

Tracking Exposed: The Potential for Undermining Urban High School Students' Academic Success through Course Placement Practices

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Abstract: *Students from marginalized populations often identified by race, ethnicity, gender, or socioeconomic level are not tracked at the same frequency as mainstreamed populations into advanced sections of high school courses in many US schools and miss out on the opportunity to develop a deeper understanding of content. It is evident that students that experience limited placement in advanced courses are less prepared for college and future employment. This study utilized descriptive statistics, correlations and regression analysis to examine tracking practices into advanced and honors high school courses in an urban US school high. The results indicated that African American and Hispanic students experienced limited access to advanced and honor courses, and these access patterns accounted for a significant portion of the achievement disparities on state mandated reading tests.*

Keywords: *Advanced Course Placement, Academic Success, Achievement Gaps*

I. Introduction

High schools in the United States of America offer a variety of course placement options for student, which range from basic (remediation), grade level, and advanced placement courses. Historically, students from marginalized populations often identified by race, ethnicity, gender, or socioeconomic level are not placed in advanced sections of high school courses and miss out on the opportunity to develop a deeper understanding of content (Ansalone, 2001; Planty, Bozick, Ingles & Wirt, 2006). It is evident that students who are not placed in advanced courses are less prepared for success at college and lack the skills necessary to enter the workforce. What is less understood, is how access to these advanced courses might impact student achievement in high schools.

While the research indicates (Archbald & Farley-Ripple, 2012) that the leading factor contributing to advanced course placement in high school is previous performance on prerequisite content courses, it is also noted that "sizeable demographically connected achievement gaps" (Archbald & Farley-Ripple, 2012, pp 48) are developed before ever entering high school. Placement in advanced courses and gifted programs begins as early as elementary schools in the US. It is noted that even in these initial placements in accelerated programs there is demographic bias making it difficult for students of color to receive academically enriched learning opportunities (Winsler, Karkhanis, Kim & Levitt, 2013).

The significance of these placements and the impact on college and career readiness cannot be overlooked. For instance, a look at students attending Berne (pseudonym) High School in an urban community located in the Northeastern region of the US provides real-world evidence of the effect academic rigor has on academic performance. Berne High School (BHS) offers basic level courses, honors, high honors and advanced placement (AP) classes for 8th-12th graders in content areas such as math, science, history, and English. Basic level courses are the default option and represent the least academically challenging course offerings at BHS. High honors courses are offered in the 10th grade as preparatory courses for future Advanced Placement (AP) courses. High honors are also offered after the 10th grade when specific AP courses are not available and students or parents request a more rigorous course offering.

Scores on the 2012 State Assessment indicates students in 10th grade honors classes showed an increase in reading scores by an average of 6.57 compared with peers placed in basic level courses. Furthermore, students enrolled in high honors courses gained an average score of 14.25 points over the average of students taking basic level courses. To further investigate this gap in scores, the data for the students enrolled in the basic level courses were disaggregated. Researchers found that populations most affected by score discrepancies were African American and Hispanic students. Could it be that a common school practice of

placing students in courses is contributing to the achievement gap between students of color and White Americans? This investigation is warranted given that African American and Hispanic students at Berne High School have limited access to honors and AP courses that are often associated with higher academic rigor.

To further explore the potential impact of differential access to academic rigor on African American and Hispanic students' test scores in reading, we employed the theoretical lens of Critical Race Theory (CRT). CRT was developed to examine how systemic racism inherent in US laws and policies, and specifically educational systems limit that quality of education for marginalized student groups (Ladson-Billings, 1998). The framework guided our analysis as we sought to gain an understanding of how district policies could lead to students of color being placed in less academically challenging courses. A case study design was utilized to explain the possible differences in course placement based upon race or ethnicity, and to explore if access patterns impact achievement on state issued reading assessments. First, we provide a review of literature focused on key issues concerning the tracking and achievement disparities in the US. Second we detail how course placement can undermine academic performance on state reading assessments. Finally, we will discuss the implications of limiting students' access to advanced courses and suggest recommendations for parents and administrators on how to ensure access to all students.

