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TRACKING WORK: RACE-ETHNIC VARIATION IN VOCATIONAL COURSE PLACEMENT AND CONSEQUENCES FOR ACADEMIC AND CAREER OUTCOMES

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A B S T R A C T

Data from the National Educational Longitudinal Study (NELS: 88) are used to examine differential student placement and to assess the independent effects of race on academic tracking "within" the vocational program. The study examines how the structure of tracking within the vocational program shapes both academic achievement outcomes and career opportunities among high school students. Student's placement in the vocational program is argued to function as a unique track program that disadvantage students academically, particularly students of color. Racial-ethnic minority students are disproportionately placed into lower level academic courses. Once so placed, their subsequent enrollment patterns in specific vocational courses may have varying effects on students' academic and career outcomes. Few studies have attempted to disaggregate how students are further tracked once they are placed into broad high school curriculum tracks. This study analyzes the specific variations in patterns of race-ethnic student placement within vocational programs and examines the consequences of such placement for academic achievement and career attainment outcomes.

Keywords: Vocational Program, Tracking, Race, Academic Achievement, School-to-Work Transition.

INTRODUCTION

Vocational education was first implemented in public schools to provide minority and immigrant students with the skills necessary to match the increasing job demands of an economy transitioning from agricultural to industrial (Howard, 2003). The vocational program has since remained part of the school curriculum and it continues to provide job skills to students, particularly for student not planning to attend college but transitioning to the workforce (Gunderson, 2004). Empirical evidence on the benefits /disadvantages of vocational education is two-fold. Some scholars argue that participation in a vocational program can reduce the likelihood of unemployment, increase earning potential, and decrease the likelihood of dropping out of school (Harvey, 2001; Mupinga and Livesay, 2004). However, other findings suggest that vocational education has become a "dumping ground" for low-achieving students (Adams, 2001; Rasinski and Pedlow 1998). Vocational education leads to occupations within the blue-collar and pink-collar sector of the labor market. More specifically, the type of courses taken leads to specific placement within the labor market. As such, there are courses that will lead to jobs that fall higher in the occupational hierarchy, while others lead to occupations with lower prestige. It is this 'tracking' structure that ultimately influences students' transition into the workforce. Recent literature identifies vocational education as a part of schools' larger tracking system. Low-achieving students primarily those from lower socioeconomic backgrounds have higher likelihoods of enrolling in vocational programs (Oakes, 2005). Consequently, to a large extent, low achieving students are encouraged to enroll in vocational courses to at least acquire job skills and matriculate into the workforce (Mupinga and Livesay, 2004; Wan Mohamed, 1998).

With the volume of vocational courses and various career paths that are available to students there lies a tracking 'within' tracking structure. Within the vocational program, students are further tracked into

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one of several areas: consumer based education (i.e. home economics, domestic, etc.); general labor courses where students are most likely to take classes in industrial arts, agricultural, and drafting/wood shop; and specific occupation courses that are in line with business, mechanics, and other technical occupations (Gale Research Group, 1998).

Empirical research consistently finds that the tracking process in secondary schools has racial, social class, and gender effects (Hallinan, 2001; Mickelson, 2001; Mickelson and Greene, 2006; Oakes, 2005). Studies have called attention to the effects of tracking and ability grouping on students of color and low income students who are often overrepresented among low academic tracks and vocational programs (Lucas, 2001). The systematic placement of students in specific academic programs contributes to the disparity in the achievement gap. For example, Braddock (1995) identified that academic programs are designed to develop the academic skills and knowledge needed for postsecondary schooling (primarily college or university attendance) while vocational programs are designed to develop occupational skills that lead to direct entry into the labor market.

