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Home Schooling: From the Extreme to the Mainstream

2nd edition

by Patrick Basham, John Merrifield, and Claudia R. Hepburn

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Executive Summary

of the thousands of studies published by The Fraser Institute, Patrick Basham's 2001 study Homeschooling: From the Extreme to the Mainstream has had almost unique popularity and longevity. In 2006, five years after it was published, the study's PDF was downloaded from our website more than 10,000 times, making it the most frequently viewed study apart from the newly released school report cards and the Tax Freedom Freedom Day calculator.

This second edition builds on the original with new research and data. The paper considers the educational phenomenon of home schooling in Canada and the United States, its regulation, history, growth, and the characteristics of practitioners before reviewing the findings on the academic and social effects of home schooling. The paper finds:

- Home schooling continues to grow in popularity among parents in both Canada and the US.
- There are good reasons to be suspicious about easy comparisons between the test scores of home schooled and other students, since it is difficult to ensure comparable testing conditions or levels of student participation, among other reasons. However, the number of scholars and studies comparing the two groups continues to grow, bolstering older studies.
- Many studies, Canadian, American, and international, have found that home schooled students outperform students in both public and independent (private) schools. One US study found that home and private school students perform comparably well, and that both maintain a strong advantage over public school students.

- Home educated children enjoy no significant advantage if one or both parents are certified teachers.
- Surprisingly, several studies have found that home education may help eliminate the potential negative effects of certain socio-economic factors. Though children whose parents have university degrees score higher on tests of academic achievement than other home schooled children, home education appears to mitigate the harmful effect of low parental education levels. That is, public schools seem to educate children of poorly educated parents worse than do the poorly educated parents themselves. One study found that students taught at home by mothers who had never finished high school scored a full 55 percentile points higher than public school students from families with comparable education levels.
- Despite a widespread belief that home educated students are not adequately socialized, the preponderance of research suggests otherwise. The average Canadian home schooled student is regularly involved in eight social activities outside the home. Canadian home schoolers watch much less television than other children, and one researcher found that they displayed significantly fewer problems than public school children when observed in free play.
- Though the long-term effects of home schooling are less well studied, both Canadian and American findings on previously home schooled adults are encouraging. Canadian home-schooled students report a life satisfaction score well above their public school peers. American studies have found indications of a wide range of non-academic benefits from home schooling.

- The widespread use of the Internet has helped the development of social connections and pedagogical resources of home schooling families.
- Home schooling families reportedly spend less than US \$4,000 per year per household on home

schooling though that cost does not place any value on the parents' time. In the United States, the most recent figures show public school spending to be \$9,644 per child.



Introduction

uring the last 25 years, the general public's familiarity with home schooling has evolved from a level of almost complete ignorance to one of widespread, though largely uninformed, awareness. This evolution was stimulated by, and reflected in, heightened media interest in home schooling.

Feature articles on home schooling graced the covers and pages of many national publications (see Wallace, 1982; Feinstein, 1986; Stecklow, 1994; Maushard, 1996; Benning, 1997; Eisler and Dwyer, 1997; Kantrowitz and Wingert, 1998; Kay, 2001; Cloud and Morse, 2001; Wall Street Journal, 2002; USA Today, 2003 and 2005; Saulny, 2006) such as Maclean's, Newsweek, The National Post, The New York Times, Wall Street Journal, Time, and USA Today, while national radio and television broadcasts1 also shone a spotlight on home schooling. Consequently, the growth of home schooling has not escaped the attention of leading policymakers in both Canada and the United States. On September 16, 1999, the US Senate passed a resolution designating the week of September 19-25, 1999, as "National Home Education Week."

Home schooling has also gained in popular support, at least in the US. A poll taken in 1985 showed that only 16 percent of families thought home schooling a good thing, whereas in 2001 this figure had risen to 41 percent (Orse and Gallup, 2001, p. 46).

Similarly, academic researchers and policy analysts are exhibiting more than a passing interest in home schooling (Ray, 1994; Ray, 2003; Van Pelt, 2003). In June 2000, for example, the *Peabody Journal of Education* devoted a 300-page issue exclusively to the topic of home schooling (McDowell and Ray, 2000). Such popular, political, and academic attention reflects the reality that, as Patricia Lines, formerly a senior research analyst for the US Department of Education and now a senior fellow at the Discovery Institute, concludes, home schooling parents are "reinventing the idea of school" (quoted in Kantrowitz and Wingert, 1998, p. 67).

