



HOME EDUCATION REASON AND RESEARCH

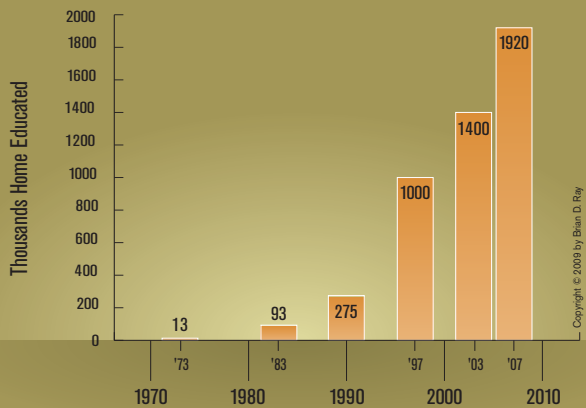
Common Questions and Research-Based Answers about Homeschooling

Brian D. Ray, Ph.D.

INTRODUCTION

Homeschooling grew from nearly nonexistent in the 1970s to roughly two million students in grades K to 12 by 2009 (Figure 1). Much of public opinion is very positive toward this private educational practice. However, genuinely curious people and ideological skeptics continue to ask questions about home-based education. Research answers some of these key questions.¹

FIGURE 1.
GROWTH OF HOMESCHOOLING IN THE UNITED STATES

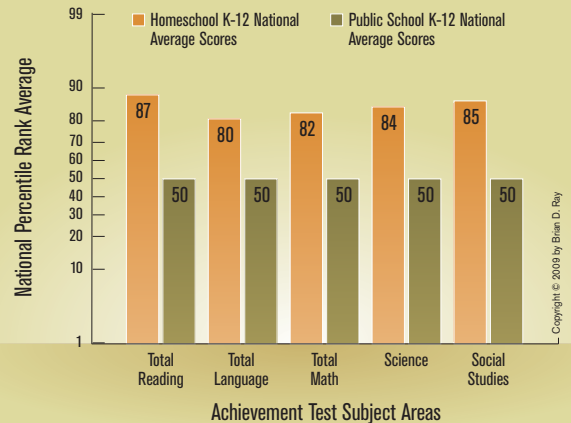


Note: Based on a summary of statistics from (a) Bielik, Stacey (2008, December). 1.5 Million Homeschooled Students in the United States in 2007. Washington, DC: U.S. Department of Education (National Center for Education Statistics). Retrieved December 23, 2008 from <http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2009030>; (b) Lines, Patricia M. (1991, October). Estimating the home schooled population (working paper OR 91-537). Washington DC: Office of Educational Research and Improvement, U.S. Department of Education; (c) Lines, Patricia M. (1998, Spring). Homeschoolers: Estimating numbers and growth. Washington, DC: United States Department of Education, Office of Educational Research and Improvement, National Institute on Student Achievement, Curriculum, and Assessment; and (d) Ray, Brian D. (2008, July 2). Research facts on homeschooling. Retrieved January 7, 2009 from <http://www.nheri.org/Research-Facts-on-Homeschooling.html>.

HOW ARE HOMESCHOOLERS DOING ACADEMICALLY? HOW DO THEY SCORE?

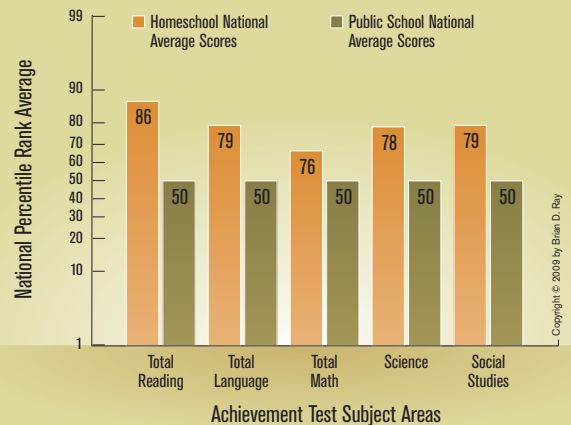
Major nationwide studies such as those by Dr. Brian Ray and Dr. Lawrence Rudner and multiple smaller-scale studies are consistent in their findings (Figure 2 and Figure 3).² In repeated studies, home-educated students typically score at the 65th to 80th percentile on nationally normed standardized achievement tests. This is 15 to 30 points higher, on average, than public-school students, whose average is the 50th percentile (Figure 4).

