

Phi Delta Kappan

Closing the Achievement Gap by Detracking

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Carol Corbett Burris
Principal
South Side High School, Rockville Centre, NY

Kevin G. Welner
Assistant Professor
University of Colorado-Boulder

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THE most recent Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools found that 74% of Americans believe that the achievement gap between white students and African American and Hispanic students is primarily due to factors unrelated to the quality of schooling that children receive.¹ This assumption is supported by research dating back four decades to the Coleman Report and its conclusion that schools have little impact on the problem.² But is the pessimism of that report justified? Or is it possible for schools to change their practices and thereby have a strongly positive effect on student achievement? We have found that when all students -- those at the bottom as well as the top of the "gap" -- have access to first-class learning opportunities, all students' achievement can rise.

Because African American and Hispanic students are consistently overrepresented in low-track classes, the effects of tracking greatly concern educators who are interested in closing the achievement gap.³ Detracking reforms are grounded in the established ideas that higher achievement follows from a more rigorous curriculum and that low-track classes with unchallenging curricula result in lower student achievement.⁴ Yet, notwithstanding the wide acceptance of these ideas, we lack concrete case studies of mature detracking reforms and their effects. This article responds to that shortage, describing how the school district in which Carol Burris serves as a high school principal was able to close the gap by offering its high-track curriculum to all students, in detracked classes.

Tracking and the Achievement Gap

Despite overwhelming research demonstrating the ineffectiveness of low-track classes and of tracking in general, schools continue the practice.⁵ Earlier studies have argued that this persistence stems from the fact that tracking is grounded in values, beliefs, and politics as much as it is in technical, structural, or organizational needs.⁶ Further, despite inconsistent research findings,⁷ many parents and educators assume that the practice benefits high achievers. This is partly because parents of high achievers fear that detracking and heterogeneous grouping will result in a "watered-down" curriculum and lowered learning standards for their children.

And so, despite the evidence that low-track classes cause harm, they continue to exist. Worse still, the negative achievement effects of such classes fall disproportionately on minority students, since, as noted above, African American and Hispanic students are overrepresented in low-track classes and underrepresented in high-track classes, even after controlling for prior measured achievement.⁸ Socioeconomic status (SES) has been found to affect track assignment as well.⁹ A highly proficient student from a low socioeconomic background has only a 50-50 chance of being placed in a high-track class.¹⁰

Researchers who study the relationship between tracking, race/ethnicity, and academic performance suggest different strategies for closing the achievement gap. Some believe that the solution is to encourage more minority students to take high-track classes.¹¹ Others believe that if all students are given the enriched curriculum that high-achieving students receive, achievement will rise.¹² They believe that no students -- whatever their race, SES, or prior achievement -- should be placed in classes that have a watered-down or remedial academic curriculum and that the tracking system should be dismantled entirely.¹³ In this article, we provide evidence for the success of this latter approach. By dismantling tracking and providing the high-track curriculum to all, we can succeed in closing the achievement gap on important measures of learning.

Providing 'High-Track' Curriculum to All Students

The Rockville Centre School District is a diverse suburban school district located on Long Island. In the late 1990s, it embarked on a multiyear detracking reform that increased learning expectations for all students. The district began replacing its tracked classes with heterogeneously grouped classes in which the curriculum formerly reserved for the district's high-track students was taught.

This reform began as a response to an ambitious goal set by the district's superintendent, William Johnson, and the Rockville Centre Board of Education in 1993: By the year 2000, 75% of all graduates will earn a New York State Regents diploma. At that time, the district and state rates of earning Regents diplomas were 58% and 38% respectively.

To qualify for a New York State Regents diploma, students must pass, at a minimum, eight end-of-course Regents examinations, including two in mathematics, two in laboratory sciences, two in social studies, one in English language arts, and one in a foreign language. Rockville Centre's goal reflected the superintendent's strong belief in the external evaluation of student learning as well as the district's commitment to academic rigor.

Regents exams are linked with coursework; therefore, the district gradually eliminated low-track courses. The high school eased the transition by offering students instructional support classes and carefully monitoring the progress of struggling students.

While the overall number of Regents diplomas increased, a disturbing profile of students who were not earning the diploma emerged. These students were more likely to be African American or Hispanic, to receive free or reduced-price lunch, or to have a learning disability. At the district's high school, 20% of all students were African American or Hispanic, 13% received free and reduced-price lunch, and 10% were special education students. If these graduates were to earn the Regents diploma, systemic change would need to take place to close the gaps for each of these groups.