Because of the growing interest in this flourishing but still poorly understood private education practice, this paper attempts to address a series of important questions. They include:

- What is home schooling?
- How does the government regulate home schooling?
- What is the history of home schooling in North America?
- How many children are home schooled?
- What are the socio-demographic characteristics of home schooling families?
- How do home schooled children perform academically?
- What is known about the socialization of home schooled children? and
- What are the public policy implications of this experiment in private education?

¹ For example, National Public Radio's three-part documentary series Homeschooling 101: Why We Do It.



The Regulation and History of Home Schooling

ong considered a private matter in North America, education is not even mentioned in the US Constitution and is not a concern for Canada's federal government. In both countries, education is the mandate of individual states or provinces. Attitudes to home schooling are therefore highly divergent from state to state and province to province (Kay, 2001; Hepburn and Van Belle, 2003).

Canadian regulation

According to Statistics Canada, home schooling occurs when a child participates in his or her education at home rather than attending a public, private, or other type of school. Parents or guardians assume the responsibility of educating their child and may develop their own curriculum guidelines using the support of local and virtual educations resources as they see fit (Luffman, 1998). They may enroll their children in certain classes or extracurricular activities provided by private or public institutions (either locally or virtually) but have not delegated to a single educational provider responsibility for the majority of their children's education, preferring to direct and manage that education personally. As the educational resources of our society grow (public and private, community-based and virtual, formal and informal), so do the options for home schooling families.

Home schooling is legal in all 10 Canadian provinces (see Statistics Canada, 1997, for a detailed provincial breakdown of home schooling regulations), but each province has its own specific rules governing home schooling; most require that home schooling parents comply with the Education (or School) Act in the respective province.² In practice, this means that the provincial government insists only upon the home schooled child receiving "satisfactory" instruction in the home environment. In most provinces, parents must register their home schooled children with their local school or school board. Three provinces (Alberta, Newfoundland, and Saskatchewan) require parents to submit an application before being allowed to home school (Hepburn and Van Belle, 2003, p. 6). "Eleven percent of Canadian home-educating families experience some school board, ministry, or social service agency interference with their home education (Van Pelt, 2003, p. 86)." Alberta pays home schooling expenses up to 16 percent of the per pupil public school expenditure (Hepburn and Van Belle, 2003, p. 6). British Columbia's E-Bus program helps with home school computer hardware and software costs. Alberta is the only province to require testing. Eight provinces issue curriculum guidelines to home schooling parents but these same provinces do not require that the curriculum be government approved. Only Alberta, Manitoba, and the Northwest Territories require the approval of curricula. Alberta, Manitoba, Nova Scotia, and Saskatchewan demand an

For example, the British Columbia School Act of 1989 gave parents the statutory right to educate their children at home on the provision that they "provide each school-age child with an educational program." In Ontario, the Education Act states that a child is exempt from attending school if he or she is receiving "satisfactory instruction at home or elsewhere."

annual report of student progress. No province, however, requires that home schooling parents possess teaching qualifications.

US regulation

The US government defines home schooling as, "The education of school-aged children at home rather than at a school" (Lines, 1993, p. 1). In 1980, home schooling was illegal in 30 states. It has only been legal in all 50 states since 1993. However, specific state laws constitute a patchwork of regulations.

There are high regulation, moderate regulation, and low regulation states. High regulation states typically require parents to inform their educational authority that they wish to begin to home school, maintain compulsory attendance laws, require that the home school curriculum be approved by the state, conduct periodic visits to the home, administer standardized tests, and require that home schooling parents be certified teachers; a requirement often drawn up by state legislatures swayed by teachers' unions whose aim is to discourage home schooling (Brandly, 1997). Moderate regulation states typically require parents to send notification and provide test scores and/or professional evaluation of the student's progress. Low regulation states do not require parents to initiate any contact with the state. For example, there are 41 states that have no minimum academic standards for parents who home school their children.3

History

Throughout history, societies have schooled children at home (Gordon and Gordon, 1990; and Stevens, 2001). In fact, home schooling (conducted either by

parents or private tutors) was prevalent throughout North America until the 1870s, when compulsory school attendance and the training of professional educators coalesced to institutionalize education in the physical environment that today we recognize as school. Notable home schooled Americans include, for example, Presidents George Washington, John Quincy Adams, Abraham Lincoln, Theodore Roosevelt, Woodrow Wilson, and Franklin Delano Roosevelt. Other successful products of American home schooling include jurists Patrick Henry, John Jay, and John Marshall, inventor Thomas Edison, General Robert E. Lee, civil rights activist Booker T. Washington, writer Mark Twain, and industrialist Andrew Carnegie.

