

THE IMPACT OF HOME SCHOOLING REGULATIONS ON EDUCATIONAL ENROLLMENTS IN THE UNITED STATES

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Three major investigations were conducted in an effort to determine the impact of home school regulations on educational enrollments in the United States. Home school regulations were obtained from state departments of education and investigated to determine the strength of the accountability measures. Populations representative of the school-age population by state, school enrollment, school non-enrollment, and home school enrollment were collected using 2000 U. S. Census data. The relationship between the strength of the home school regulations and the home school enrollments was examined. Finally, the existence of a discrepant student population was assessed.

Background of the Study

Traditional education in America is currently experiencing many changes that range from the growth of charter schools to voucher systems. In comparison with other recent changes in education, home schooling has received less attention and research than other reform movements. However, home schooling has the potential for a much larger impact on the current educational system than any of the other recent movements simply because of the sheer number of students involved (Reich, 2002). Current estimates indicate that there are between 1,300,000 and 1,700,000 students in the United States enrolled in home instruction, or as much as four percent of the total school age population (Beilick, Chandler, & Broghman, 2001). Further, indications are that the home school movement has been growing steadily from seven

to fifteen percent annually in recent years (Lines, 1999).

The concept of parents educating their children at home was once a necessity on the American frontier (Galen & Pitman, 1991). Historically, conflict arose between the government's requirement of each state to educate its children and the parents' fundamental rights to education their own children with the adoption of compulsory attendance laws for those of school age. Compulsory attendance laws in the United States promoted the widely accepted theory that one duty of each state is to offer every child educational opportunities which promote intelligence and self sufficiency. Less widely accepted, however, was the theory that the state has a duty to insist that every child accept such educational opportunity (Ensign, 1969). The rise of home school popularity has been

one of the most significant trends in education over the past half century and indications are that the home school movement may even be becoming a social movement instead of simply an educational alternative (Reich, 2002).

On the heels of harsh criticism of public schools and public demands for response to a variety of competing agendas, the most recent wave of reform in education has brought many changes that impact nearly every aspect of the American education system. Demands for quality through accountability, standards-based reform, parental choice, and societal inequities have led to magnet schools, high stakes testing, revised professional licensure standards, charter schools, and voucher systems. The American education system has responded with efforts intended to make improvement-oriented change and to submit to close public scrutiny of its performance (Galen & Pitman, 1991). With the adoption of *No Child Left Behind* (U. S. Department of Education, 2001), a political platform to improve educational performance nationally, no element of public education has been unaffected by this reform movement.

Among the recent trends that may have a marked effect on the education system as a whole is the rapid expansion of home schooling. Typically public schools have recently been subjected to enhanced scrutiny, which has not transferred to the home school arena. State-level controls over such matters as qualifications of instructors, standards for curriculum, assessment of students, and even compliance with the principle of compulsory attendance appear markedly different from state to state. State

constitutions and statutes are the mechanisms by which states control and direct education in their jurisdictions. Preliminary investigation suggested that there is wide variation in the data on home schooling and the variation may be directly attributable to variation in the language of state regulatory provisions. No research that specifically examined home school enrollments relative to state regulations and school enrollments was found.

Purpose of the Study

The purpose of this study was to investigate the educational accountability for home school students contained in the regulatory provisions of the fifty states and the influence of this accountability, if any, on the number of students enrolling in home schooling, as well as students not accounted for in census data. The following objectives guided the investigation:

1. To categorize home schooling provisions in the various states by the strength of the educational accountability measures.
2. To determine if home school enrollments in each state are directly related to the strength of the regulatory provisions governing home schooling in each state.
3. To determine if a discrepancy exists between census data of the school-age population and current enrollments of public, private, and home school students in the United States.

The objective of this descriptive study was to investigate the current status of home schooling in the United States relat-

ed to state regulatory requirements. The governing provisions for home schooling of each individual state were investigated and classified according to strength. The regulatory components included the following information:

1. What are the home school requirements for this state?
2. What are the curriculum requirements?
3. What are the instructor qualifications?
4. What assessments are required?

