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Universal Access to a Quality Education: Research and Recommendations for the Elimination of Curricular Stratification

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Executive Summary

Ronnie and Tyrone are both former students at South Side High School in Long Island New York. They both were raised in public housing, they are both African American, and they both entered high school having struggled with academics. Then the school took over.

Ronnie entered 9th grade in 1991, when the school pushed struggling students into low-track classes, separate and apart from more successful students. Due to tracking, classes in the school were stratified by race and socio-economic status. Ronnie was assigned to low-track skills classes, and he dropped out at the end of his junior year.

Tyrone entered the school in 2002, after it had adopted a policy of heterogeneous grouping. The school placed him in the same academically demanding classes as his wealthy and middle-class schoolmates. The school responded to his needs with support classes. Tyrone also responded, passing multiple International Baccalaureate courses and then going on to college.

The beneficial effects of heterogeneous grouping at South Side High School went well beyond Tyrone. This can be seen in how much the school has narrowed the achievement gap between white and minority students. Of the students entering South Side High School in 1996, 32% of all African American or Hispanic and 88% of all White or Asian American graduates earned New York State Regents diplomas. Of those entering South Side in 2001, just five years later, 92% of all African American or Hispanic and 98% of all White or Asian American graduates earned Regents diplomas. In June of 2009, 95% of the school's minority students graduated with Regents diploma, far surpassing the rate for white students in New York State.

This sort of progress has been a long time in coming. For well over twenty-five years, education commissions and prominent researchers have documented the negative effects of curricular stratification—the practice of grouping students into different academic classes by perceived ability, commonly known as

'tracking.' With little scientific debate remaining on the harmful effects of this curricular stratification, for individuals as well as society, the primary focus has finally shifted to questions about how best to reform. What does a high-quality, heterogeneously grouped academic program look like, and how can it be most successful?

This brief presents three case studies: of a school (a San Diego charter), a district (the home of South Side High School), and a nation (Finland) that have abolished curricular stratification and promoted outstanding student achievement. Based on those successes we highlight lessons and offer recommendations for changing policy and practice.

In the past, potential reformers were wary of heterogeneous grouping because there were few well-documented, successful alternatives to stratified systems. In short, the excuse for low-expectations classes was simply that there was no alternative. But today's successful heterogeneously grouped classrooms and schools—where all students are taught a challenging, common curriculum—offer convincing proof that this reform can produce increased achievement and far more equitable outcomes, and they illustrate the path to such success.

The educational leaders in the three systems described in this brief rejected curricular stratification because it has been shown to exacerbate the societal or natural disadvantages suffered by many children. These leaders realized that when students who experience difficulty are provided with an inferior curriculum, they are certain to fall farther behind. In contrast, the high-quality heterogeneously grouped schools they created give all students access to the best curriculum and an academic support system that helps ensure that they take advantage of it. These schools hold clear lessons for leaders of other schools, where students are still stratified into tracks. Detracking provides a realistic and proven pathway to academic excellence grounded in true equity.

Accordingly, the principal recommendation made here is that policy makers and educators follow the path supported by the research evidence: the elimination of curricular tracks that separate students by race, socio-economic status, or assumptions about their learning potential. That is, we recommend the elimination of curricular stratification.

We acknowledge the complexity of this reform, and we therefore also provide recommendations to guide policymakers and school districts in their attempts to move forward with the reform and at the same time provide optimal learning environments and challenging curricula for all students during the period of transition.

Among other things, we recommend that states require schools and districts to identify all curricular tracks, describe their composition by racial and socio-economic groups, and communicate student placement policies. Policymakers should communicate clearly with the public, explaining what the data demonstrate about tracking and the reasons for reform. Detracking—the phasing out of curricular stratification—should begin with the lowest track, and meaningful access to Advanced Placement (AP) and International Baccalaureate (IB) courses should be available to all students throughout the reform process.

Finally, schools need support as the reform proceeds, with a corresponding need for an organized network that connects educators with each other and with researchers, in order to promulgate best practices and strategies. Students need supports as well, as do teachers in the form of sustained professional development so that they are prepared to successfully instruct all learners in heterogeneously grouped classrooms.

The final section of the brief, authored by attorney Jennifer W. Bezoza, presents model statutory code language. These statutory provisions can be used by state legislators seeking to implement the recommendations set forth in the brief.

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For well over twenty-five years, education commissions and prominent researchers have documented the negative effects of curricular stratification—the practice of grouping students into different classes by perceived ability, commonly known as tracking or ability grouping. With little debate remaining on the need for change, the primary research focus has shifted to the implementation for reform—for movement toward heterogeneous grouping. Learning from examples of schools that have abolished curricular stratification and promoted outstanding student achievement, this brief highlights lessons and offers recommendations for changing policy and practice. At the conclusion of this brief, we present model statutory code language, drafted by attorney Jennifer Bezoza, that could be adopted by a state wishing to implement our recommendations.

Our overarching recommendation is that policy makers and educators follow the path supported by research: the elimination of curricular pathways that separate students by race, socio-economic status, or assumptions about their learning potential. That is, we recommend the elimination of curricular stratification.

Even as we make this recommendation, though, we acknowledge the complexity of reform in schools. Accordingly, this brief provides further recommendations to guide policy makers and school districts in their attempts to move forward with the reform and to provide optimal learning environments and challenging curricula for all students during the period of transition.

Among other things, we recommend that states require schools and districts to identify all tracks, describe their composition by racial and socio-economic groups, and communicate student placement policies. Policymakers should communicate clearly with the public, explaining what the data demonstrate about curricular stratification and the reasons for reform. The movement toward heterogeneous grouping—the phasing out of ability grouping, a reform sometimes called detracking—should begin with the lowest

track, and meaningful access to Advanced Placement (AP) and International Baccalaureate (IB) courses should be available to all students throughout the reform process.

Finally, schools need support as the reform proceeds, with a corresponding need for an organized network that connects educators with each other and with researchers, in order to promulgate best practices and strategies. Students need supports as well, as do teachers in the form of sustained professional development so that they are prepared to successfully instruct all learners in heterogeneous classrooms.

Introduction

As explained below, this brief begins where the research from the 1980s and 1990s leaves off—with the conclusion that tracking is a harmful, inequitable, and unsupportable practice. Readers not already convinced of that conclusion will probably also not be convinced by the brief summary of the research on curricular stratification set forth below; we urge those readers to seek out the expansive body of scholarship on the issue, some of which is cited in this brief's endnotes.

Given our starting point, the brief does not feign uncertainty or objectivity about the need for reform. Instead, it is a forthright effort to present the best of what educators and researchers have learned about how to reform. Moreover, we contend that the case studies summarized below, as well as other exemplars from around the country, should put to rest past concerns that schools must continue discredited, old practices due to the lack of viable alternatives.

In reality, reform-minded educators have, since the 1980s, diligently worked to dismantle the systems of curricular stratification embedded in American schools. Although classes which stratify educational opportunities are almost universally denounced by experts, attempts to move toward heterogeneously grouped classrooms and provide all students with challenging curricula have met with stiff resistance and, all too often, limited success.

The past decade, however, has given rise to a new generation of detracking efforts, informed by past research studies as well as the work of earlier reformers. These recent efforts have found greater success, and the study of these heterogeneous classrooms and schools—where all students are taught a challenging, common curriculum—provides valuable insights. In the past, potential reformers were wary of detracking due to the lack of well-documented, successful alternatives to stratified systems. Today's

successful exemplars offer convincing proof that heterogeneous grouping can produce increased achievement and far more equitable outcomes, and they illustrate the path to such success.

As noted above, a substantial body of literature exists that describes curricular stratification and its effects.[1] We know much about the purposes, beliefs and motivations that gave rise to this stratification and that now sustain it. We understand how students are separated both by race and socio-economic status as a result of tracking, and we understand its detrimental effects on student achievement. A knowledge base also now exists concerning the political forces that keep curricular stratification in place, notwithstanding these documented harms. After briefly summarizing this literature, we discuss lessons learned from successful, heterogeneously grouped schools as well as from schools that attempted detracking but failed. Next, we briefly discuss the normative and political changes necessary to successfully implement such a reform, as well necessary changes to curricular and instructional practices. Finally, based on research as well as these described successful models, we conclude with recommendations that provide a blueprint for policymakers and practitioners to advance this long-overdue reform.

Background

The emergence of tracking coincided with the immigration waves of the early twentieth century.[2] In theory, it was instituted to meet the diverse educational needs of the new students entering America's public high schools. Curricular stratification was embraced by the "administrative progressives" as an efficient and scientific method of providing members of this newly diverse student body with schooling appropriate to each group's academic capacity and future station in life.[3]

Yet, no matter how well-meaning the goal, tracking's rapid growth was largely due to race and class bias, along with paternalistic beliefs about immigrants and other non-mainstream children. Many prominent supporters believed that a "great army of incapables" were entering the public school system and that they needed to be sorted from those students considered ready for a classical education.[4]

As the 20th century progressed and societal opportunities expanded, curricular stratification remained an inequitable fixture of modern schooling. New immigrant groups—as well as members of other groups who had formerly been excluded from mainstream schooling, such as African Americans and students with special needs—continued to be placed in low-track classes or segregated into 'industrial' or 'vocational' high schools. Early critiques fell on

deaf ears, and the practice was not seriously questioned until the 1980s when Jeannie Oakes, Anne Wheelock and others began to document and describe its harmful effects.[5] Over the next two decades, researchers studied tracking extensively and explored its effects on achievement and social stratification. In addition, while most resisted calls for change and fought to retain systems of curricular stratification, some policymakers and educators embarked upon reforms.

Research on Curricular Stratification

Despite tracking's prevalence,[6] research has established compelling reasons to question it. Students of different races and classes are inequitably distributed among tracks. Within multi-racial schools, African American and Latino students are dramatically over-represented in low-track classes and under-represented in high-track classes.[7] In fact, disproportionate placement of African American and Latino students in low-track classes[8] and the corresponding exclusion of these students from high-track classes cannot be accounted for solely on the basis of students' prior achievement.[9] Students of color with the exact same test scores as White student are nonetheless more likely to be enrolled in lower-track classes.[10] Socio-economic status is linked to track placement as well.[11] One benefit of a movement toward heterogeneous grouping, then, is the integration of classrooms and the avoidance of this discrimination, thus providing a more equitable educational experience to all students.