Although home schooling continued in a limited fashion after the 1870s, it was not until the 1960s that it received renewed attention and interest from parents and educators. The intellectual roots of the two strains most evident in contemporary North American home schooling are both a generation in length.⁴ The first strain is ideological, and classifiable as the "Christian Right." Its philosophical leader is the former missionary Dr. Raymond Moore. In 1969, Dr. Moore, then a US Department of Education analyst, began researching the institutionalization of children's education. His main conclusion, disseminated in publications such as *Home Grown Kids* and *Home-Spun Schools*, was that a child's entry into formal education should be delayed until ages 8 to 12.

The second strain of home schooling is pedagogical and traces its theoretical lineage to the "Libertarian Left," as led by the late teacher John Holt. During the 1960s, Holt advocated educational decentralization and greater parental autonomy (sometimes known as "laissez-faire home schooling"), more recently referred to as "unschooling." Holt's thesis is that the most civi-

³ The evolving regulatory relationship between home schooling parents and government is most recently addressed by Malkin, 2001.

In Canada, most home schooling parents do so for religious or pedagogical reasons (see Smith, 1993).

Approximately five percent of home schooling in the US follows the unschooling approach, which does not adhere to a structured curricula but allow students to learn at their own pace and according to their own interests (see Cloud and Morse, 2001, pp. 52-3).

lized way to educate a child is through home schooling. To propagate his ideas, Holt wrote the highly controversial books *How Children Fail*, and *Teach Your Own*. In 1977, he founded the bimonthly home schooling magazine, *Growing Without Schooling*.

Although the contemporary image of home schooling parents depicts a homogeneous, deeply religious, socially conservative sub-group of the population, back in the 1960s and 1970s most home schooling parents were members of the counter-cultural Left, principally advocates of New Age philosophies, hippies, and homesteaders.

By the mid-1980s, however, most home schooling parents could be accurately described as part of the

Christian Right. By the late 1990s, 75 percent of American home schoolers were practicing Christians (Livni, 2000). However, in terms of religiosity, home schooling is not proving to be the *exclusive* preserve of Christian groups. In fact, "growth in home schooling may be reaching a broader range of... families and values" (Bielick, Chandler, and Broughman, 2001, p. 4; McDowell, Sanchez, and Jones, 2000; Lines, 2000b; and Welner and Welner, 1999). Muslim Americans, for example, are the fastest growing sub-group within the home schooling movement. Currently, 58 percent of home schooling families are "fundamentalists," though only 33 percent cited religion as a reason to opt for home schooling (Bauman, 2001; USDOE, 2005b).



The Growth of Home Schooling

There has been very rapid growth in home schooling in both Canada and the United States over the past 20 years. In Canada, "with the help of regionally based support groups and national organizations, the home schooling movement has been gaining momentum" (Luffman, 1998). The number of Canadian home schooled children grew every year during that period. In 1979, just 2,000 Canadian children were home schooled (Statistics Canada data, as cited in Wake, 2000).

By 1996, the respective provincial ministries of education put the number of home schooled children at 17,523, or 0.4 percent of total student enrolment—a 776 percent increase over just 18 years.⁶ However, Canada's home schooling associations claimed a much higher figure—between 30,000 and 40,000, or approximately one percent of total student enrolment.⁷ By 1997, the home schooling associations claimed there were approximately 60,000 Canadian home schooled children (Eisler and Dwyer, 1997, p. 64). By 1999, it was estimated that there are more than 80,000 children being educated in private homes. If accurate, this suggests a doubling of the home schooled population in only a few years (Wake, 2000).

In the United States, various estimates suggest home schooling has grown at a rate of between 11 to 40 percent annually (Ray, 1994; Cloud and Morse, 2001, p. 49). In 1985, there were only 50,000 American home schooled children; by 1992, there were 300,000 home schooled children (Gutterson, 1993). In the fall of 1995, the US Department of Education estimated the number of home schooled children at between 500,000 and 750,000 (Lines, 1997, p. 4). In 1999, the US Department of Education estimated that 850,000 students were being home schooled (Bielick, p. 3).8 The most recent US Department of Education (2005b; 2003 data) estimate is 1.1 million. However, according to the Home School Legal Defense Association, the number is closer to two million; perhaps as high as 2.1 million home schoolers (Ray, 2003). On the basis of those less conservative figures, home schooling appears to have grown about 7 percent per year since 2002 (National Home Education Research Institute, web site home page, http://www.nheri.org).

Currently, the United States has 55 million students attending 96,000 public schools and 30,000 private schools (USDOE, 2006). Therefore, home schoolers may comprise as much as 3.8 percent of the

⁶ This figure excludes Quebec home schoolers, as the Quebec Ministry of Education does not collect data on home schooling.

