# Sent Home and Put Off-Track: The Antecedents, Disproportionalities, and Consequences of Being Suspended in the Ninth Grade 

Prepared for the Center for Civil Rights Remedies and the Research-to-Practice Collaborative, National Conference on Race and Gender Disparities in Discipline

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12/21/12


#### Abstract

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This study is based upon a longitudinal analysis of data for a cohort of 181,897 Florida state students who were first time $9^{\text {th }}$ graders in the 2000-01 school year and follows them trough to high school and post-secondary outcomes. Analysis of $9^{\text {th }}$ grade suspension data finds that black students, students who are economically disadvantaged, and special education students are three demographics subgroups that are disproportionately suspended, both in the frequency of suspensions and the duration in number of school days lost. While poverty and ethnicity are themselves highly correlated, poverty alone does not explain the disproportionate suspension rates amongst black students. Further analyses show that out-of-school suspensions in the $9^{\text {th }}$ grade year are also significantly and negatively correlated to later high school graduation as well as post-secondary enrolment and persistence. Thus demographic disparities in disciplinary incidents serve to further widen any academic achievement gaps. Closer analysis though shows though that disciplinary incidents are interrelated with other of indicators of student disengagement from school, such as course failures and absenteeism. Therefore, policies seeking to address these issues cannot focus on reducing suspensions alone, but must also address student attendance and course passing in a comprehensive and systematic manner.


Over the past several years, research from several states (Arkansas, Colorado, Florida, Tennessee) and several large city school districts (Indianapolis, Nashville, Philadelphia,) across the country have identified out-of-school suspensions as one of the primary indicators of high school dropout (Balfanz, et. al., 2007; CSOS, 2007; EGC, 2010a; 2010b; 2010c; 2011; MacIver, et. al., 2009). The exclusion of students from school for disciplinary reasons are directly related to lower attendance rates, increased course failures, and can set a student on a path of disengagement from school that will keep them from receiving a high school diploma and further affect their chances of enrolling in post-secondary schooling and realizing many life-long career opportunities. Aside from the obvious consequences for individual students, and their contributions to their larger communities, any policies that serve to increase student exclusion from the schooling environment are also likely to be detrimental to the many efforts and resources that district and school administrators invest towards increasing their graduation rates and raising achievement levels.

Recent research has also suggested that there are clear and evident demographic disparities in the use of out-of-school suspensions as a disciplinary measure and that certain subgroups of students, particularly those from minority and high poverty backgrounds, are more likely to be suspended, as well as more often, for longer durations of time, and for more minor offenses (Fabelo, et. al., 2011; Georgia Appleseed, 2011; Losen \& Gillespie, 2012; NAACP, 2006; Sullivan \& Morgan, 2010; Texas Appleseed, 2007). Given the impact of suspensions on student academic outcomes, any racial disparities in the application of such disciplinary practices will also serve to further increase the achievement gap that exists between white and non-white students in the US (Blank \& Langesen, 1999; Harris \& Harrington, 2006) and to institutionalize such inequality.

This paper seeks to further our understanding of these issue by analyzing data from a cohort of students from the state of Florida to examine the connection between out-of-school suspensions in the $9^{\text {th }}$ grade and high school and post-secondary outcomes, as well as the interplay between school suspensions and the other primary indicators that students are off-track-poor attendance and course failures. The analyses will also examine demographic disparities in school suspensions, their relationship to poverty, and the extent to which demographic disparities in school suspensions contribute to high school graduation and post-secondary attainment gaps.

## Design \& Sample Data

The following analyses are based on a longitudinal cohort study of data for a cohort of 181,897 Florida state students who were first time $9^{\text {th }}$ graders in the 2000-01 school year. The full cohort included 205,337 students, but longitudinal analyses exclude those students who transferred out of state system in following years as their final high school and post-secondary outcomes cannot be known. The data follows these students forward to 2005-06 for high school outcomes (two
years past the expected time of graduation, 2003-04) and follows them through 2007-08 for postsecondary outcomes (four years past the expected time of graduation). Outcomes focus on high school graduation and dropout events and post-secondary enrollment at two and four-year degree granting institutions.

Available as control measures and correlates of high school and post-secondary outcomes are several student measures such as demographic characteristics (ethnicity, special education status, limited-English proficiency, overage for grade), academic behaviours (attendance, disciplinary incidents, course marks and failures), student mobility (enrollment, withdrawal, and transfer data), and achievement test scores. (In order to examine the subgroups of primary interest such as the different ethnic groups and students who were economically disadvantaged or special education status, gender was not made available for the study in order to ensure student anonymity given the other details provided). This sample of data was made available by the Florida K-20 Education Data Warehouse to examine the early warning indicators of high school dropout and post-secondary enrollment. In this paper, we examine more deeply, the role played by school suspensions in students falling off the path to high school graduation and postsecondary attainment.