II. Related Literature

Studies that explore school placement processes for students find that schools vary widely in their placement criteria when determining in which track to place a student. These criteria include size of the tracks, types of courses that are tracked (math, science, etc.) and ability level of students in the different tracks (Oakes, 1985, 2005). Garet and DeLany (1988) found that course-taking patterns differ across schools and among various academic departments. They suggested that these differences can be explained by differences in how schools organize their curriculum and in the composition of the school's student population. For the purpose of this study, we will use the term "track" to describe the process of course placement (Archibald, Glutting, & Qian, 2009). For example, once enrolled in an advanced math course the student would continue advancing through AP and honors placements, whereas students enrolled in grade level math courses would continue on the path of grade level placements.

In fact, several researchers found socioeconomic status (SES) to be a strong predictor of track placement (Alexander & Cook, 1982; Alexander & McDill, 1976; Archibald & Farley-Ripple, 2012; Buckley, 2010; Gamoran, 1992; Hallinan, 1991). Alexander and McDill (1976) followed up on a study by Heyns (1974), which questioned the impact of SES and found that once SES was added to Heyns' model, SES had a larger effect on track placement than academic ability. Specifically, they found that the higher a students' SES, the greater chance of placement in a high academic track while the lower the SES the greater the likelihood of placement in general or vocational tracks.

Inequalities extend beyond social class to include issues of ethnicity and race (Ladson-Billings, 1997; Klugman, 2013). The effect of race on track placement is prevalent in the tracking literature (ACT, 2005; Planty, Bozick, & Ingels, 2006). Some studies have found a disproportionate number of racial minorities placed in lower tracks and have concluded that tracking widens the achievement gap between different student groups. Oakes (1985) found that while poor and minority students seem to suffer the most from tracking, track placement does not appear to be related to either increased academic achievement or positive attitudes and behaviors. Oakes concluded that tracking impedes academic progress, fosters low self-esteem, promotes social misbehavior, and lowers aspirations for students placed in lower tracks. Furthermore, Oakes notes that tracking separates students along socioeconomic lines so that a greater number of poor and minority students are found in the bottom tracks. Low income and minority students are more commonly enrolled in lower ability tracks (i.e. vocational and general) than their white or high-income peers who are more likely to be enrolled a higher ability, academic track (Oakes, 1985; 1990). Since, Oakes seminal studies these results have reaffirmed by the vast majority of researchers, yet quantifying the impact of tracking on student standardized test scores remains a gap in research.

Impact of Tracking on Future Outcomes

The impact of placement in less academically challenging courses has been explored by researchers and found to have varying impacts on future outcomes. The process of sorting students leads to certain predictable outcomes, such as an inequality in student achievement (Hallinan, 1994; Hanushek & Wößmann, 2006; Oakes, 1987, 2005). Tracking and course-taking are found to account for a large amount of the differences in student achievement, particularly for low and average ability students (Braddock, 1990; Gamoran, 1987; Kulik & Kulik, 1982; Oakes, 1987). Students placed in an academically challenging pathway have more opportunities to succeed academically. Being in an academically challenging pathway increases the likelihood of high school graduation and college attendance compared to students in vocational or general tracks (Alexander & Cook, 1982; Gamoran & Berends, 1987; Gamoran & Mare, 1989; Horn, 2009; Rosenbaum, 1975; Trusty & Niles, 2003), and the likelihood of having more career opportunities (Alexander, Cook, & McDill,

1978; Alexander & McDill, 1976; Ansalone, 2009). Despite these findings tracking persists across the US, creating separate and unequal schooling experiences. In the current era of accountability through testing, new opportunities to explore the link between student test outcomes and educational practices at the school level have emerged.

For this inquiry, reading achievement is examined given its links overall student performance and cross content achievement. Furthermore, since most academic success in content area classrooms is evaluated by students' performance on content reading comprehension measures (Snow, 2010) it is important to examine the role reading comprehension plays on student academic achievement. The role of reading comprehension is central to Common Core State Standards and is a priority in all content areas. Thus, high school teachers are charged with developing students' reading comprehension skills specific to the content they teach (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). There is no refuting that redressing reading comprehension and its link to academic success is at the forefront of education reform in the United States. The importance of reading comprehension in all content areas is stressed through policy; however, more than legislation to promote effective reading instruction is necessary. The reality is that schools are not giving all students the support and encouragement that is required to develop reading comprehension skills within content areas further restricting students' opportunity to learn (Gambrell, Malloy, Marinak, & Mazzoni, 2015). This lack of support in developing critical comprehension skills can be intensified by the tracking practices of schools, thus warranting serious attention by researchers. Specifically, two essential research questions guided this study:

RQ1: Do district practices of course placements lead to students of color being placed in less academically challenging courses?