An often understudied area in academic tracking literature is the process of 'within' program tracking. For example, within the academic or college preparatory tracks, some students are further assigned to advanced placement (AP), international baccalaureate (IB) programs, and the like, with each associated with different levels of status and types of rewards (i.e. high scores on standardized tests, high GPAs, and increased probability of enrolling into post-secondary education). Similarly, within the vocational track, students are further assigned to specific specialty areas such as consumer education, health occupations, technology-communications, with each also conferring special status and rewards (i.e. employment after high school, specialized job training skills).

This paper suggests that even within the broader domain of the vocational program, tracking certain courses or choosing certain curriculum paths has lasting effects and consequences on students' academic and occupational trajectory (Ainsworth and Roscigno, 2005). Although vocational programs serve the important function of preparing students for a wide range of blue-collar careers, tracking within this program has received limited attention. Only a small number of scholars have analyzed the effects of the tracking structure within the vocational program (Ainsworth and Roscigno, 2005; Royster, 2003). Consequently, little is known about the distribution of African American, Hispanic/Latino, American Indian, Asian, and White students across and within different types and levels of vocational programs or classes.

Previous research: American public education provides opportunities to learn for students. Regardless of an individuals' social class, gender, racial-ethnic background acquiring an education equalizes their chances for upward social and economic mobility. Nevertheless, the American educational system has historically provided disproportionately greater benefits to Whites compared to students of color, and to the middle and upper classes compared to the poor. As a direct consequence of widespread and entrenched patterns of tracking and between class ability grouping in public schools, students of color and poor students often experience differentiated classroom learning opportunities (Mickelson and Everett, 2007).

Tracking and Vocational Education: Tracking as a form of stratification within schools, in theory, is designed to place students into curricular paths that match their levels of past academic achievement and perceived ability (Carbonaro, 2005). The tracking process begins at the elementary school level, but becomes more identifiable and rigid during the middle grades and high school years (Mickelson and Greene, 2006; Oakes, 2005). Although students may enter school with preexisting differences in abilities and knowledge, ability grouping and tracking cause these differences to become more pronounced as students matriculate through school (Lucas, 2001).

Such routinely differentiated classroom organization and pedagogical practice can impact students' learning opportunities in very significant ways. For example, students placed into either higher or lower ability groups in elementary school will have different exposures to formal and informal curricula, and, therefore, learn more or less depending on the group into which they are assigned (Lucas, 2001). Elementary grade achievement disparities often lead to later placement in different tracks in middle and high school. During middle school and high school, gaps in student achievement levels become increasingly larger as a consequence of not only the differentiated early instruction and curriculum exposure, but also because

of the vast differences in learning opportunities associated with participation in the honors and college preparatory programs in the middle grades and high schools, respectively (Mickelson and Greene, 2006). Students placed in lower academic tracks face significant obstacles as they matriculate through the latter stages of their education. As a result, some low tracked students pursue vocational education. This suggests that, not only are students' academic trajectories, to a great extent, are influenced by the time they enter high school, but these trajectories partly through the process of academic tracking can also strongly influence students' early career and post-secondary paths (Ainsworth and Roscigno, 2005). Racial-ethnic disparities exist across tracks, but likely to exist within academic programs. For example, Ainsworth and Roscigno (2005) and Royster (2003) found White students who enroll in the vocational program tend to benefit more than ethnic minorities. For example, Royster (2003) found among her study sample of White and Black male vocational students, White males were more likely than Black males to participate in work study/apprenticeships programs. Work-study/apprenticeships are a beneficial for students when trying to obtain jobs. Working under someone students develop strong social networks that often solidify employment after high school. Consequently, Black male students were not as likely as White male students to develop social networks with faculty and employers to increase their likelihood of employment after high school (Royster, 2003).

Royster (2003) suggests the salience of race was an instrumental factor that limited the opportunities of many Black students. She noted incidences where Black students, despite having training in skilled areas, were regulated to low-wage service occupations. Most often these students experienced 'horizontal mobility', where they would move from one low-wage occupation to another. She acknowledged this outcome was a direct result of the lack of participating in work-study-apprentice programs.

