



CIRCLE

The Center for Information & Research on
Civic Learning & Engagement

An Assessment of Civic Engagement and Educational Attainment

By Alberto Dávila and Marie T. Mora¹
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It is well documented that individuals with higher levels of education tend to be more civically engaged.² In a two-part study conducted for the Center for Information and Research on Civic Learning and Engagement (CIRCLE),³ we provide empirical evidence using 1988-2000 panel data from the National Education Longitudinal Study of 1988 (NELS)⁴ that civic engagement might also promote educational attainment: civically-engaged teenagers make greater scholastic progress during high school and subsequently acquire higher levels of education than their otherwise similar peers. Our first essay provides supporting empirical evidence for this relationship in general, and the second essay broadens these findings across gender and race/ethnicity. With regards to policy relevance, the primary results point to the importance of civic participation as one means to foster both social and human capital investments. The purpose of this fact sheet is to provide highlights from our two-part study.

High School Scholastic Progress

The empirical analyses of the relationship between civic engagement and scholastic progress, based on an education production-function framework,⁵ are discussed in detail in the first essay. Table 1 includes selected results from both essays of particular interest. Community service performed to meet course requirements or on a strictly voluntary basis had a positive and statistically significant effect on scholastic progress during high school. For example, on average course-required community service enhanced scholastic progress by 3.3 percent (in history) to 6.7 percent (in reading). Moreover, in each subject, community service conducted for classes related to higher average gains among male teenagers than females. The scholastic returns from voluntary community service were also greater for male students than for females.

Table 1 further indicates that being involved in student government during high school raised the scholastic progress of young women by 1.1 to 1.7 percentage points in history, mathematics, and science; with the exception of history, however, it did not have a significant effect for young men. It appears that the average scholastic returns from civic engagement activities during high school are not gender-neutral.

Other findings presented in the second essay suggest that community service conducted for classes had similar effects on the academic progress made by minority versus non-Hispanic white students of the same gender. As such, high school coursework that includes a service-learning component does not appear to give a particular racial/ethnic group an advantage with respect to

scholastic achievements. With few exceptions, moreover, our findings indicate that civic activities beyond service-learning had statistically similar effects on high school academic progress across race/ethnic groups, suggesting that high-school civic engagement does not generally favor the academic development of one racial/ethnic group over another.

Table 1: The Effects of Civic Engagement on Academic Progress Four Years after the 8th Grade

Civic Engagement	Reading	Mathematics	Science	History
All Students:				
Performed community service between 1990-92 as required for class	6.7%	4.6%	5.9%	3.3%
Performed strictly voluntary community service between 1990-92	8.1%	6.5%	7.6%	4.3%
Participated in high school student government	0.3%	1.3%	1.0%	1.5%
Females:				
Performed community service between 1990-92 as required for class	4.9%	4.7%	4.7%	3.3%
Performed strictly voluntary community service between 1990-92	5.7%	5.0%	6.3%	3.9%
Participated in high school student government	---	1.7%	1.7%	1.1%
Males:				
Performed community service between 1990-92 as required for class	9.4%	5.6%	8.2%	3.9%
Performed strictly voluntary community service between 1990-92	9.5%	6.3%	7.2%	4.3%
Participated in high school student government	---	---	---	1.2%
<p><i>Notes:</i> The results in the top of the table are based on over 12,000 students in the NELS who: (1) were in the 1988-1992 NELS panel, (2) reported information on the frequency of community/volunteer work in 1992, (3) were in school during the 1992 survey, and (4) had non-missing scores on the corresponding 1988 and 1992 IRT exams. The gender-partitioned samples include approximately 6,000 female and 5,900 male non-Hispanic white, African-American, Hispanic, and Asian students. Using the regression method of ordinary least squares (OLS), these estimates are based on regressing the natural logarithm of the 1992 IRT score on the corresponding 1988 $\ln(\text{IRT})$ score, interaction terms between race/ethnic binary variables and the civic engagement measures, required community service performed for reasons other than class, participation in eighth-grade student government, low eighth-grade academic ranking, immigrant status, household characteristics in 1988 (family income, parents' highest education level, parents' marital status), school characteristics in 1988 (percent of students receiving free lunch and location (urbanicity and geographic region), and binary variables for missing information for family income and the percent of students in the 1988 school receiving free lunch. Sampling weights provided by the NELS are employed here to maintain the national representation of the sample.</p>				