RQ2: Does course placement undermine academic performance in reading?

III. Methods

Participants

Data for this study was collected from BHS an urban high school in the Northeastern region of the United States. The analyses examined the graduating classes of 2011 and 2012, which allowed for a longitudinal analysis of course placement across two separate cohorts of students. During the time period of this study, BHS had 1,301 students and the racial/ethnic composition of the student population was 52% Black, 30% White, 13% Hispanic, 4% Asian, and 1% two or more races.

Procedures

Student enrollment data was used to analyze the track placement for each grade level, 9th-12th grade. Data files included course name and a code for the course level. The different course levels were Basic level, honors level, high honors level, and Advanced Placement (AP) level courses. Student scores for the State Academic Test was provided for the graduating cohorts of 2011 and 2012. The scores included were scale scores for the reading, writing, mathematics, and science subtests.

Analysis

We began our analysis of the data using exploratory and descriptive methods. The purpose was to explore graduation rate and attrition, discipline consequences, and track placements disaggregated by gender and race/ethnicity. Descriptive statistics were provided for student demographic, graduation and attrition, self-reported postsecondary plans, number of detentions and suspensions students received, and number of basic, honors, high honors, and AP courses in which students were enrolled in grades 9 through 12. For this study, we focus on and report results related only to course placement and racial clustering patterns. To explore the second research question we employed a regression analysis to account for variation in reading performance outcomes.

Interpreting Correlation Values

Correlations were calculated between the number of courses students take in a given track level each year and the track levels to determine if there was a relationship between enrollment in the various track levels across grades 9, 10, 11, and 12. For this analysis, a positive correlation indicates that a student is likely to be enrolled in a particular track in subsequent years, while a negative correlation suggests enrollment is unlikely.

Understanding Regression Analysis

Regression analysis was conducted to identify potential significant predictors of student achievement on the State issued reading assessments. Reading scale scores were the dependent variables, which simply mean researchers wanted to understand which factors could explain why some students scored high or low on state assessments (variation in test scores). Students' gender, race/ethnicity, and 10th grade track level placement

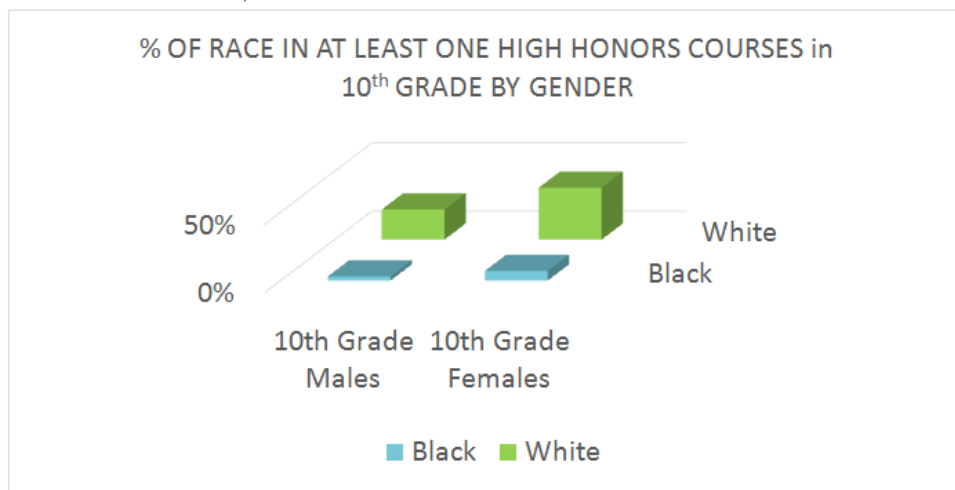
served as the independent variables or the factors being investigated to determine if and how they influence variations in test scores. In short, the purpose of the regression analysis conducted in this study was to determine if a student's race/ethnicity and track placement in 10th grade are significant predictors of how a student will perform on the the reading portion of a state issued standardized test.