The discrepancy in these numbers is not surprising. Most provinces provide no incentive for home schoolers to register (or penalty if they do not) so their numbers are presumably not an accurate reflection of total numbers of home schoolers. Home schooling associations may have access to greater numbers of these families, but their numbers may be difficult to validate.

In comparison, according to the Center for Education reform, there were, in 2005, "over one million" American children attending charter schools (http://www.edreform.com/) and 100,000 receiving school vouchers (personal communication with the Friedman Foundation, and private voucher estimate based on Merrifield, 2001 and 2004).

school-aged population. Even the Department of Education's low estimate of their numbers is more than the projected 2005 total K-12 public school enrollment of 38 of the 50 states. As a reflection of the growth in home schooling, the US Census Bureau now includes home schooling-related questions in its survey. Such growth has stimulated a significant demand for intellectual and practical resources for those interested in the theory and practice of home schooling. Consequently, *Practical Home Schooling* magazine regularly sells over 100,000 copies, while its publisher, Mary Pride, has written *The Big Book of Home Learning*, which has sold 250,000 copies. In September 2006, the online bookseller, Amazon.com, listed 1,646 home schooling-related books in its catalogue.

Why is home schooling growing so quickly? Although parents home school their children for many reasons, the principal one is dissatisfaction with some aspect of public schooling. In addition to the 33 percent that objected to the unavailability of religious instruction, 30 percent felt their public school had a poor learning environment, 14 percent objected to what the school taught, 11 percent felt their children weren't being challenged at school, and 9 percent cited morality issues (USDOE, 2005b).

Clearly, "home schooling is... the bellwether for a mushrooming disaffection with the [US] public education system" (Kay, 2001). As an American home schooling parent once commented, "not every home schooler is part of a middle-class Christian Republican family. The decision to home school is not made solely on the basis of conservative political or religious views. Many people make this decision because of the difficulties with our current school system, [or] because their children have differing learning styles" (Cleaveland, 2001).

In Canada, disappointingly, static schooling outcomes are the norm despite high levels of per-pupil spending and seemingly strenuous efforts by provincial governments to raise education standards. (See *Why Canadian Education Isn't Improving*, by Merrifield, Dare, and Hepburn 2006.) Repeatedly, polls have shown that less than half of Canadians are satisfied with public schools. Canadian research has demonstrated that home schoolers are also significantly dissatisfied with public schooling. Many of the parents surveyed in an important Canadian study on home schooling expressed the desire to pass on particular values to their children and to tailor their children's instruction to their particular interests and learning styles (Van Pelt, 2003, p. 48-49).

Efforts to improve the system's performance have yielded mixed evidence; some pointing slightly upward, and some suggesting further deterioration (Merrifield, Dare, and Hepburn, 2006).

Likewise, America's public school systems have not responded either to funding increases or to political pressure. Indeed, despite being the top domestic policy issue of every governor and of both presidential candidates in the 2000 election, and despite repeated, high profile declarations that the country had an "education emergency" and was a "Nation at Risk" (United States Commission on National Security, 2001; and National Commission on Excellence in Education, 1983), American education has failed to improve (Merrifield, 2001).

What, then, do home schooling parents perceive to be the specific comparative advantages of home schooling? The most commonly cited advantages articulated by both Canadian and US parents may be summarized as follows:

- The opportunity to impart a particular set of values and beliefs.
- Higher academic performance through one-onone instruction.

⁹ US Asst. Secretary of Education Eugene Hickok quoted in Cato Policy Report (Cato Institute, 2001).

- The opportunity to develop closer and stronger parent-child relationships.
- The opportunity for the child to experience high-quality interaction with peers and adults.
- The lack of discipline in public schools.
- The opportunity to escape negative peer pressure (e.g., drugs, alcohol, and premarital sex) through controlled and positive peer social interactions.
- The expense of private schools, and
- A physically safer environment in which to learn.

The first survey of home schooling families in Quebec found similar motivations for Quebec home educators. It found that "no religious, philosophical, or anti-state viewpoint" dominates decision making, but that parents' main motivations are "a desire to pursue a family educational project; an objection to the organizational structure of the school system; a desire to offer curriculum enrichment; and a preoccupation with their children's socioaffective development" (Brabant, Bourdon, and Jutras, 2003).

A study that considered a variety of sources from Ontario and the rest of Canada found that as home schooling has become more mainstream, more home schoolers share in "a burgeoning culture of 'pedagogical individualism' that prizes educational alternatives tailored to the needs of each unique child (Davies and Aurini, 2003).