In addition, curricular stratification in American schools has not realized its main goal: homogeneity in student ability at the classroom level. In theory, such homogeneity would allow educators to target curriculum and instruction appropriately for qualitatively different groups of students. However, researchers examining the makeup of stratified classes have found that they contain students with an extraordinarily wide range of achievement, as measured by standardized tests.[12] This is largely because course enrollment decisions are based on both formal and informal criteria, including not only test scores and prior school achievement but also student behavior, student or parent preference, completion of prerequisites, teacher judgment, and counselor guidance.[13] The empirical studies mentioned above (which found segregation in tracking that cannot be accounted for by prior achievement) also suggest that this constellation of placement criteria disadvantages lower-income students and students of color, who are disproportionately assigned to low-track classes.

During the 1980s and 1990s, when these inequities were exposed, there was also a flurry of research to discern whether curricular

stratification enhanced student learning. The research showed mixed results, in part because researchers disagreed about how tracking should be studied and how existing studies should be interpreted. Some researchers argued that if the curriculum varied, then researchers would be measuring the effects of curriculum, not the student placements into stratified tracks.[14] Others argued that curriculum variation is the very purpose of tracking and that the two should be studied as a whole.[15] Such diverse opinions on methodology produced not only diverse results, but divergent lines of research studies.

The first category of studies, which offered a straightforward comparison of ability-grouped to non- ability-grouped classes with similar curriculum, indicated that ability grouping does not affect achievement. As a group, those studies suggest that ability grouping, without curriculum differentiation, has no effect on student learning.[16]

The second group of studies, comparing high-track and low-track classrooms, indicated that when the curriculum varies with track, students in low-track classes learn less than students in the higher tracks.[17] The studies did not make clear, however, whether learning differences result from the grouping itself or from associated factors. For example, reflecting on the results of his own study of this type, one researcher explained, "While the evidence presented here does strongly support the divergence hypothesis that tracking differentially [affects] performances of high and low ability groups, it does not provide an explanation of that effect."[18] He goes on to suggest that high-track advantage may result from differentiated curriculum, better teachers in high-track classes, or different classroom cultures. Some researchers have found, for example, that students in high-track classes receive better instruction, including lessons involving higher-level thinking skills and more instructional time; in contrast, students in low-track classes typically receive drill-and-skill activities.[19] Further, the literature on compensatory programs, which are designed to isolate students in low-track classes so that they can "catch up," demonstrates that such classes do not achieve the desired results and often discourage students and result in lower achievement.[20]

A third category of studies focused on the impact of high-track curriculum. These studies primarily measured the effects of accelerated or enriched curriculum on students of high, average, and low achievement. High-achieving students clearly benefited from the enriched curriculum, and those few studies that measured the effects on average- and low-achieving students indicated that they benefited as well. That is, when more students were given the "high track" curriculum, either by design or accident (such as

unusual placements of students whose past achievement had been low), their achievement rose.[21]

However, different researchers drew different conclusions from these and other studies. Some concluded that a movement toward heterogeneous grouping might do a disservice to high-achieving students.[22] They suggested that any gains from detracking by low-achieving students would be at the expense of average and high achievers. From this perspective, curricular differentiation is needed in order to tailor curriculum to different student groups, with the likely result that only some students would receive enriched or accelerated curriculum. Other researchers believed that increased student achievement associated with the enriched curriculum of high-track classes demonstrated that a commitment to universal high-track curriculum could function as a means to successfully reform schools without negatively impacting the learning of high achievers.[23]

Both groups, then, generally agreed that the curriculum of high-track classes tends to result in greater student achievement, but this latter group of researchers and educators rejected the low expectations of earlier "administrative progressives," reasoning that access to challenging curriculum should be broadly available rather than restricted to a subgroup of accomplished students. They proposed a reform whereby heterogeneous grouping is adopted as a process of "leveling up," exposing many more students to a rigorous, engaging curriculum and to the academic culture and higher expectations associated with high-track classes. Further, they contended that the reform could only work if the high-track curriculum became the default curriculum of heterogeneously grouped classes, with adequate supports for students and teachers to facilitate success.[24]

While the research of the 1980s and 1990s did not result in consensus regarding the effects of curricular stratification on student achievement, it did inform the debate in two important ways, influencing later detracking reforms. First, findings from all three research categories suggested that both curriculum and teacher expectations are important. Given the demonstrated impact of high-track curriculum on student achievement generally, the mere sorting of higher-ability students into separate high-track classrooms cannot be identified as the only, or even primary, cause of higher achievement. Second, findings from these studies of curricular stratification raised some important questions. If all students benefit from the study of an accelerated curriculum, can that acceleration be provided in heterogeneously grouped classes? Can the needs of students in special education programs be met in such classes? Would teachers consciously or unconsciously "water down" the curriculum in heterogeneously grouped classes, or

would rigor and high achievement persist? Recent studies of heterogeneously grouping, discussed later in this brief, addressed these questions.

Early attempts at detracking

As the inequities of tracking were exposed, reports calling for the reduction or elimination of tracking were issued by prominent groups such as the Carnegie Council for Adolescent Development, the National Research Council, the National Governors Association, the National Education Association, the National Council of Teachers of English, and the California Department of Education.[25] Some courts also mandated detracking, either through consent decrees or court-imposed orders based on determinations that the tracking systems were used to racially segregate students.[26]

As heterogeneous grouping was instituted, either by mandate or through local reform, advocates of the reform learned a painful lesson: the very racial and socio-economic stratification that prompted them to question the practice of curricular stratification correspondingly made the practice attractive to some of its proponents. Oakes and Wells, for instance, describe how the detracking reforms in ten secondary schools they studied were scaled back and undermined when the reformers "ran headlong into deeply held beliefs and ideologies about intelligence, racial differences, social stratification, and privilege."[27] They found that resistance to the reform generally came from White, well-educated and politically vocal parents who pressured school administrators to keep higher-track classes for their children, separate from lower-wealth minority students who were most frequently placed in classes that were less challenging. Supporters of curricular stratification rarely spoke openly about race or class differences, instead expressing their concerns regarding, for instance, the negative influences low-track students would have on their children, the likelihood that those lower-track children are members of street gangs, or the importance of maintaining a meritocracy.

Even in districts where race was not a factor, resistance to heterogeneous grouping tended to arise from the parents of higher-achieving students. As a rule, these parents believed that their children were advantaged by the system of curricular stratification and were not reassured by the clear statements from school leaders that the reform would allow all students to be challenged in high-quality heterogeneous classes.[28] Alliances often arose between such parents and the teachers who had been assigned to high-track classes, with this combined resistance forcing school leaders and elected representatives to back away from the reform.[29] These teachers often argued that some students lacked the ability, support

and motivation needed for success and that they and their colleagues lacked the skills and strategies needed to meet the needs of all learners. Advocates of heterogeneous grouping soon learned that the reform involved far more than just a technical change in the way that students were grouped for instruction or even in the way these new classes were taught—considerable political and normative obstacles would need to be overcome for detracking to be successful.[30]

However, even in the face of strong opposition, the reform has been able to move forward in various locales, including individual schools, entire districts and, as we outline below, the country of Finland. These successful reforms provide powerful insights into the obstacles that must be overcome to successfully dismantle systems of curricular stratification.[31]

Schools dedicated to equity and excellence

Below, we profile three exemplars of heterogeneous grouping: a suburban school district, an urban high school, and a national school system. Although we are aware of other successful detracking reform efforts, these illustrate a range of approaches toward the reform. We include some description of each reform and point readers to further details contained in the articles and books cited in the endnotes. Such case studies are the best source of what we know about detracking; their existence proves the potential of the reform and offers guidance about how to achieve that potential.[32] Together, these examples illustrate how reform can be implemented at the district, school and national levels. Undoubtedly, factors beyond heterogeneous grouping—such as resources, leadership, and a social commitment to all students—impacted each of these reforms; however, the rejection of curricular stratification was a central element in each success story.

Detracked through Steady Reform: Rockville Centre

In many ways the suburban community of Rockville Centre in Long Island, New York was an unlikely place for a detracking reform. The district's overall scores were always competitive, and most residents were happy with the status quo. But those scores and that satisfaction masked a sizeable achievement gap between high- and low-performing students. Nearly three-quarters of the district's students are White, and most are from families with upper-middle-class incomes. Approximately 9% of district students are African American, 12% are Latino, and 3% are Asian American.[33] About 13% of the district's students are eligible for free or reduced-price lunch. Because of tracking, these different subgroups of students had very different educational experiences, resulting in the large achievement gap.

In 1989, the superintendent of schools, Dr. William H. Johnson, recognized the link between the district's achievement gaps and its tracking practices. At that time, each core academic area in the middle and high schools had at least two tracks, and as many as five. Minority students, especially those who received free or reduced-price lunch, were greatly over-represented in the low-track classes and largely absent from the upper tracks.

Middle-school detracking began in English and social studies in 1989, and the results showed clear success: the number of students failing courses decreased, even though it was the easier, low-track course that had been eliminated. At the same time, the scores of the school's high achievers did not decline. Only math and science remained tracked, with two levels in each subject.

The math/science experience in Rockville Centre is instructive. Students were allowed to choose the higher-level courses, so acceleration in mathematics and science was now theoretically available to all students. However, many students, and disproportionately African American and Latino students, were not choosing to enroll in these classes.[34] Therefore, the district developed a multi-year plan to remove the less challenging option, thereby eliminating all curricular stratification in middle-school mathematics and science.[35] Heterogeneous, accelerated math classes began with the sixth-grade class entering in the fall of 1995.

At the same time, the school changed teaching and learning conditions in ways that school leaders believed would help all students succeed. Specifically, the superintendent and the middle-school leadership team concluded that a combination of three elements would enable all learners to be successful without reducing the achievement of the most proficient math students: (a) heterogeneous grouping, (b) high-track curriculum, and (c) pre- and post-teaching in alternate-day math workshops for a subgroup of students, meeting for one period every other day. Any student could elect to take the workshop, but students were expected to take it when they struggled in the regular math class. Class size was restricted to 12 or fewer students. Importantly, the workshops complemented the instruction in the heterogeneous math class, allowing students who struggled to have extra support but avoiding the trap of trying to structure that support in a separate 'remedial' track.

This reform yielded prompt and demonstrable successes.[36] Nearly all students entered South Side High School, the district's only high school, having successfully completed algebra in the eighth grade, and the achievement of the most proficient math students was not affected.[37] Of greatest significance, the proportion of

students taking advanced mathematics courses such as pre-calculus and AP Calculus greatly increased for both majority and minority students of all achievement levels.[38]

As the middle school moved toward heterogeneous grouping, the high school was also detracking. Between 1998 and 2002, the high school gradually eliminated all curricular stratification in Grades 9 and 10. After the reform, the needs of students with learning disabilities have been met by support personnel who provide special education students needed assistance within the classroom.[39] Students who have significant cognitive developmental delays or are otherwise severely disabled are nevertheless fully included in Grades K-5 and receive separate academic instruction geared to life skill development in Grades 6-12.