Vocational Education and Academic Achievement: Tracking has pronounced effects on student's academic performance. Evidence points to significant academic disparities between vocational and non-vocational students (Adams, 2001; Kang and Bishop, 1989; Rasinksi and Pedlow, 1998). For example, Adams (2001) found that, when comparing vocational and college preparatory students' reading and math achievement, college preparatory students scored significantly higher on statewide standardized exams. Unlike previous studies, the current study seeks to advance this area by comparing the academic achievements of students within the three identified vocational tracks (i.e. consumer, general labor, specific occupation).

Vocational Education and Labor Market Outcomes*:* The U.S. Congress' mission for vocational education was to (1) create a program that reflects the local labor market's segmentation in terms of race and gender, and (2) to reduce unemployment rates by matching workers to jobs (Werum, 2002). The school-to-work transition process was designed to provide vocational students a source of stability as they transitioned from high school to the workforce (Ainsworth and Roscigno, 2005; Arum, 1998; Mupinga and Livesay, 2004; Royster, 2003). For example, the NAVE (1998) concluded from an extensive literature review that wage and employment outcomes are higher for students who work in areas that they studied during high school. Also, students who complete at least two credits in vocational fields and find employment in those specific fields have higher earnings and less unemployment over time than students who are enrolled in non-vocational programs in high school.

Other research has reported varying racial outcomes that might affect labor market opportunities of vocational program graduates. Ainsworth and Roscigno (2005) found significant racial, class, and gender disparities in students' eventual job placement following high school. Their results suggest that the intra-program tracking processes result in students entering the labor market at different points in the blue collar hierarchy. This in turn results in ongoing labor market and occupational inequality. For example, students that enroll in low-service courses are likely to enter the labor market as low-service workers. More specifically, women and minorities who enroll in low-service courses are most likely to enter the labor market as low-service workers.

In summary, the tracking structure within vocational programs has significant effects as students proceed with the school-to-work transition. These effects interact in ways that strongly shape students' place within the occupational hierarchy. Even though graduates of vocational programs generally enter into

the blue collar sector of the workforce, tracking within the vocational program can strongly influence academic outcomes and the placement within the blue collar sector.

Research Questions: This article investigates the effects of intra-program tracking in the vocational program on academic achievement and occupational outcomes of 12th grade students. Several questions guide this research:

1. What are the differences in academic achievement outcomes among students enrolled in the various vocational tracks?
2. What are the factors that lead to the likelihood of vocational occupational placement?

RESEARCH METHODS

Data: The National Educational Longitudinal Study (NELS) data set was used to analyze the research questions. NELS is a large, nationally representative educational data set. The U.S. Department of Education's National Center for Educational Statistics (NCES) used a cluster sampling technique to draw random samples of students in the 8th grade and employed a two-stage, stratified random sample of 25,000 eighth graders in over 1,000 schools. The initial survey was conducted in 1988, and students were surveyed again at two-year intervals throughout high school (1990 and 1992). The final follow-up took place in 1994, two years after students graduated from high school.In addition to student-level data, NELS utilized various teacher, school, and parent level educational measures that are well suited for investigating the role of tracking within the vocational program and its influence on educational and occupational outcomes. NELS contains several vocational measures that reflect the various courses within the vocational program (i.e., industrial arts, agriculture, health occupations, home economics, consumer education, and business/marketing). In this study, the vocational program is separated into three tracks: (1) consumer/homemaking, (2) general labor, and (3) specific occupations (Gale Research Group, 1998). Courses in the consumer track include home economics, cosmetology, health care, and consumer education. The general labor track includes courses in manual labor (e.g. agricultural, industrial arts, construction, etc.) and clerical occupations. Specific occupation courses focus on job-specific courses such as business, marketing, and technical occupations (laboratory and medical-technology). Specific occupation courses tend to lead to occupations in the upper tier of blue collar occupations. As a result, they offer higher wages, better benefits, and more career mobility (i.e. promotions) than general labor, consumer and homemaking careers (Gunderson 2004).