Secondly, the relationship between the strength of the regulations and the number of home school students was investigated. This was determined by identifying the school-age population, the enrolled (public and private) school population, the home school population, and the unenrolled population by state according to 2000 U. S. Census data and individual state records. Finally, school enrollments were compared to the most recent census data for school-age children to determine the existence of a discrepant student population.

Data Collection

Initially, the school enrollment data were collected for each state. These data included students enrolled in either public or private schools, students not enrolled in any form of schooling, and students enrolled in home schooling. Secondly, the regulatory provisions governing home schooling of all fifty states were gathered from each state department of education. The data from these documents were needed to investigate the areas of accountability of enrollment, curriculum, instructor qual-

ifications, and assessment requirements. Finally, population data from the 2000 U. S. Census were reported and utilized.

To obtain the statutes and the numerical population reporting, internet sources were used to gather relevant data using online research tools. Study data that could not be found from this search were solicited by mail or telephone from each state's department of education as well as from the United States Department of Education. Data were carefully coded into rubrics so as to provide consistency for reporting and analysis.

Instrumentation

The state regulations pursuant to home schooling of the fifty states were divided into four categories based upon the amount of regulation imposed on home schooling parents. The Case Survey Technique (Rosenberg, 1968 and Yin, 1994) was used as a tool for quantifying the qualitative information that had been gathered. This method allowed numerical assignments to categories of accountability requirements related to home school regulatory provision, thus allowing a classification to be determined on the basis of weak, low, moderate, or high regulations. Each of the fifty states was placed into a quartile as defined by the regulation status derived.

For the areas of enrollment, curriculum, instructor qualifications, and assessment, each state was given a score of '0' if the area was not mentioned in state regulations; a score of '1' if the area was mentioned in the requirements; a score of '2' if the area required reporting or specified qualifications; and a score of '3' if the area included sanctions, specific assess-

ments, or specialized training.

After being assigned a score of '0-3' in each of four areas, a state score total was determined. The strength of the regulatory provisions were indicated by the following score totals:

Weak Regulation	0, 1, 2, 3
Low Regulation	4, 5, 6
Moderate Regulation	7, 8, 9
High Regulation	10, 11, 12

Analysis of the Data

The data for each of the fifty states were coded in tables and rubric charts to determine the regulatory status of each state. Simple descriptive statistics (Shannon & Davenport, 2001) were used to classify states according to the strength of the home school regulatory provisions. Next, the percent of home school students was calculated. An analysis of variance (ANOVA) was used to determine which strength quartiles differed significantly. Finally, state enrollment data and U. S. Census (2000) data were compared in order to determine if a discrepant population of school-age students exists nation-wide.

Findings

The investigation conducted to categorize home schooling provisions in the various states by strength of the educational accountability measures yielded the following outcome: 13 states were found to have weak regulatory requirements concerning home schooling; 17 states were found to have low regulatory requirements concerning home schooling; 13 states were found to have moderate regulatory require-

ments concerning home schooling; and 7 states were found to have high regulatory requirements concerning home schooling. The states, by name and strength assessment are shown in Tables 1-4:

The second component of the study sought to determine patterns of enrollments relative to the strength of the regulatory provisions of each state. Using information provided on the KIDS COUNT internet site (<http://www.aecf.org>), a presentation of U. S. Census 2000 Data Online, the school-age enrolled and non-enrolled populations of students ages 5 -17 were determined. According to the 2000 Census, the U. S. school-age population was 53,014,072; the enrolled school-age population was 51,324,419; and the non-enrolled school-age population was 1,689,653.