Further examination of such a data sample also allows us to advance our understanding of disparities in school discipline and their impacts on student outcomes. Analyses of these data enable us to determine which students get suspended in $9^{\text {th }}$ grade disproportionately by demographic group, which other academic factors are correlated to and mediated by suspensions, and what the long term consequences of suspensions are on students' High-School and PostSecondary outcomes. Specifically, we use the data to address the following research questions:

- To what extent are suspensions connected to lower academic outcomes, both immediate (attendance, course failures) and long term (high school graduation and post-secondary persistence)?
- Are different demographic subgroups of students suspended at higher rates and/or for longer periods than others? And if so, do these differences remain even after controlling for poverty levels? Do these disparities contribute to high school graduation and postsecondary attainment gaps.

We then conclude by addressing the policy and practice implications of our findings.

Table 1, shows the demographic descriptives for our sample of 181,897 Florida $9^{\text {th }}$ grade students from the 2000-01 school year. While the majority, just over half of students, were of a
white ethnic background, there were sizeable minorities with one quarter of students black and one fifth Hispanic. The majority of students were also eligible for the federal Free/Reduced Lunch program during their $9^{\text {th }}$ grade yaer, and one quarter was special education status.

## Table 1 - Sample Descriptive Statistics

|  | $9^{\text {th }}$ Grade Cohort $\begin{gathered} \mathrm{N}=181,897 \\ (2000-01) \end{gathered}$ | Transfers out $\begin{gathered} \mathbf{N}=23,440 \\ (2000-01) \end{gathered}$ | Florida K-12 <br> Student Population $\begin{gathered} \mathbf{N}=2,667,830 \\ (\mathbf{2 0 0 1 1 - 1 2}) \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| New to Florida PS | 7\% | 19\% | 4\%* |
| White | 54\% | 55\% | 42\% |
| Asian | 2\% | 2\% | 3\% |
| Black | 24\% | 21\% | - $23 \%$ |
| Hispanic | 19\% | 21\% | 29\% |
| Native | <1\% | <1\% | <1\% |
| Multi-Racial | 1\% | 1\% | 3\% |
| F/RL | 59\% | 61\% | 58\% |
| Spec. Ed. | 26\% | 23\% | 19\% |
| LEP | 16\% | - $17 \%$ | 9\% |
| Overage | 26\% | 40\% | N/A |

*     - excludes students who were new to Florida as first time prekindergarten/kindergarten entrants

The 23,440 students who transferred out of the cohort were disproportionately overage and new to the Florida public school system, suggesting a more mobile group that had already repeated a grade. Similarly, the 2,472 students from our analytic sample who were missing attendance data and the 19,515 who were missing course data were also disproportionately overage and new to Florida public schools. However, overage and new students remained a minority for these groups, and as a whole, those students who transferred out of the cohort and those missing data largely resemble those that remain in our analyses. Analyses were based on complete case data of 181,897 students for most analyses with reduced samples for those analyses including attendance or course marks data. Students who are more mobile and overage, and/or have missing data are likely to have lower academic outcomes such as attendance and achievement on average. Thus, our sample data is likely be representative of students with somewhat higher outcomes levels than those of the true Florida state student population. However, those differences that do exist between our sample of students and the true Florida student population are not ones that we would expect, for any theoretical reasons, to alter the relationships or significantly impact our results. .

## Who Gets Suspended in the $\mathbf{9}^{\text {th }}$ Grade?

Overall for our cohort of 181,897 students, $27 \%$ were suspended out-of-school at least once in the $9^{\text {th }}$ grade. This tells us that suspending students in the $9^{\text {th }}$ grade is common practice and was experienced by more than one in four students. Students who were suspended in the $9^{\text {th }}$ grade were suspended on average twice during the year, and missed on average a total of seven school days due to suspension. While the average number of days lost due to suspension is pushed up by outlying incidents of students being suspended for lengthy amounts of time, $50 \%$ of all students suspended missed up to 3 days of school, another $25 \%$ missed from 4 to 7 days, and another $15 \%$ missed from 8 to 13 days of school. $40 \%$ of all students who were suspended during the $9^{\text {th }}$ grade missed at least 5 days, or one week of school, due to suspension.

Looking at the nominal rates of $9^{\text {th }}$ grade suspension by demographic background in Table 2, we are able to see who gets suspended in the $9^{\text {th }}$ grade and the variation between subgroups. Compared to the cohort average, black students, those eligible for the Free/Reduced Lunch program, special education students, and those students overage for their grade were suspended more often on aggregate than any other demographic subgroup. Black students received twice as many suspensions as white students. These four groups also lost the most school days on average due to suspension. Looking only at those students who were suspended at least once, students from those groups were also more likely to be suspended more than once and to lose more days due to suspension than other groups on average.