Sample: The sample is drawn from a subset of the 14,915 students collected between 1990 and 1994. The final sample only includes vocational students who were in 12th grade and attended public schools in 1992 (N = 748). The sample consists of 49% males and 51% females. The project only includes White (69%), Hispanic (17%), and Black students (14%).

Measures

Achievement Indicators: Students' 12th grade math/reading composite (Achieve) standardized test scores serves as the achievement model dependent variable. To determine student's placement in the occupational hierarchy, separate models for consumer/general and specific occupation were constructed as dependent variables.

Student Factors: Race-ethnicity is represented by dichotomous variables for Black and Hispanic, with non-Hispanic Whites as the reference category (Black: 0 = White and 1 = Black; Hispanic: 0 = White and 1 = Hispanic). Gender is measured where males are the reference category (male = 0, female = 1). Socioeconomic status (SES) is a composite index of parents' education, occupation, and income created by National Center for Education Statistics for the NELS data. NELS measure of educational aspirations (Aspire) for students asks "how far in school do you think you will go" where 1 = HS or less and 0 = College or more. Students' tenth grade achievement (Prior) on the math/reading exam will serve as the measure of prior academic achievement.

Identifying items that support the evidence of the correlation between student achievement and peers were used to evaluate the variable peer influence (Peers). Peer influence is a factor analytic variable that is comprised of questions focused on the relevance of peer relations as it relates to popularity, significance of good grades, importance of continuing education, etc. (i.e. "Among friends, how important is it to continue education after high school?") (6 items, $\alpha = 0.79$).

School Factors*:* Teacher experience has been cited to affect student achievement (Tchexp). This measure is evaluated by school administrators about the number

of years teaching experience among its teachers. Teacher experience is coded 0 = no experience to 9 = 25 yrs. or more, with an average of 5 years teaching. The percent of students receiving free lunch serves as the school SES measure, and school urbanicity (1 = Urban and 0 = Suburban; 1 = Rural and 0 = Suburban) is utilized to determine a schools' residential location. School racial composition (Perminor) and the percentage of students receiving free lunch (Lunch) serve as the school-level SES measure.

Analysis: To examine the race-ethnic effects on academic and occupations outcomes, ordinary least squares (OLS) modeling were used. Although OLS present a set of limitations, it was found to be the best analytical technique for this project. Goldstein (2003) argues that the use of ordinary least squares regression (OLS) and including both students and schools can be an inaccurate measure because of the tendency for OLS to treat both students and schools as the same unit of analysis. To determine vocational students' achievement and the role of their track placement within the vocational program, the analyses used the step method in their regression models. The author(s) ran three models wherein the first model determined the influential effects of race and gender on standardized test scores, controlling for vocational track placement. The subsequent models included other student-level factors and school factors to measure their impact on student achievement. The author(s) also conducted three logistic models to predict vocational students occupational placement, controlling for their vocational tracks. Similar to the OLS models, the logistic models included the step method. The first model included race and gender to determine their impact of occupational outcomes. Subsequent models included other individual-level factors and school factors to predict a student's likelihood of their placement in the occupational hierarchy.

FINDINGS

Does vocational track placement impact students' academic achievement?

The following analyses display the results of the multilevel regression model predicting vocational students' performance on standardized academic achievement tests. Table 1 indicates statistically significant predictors of academic performance on standardized exams among students within three vocational tracks: consumer/homemaking, general labor, specific occupation among Consumer/ homemaking vocational students, individual or school-level factors positively or negatively influenced their academic performance. However, an interesting observation to note is the strong negative relationship between race and standardized test scores. Although not significant, Black students scored twenty-four points lower on standardized tests than White students in the Consumer track (b = -24.50, p < .29). Again, not significant but this observation is consistent with other empirical findings regarding the role of race-ethnicity and standardized test scores.