Most recently, the safety issue in particular spurred widespread interest in home schooling (Krumbine, 2004). This reflects both that, for example, one in four American public school students has been a victim of violence at or near their school (cited in Richman, 1994, p. 111), and the heightened interest in safer schooling immediately following the April

1999 shootings at Columbine High School in Littleton, Colorado (and subsequent copycat incidents in both Canada and the United States; see, for example, Sink, 1999). In a *Newsweek* poll, 63 percent of adult Americans said it was very or somewhat likely that a shooting incident could happen at their local schools.¹⁰

The growing interest in home schooling is also greatly facilitated by new technology, specifically the growth of the Internet. Increased access to home computers and the Internet certainly underlies the rapid growth in home schooling in the past 20 years. Canadian experience suggests that, "Cheaper computers, software, easy Internet access, and the increased amount of educational material available online are encouraging more parents to keep their children at home rather than sending them to school" (Wake, 2000). Clearly, "the Internet is especially bringing home schoolers together... [as] contrary to the isolated image of the home schooler, the Net provides contacts all over the world" (Gooderham, 1996).

British Columbia's Ministry of Education is subsidizing the Internet's ability to facilitate educational inquiry. Since 1996, a provincial program known as E-Bus has provided each school board with approximately \$4,000 per interested home schooling family so that the school board may, in turn, provide each of these families with a computer, a CD-ROM, Internet access, a selection of software, and ongoing on-line assistance. In return, the students must demonstrate that they are performing at the level of their classroom peers and submit their work to an on-line instructor for grading. Also in 1996, the Alberta government linked home schooled children with public school teachers through the Internet, fax, and telephone communications.

Polling conducted April 21-22, 1999, as reported in Bai, 1999, p. 27.



The Socio-demographic Characteristics of Home Schooling Families

Both Canadian and American home schooling generally attracts two types of families: ideologues and pedagogues. The ideologues are usually, but not exclusively, religious conservatives, while the pedagogues are preoccupied with improving their child's academic and social environment (Van Galen, 1991). Interestingly, a 1990 Canadian survey found that, although only 25 percent of home schooling parents claimed no religious or spiritual commitment at all, partisan allegiance was evenly divided among the three major political parties (Priesnitz, 1990).¹¹

Home schooling parents have above-average levels of education. Among American parents who home school, 75 percent have studied beyond high school compared with 56 percent of parents nationwide (USDOE, 2005b, Table 3-1; US Census Bureau, 2006, HINC-01).

Not surprisingly, given the time and support required, home schooling families are almost exclusively two-parent families. Among the families in the 2003 National Center for Education Statistics Homeschooling Survey, 81 percent are two-parent households (USDOE, 2005b, table 3-1) compared to only 66 percent of American families with children (US Census Bureau, 2003). A January 2003 survey of 1,648 Ca-

nadian households engaged in home education found that 96.4 percent were two-parent families (Van Pelt, 2003, p. 34). In Canada, almost a third of home schooling mothers do generate income, and a full one-third of those women are employed more than 15 hours per week (Van Pelt, 2003, p. 38). In contrast, a US report from 1997 found that 87.7 percent of home schooling mothers did not work outside the home (Ray, 1997b). A 2001 study found no dramatic differences between the household incomes of home schoolers and non-home schoolers. Sixty-four percent of households in each group had annual incomes of \$50,000 or less (Bielick, *et al.*, 2001, p. 8).

Overall, 52 percent of home schooled American children are raised in two-parent families where only one parent works outside the home, compared to 19 percent for non-home schooled children (Bielick, *et al.*, 2001, p. 8). In both the US and Canada (Van Pelt, 2003, p. 33), the average size of a home schooling family is also above average. In the US, 62 percent of home schooling families have three or more children compared to 44 percent of non-home schooled families, while 56 percent of all American families with school-age children have only one or two children (USDOE, 2005b, Table 3-1; US Census Bureau, 2003).

¹¹ At that time, the Progressive Conservatives, the Liberals, and the New Democratic Party comprised the three major federal political parties.



How Do Home Schooled Children Perform Academically?

Home schooled students receive a more varied education than does a child who is conventionally schooled.

—Isabel Lyman, Cato Institute

Researchers are prone to be suspicious of generalizations about the academic achievements of students educated at home. These families often have more choice about which tests to take and when to take them and some may be prone to do well in any school setting if their parents are themselves well educated. Having said that, study after study finds that home schooled students tend to outperform their peers on a variety of tests.¹²

One comprehensive study of American home schooling was led by leading statistician and measurement expert Dr. Lawrence Rudner of the University of Maryland in 1998. The study measured 20,760 home schooled students in all 50 states on the Iowa Test of Basic Skills (Rudner, 1999). Rudner found that, "the median scores for home school students are well above their public/private school counterparts." The home schoolers' average score was between the 82nd and the 92nd percentile in reading, and reached the 85th percentile in math. Overall, test scores for home schoolers were between the 75th and 85th percentiles. Public school students scored at the 50th percentile, while private school students' scores ranged from the 65th to the 75th percentile. Rudner concluded that "those

parents choosing to make a commitment to home schooling are able to provide a very successful academic environment."