The home school population was more challenging to determine because only 19 of the 50 U. S. states collected home school enrollments for the year 2000. In order to determine an estimated enrollment for the remaining 31 states, the percentage of enrollment of the 19 responding states was determined by dividing the total school-age population by the home school populations for each of the 19 states. The reporting states were clustered according to the strength of regulations for home schooling and an average was determined. Using this estimation process, a total home school population of 619,438 students was estimated.

The indication of a discrepant, or unaccounted for, population was found by subtracting the enrolled and home school populations from the total school-age population. This population totaled 1,070,215

Table 1

States Categorized as Having Weak Regulatory Requirements

State	Enrollment Regulations	Curriculum Regulations	Instructor Regulations	Assessment Regulations	Total
Alaska	1	0	0	0	1
Arizona	2	1	0	0	3
Delaware	2	1	0	0	3
Idaho	0	1	0	1	2
Illinois	0	1	0	0	1
Indiana	2	1	0	0	3
Kentucky	2	0	0	0	2
Massachusetts	2	0	0	0	2
Michigan	0	1	0	0	1
Mississippi	2	1	0	0	3
Oklahoma	1	0	0	0	1
Texas	0	1	0	0	1
Utah	1	1	0	0	2

Table 2

States Categorized as Having Low Regulatory Requirements

State	Enrollment Regulations	Curriculum Regulations	Instructor Regulations	Assessment Regulations	Total
Arkansas	2	1	0	3	6
California	3	1	1	0	5
Connecticut	3	1	0	1	5
Florida	2	0	0	2	4
Hawaii	2	1	0	1	4
Kansas	3	0	1	0	4
Louisiana	2	1	0	2	5
Maryland	2	1	0	1	4
Montana	3	1	0	0	4
Nebraska	3	1	1	1	6
New Jersey	2	0	1	1	4
New Mexico	2	0	2	0	4
New York	3	1	0	2	6
Oregon	2	0	0	3	5
S. Dakota	2	1	1	1	5
Wisconsin	3	1	1	1	6
Wyoming	2	3	0	0	5

students. Table 5 reports the national totals for the categories of total school-age population, enrolled students, non-enrolled students, home school students, and the

discrepant population; table 6 indicates the same populations by individual state.

In order to determine the relationship between the strength of regulatory statutes

Table 3

States Categorized as Having Moderate Regulatory Requirements

State	Enrollment Regulations	Curriculum Regulations	Instructor Regulations	Assessment Regulations	Total
Alabama	3	3	3	0	9
Georgia	3	1	2	2	8
Iowa	3	1	2	3	9
Maine	3	2	0	2	7
Missouri	3	3	0	1	7
Nevada	3	3	3	0	9
New Hampshire	2	3	0	3	8
North Carolina	3	0	2	2	7
Ohio	2	2	2	3	9
Rhode Island	3	2	1	1	7
Tennessee	3	1	2	3	9
Vermont	2	3	1	2	8
Washington	2	1	2	2	7

Table 4

States Categorized as Having High Regulatory Requirements

State	Enrollment Regulations	Curriculum Regulations	Instructor Regulations	Assessment Regulations	Total
Colorado	3	3	1	3	10
Minnesota	3	1	3	3	10
North Dakota	3	1	3	3	10
Pennsylvania	3	3	2	3	11
South Carolina	3	3	2	3	11
Virginia	2	3	3	3	11
West Virginia	3	3	2	2	10

and home school enrollments, the percentage of discrepant student population was calculated by dividing the discrepant population by the total school-age population. An analysis of variance of the resulting means between strength quartiles was conducted; the analysis depicted the distribution of means as statistically sig-

nificant at the .002 level. Further, a Scheffe' Multiple Comparison Analysis was conducted and indicated statistically significant (.001) differences between states with weak regulatory status and high regulatory status as well as between moderate regulatory status states and high regulatory states. In conclusion, a signif-

Table 5

Status of School-age Children taken from U.S. Census Data in 2000

Age in Years	Total School Age Population	Number Enrolled	Not Enrolled	Home School Enrollment	Discrepancy
5 - 17	53,014,072	51,324,419	1,689,653	619,438	1,070,215

icant difference was found to exist in the percentage of home school enrollment in states with strong regulations versus states with weak regulations. These results are reported in Tables 7 and 8.