FIGURE 2.
ACADEMIC ACHIEVEMENT, GRADES K TO 12



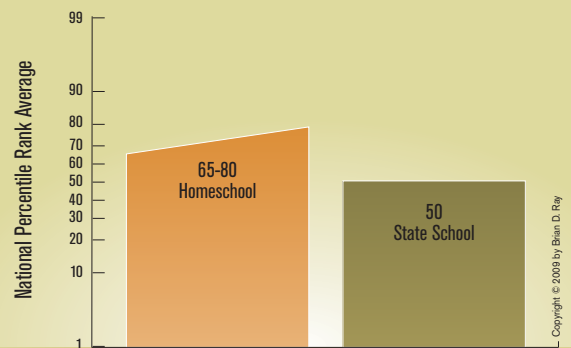
Note: Source of statistics is one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75 (1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal trails*. Salem, OR: National Home Education Research Institute, www.nheri.org.

FIGURE 3.
ACADEMIC ACHIEVEMENT, GRADE 8



Note: Source of statistics – Rudner, Lawrence M. (1999). Scholastic achievement and demographic characteristics of home school students in 1998. *Educational Policy Analysis Archives*, 7(6), retrieved January 5, 2009 from <http://epaa.asu.edu/epaa/v7n6/>.

FIGURE 4.
ACADEMIC ACHIEVEMENT OF HOMESCHOOL AND STATE-SCHOOL STUDENTS, SUMMARY OF MANY STUDIES



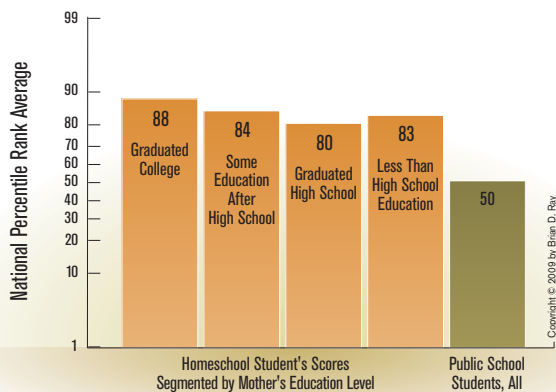
Note: Summary of statistics from many studies, grades K to 12, all subject areas, average test scores.

DOES PARENT EDUCATION LEVEL PREDICT STUDENT ACHIEVEMENT?



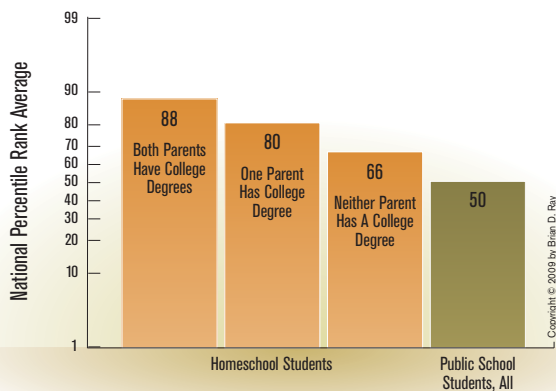
Home-educated students whose parents are high school graduates (with no additional formal education) are scoring well above the national average on achievement tests (Figure 5 and Figure 6). On the other hand, public-school students with similarly educated parents score below the national average.

FIGURE 5.
MOTHER'S EDUCATION LEVEL AND STUDENT ACHIEVEMENT
BASIC BATTERY TEST SCORE, GRADES K-12



Note: Source of statistics is one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nhen.org.

FIGURE 6.
PARENTS' EDUCATION LEVEL AND STUDENT ACHIEVEMENT
COMPOSITE TEST SCORE, GRADE 8

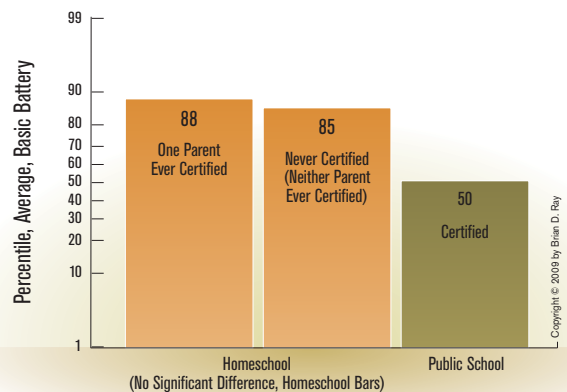


Note: Statistics are from Rudner, Lawrence M. (1999). Scholastic achievement and demographic characteristics of home school students in 1998. *Educational Policy Analysis Archives*, 7(8), retrieved January 5, 2009 from <http://epaa.asu.edu/epaa/v7n8/>.