More recently, Clive Belfield and Henry Levin have compared the relative effectiveness of home schooling to other forms of schooling. They have found that "most of the home-schooling premium comes from higher SAT verbal scores, not the SAT math scores... Insofar as there is a treatment effect (of indeterminate size) from home-schooling, it appears to be much greater for verbal scores than for math scores" (Belfield and Levin 2005, p. 106). This study found the advantage of home schooling over private schooling dramatically reduced when the researchers controlled for 21 independent variables likely to affect student results (pp. 106-108), but that a strong advantage over public schooling remained. Home schooled students scored as well as private school students on the SAT, but did not outperform them.

Interestingly, having at least one parent who is a certified teacher appears to have no significant effect on the achievement levels of home schooled students. The test scores of students whose parents had ever held a teaching certificate were only three percentile points higher than those whose parents had not—in the 88th percentile versus the 85th percentile. On the other

For a full discussion of the difficulty of comparing home school test results with those of institutionally schooled children, see Belfield and Levin, 2005, pp. 100-108.

hand, the children of university graduates perform significantly better than do children whose parents do not have a degree.

However, regardless of whether their mothers held a degree or did not complete high school, the children's scores stayed between the 80th and 90th percentile. By contrast, in 8th grade math, public school students whose parents are college graduates score at the 63rd percentile, whereas students whose parents have less than a high school diploma score at the 28th percentile. Students taught at home by mothers who never finished high school scored a full 55 percentile points higher in math and 49 points higher in writing than public school students from families with comparable education levels (Ray, 1997a). According to Rudner, "The mean performance of home school students whose parents do not have a college degree is much higher than the mean performance of students in public schools."

Almost one-quarter (24.5 percent) of home schooled students perform one or more grades *above* their age-level peers in public *and* private schools. Grades 1 to 4 home school students perform one grade level higher than their public- and private-school peers. By grade 8, the average home schooled student performs *four* grade levels above the national average (Ray, 1997a). One may contrast this with the American public school system where advancement between grades, under a system of so-called "social promotion," is primarily a function of age rather than of aptitude.

Overall, the empirical evidence clearly demonstrates that home education may be conducive to eliminating the potential negative effects of certain background factors (also see McDowell and Ray, 2000). Low family income, low parental educational attainment, parents not having formal training as teachers, race or ethnicity of the student, gender of the student, not having a computer in the home, infrequent usage of public services (e.g., public libraries), a child commencing formal education relatively later in life, relatively small amounts of time spent in formal

educational activities, and a child having a large (or small) number of siblings all seem to have less influence on the academic achievement of the home educated than on those attending public school. More specifically, in home education, educational attainment of parents, gender of student, and income of family may have weaker relationships to academic achievement than they do in public schools (Ray, 1997a, chapter 4).

There is less Canadian research data to examine, but the academic performance of Canadian home schooled students appears to be comparable to that in the US. Dr. Brian D. Ray found home schooling students scoring, on average, at the 80th percentile in reading, at the 76th percentile in language, and at the 79th percentile in mathematics. The Canadian average for all public and privately educated students is the 50th percentile. Ray's study also found that students whose parents are certified teachers perform no better than other students and that neither parental income nor parents' educational background has a significant impact on student performance (Ray, 1994). A 2003 survey found that, based on Canadian Achievement Test (CAT3) results, home educated students "perform above the Canadian norm for their levels" (Van Pelt, 2003, p. 56). At the 9th to 12th grade levels, home educated children averaged mean percentile ranks of 85, 84, and 67, respectively, in reading, language, and mathematics (p. 59).

The international evidence on the academic performance of home schooled students is equally encouraging. For example, a three-year study conducted by researchers at England's University of Durham found that home schooled students noticeably out-performed their public school peers in both literacy and mathematics (Livni, 2000). The fact that home schooling appears to improve academic performance regardless of geographic location and political jurisdiction has stimulated interest around the world. The United Kingdom, Germany, Japan, and Switzerland are some of the developed nations with growing home schooling movements (Billups, 2000).