Conclusions

Objective 1 of this study was to categorize home schooling provisions in each state by the strength of the educational accountability measure. For the purpose of this study, 13 states were deemed to have weak regulatory provisions for home schooling, 17 states were determined to have a low regulatory status, 13 states were determined to have moderate regulations, and 7 states were determined to have high regulations for home school education.

Objective 2 of this study was to determine the school-age population and school enrollment for all fifty states and to establish if a relationship exists between the strength of the home school governing regulations and the home school enrollments. The relationship between the discrepant student population and home school enrollment indicated that states with the lowest regulatory strength have the highest percentage of discrepant student population. The discrepant student population is smaller in high regulatory states. Additionally, in states having the highest regulatory status, the percentage of home school

enrollment was proportionately larger.

Objective 3 of this study was to determine the existence of a discrepant population of educationally unaccounted for children, ages 5-17, in the United States by comparing the national school-age population and the school enrollment (including home, public, and private students). An unaccounted for national population of 1,070,215 school-age children was identified in this study.

Based on the findings of this study, the following conclusions can be drawn:

1. There are no consistencies in the regulations governing home school education across America.
2. Accountability for home school education is not increasing accordingly with public school accountability in the United States.
3. Discrepant school-age population statistics are not only a likely result of poor reporting, or non-reporting, of home schooled children, but also the possible result of school-age children not attending any school.

The findings and conclusions of this study indicate that there are issues that lend themselves to further study and consideration including the establishment of a national system of accountability for edu-

Table 6

Enrollments by Individual States

State	Total School Age Population	Number Enrolled	Not Enrolled	Home School Enrollment	Discrepancy
AL	827,790	797,759	30,031	9,106	20,925
AK	143,315	137,432	5,883	1,576	4,307
AZ	984,793	938,073	46,720	10,833	35,887
AR	498,863	480,019	18,844	11,038	7,806
CA	6,766,444	6,557,372	209,072	94,730	114,342
CO	801,814	771,764	30,050	14,433	15,617
CT	618,523	606,083	12,440	8,659	3,781
DE	142,740	137,785	4,955	1,912	3,043
FL	2,695,797	2,601,474	94,323	37,196	57,127
GA	1,573,797	1,523,671	50,126	17,312	32,814
HI	217,139	210,810	6,329	3,040	3,289
ID	270,971	259,948	11,023	2,981	8,042
IL	2,367,441	2,293,098	74,343	26,042	48,301
IN	1,150,139	1,102,097	48,042	12,652	35,390
IA	544,509	531,081	13,428	5,990	7,438
KS	523,162	508,125	15,037	7,324	7,713
KY	728,302	703,533	24,769	8,011	16,758
LA	902,844	874,179	28,665	12,640	16,025
ME	230,219	223,947	6,272	2,532	3,740
MD	1,001,976	977,194	24,782	14,028	10,754
MA	1,101,119	1,074,720	26,399	12,112	14,287
MI	1,922,933	1,872,901	50,032	1,953	48,079
MN	958,551	935,267	23,284	14,634	8,950
MS	571,199	550,594	20,605	10,053	10,552
MO	1,056,913	1,018,008	38,905	3,168	35,737
MT	175,111	168,806	6,305	2,537	3,768
NE	333,052	323,555	9,497	4,706	4,791
NV	365,194	347,323	17,871	4,017	13,854