DO PARENTS NEED A TEACHING CERTIFICATE TO SUCCESSFULLY HOME EDUCATE?

Repeated studies show that home-educated students generally score above average regardless of whether either parent has ever held a state-issued teaching certificate.³ While nearly all public-school teachers have government teaching certificates and only about 10 percent of homeschool parents have ever had such certificates, homeschool students consistently outperform public-school students (Figure 7).

FIGURE 7.
TEACHER CERTIFICATION NEEDED?



Note: Source of statistics is one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nhen.org. Nearly 100% of public-school teachers are state-certified.

IS GOVERNMENT CONTROL RELATED TO HIGH ACADEMIC ACHIEVEMENT?

There is no correlation between the degree of state regulation or control of homeschooling and homeschool students' achievement (Figure 8). Many have argued that the government needs to regulate this form of private education to make sure children learn.



No research evidence supports this claim. Home-educated children in states with low regulation score just as well as those in high-regulation states. Regardless of high or low regulation, their scores are above the public-school average. Furthermore, research by Dr. Brian Ray and Dr. Bruce Eagleson found no relationship between the degree of state control over homeschooling and home-educated students' scores on the SAT college-entrance exam (Figure 9).⁴

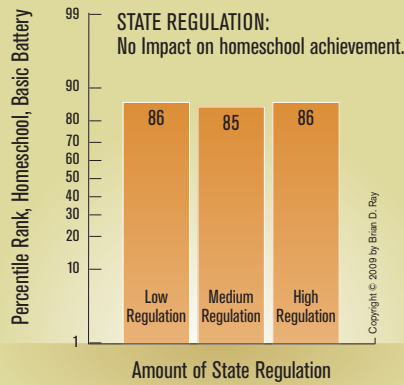
FIGURE 8a.

GOVERNMENT (STATE) REGULATION AND HOMESCHOOL ACHIEVEMENT

LOW REGULATION:
No state requirement for parents to initiate any contact with the state.

MEDIUM REGULATION:
State requires parents to send notification, test scores, and/or professional evaluation of student progress.

HIGH REGULATION:
State requires parents to send notification or achievement test scores and/or professional evaluation, plus other requirements (e.g., curriculum approval by state, teacher qualifications of parents, or home).

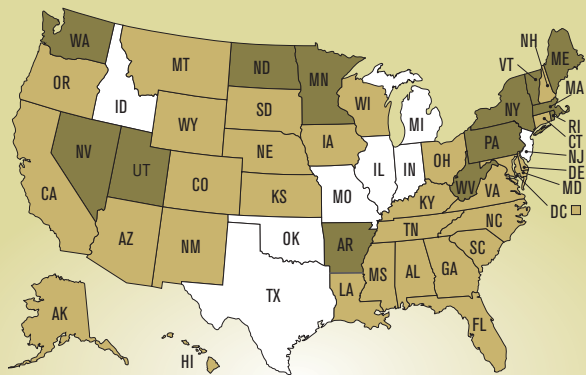


Note: Basic battery scores, grades K-12. Source of statistics is one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

FIGURE 8b.

BREAKDOWN OF STATES BY REGULATORY POLICY

LOW REGULATION MEDIUM REGULATION HIGH REGULATION

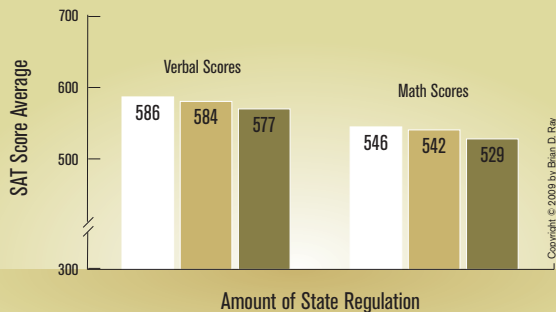


Note: See one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

FIGURE 9.