After Grade 10, students opt to study either the college preparatory New York State Regents curriculum, the curriculum of the International Baccalaureate (IB), or a combination of the two. Post-reform enrollment in 11th and 12th grade IB courses rapidly expanded. Forty-five percent of students in the class of 2006, the first class heterogeneously grouped through Grade 10, were IB diploma candidates. This compares with 35 percent for the class of 2004. Only 13 percent of the school's 2004 Black or Latino graduates were IB diploma candidates; this number nearly tripled to 38 percent for the class of 2006. And although not all students were willing to commit to the full IB program, more than 84 percent of the class of 2006 took at least one IB course. Scores remained high: over 75% of all exams were scored at 4 or better,[40] and by 2007 fully one third of the class achieved the prestigious International Baccalaureate Diploma[41] in addition to the New York State Regents diploma. Earning the IB diploma allows students to receive sophomore status at such prestigious colleges as Smith and Binghamton.

The district also saw a closing of the achievement gap in the earning of the New York State Regents diploma. 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. Five years later, the gap had dramatically closed—92% of all African American or Hispanic and 98% of all White or Asian American graduates who began South Side in 2001 earned Regents diplomas.[42] The foundation provided by heterogeneous grouping throughout the middle school and early high school years yielded long-term benefits for the district's students.

Untracked by Design: the Preuss School

On the opposite coast, a similar reform in a very different school was taking place. The Preuss School, located on the campus of the University of California at San Diego, is a public charter school for middle-school and high-school students.[43] It opened in 1999 under the direction of both the university and the San Diego Unified School District. It was designed as a challenging school without tracks.

The university carefully planned for the school to prepare motivated, low-income students for college admittance and success. The school defines low-income as no more than two times the income that qualifies a family for free or reduced-price lunch.[44] With the help of both public and private funds, the school has grown to nearly 800 students. In order to qualify for the admission lottery, students must come from low-SES households and have parents who are not graduates of a four-year college. Some Preuss students travel up to an hour by bus in order to attend this innovative, untracked school.

The Preuss curriculum is distinguished by high expectations, with all students taking the same demanding courses. The faculty of the school has created a culture focused on preparing all students for college. This culture is supported by, among other things, the continual presence of college students who serve as tutors and act as role models. The college application process is part of the school curriculum.[45]

Students take eight AP courses during high school, with all other courses taught at an honors level. The arts are an integral part of the program. Students are well supported with a longer school day and school year, a Saturday tutoring program, and tutoring provided by university students. As in the New York district, the philosophy of the school is to give all students rigorous curriculum and then vary the social and academic supports in accordance with student needs. Staff development is an integral part of the school culture; students arrive late one day each week so that teachers have the opportunity to engage in staff development activities that examine instructional practices and provide time for teacher collaboration.[46]

The commitment to heterogeneous grouping at the Preuss School is as essential a part of the mission as it is at South Side High School. Again, while Preuss educators differentiate supports, all students study the same basic curriculum designed to prepare them for Advanced Placement exams.

Because students and their families choose the school, there are inherent limitations on how well Preuss outcomes may be generalized to other urban schools serving low-income students of color. This selection bias may create a student body at Preuss with greater motivation, greater prior success, and more engaged, educated parents (although the latter is partially addressed through the eligibility process, as noted above). These are all factors that research has shown are associated with student achievement.

Any such selection bias, however is taking place within a subpopulation that is clearly disadvantaged. No high school in San Diego serves a greater proportion of low-SES students than Preuss, yet "Preuss 10th-graders outperformed San Diego Unified School District high school students on the state English language arts and math tests, with 100 percent scoring proficient in English language arts and 99 percent scoring proficient in math."[47] In addition, 74% of all Preuss students graduate having received a score of 3 or better on at least one AP exam,[48] and over 90% of the school's students go on to college. Preuss has consistently been named one of the top 50 high schools in the nation by *Newsweek* magazine, an honor that it shares with South Side.[49] Similarly, *U.S. News & World Report* ranks both Preuss and South Side as "Gold Medal" schools – in a list published just last week, Preuss is ranked as the 32nd best high school in the country, while South Side is ranked 46th.[50]

Moreover, although self-selection may be one factor helping to account for the remarkable success of Preuss students, it is important to note that the low-income students of color who experienced success following detracking in Rockville Centre were not self-selected. In fact, they generally live in Section 8 subsidized housing or in a HUD (Department of Housing and Urban Development) housing project.

A National Reform Featuring Heterogeneous Grouping

Our third example of a successful detracking reform occurred on a national level. The nation of Finland engaged in a multi-year reform that benefited its students from all socio-economic backgrounds and successfully closed its achievement gap.

In 2000, the 15-year-olds of Finland proved themselves to be among the best readers in the world as measured by their performance on the Program for International Student Assessment (PISA).[51] In 2003, Finnish teenagers were not only first in reading, but also first in mathematical literacy, problem solving and science. Included in this ranking were the students of 29 participating industrialized nations, including the United States. In 2006, Finnish students again were at or near the top in these

international tests.[52] Finland also had the second highest proportion of students who earned the highest possible score on the 2006 PISA science exam.[53] But these successes did not come easy; the country's schools first underwent an extensive reform.

In many ways, Finnish students confound conventional wisdom. For example, the SES status of Finnish families has only a minimal impact on the achievement of the nation's students, as compared to the SES impact in other nations.[54] In addition, Finland has made extraordinary progress in closing its achievement gap. The country's gap on PISA between high and low achievers was the second smallest among the participating industrialized nations in 2000, and the smallest in 2003.

Although there are many possible factors that may contribute to the success of Finnish students, one of the most remarkable features of the national school system is its commitment to excellence and equity for every child, based on the belief that each child deserves the same richness of educational opportunities until they are 16 years of age, which is the end of Grade 9 in Finland (the school starting age is seven). This equity of opportunity, however, did not always exist. Before Finland initiated its reform, a child's family, when she or he reached age 11, had to decide whether the child would attend college or vocational school.[55] Those preparing for vocational school took less challenging courses in science and mathematics. But Finnish reformers insisted on an end to this early stratification. Ability grouping in grades 1-9 was abolished in 1985 so that all students could be prepared for higher education, leaving open the full range of career options.[56]

Special education students in Finland are included in the same heterogeneous regular classrooms as other students. Instruction has become student-centered, and ample support is provided. Students are now provided with enriched, challenging coursework through the end of the ninth grade (age 16), when they decide whether they want to continue preparing for college or for a vocation.

Finnish detracking arose out of a philosophical shift that began taking place around 1968, based on a foundational belief that all children deserve an excellent education, regardless of their geographic location or their social or economic status.[57] The reformers stressed each child's potential for growth. "Young researchers argued that people's abilities and intelligence always rose to the level required by society, and that education systems merely reflected those limits or needs."[58] The curriculum became the means to delivery equity, leaving behind the old system that divided students into two groups based on "ability"—a system that mirrored and reproduced the social stratification of the country.

As in the United States, opposition to the reform has arisen in Finland from advocates for students identified as gifted, who have complained that Finnish schools do not serve the highest achievers well. Thus far, however, Finland's reformers have held sway, maintaining the equitable system while instituting changes that provide more teacher freedom in curriculum implementation. This allows Finnish educators to meet the needs of all students, but not at the expense of those facing greater obstacles.[59]

Lessons

The heterogeneously grouped schools of Finland, San Diego and Long Island share critical characteristics, practices and beliefs. In each case, the decision to steer clear of curricular stratification was based on the desire to address an equity challenge: in the case of Rockville Centre, the challenge was to close the achievement gap;[60] for Preuss, the challenge was to prepare minority students for college after affirmative action admissions preferences were prohibited by state law;[61] for Finland, the challenge was to end reproduction of social classes.[62] These schools understood that true excellence is built upon providing equitable opportunities for all.

In each case, curriculum revision was key, with challenging curricula provided to all students and with additional support provided as needed: detracking meant leveling up the curriculum, not watering it down. And, at least until students reach age 16, learning goals in these schools became the same for all students. These schools are the antithesis of the "shopping mall high school" that provides different levels of academic challenge based on students' interests or counselors' judgments of student ability.

The success of these reforms is documented in achievement data. South Side High School and the Preuss School have large numbers of students who pass college level courses (IB and AP), score highly on state examinations, and earn high-profile recognition for excellence. Finland's students rank at the top of international comparisons of academic achievement.

Each system also recognized that detracking is far more than a technical reform, in which students are regrouped and given new curricula—the professional development of teachers has been a key part of each process. Both South Side and the Preuss School use the collegial, lesson study process in which teachers design, watch and critique lessons in order to create the most effective lessons for all learners.[63] The Preuss School engages in weekly staff development, while South Side uses both after-school and during-school workshops to sustain such support.

Similarly, when the Finnish reform began, policymakers recognized that if the two-track system were to be abandoned and reforms instituted, teachers would need extensive professional development. Finnish teachers agreed to increases in training and to a mentorship program designed to help them adapt to the new school culture and to bridge the gap between college preparatory and the former vocational track instruction. Extensive national reforms in teacher preparation and development continued for decades as school reform proceeded.[64] In all three cases, staff development efforts were consistent and sustained.

Finally, reformers were willing to take on the political and special interest forces that sought to maintain the status quo. In Rockville Centre, the decision to detrack and accelerate the learning of all students met resistance from some middle-school teachers during the first years of implementation, while resistance to reform at the high school level came primarily from the parents of some high-tracked students as well as the parents of some special education students. The district continuously monitored implementation and used data to reassure parents as the reforms proceeded. Leaders listened carefully to legitimate concerns and built in structures, such as extension activities and support classes, to address them.[65] Heterogeneous grouping was eased in over time so that each child would be prepared for a more rigorous curriculum. Combined with this responsiveness and flexibility, however, was an insistence on the fundamental structure of rigorous, engaging, heterogeneous classes through Grade 10, plus full access to the International Baccalaureate program in Grades 11 and 12.