Table 6 continued

NH	233,455	226,780	6,675	3,232	3,443
NJ	1,523,392	1,487,100	36,292	2,920	33,372
NM	378,433	362,495	15,938	5,858	10,080
NY	3,446,844	3,358,136	88,708	16,965	71,743
NC	1,425,169	1,371,788	53,381	15,677	37,704
ND	121,805	117,952	3,853	3,298	555
OH	2,131,969	2,068,422	63,547	39,482	40,095
OK	655,329	634,244	21,085	7,209	13,876
OR	622,194	595,155	27,039	8,711	18,328
PA	2,193,472	2,125,515	67,957	39,482	28,475
RI	184,374	179,470	4,904	2,028	2,876
SC	745,750	722,505	23,245	13,424	9,821
SD	151,702	146,021	5,681	2,662	3,019
TN	1,023,873	988,495	35,378	11,263	24,115
TX	4,263,628	4,113,582	150,046	46,900	103,146
UT	507,537	490,077	17,460	5,583	11,877
VT	113,594	110,407	3,187	1,747	1,440
VA	1,276,575	1,240,132	36,443	14,323	22,120
WA	1,117,057	1,076,270	40,787	12,283	28,504
WV	300,362	289,607	10,755	5,407	5,348
WI	1,025,784	999,397	26,387	19,837	6,550
WY	97,124	94,251	2,873	1,962	911

cational quality, the ethnicity and specific age group categories of home schooled children and the discrepant population, a national tracking method for highly mobile students, and an accurate method of collecting and reporting the home school population.

References

- Beilick, S., Chandler, K., & Broughman, S. (2001, July 31). *Homeschooling in the United States: 1999*. (NCES 2001-033). Washington, DC: U. S. Department of Education.
- Ensign, F. (1969). *Compulsory school attendance and child labor*. New York: Arno Press and the New York Times.
- Galen J. & Pitman, M. (1991). *Home schooling: Political, historical, and pedagogical perspectives*. NJ: Ablex.
- Kids Count Census Data Online, Retrieved April 7, 2004 from <http://www.aecf.org/cgi-bin/aec-census.cgi?action=profileresults&area=05S>
- Lines, P. (1999). *Homeschoolers: Estimating numbers and growth*. A paper presented to United States Department of Education, National Institute on Student Achievement, Curriculum, and Assessment, Washington, DE. Retrieved on November 2, 2002 from <http://www.ed.gov/offices/OERI/SAI/homeschool/>
- No Child Left Behind. (2001). U. S. Department of Education. Washington, DC. Jessup, Maryland: ED Pubs.
- Reich, R. (2002, April). The civic perils of home-schooling. *Educational Leadership* 59(7), 56-59.

Table 7
Analysis of Variance of Percentage of Discrepant Population

Percentage of Discrepant Population	SS	df	MS	F	Significance
Between Groups	.001	3	.000	5.992	.002
Within Groups	.002	46	.000		
Total	.003	49			

Table 8
Scheffe ' Multiple Comparison Analysis of Percentage of Discrepant Population

(I) Quartile	(J) Quartile	Mean Difference	Standard Error	Sig.	95% Confidence Interval	
					Lower	Upper
1	2	*.007887	.0024698	.025	.000720	.015054
	3	.002930	.0026293	.744	-.004700	.010560
	4	*.011386	.0031426	.009	.002267	.020505
2	1	*-.007887	.0024698	.025	-.05054	-.000720
	3	-.004957	.0024698	.272	-.012124	.002210
	4	.003499	.0030105	.718	-.005236	.012235
3	1	-.002390	.0026923	.744	-.010560	.004700
	2	.004957	.0024698	.272	-.002210	.012124
	4	.008456	.0031426	.079	-.000663	.017576
4	1	*-.011386	.0031426	.009	-.020505	-.002267
	2	-.003499	.0030105	.718	-.012235	.005236
	3	-.008456	.0031426	.079	-.017576	.000663

*p<.05.

Rosenberg, M. (1968). *The logic of survey analysis*. NY: Basic Books, Inc.

Shannon, D. & Davenport, M. (2001). *Using SPSS to solve statistical problems*. Upper Saddle River, NJ: Prentice-Hall, Inc.

Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

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