GOVERNMENT REGULATION AND HOMESCHOOL COLLEGE SAT SCORES

LOW REGULATION MEDIUM REGULATION HIGH REGULATION



Note: Source of statistics — Ray, Brian D., & Eagleson, Bruce K. (2008, August 14). State regulation of homeschooling and homeschoolers' SAT scores. *Journal of Academic Leadership*, 6(3). Retrieved August 25, 2008 from http://www.academicleadership.org/empirical_research/State_Regulation_of_Homeschooling_and_Homeschoolers_SAT_Scores.shtml. All of the home-educated student average SAT scores were above the public-school student average scores for the same year. Maximum score is 800 for verbal or math. Definitions of low, medium, and high state regulation are given in the study's report.

WHY ARE THE HOME-EDUCATED DOING SO WELL?

Whether from high- or low-income families, whether their parents have college degrees or not, and regardless of whether their state highly regulates homeschooling, home-educated students typically are performing well above average on achievement tests. There are several reasonable explanations for this.

For example, the one-on-one tutorial method of instruction has been recognized throughout history as very effective and research supports this belief.⁵ Second, individualization, customizing curriculum and instruction to each student's strengths, limitations, learning style, and interests, is a proven way to maximize educational progress in general, and especially for special needs students.⁶ Also, providing a safe and challenging learning environment is a goal of every effective teacher, and naturally occurs in a homeschool setting.

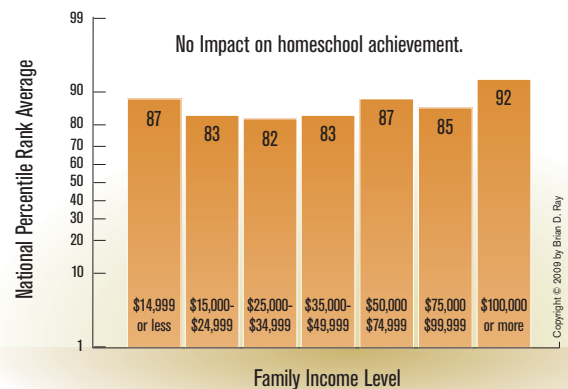
A final example of why the homeschooled are doing so well is that research shows that social capital (that is generated by relationships, trust, and social norms) and a consistency of values, beliefs, and worldview between teacher and student has a positive effect on student learning. Home-based education uniquely offers an opportunity to benefit the practices, relationships, and environment that lead to academic and personal success.⁷

DOES FAMILY INCOME PREDICT STUDENT ACHIEVEMENT?

For public-school students, household income is correlated strongly with student achievement. That is, public-school students from low-income homes score well below average. Homeschool students, on the other hand, are scoring well above average regardless of their families' income (Figure 10 and Figure 11).

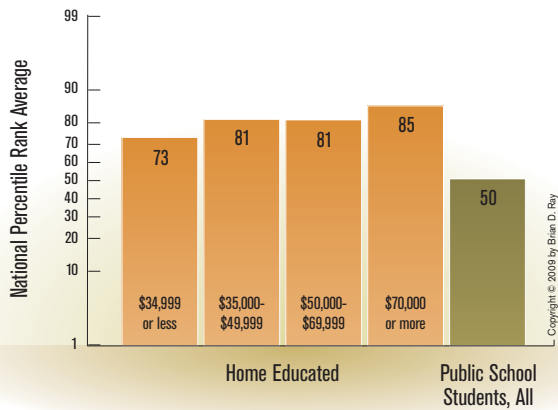
FIGURE 10.

FAMILY INCOME AND ACHIEVEMENT BASIC BATTERY TEST SCORE, GRADES K-12



Note: Dollars not adjusted for inflation for 2009. Source of statistics is one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

FIGURE 11.
FAMILY INCOME AND ACHIEVEMENT
COMPOSITE TEST SCORE, GRADE 8

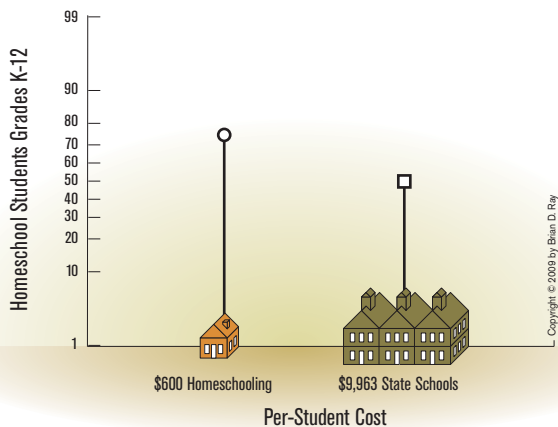


Note: Source of statistics is one research project published in two places, (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106; and (b) Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

HOW DOES THE HOMESCHOOL POPULATION AFFECT THE TAXPAYER?