For the Preuss School, the political battles occurred when the school was first proposed. In 1996, Cecil Lytle, the UCSD provost, argued in favor of a charter school on the campus that would be designed to serve disadvantaged teenagers from the greater San Diego community. He said that this would be an effective way to prepare students for UCSD and other selective colleges and thus to increase diversity without prohibited forms of affirmative action.[66] The conflict that arose among the faculty centered on whether the university's mission called for an exclusive focus on research productivity and on educating California's best-prepared students, or whether that mission imposed an obligation—ethical or practical—to help address "pipeline" issues within the K-12 educational system. As in other detracking battles, the lines were drawn between the proponents of meritocracy, couched as excellence, and those of equity. In the end—after community pressure, debate, compromise and an offer of private funding—the Preuss School began on the campus and has achieved both excellence and equity.

In Finland, political pressure still arises from critics who do not believe that the school system does enough for its brightest or most prepared students.[67] However, the country's core values and commitment to equality of opportunity for all have sustained the system. Its excellent results on the PISA examinations have reinforced the success of the reforms. In many ways, the Finnish example provides the best guidance for how political leadership can promote large-scale detracking, through a change in national goals, policy, and supports.

Questions for Further Study

The commonalities of these three detracked systems—high-quality curriculum and expectations, a commitment to equity, sustained staff development and student support, and a drive to overcome political obstacles—are clear and apparent. However, there is still a real need for research to further identify factors that facilitate a successful reform that results in all students studying a school's most challenging curriculum in heterogeneous classes. Future studies might focus on leadership and resources, as well as other potentially critical components.

Finland's success in particular should spark reforms and research regarding national or state-level policies that can drive education combining equity and excellence and that reflect a strong commitment to larger opportunity-to-learn issues, such as providing health care and good nutrition for all youth. Finland's success has come from a comprehensive system designed to provide equal educational opportunities for all students, with no curricular stratification before age 16 and with unified curricular goals and a commitment to excellent teaching. Although high achievement is an evident outcome, schools focus not on annual standardized testing but instead on ensuring that all students have strong opportunities to learn.

Although we believe that a great deal can be learned from such ongoing inquiry, this does not detract from the policy imperatives arising from the existing research base: schools should abandon tracking. While additional insights will likely improve the speed and success of detracking efforts, reform should not wait.

Instituting Reform: Recommendations

Detracking reforms can improve both equity and achievement throughout a school or system. As summarized above, research has incontrovertibly demonstrated that tracking has negative effects, and a growing body of research has established detracking to be possible and productive. Using lessons from research on heterogeneous grouping, educators can knowledgeably pursue

reform, policymakers can promote reform, and researchers can study new efforts, increasing the knowledge base and assisting school leaders. Our primary recommendation, therefore, is as follows:

1. Eliminate Curricular Pathways that Stratify Students

States should eliminate all curricular pathways that have the clear effect of stratifying students by race, socio-economic status, or assumptions regarding learning potential. That is, we recommend the elimination of tracking. Given the alternative of successful, heterogeneous classrooms, there exists no sound reason to maintain tracking structures that clearly deny equal educational opportunities.

Prior to such a statewide prohibition, we recommend that states work with district-level and school-level educators to pursue the seven policy strategies listed below[68] to transform their schools into optimal learning environments where all students have access to challenging curriculum, facilitated through the phased elimination of curricular stratification. These recommendations focus first on the state level and then move to the local level.

2. Require Schools and Districts to Identify and Describe Tracks and to Communicate Placement Policies

States should require schools and districts to identify all tracks, describe their composition by racial and socio-economic groups, as well as disability status, and communicate student placement policies to both state departments of education and the community that they serve. At both the state and local level, the resulting data should be analyzed to determine what, if any, inequities and variance in opportunities are attributable to tracking.

Well-meaning educators have often tracked students in a misguided attempt to meet the perceived needs of different populations. We recommend state-level policies that prompt teachers and school administrators to step back from the easy acceptance of past practices and to carefully examine and question any stratification within their schools. Where such stratification is identified, educators should be expected to determine the role that tracking plays. Educators should also be expected to identify to what extent curricular stratification in lower grades is limiting students' opportunities for choices in high school, and how high school tracking may limit opportunities for higher education. Finally, schools should be asked to closely examine student transcripts to understand the trajectory of tracking, questioning whether students are more often leveled down rather than up.[69] Simply put, what are the patterns and effects of curricular

stratification at the school, and how do those patterns affect different groups of students?

Such a careful review of the unintended consequences of curricular stratification can begin a more objective discussion of the policy's effects. In addition, the disaggregation and exploration of data would allow schools, districts and state education departments to examine the consequences of tracking policies, both intended and unintended.

3. Connect Educators and Researchers to Promulgate Best Practices

States, with the assistance of universities, should establish an organized network that connects educators, who are in the process of moving toward heterogeneous grouping, with each other and with researchers, in order to promulgate best practices and strategies.

As discussed above, when the inequities resulting from curricular stratification were first documented in the 1980s, reform efforts were met with stiff resistance. The parents of high-track students rallied and stopped reform in its early stages. Since that time, additional research has supported earlier findings, and the literature now includes case studies of schools and systems that have successfully detracked without lessening the learning of high achievers. This is potentially powerful information.

In addition, teachers and school leaders undertaking detracking need support and ongoing advice. The strenuous political resistance and normative dissonance that often accompany this reform are well-known and well-documented.[70] An organized network could provide reforming schools with the most recent research on grouping practices as well as the strategies that schools have used to reduce or eliminate tracking. Schools in this network could also provide the research community with study sites from which to learn, in order to further the knowledge of the educational community.

4. Communicate to the Public the Rationale for Eliminating Stratification

Policymakers, at both the state and local level, should clearly communicate to the public the rationale for eliminating curricular stratification. It is important that parents have a clear understanding of the research on tracking and detracking and these policies' effects on student opportunities and achievement.

Families should understand that low-track classes serve no legitimate educational purpose and that their elimination substantially improves the education and life chances for low-tracked children. Parents must also be reassured that the school will provide the support and teaching strategies needed to help their child be successful in more challenging and heterogeneous classes.

We also recommend the publication and communication of clear policy statements by state and district educational leaders. The groundwork for this has already been prepared. In its 1999 report, entitled *High stakes: Testing for tracking, promotion, and graduation*, the National Research Council[71] (NRC) identified low-track classes as having an especially deleterious effect on learning, since such classes are "typically characterized by an exclusive focus on basic skills, low expectations, and the least qualified teachers." The preponderance of research regarding low-track classes was, according to the report, overwhelmingly negative, leading to the Council's recommendation that students not be placed in them. Additional reports and research have since confirmed those conclusions, including a new report by the NRC, working with the Institute of Medicine.[72]

5. Phase Out Curricular Stratification, Starting with the Lowest Track

Research has demonstrated that detracking is far more than a redistribution of students between classrooms. Tracking is associated with varied curricula, pedagogy and classroom cultures,[73] as well as inequitable access to effective teachers.[74] Each of these must be addressed in a detracking reform.

Recommendation 5.1
Phase out low-track classes where they begin. The phase-out of low-track classes should allow those students leaving those classes to realize success in a more challenging environment. One strategy is to eliminate tracking where it begins in the system—often in middle school—for one cohort of students, each year eliminating tracking at the next grade level. This was the strategy used by the Rockville Centre School District.[75] Another strategy would eliminate tracking at multiple grade levels while providing strong student supports. We recommend that schools using this approach begin with subject areas such as English and social studies, in which learning is not based on the sequential acquisition of skill and knowledge.

Recommendation 5.2
Take care to ensure rigor; provide all students with access to the best curriculum and teaching. As low-track classes are phased out,

it is imperative that curricula in the remaining heterogeneous classes not be watered down. While instructional strategies should be differentiated to accommodate a more heterogeneous group of learners, learning goals should be high for all students.

Recommendation 5.3
Continue the phase-out until all stratification is eliminated. The gradual process recommended here presents two key risks that should be consciously avoided. First, reforming too slowly can extend inequitable and dysfunctional low-track classes long into the future. Second, if reforms end after only reducing the number of tracks, rather than eliminating tracking, the remaining lower-tracked classes are likely to exhibit the same educational disadvantages as the former lower-tracked classes. In the three exemplars discussed above, students benefited most from a single challenging level of instruction.

Recommendation 5.4
Make the high-track curriculum the default curriculum. If reform is to serve the needs of all students, including high achievers, it is important that the school's best curriculum become the default curriculum for all classes. If teachers simplify the curriculum, thereby eliminating rigor in order to "teach to the middle," students will not realize the achievement gains of places like Rockville Centre and the Preuss School. While there is now ample evidence that heterogeneous strategies can succeed, success depends upon implementing differentiated instructional strategies to make the high-track curriculum accessible to all students.[76]

Recommendation 5.5
Ensure that detracked classes are heterogeneously grouped. Certain offerings within the middle- and high-school schedule (special education classes, English language learner classes, or musical performance groups, for example) can result in an overall skewing of schedules, producing an imbalance among achievement groups in some classes. Counselors and school leaders must ensure that no such *de facto* tracking occurs, because maximum student benefit depends upon all classes containing a balance of low, average and high achievers.

Recommendation 5.6
Provide students with the supports needed to be successful in challenging classes. Educators recognize that students come to school with different academic preparation, parental support, talents, and confidence. Some students also have special needs or disabilities that impact their learning. If all students are to be successful in heterogeneous classes with enriched curricula, schools must level the playing field by providing needed supports—both within and outside of the regular classrooms. Such

supports would include teachers able and willing to provide lessons using alternative methods or modalities for varied learners, and appropriate accommodations being available to students with learning disabilities. As a rule, only students who have significant cognitive developmental delays or are otherwise severely disabled should receive separate academic instruction geared to life skill development, although even these students should be fully included in Grades K-5.

Recommendation 5.7
Schedule all students in heterogeneous classes that provide primary instruction; schedule any necessary supplemental instruction separately. As discussed above, Rockville Centre, the Preuss School and Finland provide instructional support to struggling students outside of their regularly scheduled, heterogeneous classes. These supplemental classes all focus on helping students succeed in their regular classes. It is important to schedule supplemental instruction separately because the alternative quickly becomes tracking; when regular and supplemental instruction are scheduled together and students are thereby enrolled by perceived ability in separate classes, the classes with extra support quickly devolve into typical, low-track classes. Double-period or two-year courses that replace, rather than supplement, regular high-level classes still segregate lower achievers and are simply another form of low-track classes. They are not equally effective and are not recommended.

6. Allow Open Enrollment in Advanced Placement and International Baccalaureate Courses

Recognizing the far-reaching advantages of taking challenging high school[77] classes for which students may receive college credit, increasing numbers of students seek to enroll in Advanced Placement (AP) and International Baccalaureate (IB) courses.[78] Yet, despite widespread agreement about the importance of taking such courses in high school, student access to such classes remains uneven and inequitable.[79] High schools should afford all students the opportunity to take AP or IB courses, and schools should provide reasonable supports to help these students succeed.

