



CARDUS

EDUCATION SURVEY

Private Schools for the Public Good

2014 Report



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Report

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CARDUS

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EXECUTIVE SUMMARY

THE CARDUS EDUCATION SURVEY 2014 report explores the impacts of various school sectors on the academic, vocational, social, and civic development of graduates, and finds that in many measures of cultural goods, **private schools are as attentive to the public good as public schools**. Common myths of isolationism and intolerance are challenged by these results from private school graduates.

Data are drawn from a representative sample of 1,500 American high school graduates between the ages of 24 and 39. This 2014 report follows on both the inaugural 2011 Cardus Education Survey of US graduates—now considered the most significant representative benchmark of non-public school academic, cultural, and spiritual outcomes in the United States—and a similar 2012 report on the development of Canadian graduates. All Cardus Education Surveys control for many other factors in graduate development, such as parental education, religion, and income, to isolate a school's particular impact ("the schooling effect").

One possible factor in their surprisingly robust social connectedness is that **private school graduates tend to look back much more favorably upon their high school experiences**. They are much more likely than their public school peers to reflect positively on their high school experience and to consider it crucial in preparing them for their adult lives. Such positive evaluations bode well for graduates' sociability and commitment to others, and suggest more research is needed into the strong climate and community of these schools.

The **private sectors continue to report strong academic outcomes, particularly in Science, Technology, Engineering, and Mathematics (STEM) streams**. And this attention to the hard sciences takes its course in later vocational choices, as well: Catholic high schools in particular excel in preparing students for selective universities and for professional, managerial, and science-related occupations. Meanwhile, Evangelical Protestant schools focus less on STEM courses and fields and instead weigh vocational calling heavily, often choosing human service careers such as social work, health care, and education.

And as in 2011, **Evangelical Protestant schools continue to lead the way in socializing their graduates in religious practices and beliefs**, which for the sake of strong families and civic engagement should not be ignored. But interestingly, non-religious private schools appear to be managing to make space in their student experiences for spiritual formation. Though these schools are usually non-confessional environments, they may suggest a model for a public school sector we hope will be simultaneously pluralistic and respecting of religious difference.



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BACKGROUND *and* CONTEXT

THE GREAT MAJORITY OF U.S. STUDENTS ATTEND neighborhood public schools, but non-traditional public schools and private schools remain a strong alternative. During 2010-11, public school enrollment increased to 49.5 million students in elementary and secondary schools from 46.1 million in 1997-98, with 2.1 million students enrolled in public charter schools. Private schools enrolled more than 5.3 million students. Within the private secondary school population, approximately 49% were enrolled in Catholic schools, 20.1% in evangelical Protestant schools, 10.5% in other religious schools, and 20.4% in private non-religious schools.¹ The number of homeschooled students increased to over 1.7 million.²

Access to educational options within the public and the non-public sectors has expanded appreciably in the last decades. The traditional public school district is becoming more diverse with the growth of charters, virtual models, and inner-district choice programs. Many states have enacted mechanisms for (mostly) low-income families to select from a variety of private schools.

This broadening of educational options has had its share of controversy. Critics worry about the financial consequences for traditional public schools and question the fitness of private schools to prepare young citizens for democratic life. This is therefore a critical time to examine the strengths and weaknesses of the different school sectors, particularly as they affect academic attainment, occupational trajectories, civic engagement, and moral and religious formation.

The 2014 Cardus Education Survey explored some of these pressing questions through a national survey of graduates of public and private schools. The project surveyed more than 1,500 American high school graduates between the ages of 24 and 39 to determine how their schooling experience affects diverse spheres of their adult life. It is intended to spark policy conversations about the entire landscape of American schooling and to support reflection and improvement within the individual sectors.

“How does each school sector influence academic and vocational outcomes and social and religious commitments?”

A Brief History of Schooling in the United States

“THE PEOPLE OF THE UNITED STATES need to know that individuals in our society who do not possess the levels of skill, literacy, and training essential to this new era will be effectively disenfranchised, not simply from the material rewards that accompany competent performance, but also from the chance to participate fully in our national life. A high level of shared education is essential to a free, democratic society and to the fostering of a common culture, especially in a country that prides itself on pluralism and individual freedom.”

—*A Nation at Risk* (1983)³

From the first colonists to land in New England and the American Founding to the ascendance in the 19th century of Horace Mann’s “common schools,” educating the public has been a central concern in American life. That included inculcating basic skills such as reading, writing, and mathematics; gaining subject knowledge in the core disciplines; developing skills needed to analyze, synthesize, and evaluate information and experiences; and preparing students to participate in democratic institutions as informed voters, activists, and leaders who understand and appreciate the key principles of democracy.

The colonial period saw the growth of missionary schools established by Catholic priests from France and Spain and Protestant schools that reflected the confessional outlook of their founders.⁴ In the early years of the Republic, America’s leaders believed the nation’s survival depended

upon the formation of knowledgeable citizens. With a curriculum modeled on the aristocratic liberal arts, the fledgling United States encouraged townships to provide “common schools” that reflected these goals. Sometimes these early schools reflected the diverse commitments of the population; larger cities often supported several varieties of Protestant and Catholic schools.

Throughout the 19th century, American schooling moved away from plural funding toward greater uniformity. This was largely in response to the influx of Catholic immigrants and a fear of divided loyalties. The resulting common schools remained vaguely Protestant in tone, with readings from the Protestant Bible and similar prayers built into the curriculum, well into the mid-20th century. Catholic leaders in particular objected to this arrangement, and thus the 19th century witnessed the growth of a robust, parallel Catholic school system across the country.⁵

As the Supreme Court’s decisions stripped away the residual Protestant norms from the public schools in the 1960s⁶, conservative Protestant churches established small religious schools that offered explicit religious teaching alongside secular subjects.⁷ The Catholic school system peaked during this time, with 5.25 million students in attendance in 1960.⁸ The vibrancy of the Catholic sector has subsequently faded, largely due to the decline of religious teaching orders, Catholic families’ movement out of urban centers and into the suburbs, and the growth of charter schools as a viable option in many urban areas.

The Islamic homeschooling movement began in the 1930s, and Islamic day schools now boast 240 schools, 85% of which were founded since the mid-1990s.⁹ Jewish schools

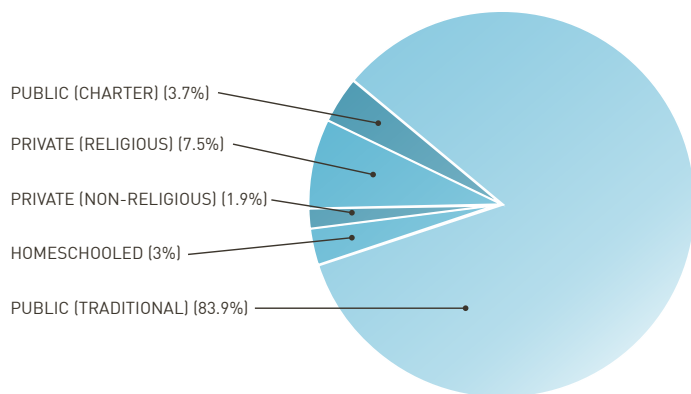


FIGURE A: Percentage of students in U.S. schools by school type, 2010-11 (National Center for Education Statistics, 2013).

have also grown dramatically over the past 40 years, with nearly 1,000 day schools currently.¹⁰

The number of homeschooled students is also on the rise, with a population roughly equal to the number of children enrolled in public charter schools.¹¹ While motivations for homeschooling differ by family, the emergence of online curricula and the growing acceptance of homeschooled students in college and university admissions have made this option more attractive for some families.

This already complex mosaic of school types is becoming more so in the wake of newer choice programs across the country.

EMERGENCE OF STATE-FUNDED PARENTAL CHOICE PROGRAMS

THERE IS NO DOUBT THAT ALL American schools carry a weighty burden. Schools—public, private, or home—are expected to prepare students for success in an increasingly competitive global economy. Schools are scrutinized on the basis of their academic performance, racial and social integration, social and emotional atmospheres, moral formation—and at the same time must operate with limited financial resources.

Disparities in public school funding and quality have concerned policy-makers for more than four decades at least. Student outcomes in tests such as the Programme for International Student Assessment (PISA) and the U.S.-based National Assessment of Educational Progress (NAEP) provide regular reminders that closing the achievement gap does not lend itself to easy or inexpensive solutions.

Among the slate of policy choices that have been debated over the past quarter century or so, state-funded parental choice programs have been the most contentious. The first voucher program, in which students in failing schools were given a certificate of funding to attend a private school of their choice, was enacted in 1990 in Milwaukee, Wisconsin.

Cleveland, Ohio, followed with its own voucher program in 1995. In 1997 Arizona created the first school tax credit program, which allowed individuals to donate to School Tuition Organizations that in turn provided scholarships for students to attend private schools. Both vouchers and tax credits are constitutional from a federal perspective, but state constitutions vary in the flexibility they allow.¹²

Today, 39 private school choice programs operate in 18 states and the District of Columbia, serving nearly 309,000 students. These programs, encompassing a variety of vouchers and tax credits, exist in Alabama, Arizona, Colorado, Florida, Georgia, Indiana, Iowa, Louisiana, Mississippi, New Hampshire, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Virginia, Washington, DC, and Wisconsin.¹³ While program details and rules vary by state, in general parents must meet certain income criteria in order to apply for and participate in voucher and tax-credit scholarship programs.

Public school choice in the form of charter schools also expanded appreciably. Charters are public schools that are exempted from many typical school district mandates, including strictures on curriculum and hours of operation. All but eight states allow for charter schools.¹⁴ During 2012-13, more than 6,200 charter schools were in operation and enrolled more than 2 million students.¹⁵ Although charters are public and therefore open to all comers, enrollment caps often mean student admission is decided by lottery.

Controversies surrounding school choice programs go to the heart of old disagreements about the purposes of schooling in the United States and introduce some new ones.¹⁶ As the public funding mechanisms expand, it becomes even more important to scrutinize the consequences of different types of schools. How does each school sector influence academic and vocational outcomes and social and religious commitments? How do the sectors fare in fostering social mobility and in closing the achievement gap? Is there a gap in civic participation? In what ways or for what causes? Where do we see strengths and where room for improvement? We take up these questions in the analysis that follows.



FINDINGS *and* PRELIMINARY ANALYSIS

Research Design

THE 2011 CARDUS EDUCATION SURVEY examined the alignment between the motivations and outcomes of Christian education. Findings demonstrated significant differences between the two largest religious school sectors, Catholic and evangelical Protestant schools. Evangelical Protestant (EP) schools excelled in forming spiritual life and faith and building commitment to family and church life, but their academic outcomes fell short of the other sectors. Catholic schools produced much stronger academic outcomes, but efforts to instill faith and spirituality did not manifest in young adulthood.

The 2014 Cardus Education Survey both repeated and extended the sphere of inquiry. The present study included questions on high school experiences, occupational directions, and views and practices regarding science and technology.