There were not significant predictors of standardized test scores when adding school-level factors to the model (i.e. percent of students receiving free lunch, urban or rural school location, and teacher experience). However, similar to the preceding model, Black students scored thirty-six points lower on standardized tests than White students with the inclusion of school-level factors (b = -36.35, p < .34).

General Labor Track: Analyzing the General Labor model, race, specifically Black students, had the largest impact on student's standardized test scores. In this case, there was a positive relationship between race and test scores. Black students enrolled in general labor vocational courses scored twenty-two points more than White General labor students on standardized tests (b = 21.89, p < .01). No other variables were significant predictors, however, there was a strong positive relationship between standardized tests and Hispanic students (b = 11.27, p < .09). Students aspirations also had a strong relationship with student achievement despite not being significant (b = -6.09, p < .25).

The addition of school-level factors in the General Labor track model, race continued to be a significant predictor of student achievement. Black and Hispanic students increased their standardized test scores by twenty-four (b = 24.51, p < .001) and twenty-three points (b = 23.48, p < .01), respectively.

These findings are consistent with prior evidence that Black and Hispanic vocational students are most likely to enroll in vocational courses such as industrial arts and wood shop (Royster 2003). Due to strong potential for successful school-to-work transitions for minority students in these fields, success academically may be the result. No other significant predictors of standardized test scores were evident.

Table 1: Coefficients of OLS Regression Model of Academic Achievement among 12th Grade High School Vocational Students by Vocational Track

	Consumer/Homemaking		General Labor		Specific Occupation	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Gender	0.25	7.88	1.87	0.94	-7.64	-7.45
	(17.40)	(33.61)	(5.94)	(5.64)	(4.78)	(4.98)
Black	-24.50	-36.35	**21.89***	**24.51****	-2.09	-3.09
	(21.97)	(35.18)	(8.70)	(8.77)	(6.49)	(7.52)
Hispanic	-3.38	-17.74	11.27	**23.48***	-8.50	-10.86
	(14.08)	(31.36)	(6.48)	(8.78)	(6.61)	(7.89)
Aspire	10.15	6.25	-6.09	-6.92	5.13	4.34
	(12.93)	(17.25)	(5.23)	(5.23)	(5.38)	(5.69)
Prior	-0.50	-0.65	-0.001	-0.04	0.06	0.10
Achieve	(0.46)	(0.67)	(0.20)	(0.20)	(0.15)	(0.17)
SES	14.11	11.79	2.87	1.84	**11.75***	**11.79***
	(9.21)	(14.88)	(3.78)	(3.74)	(4.49)	(4.92)
Peers	0.17	-0.10	0.41	0.99	-3.06	-2.23
	(8.21)	(10.69)	(3.20)	(3.03)	(2.33)	(2.55)
Teacher	3.21	2.83	-1.13	-0.35	-0.02	0.06
Exp	(3.26)	(5.02)	(0.95)	(0.94)	(0.73)	(0.77)
%Minor		5.03	-2.19			-1.29
		(11.08)	(2.16)			(1.99)
%Free		-1.26	-2.94			1.62
Lunch		(8.64)	(1.61)			(1.81)
Urban		2.78	11.08			4.74
		(23.65)	(6.98)			(6.75)
Rural		-9.19	9.59			-1.05
		(19.83)	(5.81)			(5.64)
Adjusted R2	-0.06	-0.63	0.22	0.37	0.18*	0.13
Constant	73.67*	74.96	57.32**	65.09**	60.79**	56.06***

However, general labor vocational students in urban schools scored eleven points more on their standardized tests (b = 11.08, p < .12). Evidence has shown that attending urban schools with large populations of low-income students and minority students can have an impact of students' level of academic achievement (Anyon, 1997).