We also recognize that the trajectory to such courses begins long before the final years of high school. Concerned with unequal access to IB and AP courses, the National Research Council recommends that schools develop "a coherent plan" to increase the numbers of students who are prepared to take such courses, and that schools treat "all students as potential participants in grades 6-10."[80] As recommended above, this curriculum should be the default curriculum for all students.

7. Provide Sustained Professional Development so Teachers are Prepared to Successfully Instruct All Learners in Heterogeneous Classrooms

Teachers may not have a broad range of experience with different types of learners, or they may have little background in such areas as constructivist learning theory and strategies for differentiated instruction. Professional development is likely to be key to providing teachers insight into how to tailor instructional strategies to meet the needs of diverse learners.[81]

Recommendation 7.1
Allow teachers to work collegially to find and practice new strategies to differentiate instruction. Moving a faculty from teacher-centered lessons to constructivist, differentiated lessons is difficult because, among other reasons, teachers generally gravitate toward the methodology by which they were taught. However, both Rockville Centre and the Preuss School successfully used the lesson study model[82] to allow teachers to develop and practice new lessons in a non-threatening environment. When teachers are able to share their hesitations as well as their progress with colleagues, they are better able to understand and internalize instructional changes. It is important, however, that school leaders also engage in the process, in order to provide guidance and support.

Recommendation 7.2
Make staff development a long-term commitment. Sustained, ongoing professional learning that gives teachers access to modeling and engages them in solving curricular and instructional problems provides a firm foundation for redesigned and improved instruction.[83] Schools cannot expect teachers to unlearn the practices and experiences of a lifetime overnight. In addition, a long-term commitment to staff development that supports detracking sends a signal that the reform is not a fad, but a serious transformation to which the school will dedicate itself.

8. Listen to All Parents, Including Those who Don't Speak Out

District and school leaders should listen to parents as they express concerns about the reform, but they must be careful that the voices of all parents are heard, including those who do not regularly show up at school board meetings or in district and school administrative offices.[84] We recommend that districts pursuing reform institutionalize ways to ensure that policymakers hear from a cross-section of community voices and concerns.

Conclusion

The case studies presented above are not offered as part of a 'no excuses' argument. In fact, the educational leaders in the three systems described in this brief understood that children's socio-economic and home environments do impact their learning. Parental education, neighborhood safety, family income, access to health care, pre-school opportunities and even parenting styles are some of the factors that affect student achievement.[85] These leaders also did not discount the effects of learning disabilities or natural differences in processing and retention, commonly referred to as "ability." Indeed, the support programs provided in these schools seek to address those differences—whether they result from nature, nurture or both. However, these educational leaders showed that they also strongly believe that formal schooling opportunities, coupled with the effort of the student, can profoundly affect student success.

By refusing to resort to curricular stratification as a way to respond to student differences, these leaders rejected a path known to exacerbate the societal or natural disadvantages suffered by many children. As Jeannie Oakes aptly observes about lower-track classes, "It does not take a giant leap of logic to conclude that children who are exposed to less quantity and quality of curricular content and classroom instruction will not have their academic achievement enhanced."[86] The educational leaders of heterogeneously grouped schools realize that when students who experience difficulty are provided with an inferior curriculum, they are certain to fall farther behind. In contrast, high-quality detracked schools such as those described in this brief give all students access to the best curriculum and academic supports. These schools hold clear lessons for leaders of other schools, where students are still stratified into tracks. Detracking provides a realistic and proven pathway to true excellence grounded in true equity. We offer the following model statutory code language as a resource for those state legislators wishing to implement our recommendations.

PROPOSED LEGISLATION FOR UNIVERSAL ACCESS TO A QUALITY EDUCATION

A BILL FOR AN ACT

AN ACT CONCERNING THE ELIMINATION OF CURRICULAR STRATIFICATION IN ALL PUBLIC SCHOOLS IN THE STATE.

Be it enacted by the General Assembly of the State of ABC that Title XXX is amended to include a new Article 123, which reads as follows:

ARTICLE 123
ELIMINATION OF CURRICULAR STRATIFICATION

Section 101. Legislative Declaration and Findings.

(a) The General Assembly hereby finds, determines, and declares that:

(1) The State is committed to providing *all* students with a quality education that will prepare them to enter college, to obtain a living wage job, to be productive contributors to the economic growth of the State and nation, and to actively participate in civic life.

(2) For over twenty-five years, researchers have consistently documented the negative effects on student achievement of curricular stratification, also known as tracking or ability grouping.

(3) Nationally, and in this State, students from low-income households and students with disabilities are disproportionately placed in low-track classes, as are African American, Latino, and Native American students. Racially and socio-economically stratified placement patterns cannot be accounted for by prior achievement alone and undoubtedly contribute to the State's achievement gaps.

(4) Low-track classes are typically characterized by a strong focus on basic skills and low expectations. They also tend to be taught by a school's least experienced teachers.

(5) The policy and practice of curricular stratification undermines our public schools' capacity to prepare our children for a 21st century college education and a 21st century workforce.

(6) Successful reform of curricular stratification has been proven to improve equity and achievement for all students in a school system, including the most accomplished students.

(7) There are few, if any, additional costs associated with movement away from curricular stratification and toward heterogeneous grouping tied to a high-quality curriculum. Although schools may need to allocate resources differently, such as replacing small remedial classes with support services, or changing the focus of professional development activities, schools may even experience cost savings because many high- and low-track classes typically have lower enrollment. The equalization of class enrollment may result in fewer overall classes being offered.

(8) It is the intent and purpose of the General Assembly in enacting this Article that curricular stratification be eliminated for all public school students in grades K-10, except those exempt pursuant to the definition in Section 102(b) below, within six years and that access to challenging curricula be broadly available rather than restricted to a sub-group of accomplished students.

Section 102. Definitions.

(a) "Academic class" means a class in a core academic subject and does not include elective classes, such as music, art, or gym.

(b) "Advanced Placement" or "AP" refers to rigorous, college level courses offered in high school that meet the standards of the College Board, headquartered in Princeton, New Jersey.

(c) "All students" and "all public school students" includes everyone except students with identified disabilities whose IEP team has determined that a more restrictive environment, such as a self-contained classroom, is appropriate.

(d) "Curricular stratification" means the practice of enrolling students into classes with curricula stratified from least to most challenging. This applies to prescribed systems, where enrollment in stratification classes is determined by school administrators using objective or subjective criteria, as well as to choice-based systems, where students and parents are allowed to choose among classes of different levels within a stratified system.

(e) "Exempt school" means a school that certifies to its school district and the state education department, within 30 days of the effective date of this Act, that it does not engage in curricular stratification in any of its classes or courses in grades K-10.

(f) "Exempt school district" means a school district that certifies to the state education department, within 30 days of the effective date of this Act, that none of its public schools engage in curricular stratification in any of its classes or courses in grades K-10.

(g) "Heterogeneous classes" are those that are created deliberately and conscientiously to ensure that they include low, average, and high achieving students. Heterogeneous classrooms within a given school should approximate one another in their enrollment of low, average, and high achieving students.

(h) "Heterogeneous grouping reform" means the process of reducing and then eliminating curricular stratification in all public schools and providing the necessary supports for teachers and students to further academic success in the resulting heterogeneous classes tied to a high-quality, challenging curriculum.

(i) "IEP team" means the group of people responsible for developing, reviewing, and revising the Individualized Education Program (IEP) for a student with a disability, pursuant to the Individuals with Disabilities Education Improvement Act of 2004 and subsequent reauthorizations of that law (IDEA).

(j) "International Baccalaureate" or "IB" refers to rigorous, college level courses offered in high school that meet the standards of the International Baccalaureate Organization, headquartered in Geneva, Switzerland.

(k) "Public school" means any school, except those "exempt" pursuant to the definition in Section 102(d) above, that

receives at least half of its funding either directly or indirectly through tax revenues or other public funding.

(l) "Public school district" or "school district" means any school district in the State except those "exempt" pursuant to the definition in Section 102(e) above.

(m) "State education department" means the primary department of state government responsible for K-12 education.

(n) "Within [x number] of year[s] of the effective date" means the first day of the school year that occurs after that number of years has elapsed since the effective date of the Act. For example, if the effective date is March 20, 2010, "within one year of the effective date" would mean a deadline of the first day of the 2011-12 school year and "within two years of the effective date" would mean a deadline of the first day of the 2012-13 school year.

Section 103. Identification of Current Curricular Stratification Practices.

(a) Within 90 days of the effective date of this Act, each public school in the State must, at a minimum, do the following:

(1) identify all existing tracks within the school, including sequential mathematics classes;

(2) identify all student placement policies, setting forth whatever criteria are used for placement decisions;

(3) generate a statistical analysis of the composition of courses at all levels within a stratified system, by race, ethnicity, socio-economic status, and disability; and

(4) study and identify the extent to which curricular stratification, including course pre-requisites, is limiting students' subsequent course opportunities by looking at, among other things, the likelihood that students with disabilities and students from different racial, ethnic and socio-economic groups will move from lower to higher levels.

(b) Within 150 days of the effective date of this Act, each school district in the State must collect and aggregate from each of the public schools within its jurisdiction the data and analyses required by Sections 103(a)(1)-(4) above. Each school district shall analyze this information on a district-wide basis.

(c) Within 180 days of the effective date of this Act, each school district in the State must submit to the state education department a description of the student placement policies in each of the district's public schools, a description of any district-wide placement policies, and a copy of the report generated in compliance with Section 103(b) above. Each school district must additionally post the information submitted to the state education department on its website.

(d) Within 210 days of the effective date of this Act, each school district in the State shall notify by U.S. mail the parent(s) or guardian(s) of each of the students in the district that information regarding district-wide and individual school placement policies and a report analyzing the effect of those policies is available on its website and provide the web address. Each district shall also inform parents that a hard copy will be provided, upon request.

(e) Within 270 days of the effective date of this Act, the state education department must review and analyze all of the student placement information provided to it by the school districts in the State, pursuant to Section 103(c) above, and produce a report regarding the prevalence and effects of curricular stratification in the State. A copy of the report shall be sent to each school district and made available to the general public on the state education department's website.

Section 104. Elimination of Curricular Stratification in All Public Schools in the State.