Table 2 - $9^{\text {th }}$ Grade Suspensions Rates for Cohort Examined by Demographic Background

|  | \% <br> Suspend <br> at least <br> once | Average \# <br> of <br> Suspensions | Average \# of <br> Days <br> Suspended | Average \# of <br> Suspensions <br> (for those <br> suspended) | Average \# of <br> Days Suspended <br> (for those <br> suspended) |
| :--- | :--- | :--- | :--- | :--- | :---: |
| New to <br> Florida PS | $15 \%$ | 0.3 | 1.1 | 1.7 | 6.5 |
| White | $22 \%$ | 0.4 | 1.5 | 1.8 | 6.6 |
| Asian | $10 \%$ | 0.2 | 0.7 | 1.6 | 6.8 |
| Black | $39 \%$ | 0.8 | 2.9 | 1.9 | 7.4 |
| Hispanic | $26 \%$ | 0.5 | 1.7 | 1.8 | 6.2 |
| Native | $22 \%$ | 0.5 | 1.5 | 2.0 | 6.3 |
| Multi- | $25 \%$ | 0.4 | 2.0 | 1.8 | 8.0 |
| Racial | $34 \%$ | 0.7 | 2.5 | 2.0 | 7.1 |
| F/RL | $31 \%$ | 0.7 | 2.4 | 2.1 | 7.4 |
| Spec. Ed. | $31 \%$ | 0.5 | 1.7 | 1.8 | 6.1 |
| LEP | $27 \%$ | 0.8 | 3.0 | 2.1 | 7.6 |
| Overage | $40 \%$ | $\mathbf{0 . 5}$ | $\mathbf{1 . 9}$ | $\mathbf{1 . 9}$ | $\mathbf{6 . 8}$ |
| ALL | $\mathbf{2 7 \%}$ |  |  |  |  |

The results from our cohort analysis are similar to those found at the national level in a study conducted by the Center for Civil Rights Remedies based upon K-12 data from the 2009-10 school year. That study, based on a sample of nearly half the nation's school districts and roughly $85 \%$ of all public school students in the country, found that black students and special education students were more likely to be suspended at least once and more likely to be suspended multiple times (Loesen \& Gillespie, 2012). While this national study was forced to exclude data from Florida due to enrollment errors related to the number of students with disabilities, another study of Florida data (NAACP, 2006) also found similar results as have several other studies based upon the individual states of Georgia, Louisiana, Texas, and Virginia which consistently found that black, economically disadvantaged, and disabled students are the most likely to be suspended (Ciolfi, et. al, 2011; Fabelo, et. al., 2011; Georgia Appleseed, 2011; Sullivan \& Morgan, 2010; Texas Appleseed, 2007). A survey of school administrators in California found that more than two-thirds were concerned that their school discipline policies were having a differential impact on students from different racial and ethnic backgrounds (Freedberg \& Chavez, 2012). These studies also found that students from these subgroups are often disproportionately suspended for what are minor and non-violent offences, ones which do not require out-of-school suspensions by any state mandates but rather are applied in a discretionary manner by school or district administrators, meaning that alternatives to out-ofschool suspension could be employed.

Overall in our cohort of Florida students, $39 \%$ of black students were suspended one or more times and compared to $22 \%$ of white students. While suspension rates in our study are high as they focus on the $9^{\text {th }}$ grade alone, the difference between black and white rates of 17 percentage points stands slightly higher than the national average from the Loesen study ( 12 percentage points), and would place Florida as having the $4^{\text {th }}$ highest disparity out of 48 states (Loesen $\&$ Gillespie, 2012). While the several individual state studies are based upon different metrics, results consistently found that black students were anywhere from two to four times as likely to be suspended as whites, while students with disabilities were typically twice as likely to be suspended as those without (Ciolfi, et. al, 2011; Georgia Appleseed, 2011; NAACP, 2006; Sullivan \& Morgan, 2010; Texas Appleseed, 2007). In our cohort, $31 \%$ of special education students were suspended at least once as compared to $25 \%$ of $9^{\text {th }}$ grade students without disabilities, and $34 \%$ of Free-Reduced Lunch program eligible students were suspended at least once versus $16 \%$ of non-eligible students. Again, while the nominal suspension rates in our samples are higher due to the focus on $9^{\text {th }}$ grade students as opposed to $\mathrm{K}-12$, the differential rates and odds between subgroups are similar to those of the aforementioned studies in magnitude. The most recent data available from the Florida Department of Education website shows similar outcomes. In the 2011-12 school year, black students received $42 \%$ of all out-ofschool suspensions despite making up only $23 \%$ of the K-12 student population, while white students comprised $42 \%$ of the student population but received only $32 \%$ of all out-of-school suspensions.