Specific Occupation: Enrollment in the specific occupation track only revealed one significant predictor of academic achievement on standardized tests. Social class, not race, had a positive relationship with student achievement among students enrolled in the specific occupation track. As student's social class increased their standardized test scores improve by eleven points (b = 11.75, p < .01). No other predictor influenced student achievement among students enrolled in the specific occupation vocation track. With the addition of school-level factors, student's social class continued to be a significant predictor of academic achievement similar to the previous model. As student's social class increases their standardized test scores improve by eleven points (b = 11.79, p < .01). No other predictor influenced student achievement among students enrolled in the specific occupation vocation track.

Race proved to be a significant factor in predicting student achievement among Consumer and General Labor vocational students, whereas social class was the strongest predictor of student achievement among Specific occupation vocational students. Literature states that Black and Hispanic students are more likely to enroll in the lower tiered vocational tracks, while white students are more likely to enroll in specific occupation vocational tracks. The findings are somewhat parallel with this literature.

What are the factors that predict the likelihood of vocational students going into the specific areas of the blue collar job market hierarchy?

The following analyses display the results of the multilevel logistic regression model predicting vocational students' likelihood of entering the job market at the consumer/homemaking, general labor, or specific occupation level.

Table 2. Coefficients of Logistic Regression Model of Occupational Placement among 12th Grade High School Vocational Students by Vocational Track.

	Consumer/Homemaking		*General Labor*		*Specific Occupation*	
	Model 1	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*
Gender	-10.54	-0.67	0.70	0.67	-0.58	-0.50
	(28716.39)	(17051.32)	(0.63)	(0.67)	(0.63)	(0.65)
Black	-11.18	-4.64	-0.25	0.22	0.35	-0.08
	(57566.99)	(19988.73)	(0.77)	(0.96)	(0.77)	(0.94)
Hispanic	8.32	6.84	0.75	0.96	-1.23	-1.58
	(99910.22)	(17823.93)	(1.05)	(1.35)	(1.14)	(1.40)
Aspire	-11.71	-7.39	**1.80***	**2.01***	**-1.59***	**-1.69***
	(13584.89)	(11533.84)	(0.71)	(0.78)	(0.71)	(0.75)
Prior	-1.99	-0.52	-0.02	-0.02	0.02	0.03
Achieve	(439.13)	(637.83)	(0.02)	(0.02)	(0.02)	0.02
SES	-6.20	-1.79	0.41	0.20	-0.33	-0.19
	(23887.98)	(8075.41)	(0.51)	(0.54)	(0.51)	(0.53)
Peers	11.82	-0.12	-0.22	-0.19	0.16	0.10
	(20442.97)	(6219.55)	(0.32)	(0.35)	(0.32)	(0.34)
Teacher	0.47	-0.47	0.19	0.19	-0.17	-0.17
Experience	(1772.42)	(1818.25)	(0.10)	(0.12)	(0.11)	(0.11)
%Minor		2.83		-0.21		0.11
		(5532.61)		(0.25)		(0.24)
%Free		-4.54		0.29		-0.07
Lunch		(2279.12)		(0.22)		(0.20)
Urban		0.17		-1.48		1.26
		(20131.59)		(0.92)		(0.92)
Rural		-1.06		-0.91		0.93
		(13273.78)		(0.87)		(0.86)
Constant	47.87	10.57	-0.07	0.35	-0.40	-1.58
-2 Log Likelihood	0.00	0.00	71.90	66.87	72.01	69.26
Nagelkerke R^2	1.00	1.00	0.32	0.39	0.29	0.33

Consumer/Homemaking: Among the factors predicting students' likelihood to participate in the Consumer/homemaking labor market, there were no factors that influenced student's future job placement. This may be the result of the gender disparity in the consumer track sample. Literature suggests that girls more so than boys are likely to participate in the consumer/homemaking vocational track when enrolled in the vocational program.