What we know about private schools and academic and civic outcomes is focused on the high school years. Scholars have argued over the academic strengths of Catholic schools for a few decades, and recent studies show a modest Catholic school advantage in high school (Morgan; Jeynes). Private and especially Catholic school students have been positively associated with volunteering and community service, and political knowledge (Campbell; Wolf; Sikkink). Non-Catholic religious school students have lower levels of support for democratic principles (Campbell), though there is conflicting evidence (Wolf 2007). Less is known about the trajectories of private schools students in the young adult years. Some longitudinal results show a religious school effect on religiosity (Uecker). As far as academic outcomes, Catholic schools show positive effects on educational attainment, especially for urban minorities (Neal 1997; Sander 2001), though these effects are modest and may be due to selection (Sander and Krautmann 2007).

The longer-term effect of private schools on civic outcomes is less clear. Some studies have found positive effects of Protestant schools on persistence in volunteering into the young adult years and others find evidence that private school graduates, especially from nonreligious schools, are more civically engaged (Greene et al. 1999; Dill). Overall, studies show neutral to positive effects of private schools on civic outcomes (Wolf 2007; Dee).

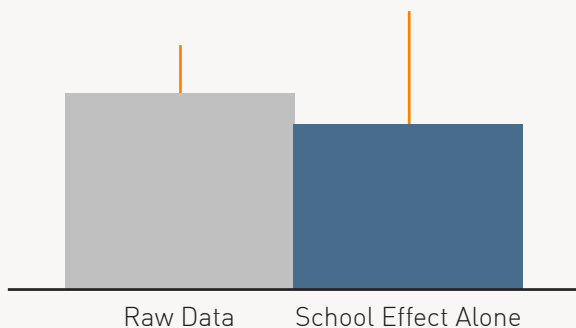
In this report, we take a broad view of school sector differences, comparing state and non-state schools generally as well as considering the specific sectors of nonreligious private, Catholic, and evangelical Protestant. We hope to understand the ways in which each sector influences its graduates into young adulthood and contributes, or detracts from, the common good. Our goal is not to dismiss any particular sector but to uncover differences that may be instructive for improving all schools.

This study is built on a nationally representative sample of over 1,500 high school graduates, ages 24 to 39. The young adults in this sample graduated from high school between 1993 and 2008. While the survey design heavily oversampled graduates of independent schools, only a very small number of respondents attended Jewish and Islamic high schools, which comprise increasingly important and growing sectors. Students from these sectors were not included in the analyses due to the small sample sizes available. Future research is necessary that provide sufficient oversamples of these religious schools.

Though the charter school movement is growing rapidly, it was in infancy at the time the survey respondents were in high school. We therefore lack a sufficient sample of charter school graduates to analyze them separately. This sector, too, needs to be oversampled if we are to understand its impact. The charter sector includes a great variety of schools, in part since charter schools have greater freedom to innovate

outside of the public school structure and governance. There is some reason to think that on average charter school graduates would have outcomes similar to the nonreligious private sector. Like nonreligious schools, many charter schools have been oriented to special missions or themes, including STEM or Arts Academies. This explicit content focus may produce graduates who are similarly oriented to science or arts and culture as the nonreligious private school graduates. Many charter schools focus on student moral formation, especially regarding character traits that contribute to educational and career success (Seider 2012). We are reminded, however, that there is a great deal of variation in this young sector. Some have argued that charter schools come to resemble traditional public schools quite closely as they deal with questions of legitimacy. Perhaps, then, the charter school graduates would fairly closely parallel the findings for traditional public school graduates on many outcomes. Future research is necessary to sort out these alternative theories.

Jewish school graduates may also parallel the nonreligious private sector. Given the place of education in the Jewish culture, we would expect that Jewish school graduates match the academic achievements of nonreligious and Catholic school graduates. We expect their civil and political outcomes to be similar to nonreligious private school graduates, especially due to the emphasis on discussion and debate of social and political issues in the classroom (Campbell). Given the strong commitment of Jewish communities to the centrality of the family and the importance of religious traditions, we would expect that Jewish high schools produce religious formation outcomes similar to evangelical Protestant schools. Organized around the Jewish tradition, dedicated to Jewish religious and scholarly texts and prayer (Fejgin 1995), Jewish schools may be similar to Evangelical Protestant schools in socializing students into the major religious rituals and practices of the faith.



For all the graphs in this report, grey bars show raw data, blue bars show the data controlled for a number of variables in order to isolate the “school effect.” See page 15 for detail. The orange “confidence interval” lines are explained in Appendix D.

Download the full data pack free at www.carduseducationsurvey.com

Since most Islamic schools are relatively young and less studied, the academic outcomes of their students are more difficult to surmise and likely to be in flux. There are perceptions within the Muslim community that Islamic schools may not be as academically rigorous as public schools (Keyworth 2012). On the other hand, the majority of Islamic schools are immigrant, community-based schools. That may provide the academic advantages of strong social bonds between students and their parents (i.e., intergenerational network closure), which, according to James Coleman, explained positive academic outcomes for Catholic high schools. In addition, first generation immigrants have been found to have high academic expectations and aspirations. In terms of civic outcomes, tension between mainstream American culture and Islamic schools may parallel evangelical Protestant schools. But the more likely alternative is that Islamic schools mirror the Catholic schools in the early 20th century (Hurst 2000), emphasizing religious formation along with the responsibilities of democratic citizenship. Like the evangelical Protestant schools, the Islamic schools emphasis on forming religious identities and practice (Guhin; Keyworth 2012) may produce distinctive religious outcomes.

The remaining high school sector that deserves considerable attention is home education, which is only somewhat smaller than the nonreligious private school sector. The home school movement itself has several distinctive tracks, and we found a commensurate variety of outcomes in levels of commitment to faith and family and in educational attainment. Some of our homeschooling findings raise questions about the civic skills and engagement of homeschooling graduates. Given the many differences between home and school education, and the complexities of isolating the school effect in this scenario, we will provide an in-depth analysis of our homeschooling findings in a separate report.

NOTES ON THE STATISTICAL ANALYSIS

We provide several graphs that show the school sector results for two separate regression analyses. The bars represent the coefficients from the regression model for each private school sector. The scale for each chart varies depending on the values of the outcome. The grey bars in our graphs show the simple comparison of each school sector and the public school sector. The differences are displayed as deviations from the public school mean for that particular variable. The grey bars show differences of, for example, the average Catholic school graduate from the average public school graduate.

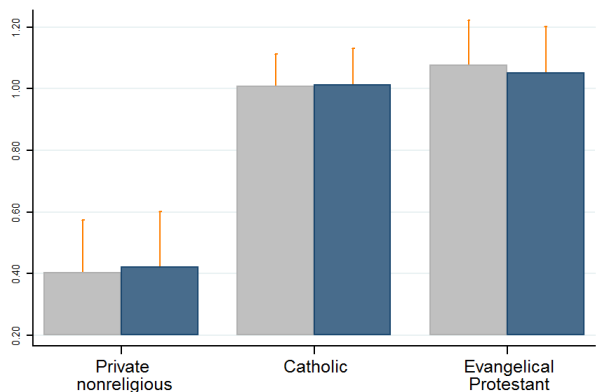
The blue bars show the average school sector differences after accounting for many of the known differences between families who send their children to public schools rather than independent schools. Variables include parent’s educational attainment, involvement in academics, and religious service attendance. We also controlled for the respondent’s race, gender, age, and characteristics of their residential location. By adjusting the mean school sector differences for family background and demographic characteristics, we focus the comparisons on what is due to school experiences and organization. In each analysis, public school graduates are the comparison group, providing a baseline outcome for which sector comparisons are made. Limitations of this methodology and additional information on our statistical analyses can be found in Appendix D.

In each section, we offer some expectations and preliminary conclusions or interpretations of our findings, followed by discussion of similarities across sectors. We also provide assessments of what makes each private-school sector distinctive. We hope our findings here encourage ongoing debate about the relationship between school organization and practices and longer-term student outcomes related to educational, occupational, and civic life.

The High School Context

OUR SURVEY ASKED RESPONDENTS to evaluate their high school experience. They rated the general atmosphere of their high schools as well as their ensuing preparation for college, personal relationships, and religious or spiritual life. We assume here that positive school experience supports greater engagement in academic attainment and better preparation for civic engagement. Overall, private

Graph 1: My high school prepared me well for having a vibrant religious or spiritual life



Cardus Education Survey Data Pack #466

school graduates viewed their high school experience more positively than public school graduates.

NONRELIGIOUS PRIVATE SCHOOL. Graduates from nonreligious private schools gave higher marks to their high school on nearly every measure compared to their peers who graduated from public school. Their general evaluation of their private school experience was on average significantly higher than public school graduates. About 62 percent of nonreligious private school graduates rated their school experience very high, in comparison to 46 percent of public school graduates. They also felt more favorably about the social atmosphere, noting in many cases that their school was close-knit and that students got along well with each other. They were very likely to say that their teachers cared about them. When it came to relationships with other students, teachers, and administrators, nonreligious private school graduates were

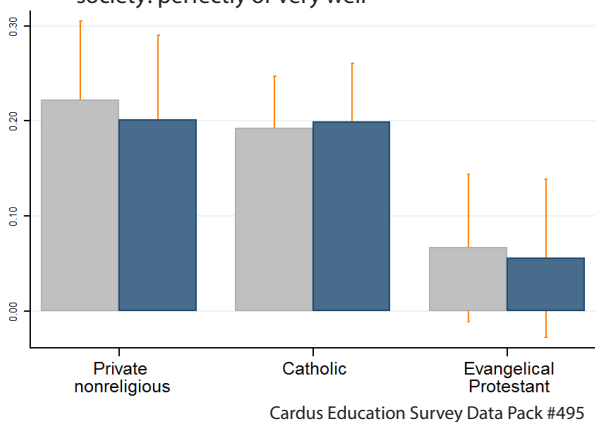
more positive about the social atmosphere of high school than public school graduates.

It comes as no surprise, then, that nonreligious private school grads reported their high school prepared them well for adult relationships. What we found somewhat surprising, however, is the support that nonreligious private schoolers found in school for their religious and spiritual lives. This finding may reflect the way in which these schools manage plural beliefs on campus so as to increase a comfort with holding distinctive views.

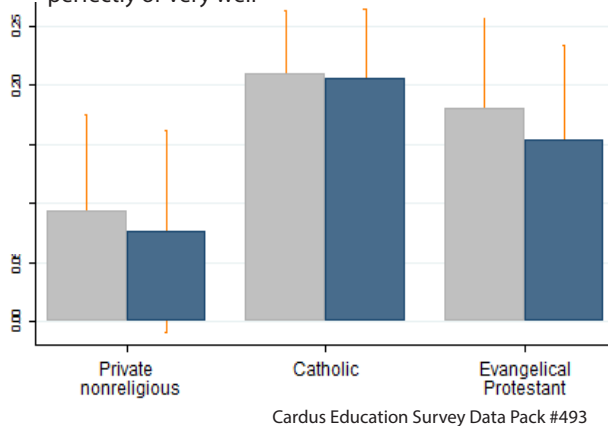
The academic emphasis of nonreligious private schools came through clearly. Nonreligious private school graduates were consistently positive about the academics at their high school. They reported that they received a quality education and that their high school experience prepared them well for college. About 68 percent of private nonreligious

 See graphs legend on page 14.