(a) Phased Elimination of Curricular Stratification through 10th Grade

(1) Within one year of the effective date of this Act, each public school in the State shall develop a plan to eliminate all curricular stratification in the school within six years of the effective date of this Act. The plan should, at a minimum:

(i) identify and describe the existing levels of the courses in the school's stratified system;

(ii) set forth a schedule for phased elimination of existing curricular stratification, such that all stratification in grades K-5 is eliminated within three years of the effective date of this Act and all stratification in grades 6-10, subject to the exception in Section 104(a)(4) below, is eliminated within six years of the effective date of this Act, with substantial progress made in each year; and

(iii) specify how the school will attempt to increase the number of students who will enter 11th grade prepared to take honors, AP, and IB classes.

(2) Within one year of the effective date of this Act, all public schools in the State must remove all restrictions on enrollment into higher tracks for students who voluntarily choose to be enrolled in those classes.

(3) Within three years of the effective date of this Act, all curricular stratification in grades K-5 must be eliminated in the State. If heterogeneous grouping reform is done in phases within the three years, priority should be given to the elimination of the lowest tracks.

(4) Within six years of the effective date of this Act, all curricular stratification in grades 6-10 must be eliminated, except for AP classes offered in those grades so long as they are open to all students who wish to enroll. If heterogeneous grouping reform is done in phases within the six years, priority should be given to the elimination of the lowest tracks.

(5) For each student with an IEP pursuant to the IDEA, who is currently placed in a restrictive setting such as a self-contained class, the IEP team must revisit, at the student's annual review, whether placement in an inclusive, heterogeneous setting would be appropriate for the student given the availability of supplementary support services

and additional professional development activities required by this Act.

(6) Each school district in the State is responsible for assuring all of its public schools fully implement their heterogeneous grouping reform plans, developed pursuant to Section 104(a)(1) above, within six years of the effective date of this Act, with substantial progress made in each year.

(b) Universal Access to Excellent Curricula

(1) The curricula in all heterogeneously grouped classes should be challenging and prepare students for college and the work force, as did the curricula formerly reserved for high-tracked classes.

(2) All public schools in the State must provide supplementary academic support services, as set forth in Section 104(c) below, so that all students can meaningfully access challenging curricula.

(3) Within six years of the effective date of this Act, each public school in the State must ensure that all of its students have access to a sequence of courses that will prepare and qualify them for entry into the State's most competitive public universities, if they so choose, and the workforce.

(c) Supplementary Academic Support Services

(1) All public school students shall be provided access to supplementary academic support services in addition to their regularly scheduled, heterogeneous classes. These support services should focus on helping students succeed in their regular classes and provide a meaningful opportunity for them to access challenging, college-preparatory curricula.

(2) Students whose test scores are below the State's proficiency standards in a particular subject or whose average grade in an academic class is an F (or the equivalent) must receive supplementary academic support services offered outside of, and in addition to, their regular, heterogeneous classes. These support services shall also be made available for students at the D or equivalent grade level, although not mandated.

(3) Available supplementary academic support services may include the following, as deemed appropriate by district and school educators: one-to-one tutoring, small group instruction, study groups, pre- and post-review of class materials, and/or supervised computer-based instruction. Such services may occur during and/or outside the regular school day.

(4) The teacher of a heterogeneous class in which a student's test scores are below the State's proficiency standards or whose average grade is an F (or the equivalent) shall convene a meeting with the student and his/her parent(s) or guardian(s) to discuss available supplementary academic support services and strategies both in school and at home to accelerate the student's progress in the class.

(5) If a student needing supplementary academic support services, pursuant to Section 104(c)(2), has an identified disability, the appropriate accommodation(s) should be determined by the IEP team.

(d) Professional Development

(1) Throughout the period of phased elimination of curricular stratification and in all subsequent years, each public school district in the State must offer all of its teachers professional development designed to provide them with the skills and strategies needed to successfully teach all types of learners in heterogeneous classes tied to high-quality, challenging curriculum.

(2) Within 270 days of the effective date of this Act, each school district must submit to the state education department a written description of the professional development activities it will undertake to meet the goals set forth in Section 104(d)(1) above.

(3) Professional development activities may include strategies for cooperative learning, inclusion and co-teaching, differentiated instruction, responding to multiple intelligences, and providing support and enrichment within the curriculum.

(e) State Clearinghouse on Heterogeneous Grouping Reform

(1) Within 90 days of the effective date of this Act, the state education department must create a clearinghouse of information on heterogeneous grouping reform to be housed at a state university. The goal of the clearinghouse is to connect educators and researchers in order to promote best practices for heterogeneous grouping reform.

(2) The clearinghouse will maintain lists of schools and/or school districts in the State and throughout the country that have successfully heterogeneously grouped classes and/or programs and are willing to serve as study sites.

(f) Monitoring and Evaluation

(1) Within 120 days of a grade level being heterogeneously grouped, each public school in the State must analyze the breakdown of the students in each academic class at that grade level that was previously stratified in order to ensure heterogeneity of students in terms of race, ethnicity, socio-economic status, and disability.

(2) Within three years of the effective date of this Act and in all subsequent years, each public school in the State must bi-annually monitor and analyze all heterogeneously grouped classes to ensure the classes contain a balance of low, average, and high achievers

(3) If a public school discovers though its monitoring and analysis that classes are not heterogeneous in terms of students' race, ethnicity, socio-economic status, disability, or academic achievement level, it must create a plan to address these issues within 45 days of completion of its monitoring and submit that plan, as well as the results of the next monitoring cycle, to the school district for review.

(4) Within three years of the effective date of this Act and continuing until eight years after the effective date of this Act, the state education department must appoint an evaluator to conduct annual evaluations of the progress and outcomes of the heterogeneous grouping reform in the State. The annual reports must be made available to each

school district and posted on the state education department's website.

(g) Enforcement

(1) Complaint Process

(i) Complaints against individual schools

(a) If, at any time, a parent or guardian of a student, a teacher, a school administrator, or any other person feels a school is not timely complying with the requirements of this Act, he/she may file a complaint with the school district on a standard form generated by the state education department and supplied to the complainant by the district. A copy of the complaint must be sent by the district to the state education department.

(b) Within 45 days of the filing of a complaint, pursuant to Section 104(g)(1)(i)(1) of this Act, the school district must investigate the complaint and produce a report with its findings. A copy of the report must be sent to the school, the complainant, and the state education department.

(c) If the school district finds the school is not in compliance with the requirements of this Act, the school district must convene a meeting with the school official(s) responsible for compliance, within 60 days of the filing of the complaint, to develop a plan to achieve timely compliance.

(d) The school district shall monitor the implementation of the plan, created pursuant to Section 104(g)(1)(i)(c) above, to assure that the school complies with the requirements of this Act.

(ii) Complaints against school districts

(a) If, at any time, a parent or guardian of a student, a teacher, a school administrator, or any other person feels a school district is not timely complying with the requirements of this Act, he/she may file a complaint with the state education department on a standard form to be supplied to the complainant by the state education department.

(b) Within 45 days of the filing of a complaint, pursuant to Section 104(g)(1)(ii)(a) of this Act, the state education department must investigate the complaint and produce a report with its findings. A copy of the report must be sent to the school district and the complainant.

(c) If the state education department finds the school district is not in compliance with the requirements of this Act, the state education department must convene a meeting with the school district official(s) responsible for compliance, within 60 days of the filing of the complaint, to develop a plan to achieve timely compliance.

(d) The state education department shall monitor the implementation of the plan, created pursuant to Section 104(g)(1)(ii)(c) above, to assure that the school district complies with the requirements of this Act.

(2) If a school district learns through some avenue, other than a complaint pursuant to Section 104(g)(1) of this Act, that one of its schools is not timely complying with the requirements of this Act, it shall convene a meeting with the school official(s) responsible for compliance within 15 days to develop a plan to achieve timely

compliance. The school district shall monitor the implementation of the plan for as long as the plan is in effect.

(3) If the state education department learns through some avenue, other than a complaint pursuant to Section 104(g)(1) of this Act, that a school district in the State is not timely complying with the requirements of this Act, it shall convene a meeting with the school district official(s) responsible for compliance within 15 days to develop a plan to achieve timely compliance. The state education department shall monitor the implementation of the plan for as long as the plan is in effect.

(4) Exempt schools and districts

(i) If a school district receives notice or information such that it reasonably believes that one of its public schools engages in curricular stratification in any of its classes or courses in grades K-10, although the school had certified that it does not to the district and the state education department, the school district shall conduct an audit of the school within 30 days. If the school district finds the school does in fact engage in curricular stratification, the school will be required to comply with all requirements of this Act and will no longer be considered "exempt".

(ii) If the state education department receives notice or information such that it reasonably believes that a school district in the State has at least one school within its jurisdiction that engages in curricular stratification in any of its classes or courses in grades K-10, although the district had certified that it does not to the state education department, the state education department shall conduct an audit of the school district within 30 days. If the state education department finds the school district does in fact have a policy or practice of curricular stratification, the school district will be required to comply

with all requirements of this Act and will no longer be considered “exempt”.

(5) Each school district is responsible for assuring that all public schools within its jurisdiction comply with all requirements of this Act.

(6) The state education department is responsible for assuring that all school districts in the State comply with all requirements of this Act.

Endnotes

[1] There is extensive literature on the topic. The following as well as additional studies referenced in this brief provide a background on what is known.

See: Braddock, J. & Dawkins, M. (1993). "Ability Grouping, Aspirations, and Attainments: Evidence from the National Educational Longitudinal Study of 1988," *Journal of Negro Education, 62*(3), 1-13.

Glass, G. V. (2002). Grouping students for instruction. In *School reform proposals: The research evidence*. (Chapter 5, pp. 95-111.). Retrieved May 16, 2009, from http://epicpolicy.org/files/Chapter05-Glass-Final.pdf

Hallinan, M. T. (1992). The organization of students for instruction in the middle school. *Sociology of Education, 65*(2), 114-127.

Lucas, S. R. (1999). Tracking inequality: Stratification and mobility in American high schools. New York: Teachers College Press.

Mickelson, R. (2001). Subverting Swann: First- and second-generation segregation in Charlotte-Mecklenburg schools. *American Educational Research Journal, 38*, 215-252.

Oakes, J. (2005). *Keeping Track: How Schools Structure Inequality*. (2nd edition). New Haven, CT: Yale University Press

Oakes, J., Gamoran, A., & Page, R. (1992). Curriculum differentiation: Opportunities, outcomes, and meanings. In P. Jackson (Ed.), Handbook of research on curriculum (pp. 570-608). New York: Macmillan.

Rubin, B.C. (2006). Tracking and detracking: Debates, evidence and best practices for a heterogeneous world. *Theory Into Practice*. *45*(1), 4-14.