Accelerated Mathematics in Heterogeneous Classes

On closer inspection of the data, educators noticed that the second math Regents exam presented a stumbling block to earning the diploma. While high-track students enrolled in trigonometry and advanced algebra in the 10th grade, low-track students did not even begin first-year algebra until grade 10.

In order to provide all students with ample opportunity to pass the needed courses and to study calculus prior to graduation, Superintendent Johnson decided that all students would study the accelerated math curriculum formerly reserved for the district's highest achievers. Under the leadership of the assistant principal, Delia Garrity, middle school math teachers revised and condensed the curriculum. The new curriculum was taught to all students, in heterogeneously grouped classes. To support struggling learners, the school initiated support classes called math workshops and provided after-school help four afternoons a week.

The results were remarkable. Over 90% of incoming freshmen entered the high school having passed the first Regents math examination. The achievement gap dramatically narrowed. Between the years of 1995 and 1997, only 23% of regular education African American or Hispanic students had passed this algebra-based Regents exam before entering high school. After universally accelerating all students in heterogeneously grouped classes, the percentage more than tripled -- up to 75%. The percentage of white or Asian American regular education students who passed the exam also greatly increased -- from 54% to 98%.

Detracking the High School

The district approached universal acceleration with caution. Some special education students, while included in the accelerated classes, were graded using alternative assessments. This 1998 cohort of special education students would not take the first ("Sequential I") Regents math exam until they had completed ninth grade. (We use year of entry into ninth grade to determine cohort. So the 1998 cohort began ninth grade in the fall of 1998.) On entering high school, these students with special needs were placed in a double-period, low-track, "Sequential I" ninth-grade math class, along with low-achieving new entrants. Consistent with the recommendations of researchers who have defended tracking,¹⁴ this class was rich in resources (a math teacher, special education inclusion teacher, and teaching assistant). Yet the low-track culture of the class remained un conducive to learning. Students were disruptive, and teachers spent considerable class time addressing behavior management issues. All students were acutely aware that the class carried the "low-track" label.

District and school leaders decided that this low-track class failed its purpose, and the district boldly moved forward with several new reforms the following year. All special education students in the 1999 cohort took the exam in the eighth grade. The entire 1999 cohort also studied science in heterogeneous classes throughout middle school, and it became the first cohort to be heterogeneously grouped in ninth-grade English and social studies classes.

Ninth-grade teachers were pleased with the results. The tone, activities, and discussions in the heterogeneously grouped classes were academic, focused, and enriched. Science teachers reported that the heterogeneously grouped middle school science program prepared students well for ninth-grade biology.

Detracking at the high school level continued, paralleling the introduction of revised New York State curricula. Students in the 2000 cohort studied the state's new biology curriculum, "The Living Environment," in heterogeneously grouped classes. This combination of new curriculum and heterogeneous grouping resulted in a dramatic increase in the passing rate on the first science Regents exam, especially for minority students who were previously overrepresented in the low-track biology class. After just one year of heterogeneous grouping, the passing rate for African American and Hispanic students increased from 48% to 77%, while the passing rate for white and Asian American students increased from 85% to 94%.

The following September, the 2001 cohort became the first class to be heterogeneously grouped in all subjects in the ninth grade. The state's new multiyear "Math A" curriculum was taught to this cohort in heterogeneously grouped classes in both the eighth and ninth grades.

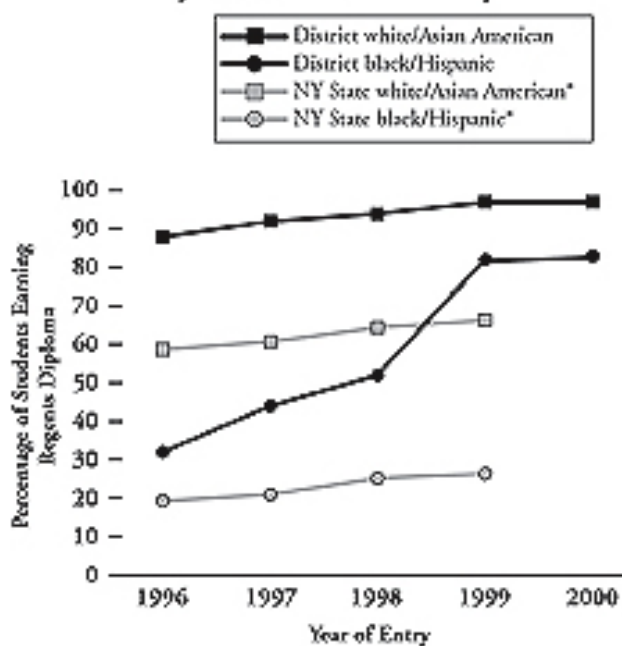
In 2003, some 10th-grade classes detracked. Students in the 2002 cohort became the first to study a heterogeneously grouped pre-International Baccalaureate (IB) 10th-grade curriculum in English and social studies. To help all students meet the demands of an advanced curriculum, the district provides every-other-day support classes in math, science, and English language arts. These classes are linked to the curriculum and allow teachers to pre- and post-teach topics to students needing additional reinforcement.