IV. Findings

Descriptive Analysis

The results indicate that there is a wide gap between the percent of White students and Black students being placed in High Honors courses in 10th grade (Figure 1). When disaggregating the data based upon gender and race, we found that 38% of White females are placed in at least one High Honors course in 10th grade, and 22% of White males are placed in at least one High Honors course in 10th grade. By comparison, only 7% of Black female students are placed in at least one High Honors course in 10th grade, and only 3% of Black male students are placed in at least one High Honors course in 10th grade.

Figure 1 Placement in at Least One High Honors Course in 10th Grade by Race & Gender (2011 & 2012 Combined Cohorts)



Correlation Analysis

Secondly, we sought to explore the relationship between the number of college track courses and the grade level of beginning placement. In both cohorts there is a moderate, positive relationship between students placed in the basic track in 9th grade and students placed in the basic track in grades 10-12. There is a moderate, negative relationship between students placed in the basic track in 9th and 10th grade and students placed in the honors, high honors (Pre AP courses), or AP tracks in grades 11-12. This indicates the more basic level courses students enrolled in during their first two years of high school the greater the likelihood these students would remain in mostly basic level courses throughout high school (Table 1 and Table 2).

Table 1 Correlation between Initial Placement and Future Placement for 9th-12th Grade (2011 Cohort)

	BasicGr ade9	BasicGr ade10	BasicGr ade11	BasicGr ade12	Honors Grade9	Honors Grade10	Honors Grade11	Honors Grade12	HighHonors Grade9	HighHonors Grade10	HighHonors Grade11	HighHonors Grade12	APGr ade10	APGr ade11	APGr ade12
Basic Gr.9	1	**-.672	**-.660	**-.642	**-.676	**-.551	**-.561	**-.446	**-.548	**-.529	**-.465	-.040	**-.424	**-.542	**-.620
Basic Gr.10	**-.672	1	**-.663	**-.644	**-.544	**-.585	**-.559	**-.469	**-.498	**-.490	**-.448	-.052	**-.410	**-.499	**-.616
Basic Gr.11	**-.660	**-.663	1	**-.726	**-.581	**-.600	**-.660	**-.525	**-.494	**-.502	**-.451	-.075	**-.389	**-.530	**-.562
Basic Gr.12	**-.642	**-.644	**-.726	1	**-.519	**-.565	**-.598	**-.671	**-.505	**-.511	**-.424	-.061	**-.437	**-.561	**-.673
HonorsGr.9	**-.676	**-.544	**-.581	-.519	1	**-.785	**-.637	**-.488	**-.259	**-.304	**-.290	.060	**-.242	**-.352	**-.443
HonorsGr.10	**-.551	**-.585	**-.600	**-.565	**-.785	1	**-.770	**-.629	**-.289	**-.225	**-.253	.108	**-.163	**-.303	**-.414
HonorsGr.11	**-.561	**-.559	**-.660	**-.598	**-.637	**-.770	1	**-.649	**-.334	**-.242	**-.189	-.007	**-.180	**-.192	**-.423
HonorsGr.12	**-.446	**-.469	**-.525	**-.671	**-.488	**-.629	**-.649	1	**-.317	**-.230	**-.176	-.007	**-.156	**-.304	**-.259
HighHonorsGr.9	**-.548	**-.498	**-.494	**-.505	**-.259	**-.289	**-.334	**-.317	1	**-.810	**-.567	-.027	**-.609	**-.618	**-.604
HighHonorsGr.10	**-.529	**-.490	**-.502	**-.511	**-.304	**-.225	**-.242	**-.230	**-.810	1	**-.678	-.023	**-.631	**-.704	**-.722
HighHonorsGr.11	**-.465	**-.448	**-.451	**-.424	**-.290	**-.253	**-.189	**-.176	**-.567	**-.678	1	**-.199	**-.436	**-.482	**-.676
HighHonorsGr.12	-.040	-.052	-.075	-.061	.060	.108	-.007	-.007	-.027	-.023	**-.199	1	.039	.091	.091
APGr.10	**-.424	**-.410	**-.389	**-.437	**-.242	**-.163	**-.180	**-.156	**-.609	**-.631	**-.436	.039	1	**-.573	**-.554
APGr.11	**-.542	**-.499	**-.530	**-.561	**-.352	**-.303	**-.192	**-.304	**-.618	**-.704	**-.482	**-.436	**-.573	1	**-.674
APGr.12	**-.620	**-.616	**-.662	**-.673	**-.443	**-.414	**-.423	**-.259	**-.604	**-.722	**-.676	**-.436	**-.573	**-.674	1

