for public high schools in Broward County. However, this gap narrowed considerably in 2006-07 (Table 1) (Figure 1).

Tables and accompanying figures can be found on the following two pages of this Research Brief. The rates in Table 1 represent those calculated by the FLDOE and vary only slightly from the longitudinal rates calculated by Research Services. FLDOE rates are being used here to allow comparisons to other South Florida counties and to the statewide ratio.

In M-DCPS, White, Non-Hispanic students tend to graduate at a higher rate than Hispanic students who graduate at a higher rate than Black, Non-Hispanic students. This relationship has been

maintained for the past six (9 - 12 grade) cohort groups (Table 2) (Figure 2). Four-year graduation rates have increased for all three of the major racial/ethnic groups for the past three cohorts (i.e., 2001-05, 2002-06, and 2003-07). The most prominent increase in graduation rate occurred for the most recent cohort (i.e., 2003-07). Rates increased for Hispanic students by 4.8 percent and for Black, Non-Hispanic students by 4.0 percent. Due to the increased graduation requirements some students require five rather

than the customary four years to graduate from high school. As a result, five-year graduation rates are approximately 4.5 percentage points higher than those for four years.

In conclusion, low high school graduation rate is one of the most important issues facing public schools at the present time. In keeping with this importance, Research Services will distribute three Research Briefs and Information Capsules that address this and similar issues (i.e., dropout

Table 1

Florida Public High School Four-Year Cohort Graduation Rates for Selected Districts: 2000-01 to 2006-07

District	00-01	01-02	02-03	03-04	04-05	05-06	06-07
Miami-Dade	53.9	55.7	57.9	60.6	59.9	59.2	63.9
Broward	62.3	65.2	62.7	66.2	67.1	67.8	66.3
Palm Beach	64.9	66.6	66.0	65.9	69.0	69.3	71.8
State	63.8	67.9	69.0	71.6	71.9	71.0	72.4

Source: Florida Public High School Graduation Rates, 2006-07, Florida Department of Education (FLDOE) cohort graduation data as of 01/14/08.

Figure 1

Florida Public High School Four-Year Cohort Graduation Rates by Selected Districts: 2000-01 to 2006-07