Educational Attainment

Another academic metric considered in both essays is subsequent educational attainment. Table 2 provides the estimates of how civic engagement related to the probability that individuals in the 1988 to 2000 NELS-panel had a four-year college degree or higher by 2000—twelve years after the eighth-grade. Civic activities undertaken during high school are related to significantly higher odds that individuals graduate from college in later years, when controlling for a host of socio-economic and demographic characteristics (for details, see the table footnotes).⁶ For example, being involved in community service to fulfill class-requirements significantly enhanced the average odds of college graduation by 22 percentage points (less so for women at 18 points, and more so for men at 29 percentage points). Student government participation during high school also enhanced these odds, by 19 percentage points for females, and 11 for males. As with the scholastic progress results above, student government had a stronger effect on the college graduation propensities of females, while course-required community service had a stronger effect for males than females. Of interest, such service appears to have a stronger effect than strictly voluntary community service among males.

Additional results discussed in the second essay indicate that on average, African-American males benefited more, and Hispanic females benefited less, from either course-mandated community service, or service undertaken on a strictly voluntary basis, than their non-Hispanic white counterparts in terms of these activities' effects on the likelihood of college graduation. The relationship between high school student government and college-degree attainment was also weaker for male and female Asian students than otherwise similar non-Hispanic whites. It follows that the relationship between high-school civic engagement and subsequent educational attainment in the U.S. seemingly varies across demographic populations.

Table 2: Marginal Effects from High School Civic Engagement on Subsequent College Graduation

Characteristic	All Students	Females	Males
Performed community service for class between 1990-92	0.221	0.180	0.293
Performed strictly voluntary community service between 1990-92	0.193	0.202	0.186
Participated in high school student government	0.163	0.190	0.110

Notes: The results in the first column are based on 9,419 individuals in the NELS who: (1) were in the 1988-2000 NELS panel, (2) reported information on the frequency of community/volunteer work in 1992, (3) and were in school during the 1992 survey. The gender-partitioned samples include 5,286 female and 4,610 male non-Hispanic whites, African-Americans, Hispanics, and Asians. Using the logit regression, these estimates are based on regressing the binary variable equal to one for individuals who had completed a four-year college degree or higher by 2000 (= 0 otherwise) on required community service performed for reasons other than class, interaction terms between race/ethnic binary variables and the civic engagement measures, participation in eighth-grade student government, low eighth-grade academic ranking, immigrant status, household characteristics in 1988 (family income, parents' highest education level, parents' marital status), school characteristics in 1988 (percent of students receiving free lunch and location (urbanicity and geographic region), and binary variables for missing information for family income and the percent of students in the 1988 school receiving free lunch. Sampling weights provided by the NELS are employed here to maintain the national representation of the sample.

Notes

¹ University of Texas – Pan American. All errors in interpretation are our own.

² Verba, S., Schlozman, K.L., and Brady, H (1995) "Voice and equality: Civic Voluntarism in American Politics." Harvard University Press.

³ Dávila, A., and M.T. Mora (2006), Civic engagement and high school academic progress: An analysis using NELS data [Part I]; and Dávila, A., and M.T. Mora (2006), Do gender and ethnicity affect civic engagement and academic progress? [Part II].

⁴ The National Center for Education Statistics (NCES) sponsored the NELS in 1988 to nationally represent eighth graders in public and private U.S. schools, and to track these students in later years. The NCES conducted follow-up surveys in 1990, 1992, 1994, and 2000. Students who dropped out of school after the eighth-grade are included in the follow-up surveys. The sample we use in this study is comprised of the 15,340 individuals in the 1988-92 longitudinal panel who provided information on whether they were performing community service in 1992. The NELS also provides scores on cognitive examinations (Item Response Theory exams) in four subject areas given to the eighth-graders in 1988, and then to students four years later. Therefore, academic performance can be observed (and accounted for) *before* and after students participated in community service, reducing the effects of omitted variables, such as ability, on the estimated relationship between civic engagement and post-eighth-grade academic progress.

⁵ For example, see Hanushek, E.A. (1986), The economics of schooling: Production and efficiency in public schools, *Journal of Economic Literature* 24: 1141-1177.

⁶ These results continue to hold when excluding individuals who had not *expected* to graduate from college in the first place (when in the eighth grade).