Closing the Gap on Other Measures That Matter

New York's statewide achievement gap in the earning of Regents diplomas has persisted. In 2000, only 19.3% of all African American or Hispanic 12th-graders and 58.7% of all white or Asian American 12th-graders graduated with Regents diplomas. By 2003, while the percentage of students in both groups earning the Regents diploma increased (26.4% of African American or Hispanic students, 66.3% of white or Asian American students), the gap did not close.

In contrast, Rockville Centre has seen both an increase in students' rates of earning Regents diplomas and a decrease in the gap between groups (see Figure 1). For those students who began South Side High School in 1996 (the graduating class of 2000), 32% of all African American or Hispanic and 88% of all white or Asian American graduates earned Regents diplomas. By the time the cohort of 1999 graduated in 2003, the gap had closed dramatically -- 82% of all African American or Hispanic and 97% of all white or Asian American graduates earned Regents diplomas. In fact, a close inspection of Figure 1 shows that for this 1999 cohort (the first to experience detracking in all middle school and most ninth-grade subjects), the Regents diploma rate for the district's minority students surpassed New York State's rate for white or Asian American students.

FIGURE 1.
Regents Diploma Rates by
Year-of-Entry Cohort and Ethnicity



*The New York State data are reported by graduating class; the state does not report year-of-entry data for Regents diploma rates. Therefore, the state data also fail to reflect dropouts and show higher Regents diploma rates than would be reported if given by YOE cohort. (Rockville Centre has a dropout rate near zero.) For these reasons, the trends shown in this figure are informative but cannot provide exact comparisons.

In order to ensure that the narrowing of the gap was not attributable to a changing population, we used binary logistic regression analyses to compare the probability of earning a Regents diploma before and after detracking. In addition to membership in a detracked cohort, the model included socioeconomic and special education status as covariates. Those students who were members of the 1996 and 1997 cohorts were compared with members of the 1998-2000 cohorts. We found that membership in a cohort subsequent to the detracking of middle school math was a significant contributor to earning a Regents diploma ($p < .0001$). In addition, low-SES students and special education students in the 2001 cohort also showed sharp improvement.

These same three cohorts (1998-2000) showed significant increases in the probability of minority students' studying advanced math courses. Controlling for prior achievement and SES, minority students' enrollment in trigonometry, precalculus, and Advanced Placement calculus all grew. ¹⁵ And as more students from those cohorts studied AP calculus, the enrollment gap decreased from 38% to 18% in five years, and the AP calculus scores significantly increased ($p < .01$).

Finally, detracking in the 10th grade, combined with teaching all students the pre-IB curriculum, appears to be closing the gap in the study of the IB curriculum. This year 50%

of all minority students will study IB English and "History of the Americas" in the 11th grade. In the fall of 2003, only 31% chose to do so.

Achievement follows from opportunities -- opportunities that tracking denies. The results of detracking in Rockville Centre are clear and compelling. When all students were taught the high-track curriculum, achievement rose for all groups of students -- majority, minority, special education, low-SES, and high-SES. This evidence can now be added to the larger body of tracking research that has convinced the Carnegie Council for Adolescent Development, the National Governors' Association, and most recently the National Research Council to call for the reduction or elimination of tracking.¹⁶ The Rockville Centre reform confirms common sense: closing the "curriculum gap" is an effective way to close the "achievement gap."

CAROL CORBETT BURRIS is the principal of South Side High School, Rockville Centre, N.Y.

KEVIN G. WELNER is an assistant professor in the School of Education, University of Colorado, Boulder.

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