**Correlation is significant at the .01 level (2-tailed) *Correlation is significant at the .05 level (2-tailed)

Table 2 2012 Correlation between Initial Placement and Future Placement for 9th-12th Grade (2012 Cohort)

	Basic Grad	Basic Grade	Basic Grade	Basic Grade	Hono rsGr	Hono rsGra	Hono rsGra	Hon orsGr	HighHon orsGra	HighHon orsGra	HighHon orsGra	HighHon orsGra	AP Grade	AP Grade	AP Grade
Basic Gr.9		**6	**5	**5	**	**	**	**	**	**	**	*	**	**	**
BasicGr.10	**6	1	**6	**6	**	**	**	**	**	**	**	*	**	**	**
BasicGr.11	**5	**6	1	**6	**	**	**	**	**	**	**	*	**	**	**
BasicGr.12	**5	**6	**6	1	**	**	**	**	**	**	**	*	**	**	**
HonorsGr.	**	**	**	**	1	**7	**6	**5	**2	**2	*.1	*.1	.09	**3	**3
HonorsGr.	**	**	**	**	**7	1	**7	**6	**2	**2	*.1	.070	.02	**2	**3
HonorsGr.	**	**	**	**	**6	**7	1	**6	**2	**1	.056	.119	-	**1	**3
HonorsGr.	**	**	**	**	**5	**6	**6	1	**2	**2	*.1	.009	.11	**2	**2
HighHonor	**	**	**	**	**2	**2	**2	**2	1	**8	**7	**1	**5	**6	**6
HighHonor	**	**	**	**	**2	**2	**1	**2	**8	1	**8	**2	**5	**7	**7
HighHonor	**	**	**	**	*.1	*.13	.05	*.1	**7	**8	1	.068	**6	**5	**6
HighHonor	*	-	*	*	*.1	.07	.11	.00	**1	**2	.068	1	-	**1	**1
APGr.10	**	**	**	**	.09	.02	-	.11	**5	**5	**6	-	1		
APGr.11	**	**	**	**	**3	**2	**1	**2	**6	**7	**5	**1	**5	1	**6
APGr.12	**	**	**	**	**3	**3	**3	**2	**6	**7	**6	**1	**4	**6	1

**Correlation is significant at the .01 level (2-tailed) *Correlation is significant at the .05 level (2-tailed)

Furthermore, Table 1 and Table 2 details that students placed in basic level courses in 9th and 10th grade are unlikely to move on to Honors, High Honors, or Advanced Placement at any point in their high school career. Students placed in Honors had at least some possibility of moving up to High Honors or Advanced Placement, but were unlikely to move down to basic level courses. This can be determined by the moderate to strong positive correlation between initial placement in Honors level courses and placement in Honors level courses throughout high school.

Multiple Regression Analysis

For this final inquiry, multiple regression analysis was conducted to investigate the impact of apparent inopportunity structures on student outcomes, namely student performance on the state issued standardized test in reading. *Table 3 - Mean Reading Scores for White, Black, and Hispanic Students (2011 and 2012 Cohorts)* details the average (mean) reading scores for the 2011 and 2012 cohorts disaggregated by race/ethnicity, and reveals that there is almost a 30-point difference in average reading scores between Black/Hispanic students and White students.