Table 3 below presents the results from multiple regression models used to control for the interaction between different students characteristics. While black and poverty status are highly correlated and interrelated, even when controlling for this interaction the individual relationships between ethnicity, F/RL, special education and overage status to suspensions rates remain statistically significant. Poverty is the most strongly related student factor to higher suspension rates, but even controlling for poverty status, black students still have significantly higher suspension rates than white students and even those of other minority groups, telling us that economic disadvantages do not account for all of the racial disparities in disciplinary incidence.

Table 3 - Regression Model Results for Suspension Outcomes

|  | \# of Suspensions |  |  | \# of Days Supsended |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
|  | Coefficient | Beta | P-Value | Coefficient | Beta | P-Value |
| New to Florida PS | -0.18 | -.05 | $.000^{*}$ | -0.51 | -.02 | $.000^{*}$ |
| Asian | -0.21 | -.03 | $.000^{*}$ | -0.66 | -.01 | $.000^{*}$ |
| Black | 0.24 | .10 | $.000^{*}$ | 0.79 | .04 | $.000^{*}$ |
| Hispanic | 0.02 | .01 | $.004^{*}$ | 0.02 | -.01 | .745 |
| Native | -0.02 | -.01 | .695 | -0.18 | -.01 | .628 |
| Multi-Racial | 0.06 | .01 | .056 | 0.71 | .01 | $.005^{*}$ |
| F/RL | 0.30 | .14 | $.000^{*}$ | 1.14 | .07 | $.000^{*}$ |
| Spec. Ed. | 0.14 | .06 | $.000^{*}$ | 0.39 | .02 | $.000^{*}$ |
| LEP | -0.13 | -.04 | $.000^{*}$ | -0.60 | -.03 | $.000^{*}$ |
| Overage | 0.34 | .14 | $.000^{*}$ | 1.41 | .08 | $.000^{*}$ |

Analyses using multi-level models that controlled for district level factors (student enrolment, the percent of students F/RL eligible, and the percent of students in each minority group) were also conducted. However, these district level factors were not predictive of either overall suspension rates or of the suspension rates for certain subgroups of students, after having controlled for individual student level factors. That is to say that there was no evidence that larger school districts and districts serving predominantly minority or high poverty students were suspending students more often or for longer periods of time, beyond the fact that they served students who were themselves suspended at higher rates individually. Similarly, individual students of various subgroups (FRL eligible, black, special education) were not suspended at higher rates in some districts versus other based, on district size or student population. The results did find that significant variations in suspension rates did exist between different school districts, but these differences are likely explained by other factors such as leadership and policy, which we were not able to account for with our available data. Similar results were found for analyses conducted at the school level. Visually however, these differences can be seen in Appendix 1 which shows the wide variation in suspension rates for black and special education students amongst schools with the highest poverty rates. These graphs make clear, that some high poverty high schools are suspending many black and special education students, and others
are suspending only a few, suggesting that how schools are organized and operate plays a significant role in determining suspension rates.

## The Impact of Suspensions on High School and Post-Secondary Outcomes

The consequences, and the implications of any demographic disparities, are made clear in Table 4 and Figure 1 which show the high school and post-secondary outcomes for students by the number of $9^{\text {th }}$ grade suspensions they received. With each increasing suspension in $9^{\text {th }}$ grade, the odds of dropping out of high school increase while conversely the chances of graduating decrease as do the chances of enrolling and persisting in post-secondary schooling. The chances of succeeding academically for each student are quite sensitive to even the first suspension as the greatest change in a student's odds of success occur with the first suspension where the associated chances of graduating drop from 3 in 4 to only half, and their chances of enrolling in post-secondary go from over $50 \%$ to under. Conversely, students' associated chances of dropping out double with their first suspension. This point has important implications for the use of out-of-school suspensions as a disciplinary policy - the risk they impose on students' chances of high school and post-secondary success are not a threat only for those students who are repeat or habitual offenders, but also for those students who are otherwise well behaved but receive even one isolated suspension.