As with other forms of private education, home education receives no government money and reduces the burden on taxpayers. If there were 2 million homeschool students in the United States in 2009 and the direct per-pupil expenditure was \$10,200, then the homeschool community saved American taxpayers \$20.4 billion by educating their own children and absorbing their own educational costs.⁸ In addition, large capital expenditures for items such as new or expanded school buildings and research and teaching done by professors in university schools of education do not need to be funded by the taxpayers on behalf of home-educated students who might have been in tax-funded schools. Homeschooling is relatively inexpensive (Figure 12).

FIGURE 12.
COST OF HOMESCHOOL VERSUS PUBLIC SCHOOL AND ACHIEVEMENT



Note: Per-pupil costs do not include all costs of education; for example, it does not include capital expenditures in public/state schools. Sources of statistics are (a) National Education Association, (2008). *Rankings and estimates 2008*. Retrieved from <http://www.nea.org/home/29402.htm>, and (b) Ray, Brian D. (2005). *Worldwide guide to homeschooling*. Nashville, TN: Broadman & Holman, Publ.

Advocates of state-controlled schooling often claim that homeschooling somehow takes money away from public school systems. Researchers Dr. John Wenders and Dr. Andrea Clements carefully addressed this point.⁹ They found that home-educated students actually represent a “cost savings” to public schools. Drs. Wenders and Clements state, “The bottom line is that home- and private schooling is a ‘win-win’ arrangement for both taxpayers and individual public school districts.” Furthermore, the academics explained the following: “Finally, in addition to being logically flawed, the argument that students who fail to enroll in public schools are a ‘cost’ implies that public schools are somehow entitled, as a property right, to every child and are being deprived of something that is their due. This is eminent domain in the extreme.”

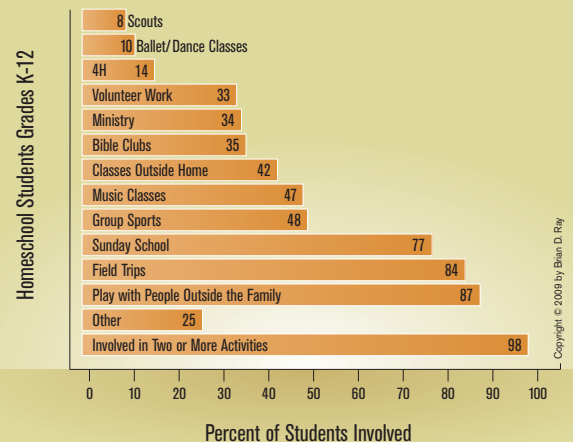
WHAT ABOUT SOCIALIZATION?

Regarding homeschooling, many ask, What about socialization? The term “socialization” is usually not well-defined and often refers to a perceived negative that home-educated students are not attending institutional classroom schools with same-age peers for 13 to 17 years of their lives and experiencing the peer pressure and collective milieu found in those settings. Multiple researchers and their studies find, however, the home educated to be developing as well or better socially, emotionally, and psychologically than institutionally schooled children and youth. For example, scholar Dr. Larry Shyers’ well-designed study found a key significant difference between the institutionally schooled and home-educated students: the home educated had lower problem behavior scores interacting with peers than did the institutional school students.¹⁰



Research finds that homeschool students and their parents are very engaged in their communities, including activities such as sports teams, co-operative classes, church activities, and community service (Figure 13). Further, homeschool children typically interact with a broader range of ages (of children and adults) than do most institutional school children.