Table 3 Mean Reading Scores for White, Black, and Hispanic Students (2011 and 2012 Cohorts)

ReadingScaleScores			
	Mean	SD	N
<i>2011Cohort</i>			
Black	229.51	31.20	117
Hispanic	231.33	35.04	27
White	258.10	35.93	86
<i>2012Cohort</i>			
Black	219.44	27.60	104
Hispanic	236.47	32.72	17
White	249.33	30.53	84

Multiple regression analysis was used to determine if race/ethnicity and track placement into basic, honors, or high honors in 10th grade significantly predicted student achievement in reading. *Table 4 – Predictors of State Reading Achievement* displays the results of the regression. The intercept group were Black students placed in a basic level track. The results of the regression analysis for reading achievement of the 2011 cohort indicated that the predictors explained 44% of the variance in students' scores (R²=.438, F (3,229) = 60.39, p<.01). The results of the regression analysis for reading achievement of the 2012 cohort indicated that the predictors explained 52% of the variance in student's reading scores (R²=.522, F(3,204)=75.15, p<.01). The regression model for reading achievement finds that the average reading score for White students was 13.58 points higher than Black or Hispanic students in the 2011 cohort and 8.16 points higher in the 2012 cohort. In sum, this implies that close to half of the reading gap is accounted for by access to more rigorous courses. The following are critical findings on the impact of track placement on reading performance for Black and Hispanic learners attending BHS:

- In the 2011 cohort, for every additional honors level class a student takes in 10th grade, their average reading score increased by 9.45 points over the average reading score of students taking basic level classes in 10th grade.

- In the 2012 cohort, for every additional honors level class a student takes in 10th grade, their average reading score increased by 6.57 points over the average reading score of students taking basic level classes in 10th grade.
- In the 2011 cohort, for every additional high honors class a student takes in 10th grade their average reading score increased by 10.12 points over the average reading score of students taking college basic level classes in 10th grade.
- In the 2012 cohort, for every additional high honors class a student takes in 10th grade their average reading score increased by 14.25 points over the average reading score of students taking basic level classes in 10th grade.

Table 4 Predictors of State Reading Achievement

Variable	2011 Cohort	2012 Cohort
Constant	211.24**	206.70**
White	13.58**	8.16*
Honors Courses, Grade 10	9.45**	6.57**
High Honors Courses, Grade 10	10.12**	14.25**
<i>R</i> ²	0.438	0.522
<i>F</i>	60.390**	75.146**
<i>N</i>	229	204
* <i>p</i> < .05 ** <i>p</i> < .01		

V. Discussion

Research Question One

The first research question was: *Do district practices of course placements lead to students of color being placed in less academically challenging courses?* To explore this question, additional background information revealed that the district's decision to change the names of the least academically challenging course from *Basic* to *College* level without change academic rigor may have been done to appease growing concerns among minority parents. This study only used "basic" to decrease confusion, but in reality parents and students were under the impression that "college level" course was designed to prepare them for college. Parent focus groups revealed that the "college" label caused most parents to assume that their students are in academically challenging courses, which caused them not to question their continued college heavy placements year after year. The descriptive analysis revealed that students of color clustered in basic level courses, while White students clustered in honor, high honor and AP courses.

Parents and guardians of marginalized students are less likely to be in the social circles that would make them aware of the true nature of the change in nomenclature (Oakes, 1985; 1990); furthermore, care providers from marginalized groups are also less likely to be aware that any parent can request their child be placed in an Honors course. In the district in question, such a policy was in effect and was used regularly by White parents to override school placement decisions. Even when parents of color were aware, school practices made it appear difficult to move back down a level if the student struggles in the more academically challenging courses. The system unfortunately was set up to perpetuate the "Mathew Effects" (Stanovich, 2008), advantaging students whose families have social and cultural capital, while restricting the opportunity of marginalized learners.

Research Question Two

The second research question was: *How does placement undermine academic performance?* To explore this question, the results from the correlation and multiple regression analysis should be considered.

Correlation Analysis.

The correlation analysis revealed that those students who are placed in basic level courses in 10th grade have almost no chance of moving to the more academically challenging courses such as Honors and High Honors in subsequent years. Furthermore, those students who are placed in Honors or High Honors have almost no chance of being put in less academically challenging classes in subsequent years. Sadly, placement in 9th grade decides the quality and rigor of courses that students are exposed to for the rest of high school careers at BHS.