Table 4 - High School and Post-Secondary Outcomes by $9^{\text {th }}$ Grade Behavioral Indicators

| Characteristic |  | $\begin{gathered} \hline \text { \# of Students } \\ \text { With } \\ \text { Characteristic } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { \% Who } \\ \text { Dropped } \\ \text { Out } \\ \hline \end{gathered}$ | \% Who Graduated | \% Who Enrolled in PS | $\begin{gathered} \hline \text { Average PS } \\ \text { Terms } \\ \text { Completed } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 Suspensions | 133,044 | 16\% | 75\% | 58\% | 4.0 |
|  | 1 Suspension | 25,821 | 32\% | 52\% | 39\% | 1.9 |
|  | 2 Suspensions | 11,693 | 42\% | 38\% | 31\% | 1.2 |
|  | 3 Suspensions | 5,833 | 49\% | 30\% | 26\% | 0.9 |
|  | 4 or more Suspensions | 5,506 | 53\% | 23\% | 23\% | 0.7 |
|  | $\begin{aligned} & \text { Attendance >= } \\ & 95 \% \end{aligned}$ | 101,296 | 11\% | 81\% | 62\% | 4.3 |
|  | Attendance 9094\% | 34,601 | 25\% | 63\% | 47\% | 2.7 |
|  | Attendance 8589\% | 16,210 | 39\% | 44\% | 35\% | 1.6 |
|  | Attendance 8084\% | 7,307 | 47\% | 31\% | 26\% | 1.1 |
|  | Attendance < 80\% | 14,386 | 57\% | 15\% | 19\% | 0.6 |
| 8 | - 0 Failures | 93,626 | 8\% | 85\% | 67\% | 4.9 |
|  | 1 Failure | 18,500 | 23\% | 66\% | 44\% | 2.3 |


| 2 Failures | 14,909 | $29 \%$ | $56 \%$ | $40 \%$ | 2.0 |
| :--- | :--- | :--- | ---: | ---: | ---: |
| 3 Failures | 7,482 | $38 \%$ | $45 \%$ | $31 \%$ | 1.2 |
| 4 or more <br> Failures | 27,865 | $51 \%$ | $26 \%$ | $25 \%$ | 0.9 |
| ENTIRE COHORT | $\mathbf{1 8 1 , 8 9 7}$ | $\mathbf{2 2 \%}$ | $\mathbf{6 6 \%}$ | $\mathbf{5 1 \%}$ | $\mathbf{3 . 3}$ |

*     - Attendance data was missing for 2,472 students and course marks for 19,515. For these categories, percents are calculated for those students with data. Students with missing data were somewhat more likely to be new to the Florida public school system and overage for grade; however this was not the case for the majority of students with missing data who otherwise resembled the sample as a whole.

Figure 1 - High School and Post-Secondary Outcomes by Number of $\mathbf{9}^{\text {th }}$ Grade Suspensions


When regression modeling is used to examine the impact of suspensions in conjunctions with demographics, and other off-track indicators the number of $9^{\text {th }}$ grade suspensions remain significantly related to high school outcomes and post-secondary outcomes as well. After controlling for demographics, attendance, and course performance in a logistic regression model (Table 5), each additional suspension further decreases a student's odds of graduating high school by $20 \%$, and decreases their odds of enrolling in post-secondary schooling by $12 \%$. It should be noted that the apparent lesser impact on post-secondary schooling does not account for the additional indirect effect that suspensions have on post-secondary enrolment by decreasing a student's chances of first graduating from high school.

Table 5 - Regression Model Results for High School and Post-Secondary Outcomes

|  | HS Graduation |  | PS Enrollment |  |  | PS Terms Completed |  |
| :--- | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
|  | Odds-Ratio | P-Value | Odds-Ratio | P-Value | Coef. | Beta | P-Value |
|  |  |  |  |  |  |  |  |
| New to Florida PS | 0.56 | $.000^{*}$ | 0.56 | $.000^{*}$ | -0.8 | -.05 | $.000^{*}$ |
| Asian | 1.48 | $.000^{*}$ | 1.77 | $.000^{*}$ | 1.6 | .05 | $.000^{*}$ |
| Black | 1.11 | $.000^{*}$ | 1.11 | $.000^{*}$ | 0.2 | .02 | $.000^{*}$ |
| Hispanic | 1.01 | .836 | 1.15 | $.000^{*}$ | 0.3 | .03 | $.000^{*}$ |
| Native | 0.88 | .339 | 0.95 | .651 | 0.2 | .01 | .365 |
| Multi-Racial | 1.01 | .948 | 1.00 | .957 | 0.1 | .01 | .735 |
| Over-age | 0.39 | $.000^{*}$ | 0.44 | $.000^{*}$ | -1.5 | -.15 | $.000^{*}$ |
| F/RL | 0.62 | $.000^{*}$ | 0.46 | $.000^{*}$ | -1.9 | -.22 | $.000^{*}$ |
| Spec. Ed. | 1.09 | $.000^{*}$ | 0.66 | $.000^{*}$ | -0.5 | -.05 | $.000^{*}$ |
| LEP Status | 0.93 | $.001^{*}$ | 1.07 | $.001^{*}$ | 0.4 | .03 | $.000^{*}$ |
| \# Suspensions | 0.80 | $.000^{*}$ | 0.88 | $.000^{*}$ | -0.3 | -.07 | $.000^{*}$ |
| Attendance Rate | 2.04 | $.000^{*}$ | 1.32 | $.000^{*}$ | 0.3 | .07 | $.000^{*}$ |
| Course Failures | 0.75 | $.000^{*}$ | 0.86 | $.000^{*}$ | -0.3 | -.17 | $.000^{*}$ |

The model for HS graduation correctly predicted the outcome for $79.6 \%$ of students while roughly explaining $29-40 \%$ of variation between students, and the model for PS enrollment correctly predicted the outcome for $69.1 \%$ of students, while roughly explaining $17-23 \%$ of variation between students for HS graduation. For PS terms completed, the model explained roughly $20 \%$ of the variation between students.