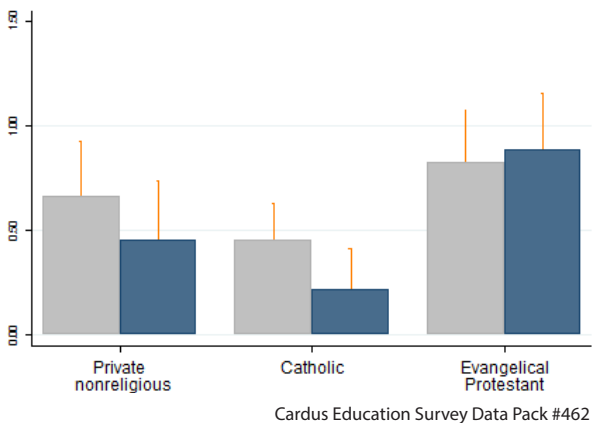
Graph 2: Prepared to interact with culture and society: perfectly or very well



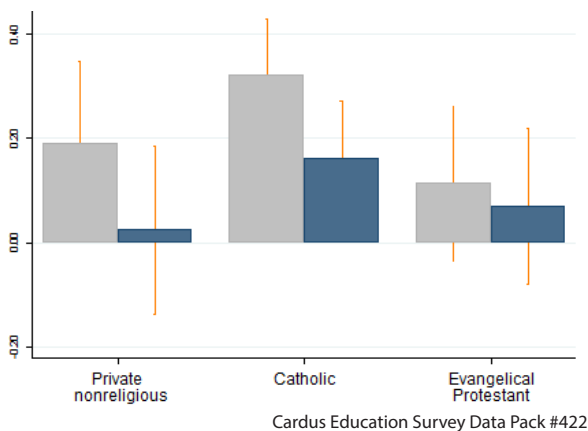
Graph 3: Prepared for relationships: perfectly or very well



Graph 4: My high school sheltered me too much from the rest of the world



Graph 5: Total number of science classes taken



school graduates reported that their high school experience prepared them very or perfectly well for college or university, while only 45 percent of public school graduates did the same. Private nonreligious school graduates also felt that they were well-prepared for their job or career.

Did graduates sense that their school environment was isolating and perhaps insular? The strengths of a tight-knit school community might come at the expense of interaction with the diversity of cultures in American society. Following Robert Putnam’s conceptual framework, we might have found that a school community with strong bonding social capital reduces social bridging capital—or, engagement with those outside the school circle. The responses are interesting: While nonreligious private school graduates were more likely than public schoolers to say they felt their high school provided an overly sheltered environment, they were also more likely to report that they were prepared to interact well with mainstream society and culture.

CATHOLIC SCHOOL. Catholic school graduates responded almost identically to their nonreligious private-school graduate peers, but with one significant difference: Catholic high school graduates recounted more positive experiences with athletic opportunities. Catholic school graduates also indicated more variability in their assessment of teachers’ caring for them. They reported that the rules were too strict and, similar to private nonreligious graduates, felt the school was too sheltered. In general, Catholic school graduates’ assessment of their relationships and the quality of their interaction with culture and society was nearly identical to their nonreligious private school peers.

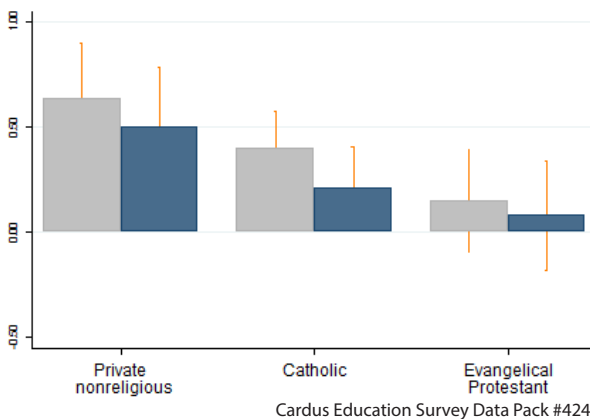
EVANGELICAL PROTESTANT SCHOOL. Evangelical Protestant high school graduates present a greater mix of results. They are clearly less likely than public school

graduates to rate athletic opportunities highly. They seem particularly enthusiastic about the caring received from teachers. But we found greater ambivalence and variety among EP graduates about the social atmosphere at their schools. About 43 percent of evangelical Protestant school graduates rated the social atmosphere very highly, which is comparable to the 44 percent of nonreligious private school graduates that did the same. But 26 percent of evangelical Protestant school graduates rated the social atmosphere very low, which is identical to the percentage for public school graduates in that category. On relationships with teachers and administrators, therefore, we couldn’t detect statistically significant differences from public school graduates. These graduates did see their school as more close-knit than did public school graduates. They were more likely than public school graduates to regard school rules as too strict and to see the school as isolating them from the “real” world. But like other private school graduates, our Evangelical Protestant sample offered high marks on the quality of education they received, as well as their preparation for religious life, college and career.

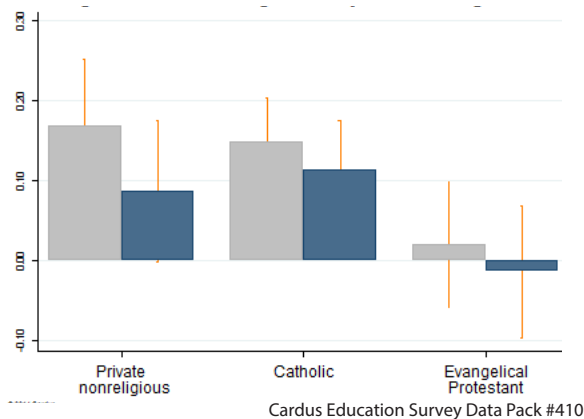
Unlike the other private school sectors, the EP graduates were not significantly different from public school graduates in reporting that their high school prepared them well for interaction with mainstream society and culture.

The quality of the social relationships during high school may have a longer-term impact on civic involvement through cultivating a particular set of social and civic skills. In the analyses that follow, however, we look for correspondence between these students’ evaluations of their high schools and their behavior in early adulthood. It may be that the social enclave built social and civic skills for effective engagement in public life as well as motivation to “get out of the bubble” through active civic involvement.

Graph 6: My high school classes increased my interest in math



Graph 7: Took trigonometry class in high school



Academic Outcomes

THERE IS A GENERAL ASSUMPTION that Catholic and independent high schools offer strong academic programs. Evangelical Protestant schools, by contrast, are often criticized for setting low academic expectations in their pursuit of religious formation. In this section, we consider these claims in light of math and science education and educational attainment.

It was difficult for us to assess the rigor of these graduates' STEM courses; we were limited to respondent reports on which advanced courses they completed in high school and their personal assessments of their preparation for math and science. When it comes to course-taking, other studies provide little evidence to show that religious schools are much different from public schools (NCES report). Each sector appears to follow similar models for course offerings and requirements.

In general, we found that Catholic and private non-religious school graduates do outpace other sectors in generating interest in math and science, as well as in general educational attainment. Our survey's findings raise some concerns about STEM education in evangelical schools, where students are less likely to take higher-level math and science courses and indicate less interest in science and math after graduation. More on this below.

SIMILARITIES. We found few differences among the private- and public-school sectors on the lower end of standard math sequences. High school graduates across all sectors were equally likely to report taking an algebra course (Cardus Education Survey 2014 Data Pack, 408. See note on page 14). Although our survey did not delve into course

content, we found the average number of science courses graduates reported taking was similar across all sectors. (422). It was, rather, the level of course that differentiated the sectors.

NONRELIGIOUS PRIVATE SCHOOL. Overall, the survey found consistent support for the expectation that nonreligious independent schools provide more significant supports for STEM than other sectors. Students from these schools consistently report taking advanced courses in math and science. And, even more impressive, the courses seem to be particularly effective in bolstering student interest in STEM subjects. Graduates report that math and science study in high school prepared them well for postsecondary science and math. We also found some evidence that nonreligious private school graduates pay more attention to science news after high school.

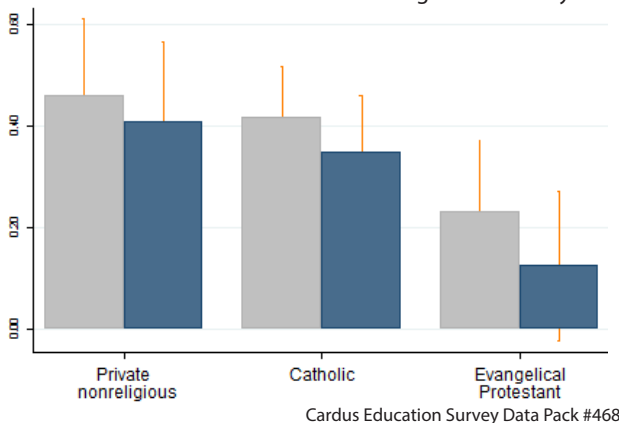
In particular, we found that nonreligious private graduates took more advanced math classes than public school graduates. They took pre-calculus and calculus in high school (411, 412). When asked how their courses in math and science influenced their interest in science, these graduates were the most likely to credit their classes with sparking their interest (423).

Graduates of private non-religious schools were also more likely to rate their STEM preparation more positively than public school graduates.

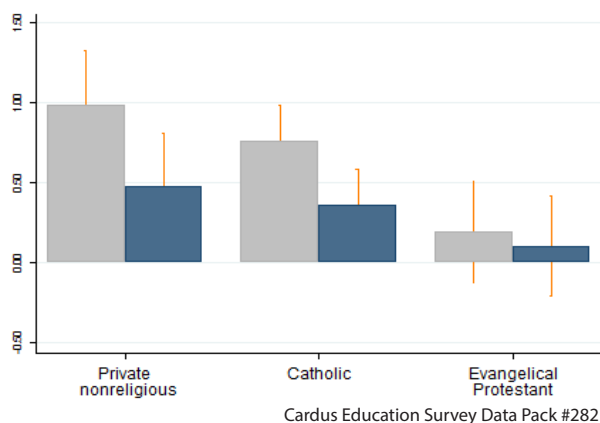
CATHOLIC SCHOOL. Catholic school graduates appear most similar to private nonreligious school graduates in STEM preparation and interest. They took more advanced classes in science and math than their public school peers. They were not, however, as consistent as nonreligious private

See graphs legend on page 14.

Graph 8: My high school prepared me well for success in math or science courses in college or university



Graph 9: Years of Education



schoolers in reporting that their high school experiences increased their interest in science or math.

Catholic school students were more likely to report taking geometry and trigonometry (409, 410) as well as pre-calculus and calculus courses in high school (411, 412). They also reported taking advanced science courses such as chemistry and physics (415, 416). These findings may reflect the importance placed on a core academic curriculum for all students in Catholic schools, which would be reflected in the averages we report here.