Multiple Regression Analysis.

Without the opportunity to experience the rigor associated with academically challenging classes like Honors, High Honors, and Advanced Placement courses, students are not prepared for the rigor of college. Additionally, the scores for the state reading tests reveal that students who do not enroll in at least one Honors or High Honors course in 10th grade do not achieve reading scores comparable to their peers who do take at least one Honors or High Honors course at BHS. Course placement is predictive of close to half of test score variation in reading at BHS.

VI. Conclusions

Considering the case of BHS, students must have the opportunity to try more academically challenging courses. Additionally, policies and practices that serve to limit access to academically challenging courses must be redressed. In some cases, the policies are even set up to obscure the truth, and practices to decrease parent advocacy. In this case, they led parents to assume their children were being exposed to rigorous coursework; however, the reality was that students were being denied the rigor required to prepare them for college and further success.

VII. Recommendations

Students must be academically challenged to ensure their readiness to take part in post-secondary educational opportunities. To this end, we must explicitly challenge all educators and students to raise their expectations for achieving at the highest possible levels. Almost all students have a desire to be challenged in their schoolwork. Despite the fact that the most negatively-stigmatized student groups are viewed as *unruly* or *apathetic*, many of the students from these groups reported a desire to be held to high academic and behavioral expectations.

Additionally, policies must ensure all parents and students have a clear understanding of each course offering and how it prepares students for future success. Course information should be placed online, sent home and made available in libraries, churches and community-centers for students and families to access when planning their schedules. Also, counselors should be available to answer parent and student questions to help ensure students are enrolled in the best course options for their future plans.

Finally, placement policies should be transparent and allow for students to try a variety of academically challenging courses. Transparency in placement policies helps parents and students make informed decisions. Parents need to understand what goes in to placement in courses. This should be easy for parents to access, and policies should be in place to allow students and/or parents to not only access the information but to contest it when the student's best interests do not seem to be in mind.

References

- [1]. Alexander, K. L., & Cook, M. A. (1982). Curricula and coursework: A surprise ending to a familiar story. *American Sociological Review*, 47(5), 626-640. <http://dx.doi.org/10.2307/2095163>
- [2]. Alexander, K. L., Cook, M.A. & McDill, E.L. (1978). Curriculum tracking and educational stratification: Some further evidence. *American Sociological Review*, 43(1), 47-66. <http://dx.doi.org/10.2307/2094761>
- [3]. Alexander, K. L., & McDill, E. L. (1976). Selection and allocation within schools: Some causes and consequences of curriculum placement. *American Sociological Review*, 41(6), 963-980.
- [4]. Ansalone, G. (2009). Tracking, schooling and the equality of educational opportunity. *Race, Gender & Class*, 16(3/4), 174-184.
- [5]. Archbald, D. & Farley-Ripple, E. N. (2012). Predictors of placement in lower level versus higher level high school mathematics. *The High School Journal*, 96(1), 33-51. <http://dx.doi.org/10.1353/hsj.2012.0014>
- [6]. Archbald, D., Glutting, J., & Qian, X. (2009). Getting into honors or not: An analysis of the relative influence of grades, test scores, and race on track placement in a comprehensive high school. *American Secondary Education*, 37(2), 65-81.
- [7]. Buckley, L. (2010). Unfulfilled hopes in education for equity: Redesigning the mathematics curriculum in a US high school. *Journal of Curriculum Studies*, 42(1), 51-78. Braddock, J. H., II. (1990). Tracking: Implications for Student Race-Ethnic Subgroups. Report No. 1. Baltimore, MD: Center for Research on Effective Schooling for Disadvantaged Students. <http://dx.doi.org/10.1080/00220270903148065>
- [8]. Gamoran, A. (1987). The stratification of high school learning opportunities. *Sociology of Education*, 60(3), 135-155. <http://dx.doi.org/10.2307/2112271>
- [9]. Gamoran, A. (1992). Access to excellence: Assignment to honors English classes in the transition from middle to high school. *Educational Evaluation and Policy Analysis*, 14(3), 185-204. <http://dx.doi.org/10.3102/01623737014003185>
- [10]. Gamoran, A., & Berends, M. (1987). The effects of stratification in secondary schools: Synthesis of survey and ethnographic research. *Review of Educational Research*, 57(4), 415-435. <http://dx.doi.org/10.3102/00346543057004415>
- [11]. Gamoran, A., & Mare, R. D. (1989). Secondary school tracking and educational inequality: Compensation, reinforcement, or neutrality? *American Journal of Sociology*, 94(5), 1146-1183. <http://dx.doi.org/10.1086/229114>
- [12]. Gare, M. S., & DeLany, B. (1988). Students, courses, and stratification. *Sociology of Education*, 61(2), 61-77. <http://dx.doi.org/10.2307/2112265>
- [13]. Hallinan, M. T. (1991). School differences in tracking structures and track assignments. *Journal of Research on Adolescence*, 1(3), 251-275. http://dx.doi.org/10.1207/s15327795jra0103_4
- [14]. Hallinan, M. T. (1994). School differences in tracking effects on achievement. *Social Forces*, 72(3), 799-820. <http://dx.doi.org/10.1093/sf/72.3.799>
- [15]. Hanushek, E. A., & Wößmann, L. (2006). Does educational tracking affect performance and inequality? Differences-in-differences evidence across countries. *Economic Journal*, 116(510), C63-C76. <http://dx.doi.org/10.1111/j.1468-0297.2006.01076.x>
- [16]. Heyns, B. (1974). Social selection and stratification within schools. *American Journal of Sociology*, 79(6), 1434-1451. <http://dx.doi.org/10.1086/225709>
- [17]. Horbec, D. (2012). The Link between Reading and Academic Success. *English in Australia*, 47(2), 58-67. Retrieved from <http://libezproxy.tamu.edu:2048/login?url=http://search.ebscohost.com/libezproxy.tamu.edu:2048/login.aspx?direct=true&db=eric&AN=EJ998334&site=ehost-live>; http://www.aate.org.au/view_journal.php?id=51
- [18]. Horn, D. (2009). Age of selection counts: A cross-country analysis of educational institutions. *Educational Research and Evaluation*, 15(4), 343. doi:10.1080/13803610903087011