Higher education for home schooled children

Post-secondary institutions that welcome home schooled students are increasing. According to the National Association for College and Admission Counseling in the United States, the percentage of American colleges with formal policies for assessing home educated students rose from 52 percent in 200 to 83 percent in 2004 (Chandler, 2007). In the absence of school transcripts, some American colleges offer applicants the option of submitting standardized test scores, letters of recommendation, and a portfolio of their written work. Also, many home schooled students are writing the General Educational Development tests, a high school equivalency exam, in order to demonstrate their academic progress to the 75 percent of American universities accepting such students. In recent years, home schooled students are gaining admission and scholarships to the most prestigious universities. At the end of the last decade, over 700 post-secondary institutions across the United States, including Harvard University, Yale University, Stanford University, MIT, Rice University, and the Citadel, admitted home schooled students (Leung, 2000). Total numbers of applications to these institutions have also increased. For

instance, Stanford University received 36 applications from home-educated students seven years ago, but the number had climbed to 104 this year, while Virginia's College of William and Mary saw an increase from 49 to 67 in the past two years. (Chandler, 2007), September 2000 saw the opening of Patrick Henry College, in Virginia, the first university established especially for home schooled children. (See Cooper, 2005, for more on this.) The welcoming attitude of post-secondary institutions to home schooled students recognizes that they "bring certain skills-motivation, curiosity, the capacity to be responsible for their education—that high schools don't induce very well" (Jon Reider, Stanford University admissions official, quoted in Clowes, 2000). Related to that, home schoolers have become highly sought-after armed forces recruits (HSLDA, 2005b).

To the north, an increasing number of Canadian universities and colleges are accepting home schooled students. These include the University of Toronto, York University, Dalhousie University, the University of Saskatchewan, and St. Francis Xavier University. Many of these post-secondary institutions require some type of standardized testing, be it provincial examinations or SATs, before offering admission.



The Socialization of Home Schooled Children

I have never let my schooling interfere with my education.—Mark Twain

Perhaps the most widely-held misconception about home schooled students is that they are not adequately socialized, spending all their days with their immediate family at home without the benefit of a wider array of influences. The preponderance of social science research, however, refutes this image of the home schooled childhood being stifled by lack of interaction. Contrary to the concerns of the educational establishment, the typical home schooled child participates in a wide variety of extracurricular activities. The average home schooled student is regularly involved in eight social activities outside the home (Van Pelt, 2003, p. 90). These include afternoon and weekend programs with public school students (e.g., sports, scouts, church groups, ballet, Little League, neighborhood play, part-time employment, and voluntary work), and day-time field trips and cooperative programs with groups of other home schooled students (Mattox, 1999).

This reflects, in part, the fact that home schooled children watch much less television than their public school peers. Of all home schooled children, 65 percent watch one hour or less of television per day, compared to 25 percent nationally. On average, 40 percent of American fourth-graders watch over three hours of television a day, but among home schooled children, only 1.6 percent consume comparable amounts of television (Rudner, 1999). Van Pelt's 2003 Canadian survey of 1,648 home education households found that 75.8 percent of home-educated students watched less than two hours of television on an average weekday. Over one quarter of them watched no television (2003, p. 6).

In 1992, Prof. Larry Shyers assessed whether or not home schooled children suffer from retarded social development. His research observed children in free play and group interaction activities. Shyers found that public school children had significantly more problem behaviors than did the home schooled. Possibly this is because the primary models of behavior for the home schooled are their parents, rather than their peers. Shyers also concluded that there was no significant difference between home schooled and non-home schooled children in terms of either self-concept development or assertiveness (Shyers, 1992).

The long-term outcomes of home schooled children also suggest success. According to Van Pelt's survey of 1,648 Canadian home education households, home schooled students enjoy a life satisfaction score considerably above the score of their public school peers (2003, p. 7). Older American research supports this Canadian finding. Commenting on his ongoing investigation into the long-term effects of home schooling, education policy researcher J. Gary Knowles pronounced, "I have found no evidence that these adults were even moderately disadvantaged... Two thirds of them were married, the norm for adults their age, and none were unemployed or any on any form of welfare assistance" (Knowles, 1991). According to Prof. Thomas C. Smedley's personal interaction and communications research, home schooled students are more mature and better socialized than are those sent to either public or private school (Smedley, 1992). Data has also been collected suggesting that home schooled students are friendlier than their public school peers, as well as more independent of peer values as they grow older. Research by Dr. Raymond Moore has indicated that the home schooled are happier, better adjusted, more thoughtful, competent, and sociable children (Moore, 1986).

The list of benefits to the home schooled appears to exceed even its academic and social advantages. For example, Prof. John Taylor (1986) found that the home schooled have significantly higher self-esteem than those in public schools. According to Prof. Mona Delahooke (1986), the home schooled are less peer dependent than private school students, and the home schooled are as well adjusted, socially and emotionally, as their private school age-mates. Prof. Linda Montgomery (1989) found that home schooled students are as involved in out-of-school and extracurricular activities that predict leadership in adulthood as are those in the comparison private school (who are more involved than those in public schools).