General Labor: Analyzing the General Labor model, student aspirations was the one factor that contributed to the likelihood of students entering the general labor job market. Student's aspirations were positively associated with their likelihood of entering the general labor field (odds ratio = 7.46, $p < .05$). Race and gender were not significant predictors, however, there was a strong association between Hispanic students (odds ratio = 2.62, $p < .48$) and job placement along with gender (odds ratio = 1.95, $p < .32$) and job placement in the general labor field.

Specific Occupation: The likelihood of entering the specific occupation job market (or not) is most dependent upon student's aspirations. Unlike the general labor track where there was a positive association with student's aspirations and job placement, among specific occupation job placement there was a negative association with student aspirations (odds ratio = 0.19, $p < .05$). Again, race and gender were not significant predictors of students' job placement within the specific occupation hierarchy. Although not significant, there were strong associations between attending urban (odds ratio = 3.54, $p < .17$) and rural schools (odds ratio = 2.55, $p < .28$) and job placement in the specific occupation field.

DISCUSSION

The core argument of this paper suggests that race and social class is a factor in the tracking process within the vocation programs and consequently, its subsequent influence on academic achievement and future job placement trajectory. The research findings highlight how race and social class significantly differentiate vocational students' academic achievement. However, regarding future job placement opportunities largely depend on student's career aspirations.

Consistent with prior empirical findings, race continues to be one of the most salient predictors of academic achievement among vocational students. Vocational education is most often viewed as a 'dumping ground' by some whereby low-income, minority students are disproportionately placed. In so doing, they are likely to perform poorly on standardized achievement tests compared to non-vocational students. However, placement in the various vocational tracks may yield varying standardized test results. For instance, Black students enrolled in the General Labor track actually improved their standardized test scores. This finding may support the opposing idea that vocational training for racial minority students may be beneficial because it's preparedness for the school-to-work transition. Among this population, college enrollment may not be an aspiration but acquiring skills that will translate into job opportunities immediately following high school may encourage students to do well academically. This could suggest that for those Black students who understand that opportunity lies within the labor market immediately following high school may take a stronger approach to performing well in school. What's going on is that some students tend to do better in school when taking courses directly related to their interests. Efforts in those classes can have a subconscious effect on performance in other classes.

Neither race nor social class had an impact on vocational student's placement in the job market queue, yet student aspirations were a significant factor. The main purpose of the vocational program, now Career and Technical program is to prepare students for jobs/careers immediately after high school. Because vocational programs help prepare students' school-to-work transition, future aspirations for job placement is in line with the general purpose of the vocational program. The early inception of the vocational program was to provide racial minority and immigrant students with job skills compatible with the economy (Howard 2003). Today, although opportunities have improved for racial minorities, immigrants, and poor students, vocational education remains essential in providing similar populations with occupational opportunities in the school-to-work transition.

CONCLUSION

The vocational program provides students with alternative post high school opportunities if they are not academically prepared for post-secondary education. Although vocational programs serve the important function of preparing students for a wide range of blue-collar careers, tracking *within* this program has received limited attention from researchers (Ainsworth and Roscigno 2005; Royster 2003). Thus, very little is known about the actual dispersion of African American, Latino, American Indian, Asian, and White students across and within different types and levels of vocational programs or classes.

There have been mixed reviews on the role and purpose of vocational education. On one hand, evidence supports that the vocational program provides students with specific occupational skills that makes them competitive in the labor market. It also suggests that participation in a vocational program can reduce the likelihood of dropping out of school and increase earning potential (Arum 1998; Arum and Shavit 1995; Harvey 2001; Mupinga and Livesay 2004). On the other hand, scholars argue that the vocational program contributes to race and social class inequality (Ainsworth and Roscigno 2005; Wan Mohammad 2008). They suggest that students who participate in the vocational program are only likely to acquire low-wage, menial working class occupations. Also considering these students have to take other courses that meet graduation requirements they are likely to not perform as well academically because they are often enrolled in lower tracked course. This project furthers the much-needed discussion and, more importantly, the research on how students are distributed in the vocational program and how it redistributes racial and social inequalities.

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