EVANGELICAL PROTESTANT SCHOOL. Evangelical Protestant school graduates track with their public school peers in the number and level of higher math and science courses they take, although as mentioned they fall below their private school peers.

When asked whether taking math courses increased their interest in the subject, EP graduates were just as likely as public school students to respond positively (424). These graduates were also more likely to report having taken biology courses (414), though they were not distinctive in taking upper level science classes, only matching public school graduates on that score. We found no gender difference between Evangelical Protestant men and women; both were as likely to take advanced math and science courses and to increase their interest in these subjects through their schooling experience.

We wondered about the causes for the seemingly lower emphasis upon math and science in Evangelical Protestant schools. Do religious disagreements about the theory of evolution and human origins play a role? Or are the schools not sufficiently funded in this area? The data did not allow

us to conclude either way. We did find that Evangelical Protestant graduates were no different from their public school peers in their positive evaluation of their high school math and science preparation (468; 496). This is notable, given the perceived tension between science and religion among Evangelical Christians, especially on the questions of creationism and evolution.

Interestingly, Evangelical Protestant high school graduates' interest in science is lower on average than public school graduates, but this difference does not hold up after controlling for family background. In our results for science outcomes, they appear similar to public school graduates.

ACADEMIC ATTAINMENT

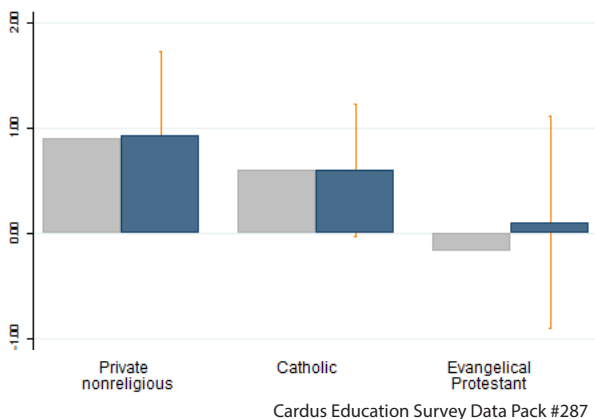
THE 2014 CES SURVEY ASKED respondents to report their highest educational degree, which we evaluated both as nominal categories and as total years of education. We also asked where each respondent received his or her bachelor's degree. We used the National Center for Education Statistics IPEDS data on colleges and universities, which includes college placement in the Carnegie classification scheme, to assess the kinds of colleges and universities our respondents attended.

In general, we find that school sector is an important determinant of the type of college or university that students attend. Nonreligious private and Catholic sectors encourage and facilitate elite college and university placement, while Evangelical Protestant schools steer their students away from those institutions. The graduates from all sectors look like this: 77 percent of nonreligious private school graduates achieve a bachelor's degree or more, and the comparable figures for Catholic school graduates is 75 percent, for evangelical Protestant school graduates, 64 percent, and for public school graduates, 57 percent.

NONRELIGIOUS PRIVATE SCHOOL. Private non-religious school graduates attain more years of education than public school graduates (282) even after accounting for family background differences. There is some evidence that this nonreligious private school effect is enhanced for graduates from families with higher parental education. Graduates from these schools were also most likely to have earned a doctoral degree (296, 297). They were also more likely to attend selective universities (313) and private sector colleges and universities (331).

CATHOLIC SCHOOL. As with graduates from nonreligious private schools, Catholic high-school graduates complete more years of schooling than their public school peers. We

Graph 10: Educational degree: Professional or Doctorate compared to Bachelors



found no evidence that this “Catholic school effect” was limited to graduates whose parents had completed higher education but was common to all Catholic school graduates. Catholic school graduates were less likely to simply finish their schooling with a high school diploma or an associate’s degree (285), and more likely to attain a bachelor’s degree (283, 284). We did not find a strong relationship between Catholic schooling and advanced graduate degrees. In fact, after including controls, Catholic graduates were similar to public school graduates in achieving degrees beyond the BA (286, 287).

Compared with their public school peers, Catholic school graduates were more likely to pursue degrees at more selective universities (312), at universities that offered doctorates (321), and at research-intensive universities (as measured by the Carnegie classification system) (328).

EVANGELICAL PROTESTANT SCHOOL. We did not find sharp differences between Evangelical Protestant graduates and their public school counterparts in overall educational attainment. When we accounted for family background, Evangelical Protestant and public school graduates reported about the same total years of education, and the same likelihood of attaining degrees beyond the bachelor’s. This differed from our finding in the 2011 CES survey, which had found the Evangelical Protestants weaker here. This may suggest an upward trajectory for educational attainment of Evangelical students in later cohorts.

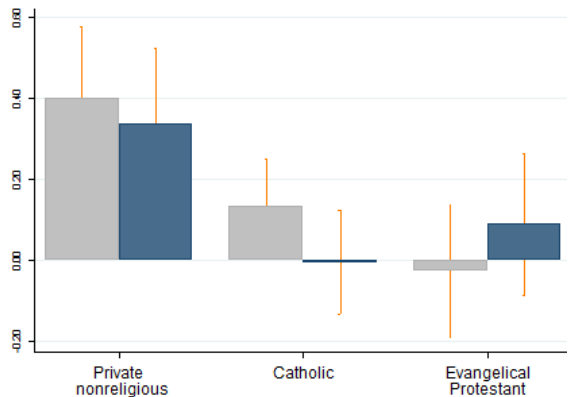
Evangelical Protestant school graduates were more likely to attend small colleges (319) and specifically Evangelical Protestant colleges and universities (318). We also found that these graduates were more likely to attend less-selective colleges and universities—including colleges with open-admissions policies—compared to all other respondents. (320, 324).

Because of the gender distinctions that sometimes exist in Evangelical Protestant culture, we wondered if Evangelical Protestant women were discouraged from achieving higher levels of education. The only difference we found favored females: evangelical Protestant school men compared to women were more likely to top out at the high school diploma rather than going on to a bachelor’s degree. This may reflect a stronger orientation to construction, craft, and manufacturing sectors in Evangelical Protestant schools, which may be a draw for males. Our survey found no other differences in educational attainment between EP men and women.

Similarly, parental education did not make a significant difference in the overall educational attainment of their children. The one exception: Evangelical Protestant graduates with less educated parents are more likely to complete their education with a high school diploma. When considering years of education, however, we found no

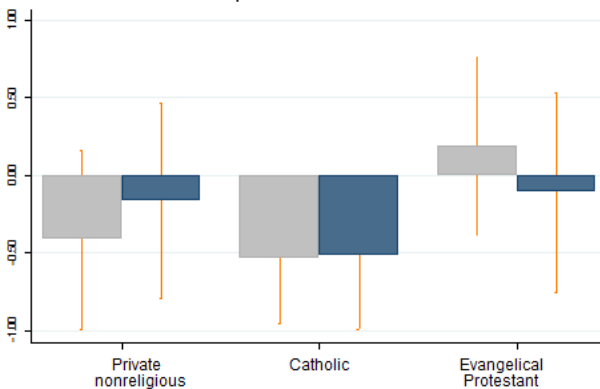
See graphs legend on page 14.

Graph 11: Desire job with chance to be creative



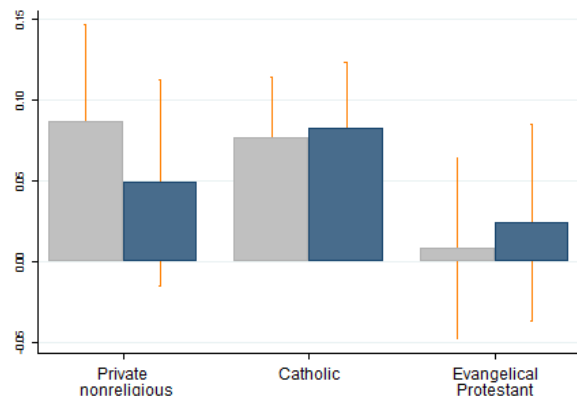
Cardus Education Survey Data Pack #16

Graph 12: Primary major in university: Humanities compared to social science



Cardus Education Survey Data Pack #350

Graph 13: Professional or science occupation



Cardus Education Survey Data Pack #383

differences related to the education of Evangelical students' parents. This finding suggests that Evangelical Protestant schools do as well fostering educational attainment among families with lower socioeconomic status as they do with families with a higher socioeconomic status. A common school effect is evident here among evangelical Protestant school graduates.

JOB AND CAREER

THE 2014 CES SURVEY ALSO explored closely related questions of graduates' career aspirations, college majors, and current occupations. We also consider the kind of job favored by the average graduate in each sector. We asked our respondents, for example, how important it is to them to have a high paying job; a job that allows them to use their creativity; a job that provides opportunities to be helpful to others; and so on.

It is clear that high schools not only influence whether and where students attend college, but what they study and which profession they choose. When asked about majors, a few differences emerge—particularly among Catholic and Evangelical Protestant school graduates. The college majors of private non-religious and public school graduates are marked by wide variability.

To preview our findings, Catholic school graduates are especially likely to end up in STEM-related fields and to hold professional or managerial positions. Evangelical Protestant graduates, by contrast, are less likely to occupy high-paying or STEM-related jobs.

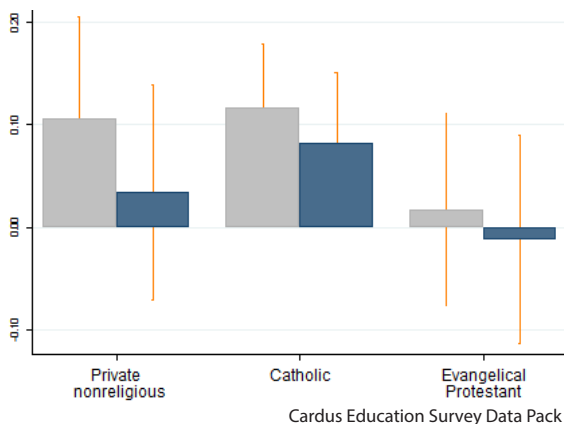
SIMILARITIES. Graduates across all sectors reported similar interest in finding jobs that provided the opportunity to directly help others (15), to contribute to society (18), to establish roots in a community rather than having to move regularly (19), and to make friends (17). We also found that graduates in all private school sectors were more likely than public school graduates to report that they were well prepared for the university experience (464, 492), the work force and their occupation (463, 497).

NONRELIGIOUS PRIVATE SCHOOL. These graduates are much more likely to seek jobs allowing them to be creative (16). This may be related to our findings, discussed below, that graduates of non-religious private schools are more likely to donate to and volunteer with arts and culture organizations. An emphasis on creativity may be more integrated into the organization of the school and have a stronger place in the socialization of students within these schools.