## The Interaction between Suspensions and Other Academic Factors

As seen above in Table 4, students' $9^{\text {th }}$ grade course marks and attendance are also key factors determining their odds of graduating from high school and enrolling in post-secondary schooling. Both attendance and course passing are in turn intermediate academic outcomes, themselves mediated by students' suspensions. Studies conducted in five Massachusetts schools districts as well as in Austin, Texas (Everyone Graduates Center, 2010d \& 2010e), tracked high school dropouts back through the school years prior to their dropout events and found that on average, behavioral warning signs of disengagement from school were the first to emerge, before attendance or course issues.

In our sample of Florida data, it is not possible to know the extent to which being suspended in the $9^{\text {th }}$ grade preceded or followed poor attendance and course performance in the $9^{\text {th }}$ grade. We can establish, however, that suspensions contributed to students missing more school. Among students who were suspended at least once in the $9^{\text {th }}$ grade, the number of days lost due to suspension was on average equivalent to $40 \%$ of their days absent from school that year. Though the average is skewed by extreme cases where students received long suspensions for large
numbers of days, the number of days lost to suspension was still equivalent to at least $30 \%$ or more of their days absent for half of those students to receive a suspension, and equivalent to $60 \%$ or more of their days absent for one quarter of those students suspended. That behavioral and discipline issues affect students in several complex and interconnected ways is an important point for policy and intervention. More detailed analysis of the interrelationships between suspensions, attendance, and course performance shows two clear groups of students. In Table 6, we see how frequent is the co-occurrence of suspension with attendance and course failure as almost half of those students suspended in the $9^{\text {th }}$ grade were also chronically absent (attendance under $90 \%$ ) and nearly three-quarters failed a course, rates much higher than for those students who were not suspended in the $9^{\text {th }}$ grade year. Hence, for these students efforts need to focus on more than just decreasing their suspension rates alone, as their $9^{\text {th }}$ grade performance indicates a broad disengagement from and lack of success in school.

Table $6-\boldsymbol{9}^{\text {th }}$ Grade Attendance and Course Indicators by Suspension

|  | Attendance $<\mathbf{9 0 \%}$ in <br> $\mathbf{9}^{\text {th }}$ | Course Failure in <br> $\mathbf{9}^{\text {th }}$ |
| :---: | :---: | :---: |
| Suspended in $\mathbf{9}^{\text {th }}$ <br> $(\mathbf{N}=\mathbf{4 8 , 8 5 3})$ | $42 \%$ | $73 \%$ |
| Not-Suspended in <br> $\mathbf{9}^{\text {th }}$ <br> $(\mathbf{N}=\mathbf{1 3 3 , 0 4 4})$ | $13 \%$ | $36 \%$ |

There is a second set of suspended students in the $9^{\text {th }}$ grade (about 1 in 5 in our sample) for whom their only $9^{\text {th }}$ grade off-track indicator was a behavioral one. Here there is clear evidence that for students who are otherwise regularly attending school and passing their courses in the $9^{\text {th }}$ grade, being suspended can lead to more suspensions, lowered attendance and course failure in later years, and as such act as the trigger mechanism which puts them on the path to ultimately dropping out. As evidenced in Table 7, most of the students who's only off track indicator in $9^{\text {th }}$ grade was being suspended, exhibited other academic or behavioral issues throughout their later high school years, primarily in further suspensions, but also in course failures and chronic absenteeism. Over the course of $10^{\text {th }}$ to $12^{\text {th }}$ grade, $42 \%$ of the students whose only off-track indicator in $9^{\text {th }}$ grade was being suspended became chronically absent, and $59 \%$ experienced course failure. This suggests that for about $20 \%$ of the students suspended in $9^{\text {th }}$ grade, efforts to find alternatives to suspensions, alone could have a significant pay-off in terms of reducing dropout and increasing post-secondary attainment rates.