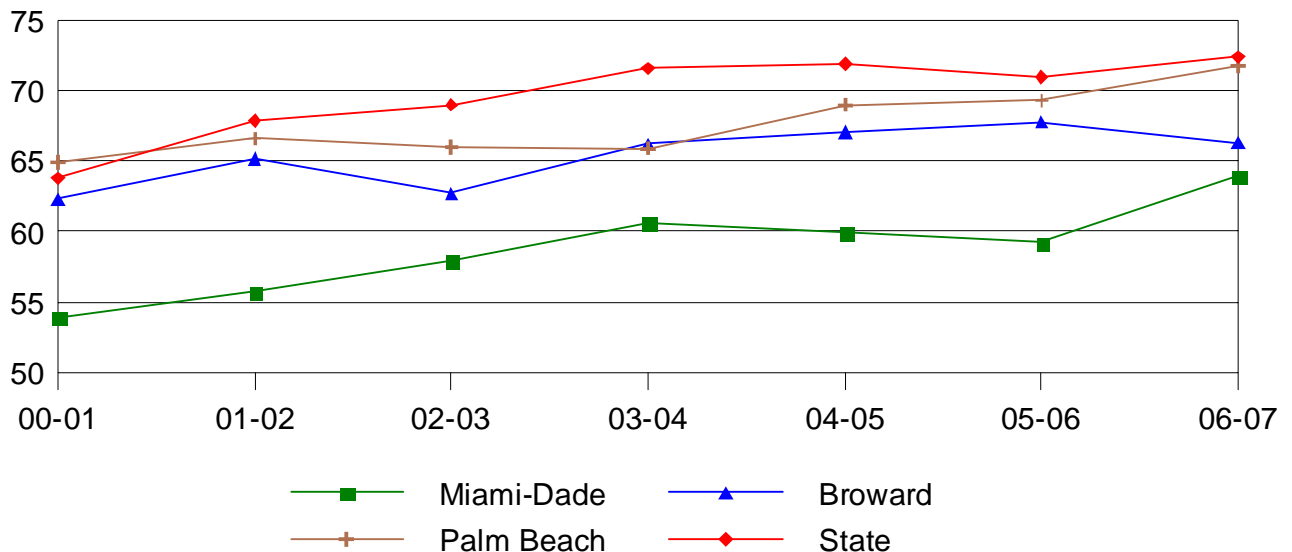


Table 2

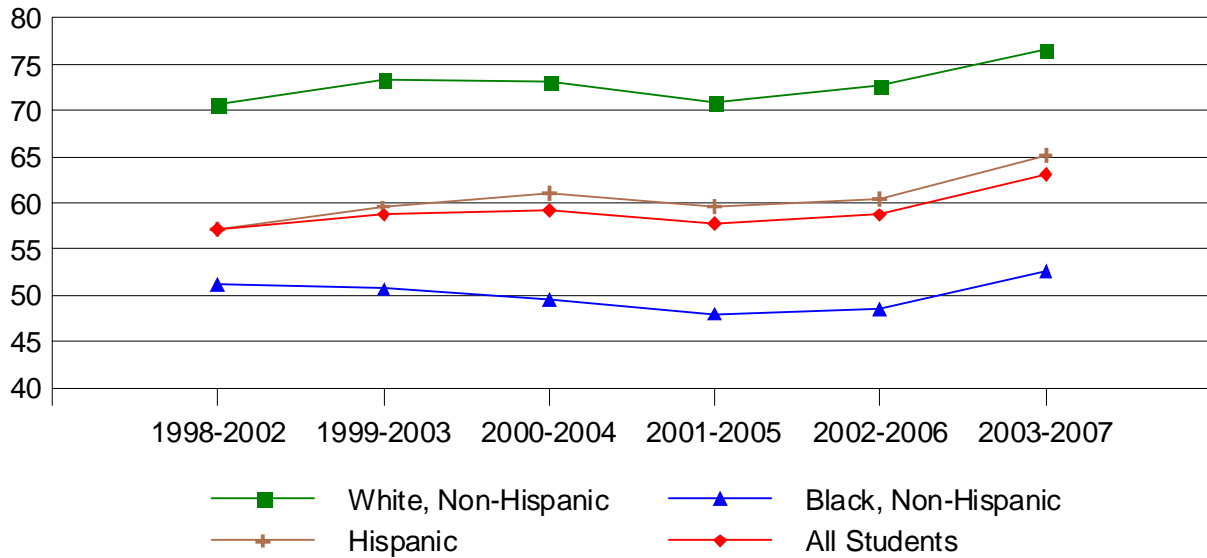
Longitudinal Graduation Rates by Race/Ethnicity for the Past Six M-DCPS Cohorts

Group	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007
White, Non-Hispanic	70.7	73.3	73.1	70.8	72.7	76.6
Black, Non-Hispanic	51.2	50.7	49.5	48.0	48.6	52.6
Hispanic	57.1	59.5	61.1	59.6	60.4	65.2
All Students	57.2	58.7	59.2	57.8	58.7	63.1

Source: Miami-Dade County Public Schools, *Dropout and Graduation Rates*; May 2004, May 2005, February 2006, March 2007, February 2008, Office of Assessment, Research, and Data Analysis

Figure 2

Longitudinal Graduation Rates by Race/Ethnicity for the Past Six M-DCPS Cohort Groups



rate and grade retention) in the very near future. This particular Research Brief has shown that the four-year graduation rate for M-DCPS students in grades 9-12 has increased for all three of the major racial/ethnic groups for the past three cohorts. Additionally, efficacy of the method used

by M-DCPS to calculate graduation rates received confirmation from recent U.S. Department of Education regulations which require all districts to develop similar cohort methodologies by the 2012-2013 school year.

All reports distributed by Research Services can be accessed at <http://drs.dadeschools.net> under the "Current Publications" menu.

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