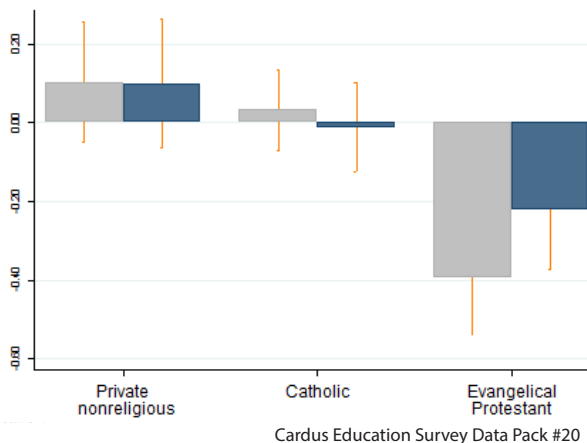
CATHOLIC SCHOOL. Catholic school graduates appear to be preparing themselves for high-end professional and technical jobs. They are less likely to pursue majors related to education (348), humanities (350), and services. They are more likely to report social science majors (355) and, distinctive from other sectors, they are just as likely to pursue a major in a STEM field as they are in business, social science, humanities, and health (352-361). Catholic school graduates were more likely work in a professional or science-related occupation (383). They were also more likely to hold a professional or managerial position (382).

EVANGELICAL PROTESTANT SCHOOL. In contrast with their Catholic and nonreligious school peers, graduates of Evangelical Protestant schools stand out by placing much less emphasis on seeking work that pays well. (20). In our survey, these graduates were much less likely to agree that pay is an important consideration, suggesting they are

Graph 14: Management or professional occupation



Graph 15: Desire job that pays well



more willing to make personal sacrifices and to pursue work that may not be valued as highly in our society—perhaps jobs related to religious ministry and serving others in areas such as social work, health care and education. They also were much more likely than the other sectors to seek a job that fulfills their religious calling (21) and much more likely to believe that God called them to their line of work (22). The Evangelical Protestant outlook on occupational choice and job fulfillment may shed light on these graduates' educational choices and attainment. They may not be as interested in professional, science, and management positions because they may view such work to be less consistent with a religious calling.

When compared with just about every other available major—business, services, humanities, social science, health, and education—Evangelical Protestant school graduates were not likely to pursue a major in STEM (352-361). This is consistent with earlier findings on the science and math courses taken by Evangelical Protestant school graduates, which may in turn influence their college major and choice of profession.

Civic and Political Life

THE ABILITY TO NEGOTIATE within the public square and contribute to the common good remains a primary rationale for American public education. A recurring question is whether American schools are fulfilling their role in civic education, and whether private schools in particular help or hinder democratic preparation and integration. We examined these concerns via questions on the civic attitudes and civic behaviors of graduates.

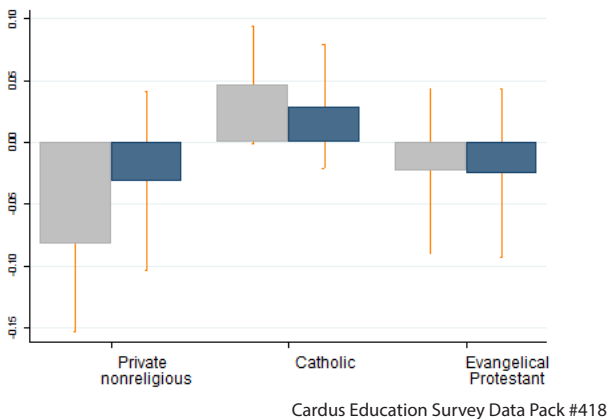
Overall, our findings reveal neither a public nor a private school advantage in civic education. Our evidence shows that private and public school sectors provide similar opportunities in learning foreign languages and at least encountering a civics course. There were some surprises; Catholic school graduates do not appear as the model citizens that we expected based on previous research (Campbell). But they are no less prepared, committed or involved than their public school peers. And while we found lower levels of trust among Evangelical Protestants, this does not translate into neglect of civic life.

SIMILARITIES. When we analyzed what courses our sample of graduates reported taking, we found that students across our sectors were equally likely to say they took at least one foreign language course and one civics course (418, 419). Private schools tend to have a smaller student body, which often restricts course offerings. It is notable, then, that private school sectors are offering and often requiring their students to take language and civics classes with a frequency similar to public schools.

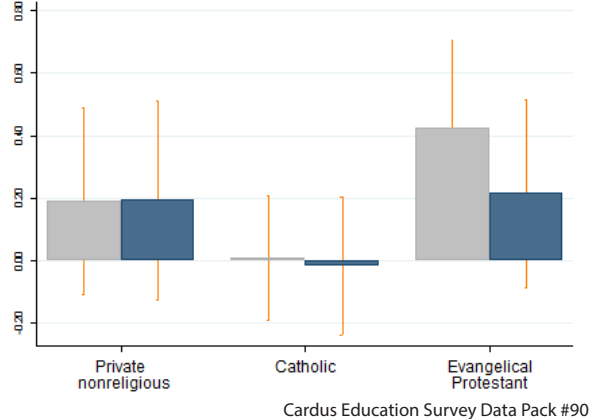
Did students become more interested in civics *as a result of* their high school experiences? Our findings do not reveal clear sector differences on that score, either. After accounting for family background, schools appear to be fostering a very similar level of interest in civics (425). The raw differences in civic interest reveal large positive differences that favor private over public schools, although these are not statistically significant once controls are introduced. The question is whether the level of interest is acceptable within any sector.

See graphs legend on page 14.

Graph 16: Took foreign language class in high school



Graph 17: I have an obligation to be involved in politics



CIVIC COMMITMENTS AND INVOLVEMENT

BESIDES OPPORTUNITIES IN civics courses, good citizenship depends on support for central democratic principles, such as free speech. We would also like to see young adults with high levels of social trust and efficacy, which encourages participation in political life and perhaps also increases willingness to contribute to the common good.

Our survey asked respondents several questions about the extent they trusted diverse types of people. The survey also asked about trust in institutions. Democratic education theorists are concerned that citizens are not fatalistic but have a sense that they can make an impact through involvement in politics and their community. We consider below the question of whether respondents felt they could impact their communities by getting involved. We looked, too, at how interested our respondents are in the political process, and whether or not they felt a sense of obligation to participate in civic life. We then consider the extent that young adults are actually involved in volunteering, community service, and politics, as well as the types of organizations they join. Finally, we provide information on giving patterns, including whether our respondents donated financially to religious congregations, other religious organizations, political organizations or causes, or other nonreligious organizations.

There are some specific concerns we investigated. Research suggests that, given its emphasis on volunteering and service, Catholic schooling might be associated with high levels of civic involvement. We wondered where Evangelical Protestant high school graduates stood on willingness to get involved beyond local congregations, and whether they fulfilled a common stereotype on right-wing political activism. We did expect that evangelical Protestant schools would be lower on some political tolerance measures (Campbell). Did these hold in our findings? We explored both sensibilities and behavior in our survey.

SIMILARITIES. Our data suggest that public and private school students have strikingly similar attitudes and experiences in civic and political matters.

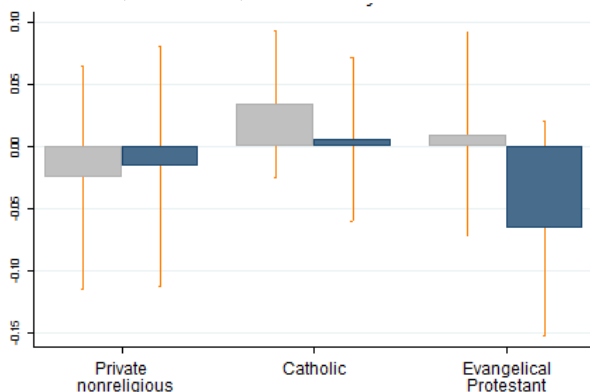
With few exceptions, we find relatively consistent support for civic engagement across the school sectors. This is evident in levels of political interest, feelings of obligation to participate in civic affairs, levels of civic participation, and trust in organizations.

When analyzing questions on support for democratic principles, our results do not show differences across sectors after controls for family background. All of our respondents support free speech (24). All school sectors reported an obligation to work toward eliminating injustice in society (162). Their sense of obligation to be involved in politics was nearly identical (90).

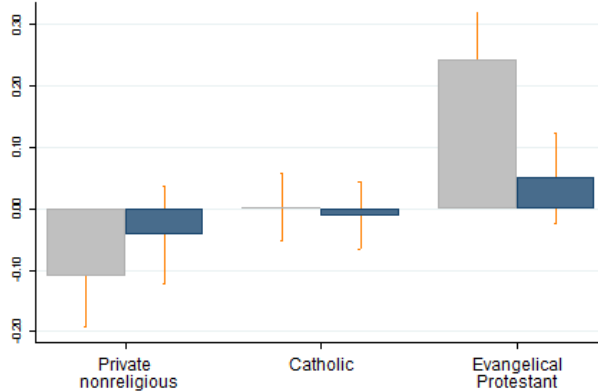
There are important similarities regarding political interest as well. The data reveal that graduates across sectors are similarly interested in politics as adults (230). When asked how often they discussed politics with others, our respondents did not differ by sector. We did not find clear school sector differences in the extent of political discussion with family members (234), with friends (233), and with church members (232).

Volunteering in congregations is not statistically different across school sectors. We found some evidence that Evangelical Protestant respondents spend a great deal

Graph 18: In the past 12 months I've given money to a charity



Graph 19: In the past 12 months I have donated money or goods to a church or religious congregation



of time and effort volunteering in congregations, but these effects are not statistically significant after accounting for differences in family background. Catholic school graduates are somewhat less likely to volunteer in their congregations, though this is not quite statistically significant. (134-136).

Our results show fairly consistent willingness among respondents across the private school sectors to volunteer (158). Respondents across all sectors were equally willing to give to charities, whether financially or with their time (169). The likelihood of giving to a political cause was similar across all sectors (210). Giving to religious congregations was also fairly similar across school sectors after taking family background into account. (211).

NONRELIGIOUS PRIVATE SCHOOL. We found widespread and active civic participation from nonreligious private school graduates, especially in the arts and cultural sector. These graduates were more likely to report taking leadership roles in community organizations. About 65 percent of nonreligious private school graduates report leadership roles in non-congregational organizations, while the other sectors hover around 50 percent on this measure.

Private non-religious graduates were more likely to volunteer for an arts or cultural organization, and for an umbrella organization (large non-profits serving a variety of needs and constituents, such as United Way 187) than the other sectors. While we found fairly consistent levels of participation in school and community groups across the private-school sectors, our private nonreligious cohort is more involved in non-congregational organizations (204) and played stronger leadership roles in those groups. (206, 207).

CATHOLIC SCHOOL. Among the more surprising discoveries in our analysis was the way in which Catholic school graduates did *not* distinguish themselves on measures of civic obligation and engagement. As noted, Catholic schools are known to facilitate—even require—volunteering and community service among their students (Campbell), but net of our controls we did not find a distinctive Catholic school effect on civic involvement.