Vanfossen, B. E., Jones, J. D., & Spade, J. Z. (1987). Curriculum tracking and status maintenance. *Sociology of Education, 60*, 104-122.

Welner, K. G. & Oakes, J. (2007). Structuring Curriculum: Technical, Normative, and Political Considerations. In *Handbook of Curriculum and Instruction*, edited by F. Michael Connelly, Ming Fang He, and JoAnn Phillion (Chapter 5, pp. 91-112). Thousand Oaks, California: SAGE Publications.

[2] Oakes, J. (2005). *Keeping Track: How Schools Structure Inequality*. (2nd edition). New Haven, CT: Yale University Press.

[3] Oakes, J. (2005). *Keeping Track: How Schools Structure Inequality*. (2nd edition). New Haven, CT: Yale University Press.

Tyack, D. B. (1974). *The One Best System: a History of American Urban Education*. Cambridge, MA: Harvard University Press.

[4] Kliebard, H. (1995). *The Struggle for the American Curriculum, 1893-1958*. 2nd edition. New York: Routledge. (Page 13).

Oakes, J. (2005). *Keeping Track: How Schools Structure Inequality*. (2nd edition). New Haven, CT: Yale University Press. (Pages 23-24).

Tyack, D. B. (1974). *The One Best System: a History of American Urban Education*. Cambridge, MA: Harvard University Press.

[5] Oakes, J. (1985). *Keeping Track: How Schools Structure Inequality*. New Haven, CT: Yale University Press.

Wheelock, A. (1992). *Crossing the Tracks: How "Untracking" Can Save America's Schools*. New York: New Press.

[6] The precise extent of tracking in the U.S. has not been authoritatively demonstrated. This is in part a definitional problem, since different respondents will differently categorize practices such as gifted pull-out programs, "flexible" reading groups, and accelerated opportunities that students opt into, such as AP courses. It is also in part due to self-reporting problems on national surveys that ask school administrators whether they track, and in part due to the great variation (encountered by other researchers) in the coursework attached to a given course name. However, the estimates arising from various studies suggest that a substantial majority of secondary schools still track, and the majority of elementary schools also include some forms of tracking.

Catsambis, S., Mulkey, L., & Crain, R.L. (2001). For better or for worse?: A nationwide study of the social psychological effects of gender and ability grouping in mathematics." *Social Psychology of Education, 5,* 83–115.

Henke, R. R., Chen, X., and Goldman, G. (1999). *What Happens in Classrooms? Instructional Practices in Elementary and Secondary Schools, 1994–1995*. Washington, DC: National Center for Education Statistics.

Loveless, T. (1998). The tracking and ability grouping debate. *Thomas B. Fordham Foundation, 2*(8). Retrieved from http://www.edexcellence.net/library/track.html

Rees, Daniel I., Laura M. Argys, and Dominic J. Brewer (1996), "Tracking in the United States: Descriptive Statistics from NELS," Economics of Education Review 15(1), pp. 83-89.

[7] Black, S. (1992). On the wrong track. *Executive Educator, 14*(12), 46-49.

Braddock, J. & Dawkins, M. (1993). "Ability Grouping, Aspirations, and Attainments: Evidence from the National Educational Longitudinal Study of 1988," *Journal of Negro Education, 62*(3), 1-13.

Hallinan, M. T. (1992). The organization of students for instruction in the middle school. *Sociology of Education, 65*(2), 114-127.

Oakes, J., et al. (1990). *Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science*. Washington, DC: National Science Foundation.

Slavin, R. E., & Braddock, J. H., III. (1993). Ability grouping: On the wrong track. *College Board Review, 168,* 11-17.

[8] Low-track classes were ostensibly designed to group struggling students together and provide remediation, while high-track classes were designed to challenge high-achieving students.

[9] Welner, K. (2001). *Legal Rights, Local Wrongs: When Community Control Collides With Educational Equity*. Albany, New York: SUNY Press.

[10] Welner, K. (2001). *Legal Rights, Local Wrongs: When Community Control Collides With Educational Equity*. Albany, New York: SUNY Press.

[11] Lucas, S. R., & Gamoran, A. (1993). *Race and track assignment: A reconsideration with course-based indicators of track location.* Washington, DC: Office of Educational Research and Improvement.

Lucas, S. R. (1999). *Tracking inequality: Stratification and mobility in American high schools.* New York: Teachers College Press.

Vanfossen, B. E., Jones, J. D., & Spade, J. Z. (1987). Curriculum tracking and status maintenance. *Sociology of Education, 60,* 104-122.

[12] Kifer, E. (1993). Opportunities, talents and participation. In L. Burstein (Ed.), *The IEA study of mathematics III: Student growth and classroom processes* (pp. 279308). Oxford, UK: Pergamon Press.

Oakes, J. (1985). *Keeping Track: How Schools Structure Inequality*. New Haven, CT: Yale University Press.

Welner, K. (2001). *Legal Rights, Local Wrongs: When Community Control Collides With Educational Equity*. Albany, New York: SUNY Press.

[13] Useem, E. L. (1992b). Middle schools and math groups: Parents' involvement in children's placement. *Sociology of Education, 65,* 263-279.

[14] Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of Educational Research, 60,* 471-499.

[15] Kulik, J. A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives.* Storrs, CT: National Center of the Gifted and Talented.

[16] For a full discussion of such studies and their results see the following:

Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of Educational Research, 60,* 471-499.

Kulik, C. L., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. *American Educational Research Journal, 19,* 415-448.

Kulik, J. A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives.* Storrs, CT: National Center of the Gifted and Talented.

Slavin, R. E. (1990). Ability grouping in secondary schools: A response to Hallinan. *Review of Educational Research, 60,* 505-507.

Slavin, R. E. (1995). Detracking and its detractors: Flawed evidence, flawed values. *Phi Delta Kappan, 77,* 220-223.

[17] Examples of low track/high track studies include the following:

Brewer, D. J., Rees, D. I., & Argys, L. M. (1995). Detracking America's schools: The reform without cost? *Phi Delta Kappan, 77,* 210-212, 214-215.

Gamoran, A. (1987). The stratification of high school learning opportunities. *Sociology of Education, 60,* 135-155.

Vanfossen, B. E., Jones, J. D., & Spade, J. Z. (1987). Curriculum tracking and status maintenance. *Sociology of Education, 60,* 104-122.

Hoffer, T. B. (1992). Middle school ability grouping and student achievement in science and mathematics. *Educational Evaluation and Policy Analysis, 14*(3), 205-207.

[18] Kerckhoff, A. C. (1986). Effects of ability grouping in British secondary schools. *American Sociological Review, 51*(6), 842-58. p. 856.

[19] See: Oakes, J. (1982). The reproduction of inequity: The content of secondary school tracking. *Urban Review, 14*(2), 107-120.

Oakes, J. (1986). Keeping track, Part 1: The policy and practice of curriculum inequality. *Phi Delta Kappan, 68,* 12-18.

[20] See Mehan, H., Hubbard, L, Lintz, A. & Villanueva, I. (1994). Tracking untracking: The consequences of placing low track students in high track classes. The Center for Research on Education, Diversity and Excellence, University of California at Berkeley. Retrieved May 3, 2009, from http://repositories.cdlib.org/crede/ncrcdsllresearch/rr10/

Peterson, J. M. (1989). Remediation is no remedy. *Educational Leadership, 46*(6), 2425.

[21] See White, P., Gamoran, A., Porter, A. C., & Smithson, J. (1996). Upgrading the high school math curriculum: Math course-taking patterns in seven high schools in California and New York. *Educational Evaluation and Policy Analysis, 18,* 285-307.

Bloom, H. S., Ham, S., Melton, L., & O'Brient, J. (2001). *Evaluating the accelerated schools approach: A look at early implementation and impacts on student achievement in eight elementary schools.* New York: Manpower Demonstration Research Corporation.

Peterson, J. M. (1989). Remediation is no remedy. *Educational Leadership, 46*(6), 2425.

[22] See Loveless, T. (1998). The tracking and ability grouping debate. *Thomas B. Fordham Foundation, 2*(8). Retrieved from http://www.edexcellence.net/library/track.html

Loveless, T. (1999). Will tracking reform promote social equity? *Phi Delta Kappan, 56*(7), 26-32.

Kulik, J. A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives.* Storrs, CT: National Center of the Gifted and Talented.

[23] Oakes, J., et al. (1990). *Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science.* Washington, DC: National Science Foundation.

Braddock, J. H., II. (1990). Tracking the middle grades: National patterns of grouping for instruction. *Phi Delta Kappan, 71,* 445-449.

Slavin, R. E., & Braddock, J. H., III. (1993). Ability grouping: On the wrong track. *College Board Review, 168,* 11-17.

Wheelock, A. (1992). *Crossing the tracks: How "untracking" can save America's schools*. New York: New Press.

[24] Oakes, J., et al. (1990). *Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science.* Washington, DC: National Science Foundation.

Braddock, J. H., II. (1990). Tracking the middle grades: National patterns of grouping for instruction. *Phi Delta Kappan, 71,* 445-449.

Slavin, R. E., & Braddock, J. H., III. (1993). Ability grouping: On the wrong track. *College Board Review, 168,* 11-17.

Wheelock, A. (1992). *Crossing the tracks: How "untracking" can save America's schools*. New York: New Press.

[25] Carnegie Council for Adolescent Development (1989). *Turning points: Preparing American youth for the 21st Century*. Washington DC: The Carnegie Corporation of New York.

The College Board. (1989). *Access to Knowledge*, edited by J. I. Goodlad. New York: College Entrance Exam Board.

Heubert, J. P., & Hauser, R. M. (Eds.). (1999). *High stakes: Testing for tracking, promotion, and graduation.* Washington, DC: National Research Council.

National Governors' Association. (1993). *Ability Grouping and Tracking: Current Issues and Concerns.*

National Research Council and the Institute of Medicine. (2004). *Engaging Schools: Fostering High School Students' Motivation to Learn*. Washington, D.C.: National Academy Press.

California Department of Education (1992a). *It's elementary*. Sacramento: CDE.

California Department of Education (1992b). *Second to none: A vision of the new California high school*. Sacramento: CDE.

California Department of Education (1987). *Caught in the middle: Educational reform for young adolescents in California public schools*. Sacramento: CDE.

Hallinan, M.T. (2004). Whatever happened to the detracking movement? *Education Next, 4*(4). Retrieved June 14, 2009, from http://www.hoover.org/publications/ednext/3260116.html.