Table 7 - Later Academic Warning Signs by $9^{\text {th }}$ Grade Suspension

|  | Suspended in $10^{\text {th }}$ | Suspended in $11^{\text {th }}$ | Suspended in $12^{\text {th }}$ | Suspended in Upper Grades |
| :---: | :---: | :---: | :---: | :---: |
| Students who were Suspended in $9^{\text {th }}$ <br> With no other Indicators ( $\mathrm{N}=10,604$ ) | 46\% | 41\% | 30\% | 66\% |
|  | Attendance < 90\% in 10th | Attendance < $90 \%$ in $11^{\text {th }}$ | Attendance < $\mathbf{9 0 \%}$ in 12th | Attendance < 90\% in Upper Grades |
| Students who were Suspended in $9^{\text {th }}$ <br> With no other Indicators ( $\mathrm{N}=10,604$ ) | 16\% | 23\% | 25\% | 42\% |
|  | Course Failure in $10^{\text {th }}$ | Course Failure in $11^{\text {th }}$ | Course Failure in $12^{\text {th }}$ | Course Failure in Upper Grades |
| Students who were Suspended in $9^{\text {th }}$ <br> With no other Indicators ( $\mathrm{N}=10,604$ ) | 32\% | 37\% | 38\% | 59\% |

A final key factor in terms of policy and practice is that for many of the students suspended in $9^{\text {th }}$ grade, this is the continuation of an experience which goes back to middle school and for some all the way back to $6^{\text {th }}$ grade and beyond. Table 8 shows that for many students who are suspended in $9^{\text {th }}$ grade, it is not their first behavioral incident in school. Over one-third were suspended as early as three years prior (in what would have been $6^{\text {th }}$ grade for most), while roughly half were suspended in either $7^{\text {th }}$ or $8^{\text {th }}$ grades. Over two-thirds were suspended at least once in the middle grades. Moreover, nearly half of the students who were suspended in $9^{\text {th }}$ grade, where also chronically absent during at least one of their middle grade years, indicating that they entered high school already significantly disengaged from schooling. While those students who had several different off-track indicators in $9^{\text {th }}$ grade were most likely to exhibit an indicator in the middle grades, even the majority of those students who received only a suspension in $9^{\text {th }}$ grade had previously exhibited some kind of indicator in the middle grades. Finally, among all ninth graders who had an off-track indicator (suspension, poor attendance, or course failure) and also were either suspended or chronically absent in the middle grades roughly half were suspended before they were chronically absent in the middle grades. In other words
had some indication that being suspended was among their first off-track indicators. Course marks were not available for the middle grades data of our sample.

Table 8 - Earlier Academic Warning Signs by $9^{\text {th }}$ Grade Suspension

|  | Suspended in $6^{\text {th }}$ | Suspended in $7^{\text {th }}$ | Suspended in $8^{\text {th }}$ | Suspended in Middle Grades |
| :---: | :---: | :---: | :---: | :---: |
| Students who were Suspended $\begin{gathered} \text { in } 9^{\text {th }} \\ (\mathrm{N}=48,853) \end{gathered}$ | 39\% | 47\% | 51\% | 69\% |
|  | Attendance < $90 \%$ in $6^{\text {th }}$ | $\begin{aligned} & \text { Attendance < } \\ & \mathbf{9 0 \%} \text { in } 7^{\text {th }} \end{aligned}$ | $\begin{aligned} & \text { Attendance < } \\ & \mathbf{9 0 \%} \text { in } 8^{\text {th }} \end{aligned}$ | Attendance < 90\% in Middle Grades |
| Students who were Suspended in $9^{\text {th }}$ ( $\mathrm{N}=48,853$ ) | 25\% | 30\% | 32\% | 48\% |

Thus, the Florida data suggests that for half to two-thirds of students, $9^{\text {th }}$ grade suspensions is the continuation of multi-year experience with behavioral sanctions and/or attendance issues. For others, $9^{\text {th }}$ grade might be the first time they are suspended but that this also co-occurs with other off track academic indicators. For others still (perhaps about 1 in 5 of suspended students), $9^{\text {th }}$ grade suspension may be their first time and only indicator, but then for many leads to other indicators in upper grades. These relationships between disciplinary incidents and other academic and behavioral measures such as attendance and course failures are similar and consistent for the demographic subgroups of black students, economically disadvantaged students, and special education students, whom as we have seen are suspended at more frequent rates. Tables 6-8 above could only be calculated for those students without missing data. Those students with missing data are typically more disengaged on average and thus exhibit more frequently the academic indicators examined above. Thus we expect these to be conservative estimates of both the frequency with which these indicators occur, and the frequency with which they appear in tandem. For all groups of students experiencing $9^{\text {th }}$ grade suspension, the interaction of behavioral issues to other academic indicators, as well as to past, present and future patterns, emphasizes that keeping all students on track to high school and post-secondary success will be more complex than just finding disciplinary alternatives to suspension. On the other hand, the data does also suggest, the for significant number of students, being suspended from school is a triggering event which ultimately leads to poor attendance and course failure and through them dropping out. As a result efforts to reduce the number of suspensions in the middle grades and high school may well help keep more students on track to high school graduation and post-secondary attainment. Some policy alternatives such as early warning indicator systems, improved classroom management training, social emotional learning, and

SWPBIS, target reductions in suspensions but are also part of broader efforts to improve student engagement and achievement.