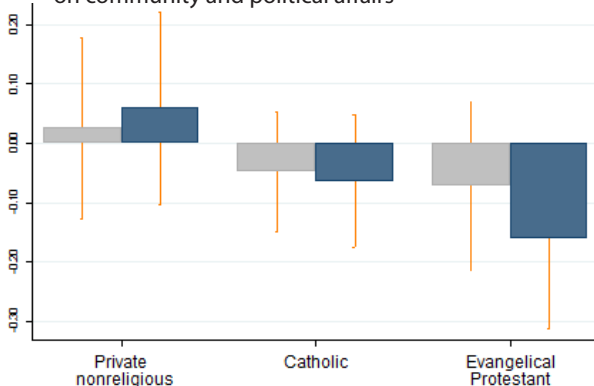
Our survey did find that Catholic school graduates are more likely to report discussing politics at work, which may be a reflection of the professional occupations they hold. In addition, Catholic school students compared to public school students appear less willing to be involved in political protest (160). Finally, Catholic school graduates were more likely to donate to non-religious organizations than public school graduates.

Catholic school graduates appear open to participating and giving to secular as well as religious organizations. Overall, however, we find average levels of civic commitments and involvement from this group, i.e., with this age cohort at least, there is no strong school effect.

EVANGELICAL PROTESTANT SCHOOL. When asked specifically about their trust in various public organizations, the responses of Evangelical Protestant school graduates stand out. They are less likely to trust the federal government (10), less likely to trust the media (11), and less likely to trust school teachers and administrators (12). This is not surprising, since Evangelical Protestant institutions often foster the sense of tension between mainstream culture and their own. Evangelical Protestant women, however, are more trusting than men in these measures.

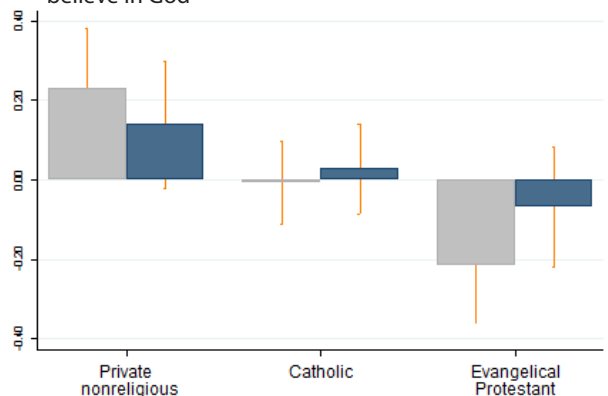
See graphs legend on page 14.

Graph 20: I personally think I can have an impact on community and political affairs



Cardus Education Survey Data Pack #243

Graph 21: Several of my closest friends do not believe in God



Cardus Education Survey Data Pack #44

The countercultural stance of Evangelical Protestants, which their schools seem to reinforce, may play a role in depressing this group’s engagement in community and political involvement (243). The extent that members of this group sense they’re outside the mainstream of culture and society may reinforce a belief that they won’t be heard in the public square, discouraging them from participation. That may explain why we find lower levels of political efficacy among Evangelical Protestant graduates compared with public and other private school graduates.

We also found that the Evangelical Protestant cohort is less likely to volunteer with arts and culture groups or activities. The contrast with their nonreligious private school peers is fascinating, and likely reflects differences between the organizational ties and social position of nonreligious versus Evangelical Protestant schools.

We found evidence that Evangelical Protestant graduates are not as clearly disengaged from politics as they reported in the 2011 CES survey. On most measures in the 2014 data, they were similar to the public school graduates. But they are still less likely to know an elected official personally. This group is less likely than public school graduates to be active in politics, even though none of these differences is statistically significant after controls.

As one would expect, involvement in a religious congregation is quite high in this group. They are as involved as public school peers, but less involved than their private school peers, in volunteer work outside of their congregations.

Evangelical Protestant graduates are distinctive when it comes to their charitable contributions. They are more likely than other cohorts to believe they have an obligation

to tithe to their church or religious congregation (214) and to give to charitable organizations. They reported the highest total charitable donation levels (220). Evangelical Protestant graduates are on average more likely than the public school graduates to give to religious organizations outside of their own church congregation (212), and they were much less likely to give to a secular organization (213).

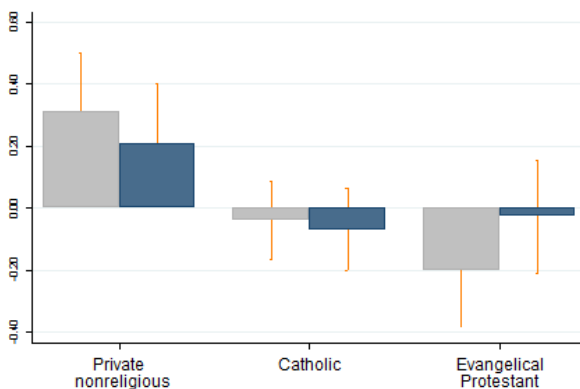
In sum, Evangelical Protestant graduates civic participation looks very much like the civic participation of public school graduates. And this holds up despite the cultural tensions that mitigate Evangelicals’ social trust and efficacy, and the greater time and social commitments of these graduates to their churches. The total amount of charitable donations of Evangelical Protestant school graduates is high relative to other sectors, even though their giving is channeled through religious organizations.

SOCIAL TIES AND HORIZONS

Private schools may build functional communities and the kind of social capital that is beneficial to student success, but we may also ask if this impedes participation in a pluralistic society. Public schools’ mission and legitimacy, in contrast, has often been predicated on their ability to bridge social differences. Our interest is to understand the social bridging that occurs as a result of experiences in each school sector.

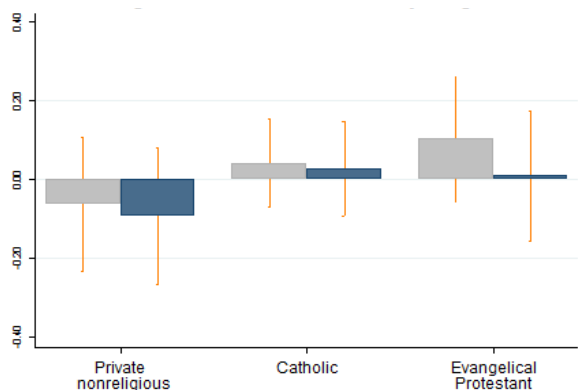
We asked our respondents to consider their school’s social environment and how it affected their adult relationships across social divides. We then asked them to share particular characteristics of their four closest friends, and to rate their trust of people from diverse economic

Graph 22: Several of my closest friends are of a different race or ethnicity than I am



Cardus Education Survey Data Pack #50

Graph 23: How much I trust my neighbors



Cardus Education Survey Data Pack #6

backgrounds and social milieus. Ultimately, we wanted a better idea of whether school sector matters for social ties, trust, or perceptions of school social environments.

Overall, we found that private schools appear to promote social interaction and engagement across social differences at least as effectively as public schools do. We also found some evidence of religious insularity among Evangelical Protestant graduates, although even this group appears to have bridged social differences in ways that approximate their public school peers.

SIMILARITIES. Across school sectors, respondents reported a similar number of close social ties. These ties were equally likely to be from one’s workplace (37). Respondents across sectors were also likely to have close ties with people who held similar religious beliefs (43). (We did find key differences among our Evangelical Protestant graduates, however. We elaborate below.) Close ties to minority groups in adulthood did not vary consistently by school sector. Respondents in all sectors were similarly likely to have a close friend who was an atheist (44) as well as a close friend who was of a different race (50). Evangelical Protestant school graduates were slightly less likely than others to have a gay or lesbian friend (55). Based on these findings, it appears that all school sectors encourage (or discourage) diverse relationships to a similar degree.

When asked to rate their trust in individuals, graduates across sectors reported similar extent of trust of people in general (5). They report placing similar trust in neighbors (6), co-workers (8), and strangers (9) as well as those who do not believe in God (14). If atheists are “the other” in American culture, as sociologist Penny Edgell Baker has posited, it is noteworthy that Evangelical Protestant graduates do not report that they mistrust unbelievers more than the other sectors do.

NONRELIGIOUS PRIVATE SCHOOL. We found small differences in the close social ties of nonreligious private school graduates. Compared with their public school peers, friends of these respondents were less likely to have attended their high school. And there is some evidence that friends of these respondents are more likely to be racial and ethnic minorities. Perhaps the higher level of racial and ethnic diversity in nonreligious private schools (Reardon) helps explain this finding.

We also found that nonreligious private school graduates were much more likely to be non-citizens. About 27 percent

of nonreligious private school graduates are non-citizens, which is much greater than the 3 percent of public school graduates who are non-citizens. That form of diversity may also provide an important opportunity for interacting across social differences within the school community.

All of our respondents were equally likely to know a corporate executive (52), but graduates of private non-religious schools were the only ones more likely to know a community leader personally (53). This finding is consistent with the civic participation findings for this group discussed earlier.

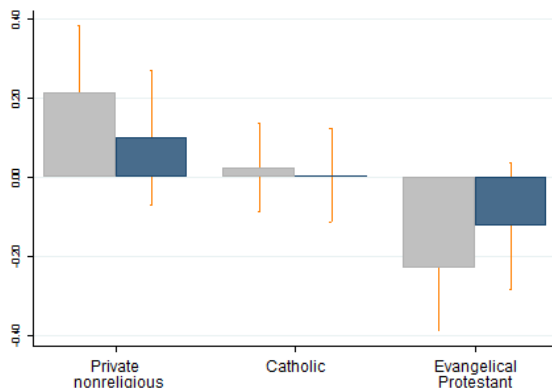
CATHOLIC SCHOOL. Graduates among this group were more likely than their peers to report close friendships with people who have four-year college degrees (40). And they were more likely than the public school cohort to know an elected official personally. These results suggest a more central social network position of the average Catholic school graduate than public school graduates, even after controlling for family background differences.

EVANGELICAL PROTESTANT SCHOOL. Evangelical Protestants have more friends who are religious, though the evidence for religious similarity of friends is mixed. Not surprisingly, friends of these respondents are more likely to be members of their local congregation. They are also more likely to regularly attend religious services. But on the other measures of religious characteristics of friends, Evangelical Protestant graduates do not differ significantly from their public school peers (45).

In terms of social trust, we find that Evangelical Protestant school graduates are much more likely than their

See graphs legend on page 14.

Graph 24: How much I trust people who do not believe in God



Cardus Education Survey Data Pack #14

public school peers to trust people in their local church congregations, which is consistent with the number of close friends they report from their congregations (46). Graduates from this group also are more likely to mention a parent as a close friend, which may result from the emphasis on the family within Evangelical Protestant institutions (Wilcox).

Consistent with the somewhat lower levels of educational attainment among Evangelical Protestant graduates in our sample, the results show they are less likely than their public school peers to have friends with advanced degrees.

Those differences aside, we find substantial similarities among Evangelicals and their peers in the other sectors surveyed. Despite a dearth of racial diversity in Evangelical Protestant schools, these graduates are no less likely to have friends from racial and ethnic minority groups. They are not, however, particularly well positioned in elite social networks.