[26] For a complete analysis of these cases see Welner, K. (2001). *Legal rights, local wrongs: When community control collides with educational equity*. Albany, New York: SUNY Press. As Welner discusses, court involvement offers one possible way of changing the political context around policy decision-making. In some situations a court order may in fact be the only way of overcoming local political opposition to equity-minded reform. However, other communities may be able to address political issues less confrontationally. See Welner, K. G. & Burris, C.C. (2006). Alternative Approaches to the Politics of Detracking. *Theory Into Practice*, *45*(1), 90-99.

[27] Oakes, J. & Wells, A. S. & Associates (1996). *Beyond the technicalities of school reform: Policy lessons from detracking schools*. Los Angeles: Authors. (p. 40).

See also Welner, K. G. (2001). *Legal rights, local wrongs: When community control collides with educational equity*. Albany, New York: SUNY Press.

[28] Oakes, J., Wells, A. S., Jones, M. & Datnow, A. (1997). Tracking: the social construction of ability, cultural politics and resistance to reform. *Teachers College Record, 98*, 482-510.

[29] Welner, K. G. & Burris, C.C. (2006). Alternative Approaches to the Politics of Detracking. *Theory Into Practice*, *45*(1), 90-99.

[30] Readers interested in these political issues are strongly encouraged to read the following and the work cited therein: Welner, K. G. & Burris, C.C. (2006). Alternative Approaches to the Politics of Detracking. *Theory Into Practice*, *45*(1), 90-99.

[31] For examples of both middle and high schools that began detracking reforms, see Oakes, J., Quartz, K. H., Ryan, S. & Lipton, M. (2000). *Becoming good American schools*. San Francisco, CA: Jossey-Bass.

Oakes, J., Wells, A. S., Jones, M. & Datnow, A. (1997). Tracking: the social construction of ability, cultural politics and resistance to reform. *Teachers College Record, 98*, 482-510.

Welner, K. G. (2001). *Legal rights, local wrongs: When community control collides with educational equity*. Albany, New York: SUNY Press.

[32] In addition to these three case studies, readers are referred to the math detracking reform described by Jo Boaler and Megan Staples at Railside High School (a pseudonym). See:

Boaler, J. (2006). How a detracked mathematics approach promoted respect, responsibility and high achievement. *Theory into Practice, 45*(1), 45-46.

Boaler, J. & Staples, M. (2008). Creating Mathematical Futures through an Equitable Teaching Approach: The Case of Railside School. *Teachers College Record*, *110*(3), pp. 608-645.

Readers may also find useful some descriptions of detracking reforms that met with lesser degrees of success or were discontinued after encountering strong opposition. See:

Oakes, J., Quartz, K. H., Ryan, S. & Lipton, M. (2000). *Becoming good American schools*. San Francisco, CA: Jossey-Bass.

Welner, K. (2001). *Legal rights, local wrongs: When community control collides with educational equity*. Albany, New York: SUNY Press.

[33] Most of the district's African American students are eligible for free or reduced-price lunch and live in a HUD (Department of Housing and Urban Development) housing project. Similarly, the majority of Latino families reside in Section 8, subsidized apartments in the downtown area of the larger village.

[34] Acceleration in mathematics and science results in students taking Algebra in Grade 8 and a high school science course in Grade 8. In this context, acceleration has a literal meaning—students take a course one year prior to the majority of their peers in New York State.

[35] According to New York State law, school districts must provide the opportunity for at least some students to study 9th Grade mathematics in 8th Grade, so that they could take calculus prior to graduation. Therefore, if the middle school were to detrack, all students would need to be accelerated.

[36] Burris, C. C. (2003). Providing accelerated mathematics to heterogeneously grouped middle-school students: The longitudinal effects on students of differing initial achievement levels. *Dissertations Abstracts International*, *64*(5), p. 1570.

Burris, C. C., Heubert, J., & Levin, H. (2006). Accelerating mathematics achievement using heterogeneous grouping. *American Educational Research Journal*, *43*(1), 103-134.

[37] Further, more students passed the Regents exam in Grade 8 than had passed previously, with the higher-track students taking the exam in grade 8 and the lower track students taking it in Grades 9 or 10.

[38] See Burris, C. C., Heubert, J., & Levin, H. (2006). Accelerating mathematics achievement using heterogeneous grouping. *American Educational Research Journal*, *43*(1), 103-134, for a complete analysis of the achievement effects which resulted from universal acceleration in mathematics.

There was a statistically significant increase in the probability of studying calculus after universal acceleration, with a tripling of the percentage of the district's minority students studying AP Calculus. The rate increased from 11% for the students of color in three pre-detracking cohorts, to 36% after all students were accelerated. To put this rate in national perspective, according to the National Center for Education Statistics, the percent of African Americans and Latinos who graduated in 1998 and studied any calculus in high school was less than 10%. National Center for Educational Statistics. (2002). *Digest of education statistics, 2001: Chapter 2. Elementary and secondary education.* Washington, DC: Institute of Education Sciences, U.S. Department of Education. Retrieved June 14, 2009, from http://nces.ed.gov/pubs2002/digest2001/tables/dt142.asp.

[39] The district eliminated self-contained classrooms for all but the most developmentally delayed student (less than 1% of the school population). Students with an IEP received services in the regular classroom and meet with their special education teacher one period a day to work on meeting their IEP goals, and to receive support in the curriculum.

[40] A score of 4 on an IB exam is equivalent to a score of 3 on an Advanced Placement (AP) exam. Such scores, or better, are considered for college credit.

[41] To earn an IB Diploma a candidate must (a) take the courses needed to earn a minimum of 24 points on assessments from six IB courses, five of which must come from the above-listed groups 1-5 of the areas of study (every option except the arts) and (b) complete the three 'central elements:' a chronicle of their extracurricular/service learning activities, a transdisciplinary epistemology course (Theory of Knowledge), and an extensive independent research project conducted over the course of two years under the guidance of a faculty mentor.

[42] For additional analysis demonstrating that connection between detracking and the closing of the achievement gap, see the following:

Burris, C. C, Wiley, E., Welner, K.G., & Murphy, J. (2008). Accountability, rigor and detracking: Achievement effects of embracing a challenging curriculum as a universal good for all students. *Teachers College Record*, *110*(3), 571-608.

Burris, C. C., & Welner, K. G. (2005). Closing the achievement gap by detracking. *Phi Delta Kappan, 86*(8), 594-598.

[43] United States Department of Education (2006). Charter high schools closing the achievement gap: Innovations in Education. Retrieved June 14, 2009, from http://www.ed.gov/admins/comm/choice/charterhs/report.pdf.

[44] Meehan, H. (2007). Inter-organizational collaboration: A strategy to improve diversity and college access for underrepresented minority student. *Actio: An International Journal of Human Activity Theory, 1*, 63-91.

[45] Meehan, H. (2007). Inter-organizational collaboration: A strategy to improve diversity and college access for underrepresented minority student. *Actio: An International Journal of Human Activity Theory, 1*, 63-91.

[46] Alvarez, D. & Meehan, H. (2006). Whole school detracking: a strategy for equity and excellence. *Theory into Practice*, *45*(1), p. 82-89.

[47] United States Department of Education (2006). *Charter high schools closing the achievement gap: Innovations in Education*. Retrieved June 14, 2009, from http://www.ed.gov/admins/comm/choice/charterhs/report.pdf. (Page 54)

In fact, the 2009 California Academic Performance Index (API) rankings showed Preuss with the highest score among San Diego County high schools, outpacing high schools with a much lower percentage of Title 1 students. The following table shows the highest performers:

School Name	2008 API Score	2009 API Score	Percent Title I
Preuss School UCSD	879	894	100%
Coronado High	850	861	0.04%
Canyon Crest Academy	843	868	0.02%
Westview	855	867	0.07%
Torrey Pines	849	861	0.06%
Rancho Bernardo	843	855	0.06%
Scripps Ranch	828	842	19%
Poway High	823	836	15%
La Jolla High	818	832	21%
Escondido Charter	827	832	17%
Carlsbad HS	820	831	18%
Valhalla HS	800	821	21%

Source: UCSD Professor Hugh Mehan.

[48] *U.S. News and World Report*. Retrieved June 14, 2009, from http://www.usnews.com/listings/high-schools/california/preuss_school_ucsd.

[49] Matthew, J. (2007). *The top of the class*. Available at: http://www.newsweek.com/id/39380.

[50] America's Best High Schools: Gold Medal List. *U.S. News and World Report*. Retrieved December 11, 2009, from http://www.usnews.com/articles/education/high-schools/2009/12/09/americas-best-high-schools-gold-medal-list.html?PageNr=2

[51] Since 1999, Finland—along with most other OECD countries—has not participated in the alternative international test, the TIMSS, which focuses more on direct knowledge, as opposed to the applied knowledge focus of the PISA. Its 1999 TIMSS scores were, however, significantly higher than the U.S. in both math and science. See http://nces.ed.gov/Timss/results99_1.asp and http://www.tes.co.uk/article.aspx?storycode=6006247

[52] For articles that discuss the above data, as well as provide a description of Finnish reforms see: Finnish National Board of Education. (2004). *Background for Finnish PISA success*. Retrieved July 9, 2007, from: http://www.edu.fi/english/page.asp?path=500,571,36263

BBC News. (2004). Finland tops global school table. Retrieved July 9, 2007, from: http://news.bbc.co.uk/2/hi/uk_news/education/4073753.stm

Cavanagh, S. (2005). Finnish students are at the top of the world class. *Education Week, 24*(27), 8.

Linnakyla, P. & Valijarvi, J. (2005). Secrets to literacy success: The Finnish story. *Education Canada, 45*(3), 34-7.

Landers, J. (2009). Texas school reformers try to learn lessons from Finland. *Dallas Morning News*. Retrieved February 20, 2009, from: http://www.dallasnews.com/sharedcontent/dws/dn/latestnews/stories/020809dnbusfinaland.30a53af.html.

See also Darling-Hammond, L. (2010). *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*. New York: Teachers College Press. (pp. 164-172).

[53] Bracey, G. (2009). PISA: Considerations for the economy. *Principal Leadership*, *9*(7) pp. 52-54.

[54] Linnakyla, P. & Valijarvi, J. (2005). Secrets to literacy success: The Finnish story. *Education Canada, 45*(3), 34-7.

[55] Aho, E., Pitkanen, K., & Sahlberg, P. (2006). *Policy development and reform principles of basic and secondary education in Finland since 1968*. Washington DC: The World Bank.

[56] Finnish National Board of Education. (2004). *Background for Finnish PISA success*. Retrieved July 9, 2007, from: http://www.edu.fi/english/page.asp?path=500,571,36263

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