## Policy and Practice Implications

The Florida cohort data indicates, that being suspended in the $9^{\text {th }}$ grade is common experience impacting more than one in four students. The data further shows that suspension rates and number of days suspended are disproportionately higher amongst poor, black, and special education students. The data analysis, moreover, demonstrates that not only are suspensions common but that they have significant negative consequences for student's educational success. Suspension in $9^{\text {th }}$ grade is directly related to students' high school and post-secondary outcomes, putting these subgroups of students at an even greater disadvantage. Suspensions are also indirectly related to other key influencers of the odds that students will graduate and enroll in post-secondary schooling through their relationships to student attendance and course passing. Consequently, even a single suspension in the $9^{\text {th }}$ grade considerably lowers the odds that a student will graduate from high school or enroll in college. Being suspended even once in $9^{\text {th }}$ grade is associated with a two-fold increase in the risk for dropping out.

Most students that were suspended in the $9^{\text {th }}$ grade were also suspended and/or experienced at least one year of chronic absenteeism in the middle grades. Most also were either chronically absent in the $9^{\text {th }}$ grade or experience course failure, and will continue to do so in the upper high school grades. This means for many students who are suspended in the $9^{\text {th }}$ grade, the suspension is part of a broader array of indicators that the student has fallen off the path to high school graduation and post-secondary success, indicating that improvement efforts will need to be more comprehensive than just attempting to limit suspensions during in high school. For a significant minority of students, however, that data does indicate that being suspended in middle or high school is the triggering event which then leads to broader disengagement with schooling and eventually dropping out. Policies seeking to reduce these disciplinary disparities between groups of students and to close racial gaps amongst other academic outcomes, thus likely need to follow both a strategy of working to reduce suspensions, while also working in a more comprehensive and systematic manner to also address student attendance and course passing as interrelated and key indicators of student high school and post-secondary outcomes. Conversely, interventions that seek to improve student engagement or course passing but fail to address or ignore disciplinary exclusion are failing to address a major contributing factor.

The swell of predictor research has led directly to recent policy changes and the systematic application of this knowledge by states and districts in efforts to stem their dropout crises and increase their local graduation rates. The knowledge that suspensions, attendance, and course passing are highly interrelated, and that students' behaviors in $9^{\text {th }}$ grade can identify their future outcomes, has led to the development and implementation of Early Warning Systems that
identify those students most at risk of dropping out based upon their $9^{\text {th }}$ grade records and data. Support from the Federal Department of Education for its High School Graduation Initiative (HSGI) projects, and from the National Governors Association Center for Best Practices Association has allowed many states and districts to establish Early Warning Systems by determining which indicators are best for their schools and generating reports from their data base systems for school staff that identify those students most at risk in order to intervene with them prior to their total disengagement from the school system and to keep them on track to graduation.

This work needs to be taken a step further by integrating early warning systems, including data on school discipline, into the nation's on-going efforts to turnaround its lowest performing schools. In particular, states beginning to implement their waivers from NCLB, should provide technical assistance to districts with low performing schools to increase their capacity to implement and monitor the effectiveness of comprehensive reforms which not only provide better instruction to students, but also enable students to attend school regularly, not be suspended, and succeed in their courses.

Bipartisan awareness of the importance of raising graduation rates, and increasingly combating chronic absenteeism, have broadened and deepened understanding of the multiple elements which need to be addressed to increase educational achievement in the United States. To this we need to add a deeper understanding of the role school discipline and its disproportionalities plays in the nation's educational success. States and districts need to undertake reviews of the discipline policies to insure that they hold students accountable for good behavior but do not explicitly or implicitly sanction students in manners which increase the odds that they will not graduate. For example, it is counter- productive to suspend students for being chronically absent.

Finally, given that being suspended in the $9^{\text {th }}$ grade greatly diminishes a student's odds of graduating and enrolling in post-secondary schooling, and that clear evidence exists not only in Florida, but across the nation, that minority and special education students are suspended disproportionately (even after controlling for poverty), real urgency needs to be applied to ending this disproportionality. The fact that high poverty high schools with low suspension rates for black and special education students exist in Florida and other states, indicates that not only must we act but that we can act. This is why on-going efforts like the Consensus Project on School Discipline are so essential. Otherwise, given the centrality of a high school diploma and postsecondary schooling to adult success in the $21^{\text {st }}$ century, we are knowingly creating an unequal and less successful society.

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