FIGURE 13.
HOMESCHOOLERS’ ACTIVITIES AND SOCIAL INVOLVEMENT

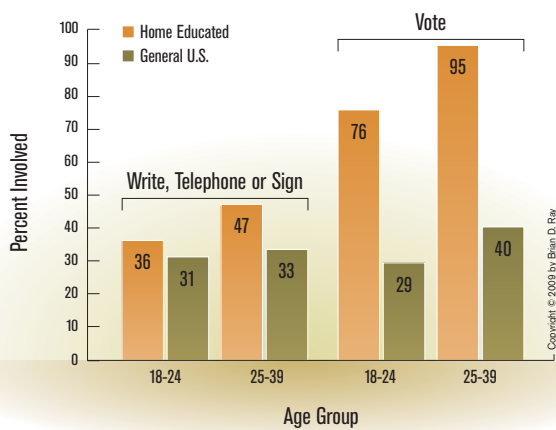


Note: Source of statistics – Ray, Brian D. (1997). *Strengths of their own—Home schoolers across America: Academic achievement, family characteristics, and longitudinal traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

BUT HOW WILL THEY DO IN THE “REAL WORLD” OF ADULTHOOD?

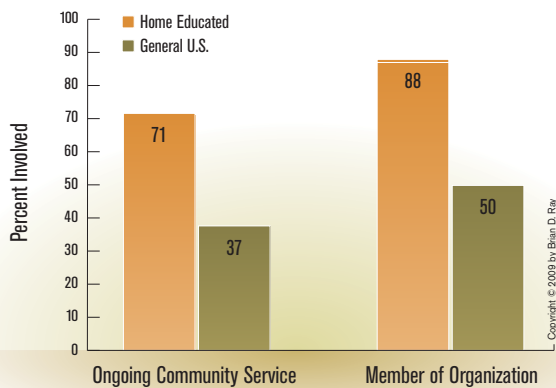
Dr. Ray studied over 7,000 adults in the United States who had been home educated.¹¹ Those who were home educated are like other adults who further their education in college or otherwise, develop careers, marry, and have children. But in other ways, they are notably different. For example, this study found those who had been homeschooled are more civically engaged than other adults, shown by the fact that they vote, attend public meetings, write or telephone editors and public officials, participate in protests and boycotts, contribute money to political candidates, parties, and causes, and work for political candidates, parties, and causes at a higher rate than do their American adult peers (Figure 14). Also, they are involved in community service and community organizations at a higher rate than the average American adult (Figure 15).

FIGURE 14.
CIVIC INVOLVEMENT OF ADULTS WHO WERE HOME EDUCATED



Note: The two items represented in the figure are (a) Wrote/telephoned editor/public official or signed a petition, and (b) Voted in national/state election in the U.S. in past 5 years. For more detail, see the source of the statistics – Ray, Brian D. (2004). *Home educated and now adults: Their community and civic involvement, views about homeschooling, and other traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

FIGURE 15.
COMMUNITY SERVICE AND ACTIVITY OF ADULTS WHO WERE HOME EDUCATED



Note: The two items represented in the figure are (a) Do you participate in any ongoing community service activity, for example, coaching a sports team, volunteering at school, or working with a church or neighborhood association?, and (b) Are you a member of any organization, like a community group, church or synagogue, union, homeschool group, or professional organization? For more detail, see the source of the statistics – Ray, Brian D. (2004). *Home educated and now adults: Their community and civic involvement, views about homeschooling, and other traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.

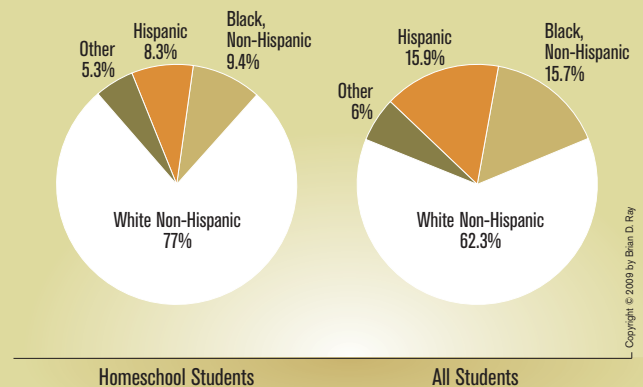
Positive findings such as these are emerging in face of unsupported claims such as one that a professor made that the home educated will not be as decent, civil, or respectful as state-schooled students.¹² Research findings by others are consistent with those of Ray. For example, Dr. Gary Knowles and Dr. James Muchmore found the following: “Respect for individual differences and a concern for others, for instance, were values shared by all of them... Moreover, these adults did not appear to exhibit characteristics that imply that they were disadvantaged as a result of their home education experiences, as critics of home education suggest.”¹³ And scholars McCulloch, Slocum, Kolegue, and Montaudo found that the more a person is educated at home, the less cynical he or she will be.¹⁴

WHO CHOOSES HOME EDUCATION?