- [19]. Klugman, J. (2013). The advanced placement arms race and the reproduction of educational inequality. *Teachers College Record*, 115(5), 1.
- [20]. Kulik, C.-L. C., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. *American Educational Research Journal*, 19(3), 415-428. <http://dx.doi.org/10.3102/00028312019003415>
- [21]. Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education?. *Qualitative Studies in Education*, 11(1), 7-24. <http://dx.doi.org/10.1080/095183998236863>
- [22]. National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). Common Core state standards English language arts & literacy in history/social studies, science, and technical subjects. Washington, DC: Authors.
- [23]. Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven, CT: Yale University Press.
- [24]. Oakes, J. (1987). *Tracking in secondary schools: A contextual perspective* (No. RAND/P-7342). Santa Monica, CA: The RAND Corporation.
- [25]. Oakes, J. (1990). *Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science*. Santa Monica, CA: RAND Corp.
- [26]. Oakes, J. (2005). *Keeping track: How schools structure inequality* (2nd ed.). New Haven, CT: Yale University Press.
- [27]. Planty, M., Bozick, R., Ingels, S. J., National Center for Education Statistics (ED), Washington, DC, & Research Triangle Inst., Durham, NC. (2006). *Academic pathways, preparation, and performance: A descriptive overview of the transcripts from the high school graduating class of 2003-04. E.D. TAB. NCES 2007-316* Distributed by ERIC Clearinghouse.
- [28]. Rosenbaum, J. E. (1975). The stratification of the socialization process. *American Sociological Review*, 40(1), 48-54. <http://dx.doi.org/10.2307/2094446>
- [29]. Snow, C. E. (2010). Academic language and the challenge of reading for learning about science. *Science*, 328(5977), 450-452. <http://dx.doi.org/10.1126/science.1182597>
- [30]. Stanovich, K. E. (2008). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *The Journal of Education*, 189(1/2), 23-55.
- [31]. Trusty, J., & Niles, S. G. (2003). High-school math courses and completion of the bachelor's degree. *Professional School Counseling*, 7(2), 99-107.