Religious Formation

MANY PARENTS CHOOSE RELIGIOUS schools in order to socialize students into religious practice and community. We consider whether religious schools meet these expectations. Keeping in line with what we've already seen with their responses to questions about social ties and trust, Evangelical Protestant graduates appear very active in their religious practice and congregations as adults. The results also suggest that graduates of Catholic schools are in many ways similar to graduates of public and private non-religious schools on matters of religious views and practices. Personal

religiosity of non-religious private, Catholic, and public school graduates are similar on most measures.

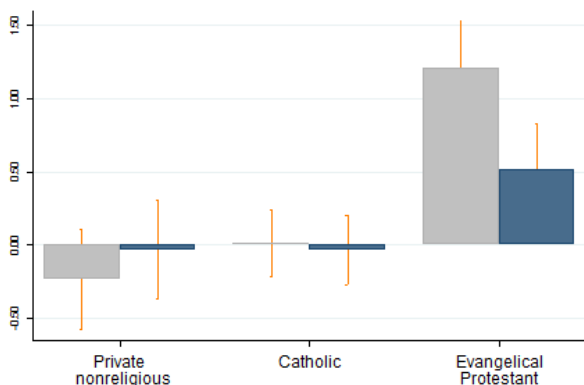
SIMILARITIES. As we have already seen, and we will see again below, Evangelical Protestant graduates are distinctive on several religious measures. But it is important to note that, across all sectors, respondents were equally likely to report experiencing spiritual fulfillment (77), spiritual peace (78), and communion with God (80). They were also equally likely to express interest in strengthening their faith (79). And all sectors have a similar average frequency of religious service attendance (119).

NONRELIGIOUS PRIVATE SCHOOL. Looking across all our religious variables, we find some tentative evidence to suggest that nonreligious private school graduates are more liberal religiously than their public school peers, but the results are not conclusive. Across most religious practices, we found no evidence that nonreligious private schoolers differed significantly from public school graduates in their religious commitment.

CATHOLIC SCHOOL. Catholic school graduates were similar in their responses to Catholic students who attended high school in other sectors. While Catholic schooling did not seem to result in a higher likelihood of Catholic practice in adulthood, Catholic school graduates were no less likely to practice their faith than Catholic students in other school sectors.

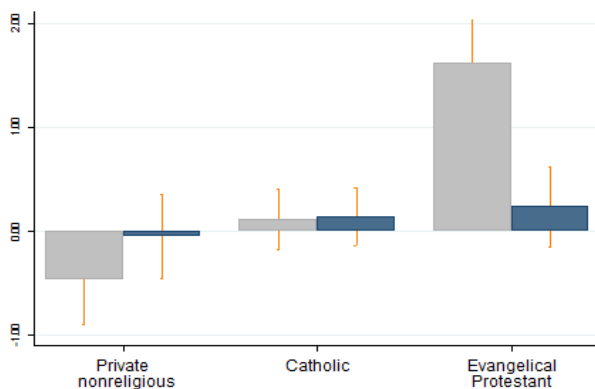
Catholic school graduates were slightly more likely to feel an obligation to respect the authority of the Church. This represents a small but significant difference from the 2011 Cardus Education Study, where Catholic school graduates were less likely to feel obligated to the Catholic Church.

Graph 25: God has called me to the particular line of work I am in



Cardus Education Survey Data Pack #22

Graph 26: I frequently attend religious services



Cardus Education Survey Data Pack #119

EVANGELICAL PROTESTANT SCHOOL. As we have shown, the Evangelical Protestant school experience has an important influence on their understanding of vocation. These graduates are more likely to seek jobs that fulfill a religious calling (21). They place less emphasis on finding jobs that pay well (20), and they feel called by God to a particular line of work.

There are other religious differences from public school graduates. The Evangelical school graduates in our survey were more likely to agree with statements regarding infallibility of the Bible (96) and the literal truth of the creation story (95). They were least likely to agree that the Bible contains errors in science and history (97). It would appear that Evangelical Protestant schools underscore beliefs that are outside the mainstream of most educational circles.

As we've noted, there is evidence supporting the notion that Evangelicals are more likely to be involved in

religious congregations. They show high levels of giving, participation, and volunteering (134-137), as well as greater frequency of religious service attendance (119). But while the raw differences with their public school peers were extremely high, these outcomes appear to have more to do with a family effect than a direct school effect. Once family background, family religiosity, and other controls were included, the school effect among Evangelicals was similar to other sectors.

The strongest Evangelical Protestant school effects concern individual religious practices. According to our analysis, these graduates read the Bible more, (98), pray more (120), and, in particular, pray more at home (268, 272). The fact that Evangelical schools institutionalize the importance and practice of religiosity appears to have a longer-term impact on graduates.

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DISCUSSION *and* CONCLUSION

OVERALL, THE RESULTS OF THE 2014 Cardus Education Survey portray private school graduates as similar to their public school peers across a number of measures linked to standard school missions and purposes. Of course there are differences across sectors. But the evidence strongly shows that private schools and public schools do not differ significantly when it comes to involvement in civic life. Our evidence suggests that conservative religious schools are not creating citizens who are particularly separatist, uninvolved in civic life, and unable or unwilling to participate in a pluralistic public square. Clearly, there are public strengths of private schools that emerge in our data.

The results do raise questions about how strengths in each sector may inform reform efforts in American education. We outline a few ideas on this below.

STUDENT EVALUATION OF THE HIGH SCHOOL EXPERIENCE. Private school graduates are much more likely than their public school peers to reflect positively on their high school experience and to consider it crucial in preparing them for their adult lives. To some degree, this may reflect the personal investment that private school students feel in attending a school of their choice.

Positive evaluations of schooling and the school experience, particularly during the trials of adolescence, should not be overlooked. Further study into the climate and community of private and private religious schools may provide important direction for improving high school engagement and meeting the needs of students across all sectors.

PREPARATION IN STEM SUBJECTS. The private non-religious and Catholic schools are very strong when it comes to placing students in high-level courses, sparking interest in STEM subjects, and preparing them for college-level work. These strengths appear to carry through to choice of major and occupation. Tensions between religion and science may account for some of the weaker course offerings of evangelical Protestant schools, though other structural reasons, such as the difficulty of attracting science teachers, may explain why EP school students are not likely to take up STEM occupations.

EXPOSURE TO ARTS AND CULTURE. There is some evidence that private non-religious schools provide more opportunities for exposure to and engagement in arts and culture. Graduates are more likely to volunteer and support the arts financially and also value jobs that incorporate creativity. Evangelical Protestant schools are noticeably weaker in this area. This contrast is interesting and warrants further research on school culture and practices.

CIVIC DEVELOPMENT. Civic participation of graduates appears to be similar across all sectors. Regardless of whether respondents attended a nonreligious private school, a Catholic school, an Evangelical school, or a public school, they were just as likely to take a civics course, and reported strikingly similar attitudes about working in the interest of the common good and addressing injustices. These graduates, regardless of sector, are about as likely to be interested in politics and give their time to volunteer work. And Evangelical Protestant school graduates donate at higher levels than the other sectors.

SPIRITUAL DEVELOPMENT. Evangelical Protestant schools seem to be the most successful at socializing their graduates in religious practices and beliefs. While our findings are neutral for the Catholic sector, Catholic school graduates are no less likely to practice their faith as adults than public school graduates. Graduates from both sectors reported that they were well prepared religiously. Interestingly, non-private religious school graduates are also more likely to respond that their school experience prepared them religiously. Although these schools are, for the most part, non-confessional environments, they appear to make space for acknowledging and supporting the personal faith of students.

SOCIAL CAPITAL DEVELOPMENT. The close-knit nature of private school communities and the strength of relationships between students and teachers suggest private schools are adept at fostering social capital. Graduates feel prepared for relationships. And in fact enjoy close ties with individuals who are different from themselves in significant ways, including close friends who differ in belief and race/ethnicity. The social capital built within private schools does not appear to exclude bridges across social differences.

ACADEMIC AND OCCUPATIONAL TRAJECTORIES. Catholic high schools excel in preparing students for higher education. Graduates of Catholic high schools attend, and also complete, more selective universities. They also move into more professional, managerial and science-related occupations. More attention to the mechanisms behind this Catholic high school push toward college—be it in the

offering of a core curriculum or in high teacher expectations for all students—may prove instructive for other sectors.

Conclusion

IT IS IMPORTANT TO KEEP in mind that this study provides a broad overview of graduates' lives in their 20s and 30s. During the high school years, school sectors may be very different in the extent that they facilitate and require volunteering and community service, even if these differences are not as stark as graduates enter the young adult years. We do not know from these findings whether the impact of school sector will change as graduates move into their middle-aged years. Catholic high school experience leads to a strong commitment to higher education degrees and to building managerial and professional careers in the young adult years, which may diminish civic involvement. The Catholic high school experience of volunteering and community service may lead to greater civic involvement later in the life course after careers are established.

Still, we find notable sector differences that shed important light on the public contribution of private schools. First, private school graduates are much more positive about their high school experience. This is likely an outcome of the emphasis on personal relationships and building strong school communities within many private schools. That positive experience of a schooling institution may have long-term effects on civic life that are related to sociability and commitment to others developed within the social context of private schools. Of course, we are not suggesting that schools should simply do what makes their students happy and satisfied customers. But to the extent that schools can create functional communities that are meaningful and engaging for students, they are more likely to have a positive impact on the educational, civic and character formation of their students. The strength of the school community, even if that feels somewhat sheltered and set apart from the “real” world, may make an important contribution to the public good.

Second, the private sectors are successfully educating students in STEM subjects and tend to increase their interest in these fields, which are in demand in an economy that faces increasing global competition. The lone exception is the Evangelical Protestant school graduates. Despite the Evangelical Protestant school disadvantages in terms of school size and countercultural stances on evolution as well as lack of trust in scientists, however, they match public schools in STEM classes and interest in math and science. They are less likely to take up STEM or higher status

“Our evidence supports the view that private schools are as attentive to the public good as public schools.”

occupations, but it is important to note that this impulse may result from evangelical Protestant graduates’ concern with religious calling. Instead of STEM jobs, they take up service and nonprofit occupations that directly meet human needs, such as social work, health care, and education. In this way, Evangelical Protestant schools are preparing a cohort that are very concerned with and involved in human service rather than self-interested pursuits of high paying, high status jobs. That is not the only public good to be served, but it is an important contribution nonetheless.

Regarding civic skills and engagement, we don’t find many strong school sector differences. Whether the private school civic glass is half full or half empty depends on where you stand. Many in the Catholic and nonreligious private sectors, which strongly emphasize civic obligations and experiences in the high school years, are striving for greater civic distinction for their graduates. It appears that these schools will have to figure out how to combine academic and civic excellence in a way that spills over into the college and young adult years. That is not an easy task given the competition for and demands of elite colleges and managerial and professional occupations. On the other hand, the evidence does not lead us to conclude that private schooling compared to public schooling experiences lead to private and self-interested orientations in adult life. In fact, we find that private school graduates are very similar to public school graduates in civic engagement. When combined with the other strengths of private schools, the overall story of the public contributions of private schools is quite positive. Evangelical Protestant school graduates, while not having particular strengths in academic and occupational outcomes, are surprisingly active in civic life despite lower levels of trust and efficacy and higher levels of commitment to religious congregations. Since congregations are one of the most important generators of a vital civic life (Musick), the combined contribution of Evangelical Protestant graduates to civic life is substantial. In contrast to some studies of high school students (Campbell), we do not find evidence that Evangelical Protestant school graduates are any less supportive of democratic principles than public school graduates.