Home educators are from all social and racial/ethnic backgrounds: parents with a 10th-grade education, others with Ph.Ds; the wealthy and the less well-off; agnostics, Christians, humanists, Jews, Mormons, Muslims, and New Age devotees; families with eight children and those with one; married couples and single parents; those in the inner city and those in the wilderness of Alaska; sales clerks, public schoolteachers, doctors, and plumbers; and parents who never stopped being the main and daily educators of their son from his birth, and parents who removed their daughter during the seventh grade from an institutional school setting.

Every year the variety of home educators broadens and expands. Research published by the U.S. Department of Education, for example, discovered that 23 percent of home-educated students in the spring of 2003 were black/non-Hispanic, Hispanic, or “other,” while families from such minority groups were much rarer in homeschool groups about a decade earlier (Figure 16).¹⁵

FIGURE 16.
RACE/ETHNICITY OF HOMESCHOOLERS AND ALL STUDENTS, K-12, 2003



Note: Source of statistics – Princiotta, Daniel, & Bielick, Stacey, and Chapman, Christopher. (2006, February). *Homeschooling in the United States: 2003 statistical analysis report* (NCES 2006-042). Washington, DC: U.S. Department of Education. Retrieved May 28, 2007 from <http://nces.ed.gov/pubst2006/2006042.pdf>. There is evidence that the percentage of minorities homeschooling has increased since 2003. Total not 100 due to rounding.



WHY DO PEOPLE HOME EDUCATE THEIR CHILDREN?

Homeschooling has re-emerged and continued to grow for the past 30 years. Parents (and youth) give many reasons for this trend. Those reasons, however, can be grouped plainly into six categories (Figure 17). The reasons are to (a) customize or individualize each child's education, (b) accomplish more academically than in an institutional school, (c) provide a

safe learning environment, (d) offer consistently parent-guided social interaction, (e) enhance strong family ties, and (f) transmit the values, beliefs, and worldview of the parents rather than those of the public-school system or of others.

FIGURE 17.
REASONS PARENTS AND YOUTH CHOOSE TO HOMESCHOOL



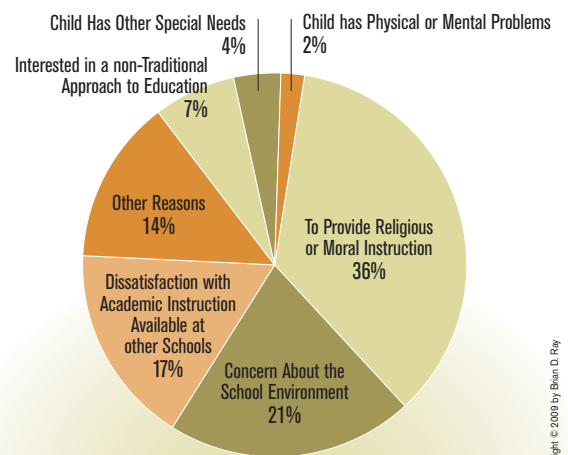
Note: The size of the blocks of reasons does **not** necessarily represent any statistic (e.g., percent). Source of statistics – several studies, summarized in the following: Ray, Brian D. (2005). *Worldwide guide to homeschooling*. Nashville, TN: Broadman & Holman, Publ.



Consistent with this categorization of reasons for home-based education, research recently published by the U.S. Department of Education reported the reasons parents give for homeschooling. The findings also show that 36 percent of parents state the most important reason was “to provide

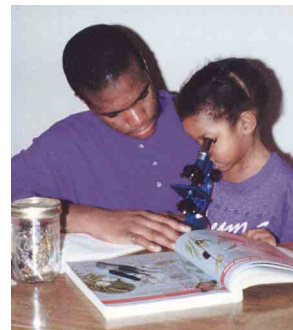
religious or moral instruction” (Figure 18). For an additional 21 percent, the most important reason was “concern about the school environment,” and for 17 percent it was “dissatisfaction with the academic instruction available at other schools.”¹⁶

FIGURE 18.
FIGURE 18. MOST-IMPORTANT REASONS FOR HOME EDUCATING



Note: Source of statistics – Bielick, Stacey. (2008, December). 1.5 Million Homeschooled Students in the United States in 2007. Washington, DC: U.S. Department of Education (National Center for Education Statistics). Retrieved December 23, 2008 from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009030>. Total not 100 due to rounding.