The successful socialization of home schooled children (Van Pelt, 2003, p. 90) is aided immeasurably by the fact that each province and every state has at least one home school association. In fact, 85 percent of home schoolers either belong to a home school association or plan to join one (Lyman, 2000). Importantly, "Home school associations offer students the chance to interact with other home schoolers whether on the Internet, in study groups, or for field trips. Some home schooling associations offer shared facilities, such as a library or gymnasium, and some have organized athletic teams and competitions for students" (Raycroft, 2000). Most such associations provide newsletters, curriculum advice, legal counsel, and networking opportunities, as well as sponsor conferences and organize yearbooks. Some even administer graduation ceremonies.



Conclusion

Home schooling, initially off the radar screen, has in the 36 years of its modern revival become a mainstream alternative to institutional schooling of any kind, public or private. No longer monolithic, easily accessibly, adaptable, and responsive to its consumers... home schooling is the still extreme, but rapidly assimilating cultural prototype for inevitable reforms to public education in the coming decades, already in vigorous germination in the form of school voucher programs and charter schools. (Kay, 2001)

This paper has established that home schooling is a thriving educational movement both in Canada and the United States. It has also empirically demonstrated that the academic *and* socialization outcomes for the average home schooled child are superior to those experienced by the average public school student. Consequently, does the rise of home schooling provide any implications for education policy in North America?

There is one overriding lesson for policymakers to learn from this survey of home schooling. As home schooling researcher Isabel Lyman pithily described the American experience: "Home schooling has produced literate students with minimal government interference at a fraction of the cost of any government program" (Lyman, 1998). A breakdown of the respective American costs produces a startling comparison. For example, even if one includes the cost of purchased instruction and field trips, households spend less than \$4,000 a year to home school (Homefires, 2006). That expenditure may benefit multiple children, but it does not include cost of lost income when a parent leaves the labour force to home school. State schools spent an average of \$9,644 per student (pre-kindergarten

through the 12th grade) during school year 2002-2003 (USDOE, 2005a). It is clear that the direct costs of public (state-run) schooling in the United States are much higher than what home education families typically spend. Most tellingly, perhaps, home schooling produces an average 85th percentile ranking on test scores; public school students average a 50th percentile ranking. Canadian and US home schooling families receive very little public funding. In British Columbia, public and private schools receive a government grant for each registered home schooled child, but in most cases, and in most jurisdictions, home schooling families are not dependent on public, tax-funded resources. Home schooling families may be saving their fellow taxpayers significant sums of money. For example, according to a study conducted in Oregon more than a decade ago, home schoolers saved that state's taxpayers \$31 million annually (Ray, 1993). It has been argued that home schoolers serve "as models of economy and effectiveness" (Audain, 1987). Such realities suggest that both Canadian and American policymakers should consider whether or not home schooling parents, whose property taxes subsidize public schools, merit a reduction in those taxes or some other recognition of their contribution.

It is also the case that while in many jurisdictions home schooling has been largely deregulated, "further deregulation would make the parents' task easier" (Lyman, 1998). After all, a comparison of home schooled students' performance in highly regulated, moderately regulated, and unregulated American jurisdictions found no statistical difference. That is, the degree of government regulation has no significant effect on the academic performance of home schooled children. It was found that whether a given state imposes a high or

low degree of regulation, home schooled students' average test scores are at the 86th percentile (Ray, 1997b).

It appears that there may be growing recognition of this reality. Hence, the American home schooling community triumphed politically when it successfully lobbied the US Congress to abandon plans to require that parents acquire certification as teachers before being allowed to home school their children. According to Hudson Institute senior fellow Chester E. Finn, Jr., this was an impressive demonstration that, "Americans are becoming fussy consumers rather than trusting captives of a state monopoly. They've declared their independence, and are taking matters into their own hands" (Finn, quoted in Kantrowitz and Wingert, 1998, p. 67). A majority of the public is also aware that an alternative instrument for the delivery of education may be available. A 1998 Newsweek poll, for example,

found 59 percent of Americans agreeing that home schooled students are at least as well educated as public school students (Kantrowitz and Wingert, 1998).

The United Nations Declaration of Human Rights declares that, "Parents shall have the prior right to choose the kind of education that shall be given to their children" (Article 26 (3)). If Canadian and American policymakers, often so enthusiastic to comply with the aforementioned international organization's latest edict, are seriously committed to the meaning of this universal declaration, government interference in the area of home schooling will be limited. Although home schooling is neither desirable nor possible for all families, it has proven itself to be a relatively inexpensive and successful educational alternative. As such, it merits both the respect of policy makers and the further attention of researchers.



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