All told, then, our evidence supports the view that private schools are as attentive to the public good as public schools.

It is also interesting that many private schools are able to achieve relatively strong academic and civic outcomes while at the same time contributing to a vital religious life for their graduates. Although few would see this outcome as a public good, the importance of religious life for strong families and civic engagement should not be ignored. We also note that nonreligious schools can successfully make room for the religious and spiritual development of their graduates in ways that seem to overcome the limits of many public schools in the areas of religious education and religious and spiritual development of students. That nonreligious school graduates may make space for a diversity of religious expression as well as moral and character formation may provide a model for a public school sector that strives to be simultaneously pluralistic and respecting of religious difference.

Finally, there is great concern that private schools isolate their students from social diversity, which may have reduce social bridges across significant divides, including those of race and ethnicity. In contrast, the public school was designed to meld social diversity and prepare citizens for constructive participation in a pluralistic public square. We find no evidence for these common perceptions. Whether or not public schools serve greater social diversity and avoid forms of segregation within schools, such as educational tracking that reinforces social segregation, we do not find that a public school experience leads to different patterns of social ties in the young adult years. Private schools, including Evangelical Protestant schools, are not more likely to produce graduates who are isolated from social differences among their close ties. It seems more likely, then, that the sociability and lack of social segregation within private school communities—if not explicit socialization in inclusive norms in these schools—forms graduates who are equally if not more open to interaction with difference in their adult lives. That provides a further contribution of private schools to public life.



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APPENDIX A

Introduction to Cardus

CARDUS (root: *cardo*, the axis or main street of Roman cities) is a think tank dedicated to the renewal of North American social architecture. Drawing on more than 2,000 years of Christian social thought, Cardus works to enrich and challenge public debate through research, events, and publications, for the common good.



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Cardus staff and fellows regularly write for national newspapers and journals (www.cardus.ca/columns).

Subscribe to the Cardus Monthly newsletter (free): go.cardus.ca/monthly

APPENDIX B

Research Team

THE RESEARCH TEAM worked in a collaborative manner in overseeing the survey design and providing the analysis for this report. Ray Pennings served as the chair and coordinator of this committee, David Sikkink as principal researcher for the quantitative study, and Julie Dallavis as the “pen” for this report. The Research Team wishes to acknowledge the contribution of Ben Boychuk who served as copy editor and Kathryn de Ruijter for the layout and design work on this project.

RAY PENNINGGS (B.A., McMaster University; M.A., Puritan Reformed Theological Seminary) is a co-founder and Executive Vice-President of Cardus. Pennings previously held various positions in both the labour relations and public policy realms and regularly provides public policy punditry in newspaper, radio, and television appearances. Pennings has also contributed to seven books and hundreds of journal articles. He is also a principal of Big Road Partners, a public square consulting firm that consults widely, helping institutions strategically connect their beliefs with their behaviours. Pennings lives in Calgary and has a long career of activism within his community and church. He currently serves on the board of the Rosebud Center for the Arts, is a past Chair of Redeemer University College, and was the founding President of Worldwide Christian Schools (now EduDeo.) Ray lives in Calgary with his wife Kathy and son Chris.

DAVID SIKKINK (B.A., Bethel College; M.A., University of North Carolina Chapel Hill; Ph.D., University of North Carolina Chapel Hill) is an associate professor in the Department of Sociology at the University of Notre Dame, and director of the Cardus Religious Schools Initiative at UND. He is also a Fellow in the Center for the Study of Religion at Notre Dame as well as the Institution for Educational Initiatives. His main research interests are in education, religion, and politics. Sikkink’s publications include articles on pathways from religious participation of teenagers to educational outcomes (*The Sociological Quarterly*). It reveals how religious participation affects social capital and extracurricular participation of teenagers, which in turn leads to better educational outcomes. David has also investigated the relation between religious tradition and views of public schools, which resulted in an article in *Social Forces*, “The Social Sources of Alienation from Public Schools.”

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CHRISTIAN SMITH (B.A., Gordon College; M.A., Harvard University, Ph.D., Harvard University) is the William R. Kenan, Jr. Professor of Sociology and Director of the Center for the Study of Religion and Society at the University of Notre Dame. Smith's research focuses primarily on religion in modernity, social theory, adolescents, cultural sociology, and American evangelicalism. Smith was a Professor of Sociology at the University of North Carolina at Chapel Hill for 12 years before his move to Notre Dame.

APPENDIX C

Project Funding and Parameters

THE CARDUS EDUCATION SURVEY originated with a symposium on the relationship between education and culture change, held in December 2007. That symposium identified various research gaps regarding the state of K-12 Christian education in North America and the lack of reference benchmarks. Since that time, numerous symposia, publications, and consultations have taken place to address this gap.

In 2011, we released *Cardus Education Survey: Do the Motivations for Private Religious Catholic and Protestant Schooling in North America Align with Graduate Outcomes?*, a report on schooling effects based on a representative survey of the adult US population. In 2012, we followed this up with a similar report based on a survey of the Canadian adult population, *Cardus Education Survey: A Rising Tide Lifts All Boats*.

Cardus has subsequently partnered with the University of Notre Dame to establish the Cardus Religious Schools Initiative, a research center that seeks to generate new theoretical and empirical tools for understanding religious schools (www.crsi.nd.edu). This center has been providing evaluations of existing research on religious schools, utilizing government and other datasets to address key issues and questions facing the religious school community. This report is based on primary data that has been collected for this purpose.

Education is one of the primary research areas for Cardus, a think tank with charitable status in both the United States and Canada. Earmarked foundation support for this project has been received from the Richard and Helen DeVos Foundation based in Grand Rapids, MI, the William Voortman Foundation based in Hamilton, ON, and from an anonymous donor.

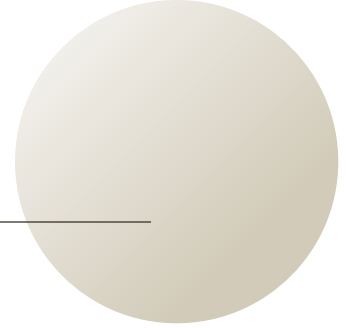
Cardus's audited financial statements are available at www.cardus.ca/organization/donors.

The participation and endorsement of various school associations was also solicited in the course of data collection. In three cases, cost-recovery funding was received from the association for the extra costs involved in providing association-specific reports of the data collected.

As the development of the Cardus Education program remains a work in progress, readers are invited to visit our website and subscribe to the free Cardus Education newsletter:

www.carduseducationsurvey.com

APPENDIX D



Research Methodology

PRINCIPAL RESEARCHER

DR. DAVID SIKKINK, University of Notre Dame

RESEARCH GOALS

THIS RESEARCH STUDY HAD several goals. First, the study sought to provide evidence of the life directions of graduates of Catholic and Protestant Christian schools in the United States and Canada. The survey of graduates—which included participants from Catholic, Protestant, non-religious private, public, and homeschool graduates—focused on educational and occupational attainment, civic and political engagement, spiritual formation, marriage and family as well as social psychological outcomes in the young adult years. It also surveyed graduates about their experience of high school and asked graduates to provide family background characteristics, including parent’s education, family structure while in high school, relationships with parents, and so on.

METHODOLOGY

THE 2014 CARDUS EDUCATION SURVEY was based on a random sample of Americans provided by one of the most respected internet survey firms, GfK, which is based on Chicago and is responsible for an ongoing internet panel, the Knowledge Networks (KN) panel. KN panel respondents participate in internet surveys for three to five years and receive incentives for their participation.

For the 2014 CES, a large oversample of private school graduates was selected from the KN panel. In addition, the random sample was limited to respondents between 24 and 39 years of age who had graduated from high school. Schooling history information included whether the respondent had primarily attended a Catholic, conservative Protestant or “Christian school,” another type of Christian school, a non-Christian religious school, a nonreligious school, or a home school. About 1,000 of the respondents had primarily attended a private elementary or high school, and about 500 had primarily attended public school. Respondents completed a half-hour survey that included questions on schooling history and experiences, evaluation of their high school, family background, occupational goals, current education and occupation, marriage and family, religious and spiritual involvement, and civic and political engagement. GfK profile and public affairs information previously collected about panel respondents was also merged into the survey dataset. In addition, since the survey asked the college or university attended by the respondent, government data on colleges and universities available in the Integrated Postsecondary Education Survey was merged into the final dataset.

The resulting datasets were analyzed using nested regression analyses to predict outcomes related to socio-economic status, personality and mental health, prosocial attitudes and behavior, including volunteer, civic engagement, and political participation. For each dependent variable, the first model included binary variables related to type of schooling—public high school, Catholic high school, conservative Protestant or “Christian school,” and nonreligious private school. Those who primarily attended public high school served as the comparison group.

The second model added demographic variables, including gender, race, age, and region of residence, as well as numerous family background characteristics. Specifically, the education, religious tradition, religious service attendance, and volunteering habits of respondent’s mother and father were included as controls. Binary variables that measured whether each parent was Catholic, conservative or traditionalist Catholic, or evangelical Protestant, respectively, were

also included in the model. Additional variables included how close the respondent was to their mother and father and whether their father or mother pushed the respondent academically. The marital status and living arrangement when the respondent was in high school was also controlled. In particular, a variable was included for respondents who were raised by both biological parents, a variable indicating whether parents were ever divorced or separated, and variables for the number of years that respondents lived with each biological parent. The number of siblings was also included as a control, since this may correlate with religious families and educational outcomes. We expect that the context of religious school graduates may also differ in ways that would influence the results for religious and civic outcomes. Therefore, we included controls for several characteristics of the county in which the respondent resides, including the population, the percent white, the total religious adherence rate, the proportion of the county population that are in mainline Protestant churches, the proportion of the population in Catholic parishes, and the proportion of the population in evangelical Protestant congregations. In addition, we included controls for the number of years that private school respondents were enrolled in public elementary or high schools.

Missing values were imputed using multiple imputation techniques. Appropriate regression models (linear, logistic, and multinomial) were used depending on the type of dependent variable. Coefficients from the regression models are presented in the graphs in this report. Smaller coefficients or those with higher standard errors should be considered essentially identical to zero. Given the small sample sizes of all but the Catholic sector, coefficients in the tables are considered significant if the p-value is less than .1. The charts include the high and low boundaries for the 90 percentile confidence interval for each coefficient, which are shown as “whiskers” overlain on each bar. If the value of zero is included within the confidence interval, the coefficient is not statistically significant, meaning that we cannot posit with over 90 percent confidence that the real average difference with public school graduates is not zero.

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