The fundamental reasons for choosing and practicing parent-led home-based education (otherwise known as homeschooling) have been rather stable through the roughly 30-year history of the movement. Regardless of background, the reasons are basic regarding what home-educating parents think is important in the education and upbringing of their children. An increasing number and percentage of parents are concluding that it is a parent's job to be the main educators and mentors in their children's lives, and that it is not the job of other adults, the government, or their children's peers.



Further, based on research findings and their own experience, an increasing number of parents are concluding that they can do a better job of educating and bringing up their children than government-run institutional classrooms and school systems. Research consistently shows that home-educated students are doing well academically, in their social, emotional, and psychological development, and into occupations, civic engagement, community activities, and family life in their adult years. The homeschool population has grown remarkably for 30 years, and most indications are that it will continue to grow into at least the near future.



ENDNOTES / REFERENCES

1. Several research studies are cited in this review, but the references are far from exhaustive. More complete reviews and bibliographies of research on home education can be found in sources such as the following: (a) Ray, Brian D. (2005). A homeschool research story. In Bruce S. Cooper (Ed.), *Home schooling in full view: A reader*, p. 1-19. Greenwich, CT: Information Age Publishing. (b) Ray, Brian D. (2008, September 24). *Bibliography of research on homeschooling: International*. Retrieved January 8, 2009 from <http://www.nheri.org/Bibliography-of-Research-on-Homeschooling-International.html>. (c) Ray, Brian D., & Eagleson, Bruce K. (2008, August 14). State regulation of homeschooling and homeschoolers' SAT scores. *Journal of Academic Leadership*, 6(3). Retrieved January 23, 2009 from http://www.academicleadership.org/emprical_research/State_Regulation_of_Homeschooling_and_Homeschoolers_SAT_Scores.shtml.
2. (a) Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106. (b) Ray, Brian D. (1997). *Strengths of their own*. Salem, OR: National Home Education Research Institute, www.nheri.org. (c) Rudner, Lawrence M. (1999). Scholastic achievement and demographic characteristics of home school students in 1998. *Educational Policy Analysis Archives*, 7(8), retrieved January 5, 2009 from <http://epaa.asu.edu/epaa/v7n8/>.
3. Same references as for Endnote 2.
4. Ray, Brian D., & Eagleson, Bruce K. (2008, August 14). State regulation of homeschooling and homeschoolers' SAT scores. *Journal of Academic Leadership*, 6(3). Retrieved August 25, 2008 from http://www.academicleadership.org/emprical_research/State_Regulation_of_Homeschooling_and_Homeschoolers_SAT_Scores.shtml.
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6. Ray, Brian D. (2002). Customization through homeschooling. *Educational Leadership*, 59(7), 50-54.
7. Ray, Brian D. (2000). Home schooling: The ameliorator of negative influences on learning? *Peabody Journal of Education*, 75(1 & 2), 71-106.
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9. Wenders, John T., & Clements, Andrea D. (2007). An analysis of the economic impact of home and private schooling in Nevada. *Home School Researcher* 17(2), 13-35; quotes from p. 32. Also available January 9, 2009 from <http://www.nheri.org/Volume-17-Issue-2/An-Analysis-of-the-Economic-Impact-of-Home-and-Private-Schooling-in-Nevada.html>.
10. (a) Medlin, Richard G. (2000). Home schooling and the question of socialization. *Peabody Journal of Education*, 75(1 & 2), 107-123. (b) Shyers, Larry E. (1992). A comparison of social adjustment between home and traditionally schooled students. *Home School Researcher*, 8(3), 1-8.
11. Ray, Brian D. (2004). *Home educated and now adults: Their community and civic involvement, views about homeschooling, and other traits*. Salem, OR: National Home Education Research Institute, www.nheri.org.
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