

**TESTIMONY OF BRIAN D. RAY, PH.D. BEFORE THE MONTANA
SENATE EDUCATION COMMITTEE REGARDING SENATE BILL 291**

February 14, 2005

Mr. Chairman, Members of the Committee, Ladies and Gentlemen:

My name is Brian Ray. I have taught as a state-licensed teacher in public and private schools, supervised pre-service teachers in public schools, and served as a professor in the areas of science, statistics, research methodology, educational and psychological measurement and evaluation, and educational philosophy, at the undergraduate and graduate university levels. I have been following and doing research on homeschooling for about 22 years. Among many other studies in the US and Canada, I have conducted two studies on homeschooling in Montana. I am an independent researcher, writer, and consultant, and president of the nonprofit National Home Education Research Institute, based in Salem, Oregon. I have served as an expert witness in courts and to legislatures in many states. I testified here in 1991.

Thank you for hearing my testimony. I will present to you several reasons why you should oppose Senate Bill 291.

[not read for oral testimony] Empirical research, standards of educational measurement and evaluation, the philosophy of educational freedom, and my experience with the homeschool community all contradict the substance and spirit of SB 291.

Over 20 Years of Research

First, I will give you several research findings. Home educators in Montana and across the nation have consistently shown a remarkable record of success in the education of their children during the past 24 years (Ray, 1997, 2000, 2005; Rudner, 1999). These successes are in academics, civic involvement, family life, and social, emotional, and psychological development. For example, homeschool students consistently score 15 to 30 percentile points higher on standardized academic achievement tests than do their counterparts in public schools, on average. I have provided the committee members with two reports on some of this research. I have conducted two studies of Montana homeschoolers, one in 1990 and one in 1995, and found them to be scoring about 20 percentile points above the national average. Interestingly, Montana homeschool students performed equally well regardless of how much their testing was controlled. There is no evidence that homeschoolers are doing poorly in Montana today nor need increased control.

Research also shows that homeschool children of parents with relatively low formal education, such as a high school diploma or GED, and having no teacher certificate outscore average public-school students. **[not read for oral testimony]** In fact, it is statistically likely that the public-school child of a low-education parent would do better if he or she left public school to be homeschooled.

SB 291 clearly implies that increased regulation and pedagogical prescriptions will assure that homeschool children succeed in learning. Research that I have personally conducted (and research by others) shows no relationship between the degree of state control and regulation of homeschooling (e.g., registration with public schools, testing, parent qualifications, monitoring) and homeschool students' learning (i.e., academic achievement; see, especially, Ray, 1997, 2000, 2005). You may later refer to Appendix A. That is, research shows that there is not even a "correlation" evident in the data. There would at least need to be a correlation to even suggest a causative relationship, but there is none.

[not read for oral testimony] For about 22 years, I have been doing basic research, publishing my research in refereed journals and at professional meetings, following the research of others, publishing a refereed research journal, and networking researchers all related to the topic of home-based education (i.e., homeschooling), and I know of no research that substantiates a positive relationship between government control of homeschooling and the learning of homeschool students.

[not read for oral testimony] Furthermore, and most interestingly related to the proposed legislation at hand, research by Dr. Jay P. Greene (2002) shows: "Academic achievement [in public schools] is positively correlated with educational freedom." One of the elements in Greene's education freedom variable is the regulatory environment for homeschooling. In other words, his research shows that the more educational freedom in a state, including *less government control and regulation of homeschooling*, the *higher is academic achievement in public schools*. His work suggests the possibility that giving homeschool parents more freedom would actually be related to an increase the academic achievement of public school students.

[not read for oral testimony] Professional standards of social science, educational, and psychological research and measurement and evaluation make it clear that neither researchers nor policymakers should use empirical relationships that are either absent or methodologically tenuous to maintain or create control over persons' lives. In other words, research should present clear and compelling evidence of at least correlation and, more definitely, cause-and-effect, before policymakers use it to create or maintain regulations or law that control people. And, even if research shows correlation or causation, then ethics and philosophy must be considered before control is maintained or created.

[not read for oral testimony] All things considered, and especially since there is no positive (or objective, empirical, or research) proof that control and regulation by the government of home education has ever significantly increased children's learning, it makes no sense to assume that such has been, is, or will ever be the case. In fact, due to the lack of correlational evidence, let alone cause-and-effect evidence, any person or group (e.g., state government, policymaker, private educational service provider, public school employee, parent) who promotes the maintenance of or increase of control and regulation over home education bears a heavy burden of proof to verify that the state needs to continue to control and regulate, or increase such.

Section 7 would require monitoring of a family's homeschooling by a Montana-licensed teacher. There is no empirical evidence this will solve a problem, if one exists. Second, I understand that Montana universities do not teach courses on the industry standard for evaluating a successful

homeschool and require all persons to take and pass the courses to become state-licensed teachers. I know of no such courses anywhere in the nation. I know of no evidence that state-licensed teachers in any state know how to monitor homeschooling. I know of no research evidence that state-licensed teachers in general know how to monitor public schooling, let alone homeschooling. The monitoring provision of SB 291 is based on nothing reliable.

Section 8 of SB 291 indicates that homeschooling is not good for special-needs children. Research evidence (by Dr. Steven Duvall and others, see references) directly contradicts this implied claim. Homeschooling of special-needs students by parents who are not formally trained in education outperform their peers in public schools who are taught by specially trained teachers.

[not read for oral testimony] One-on-one teaching, mastery learning, and a caring environment full of social capital appear to be a great formula for special-needs children. It may be that Montana should encourage parents of special-needs children to homeschool them.

Standards of Educational Measurement and Evaluation

[not read for oral testimony] Now I will address professional standards of educational measurement and evaluation.

Section 8 of SB 291 would mandate standardized testing of private homeschool students. First, there is no research evidence that mandated testing of homeschoolers will assure that they all succeed academically. Second, the term “nationally standardized examination” is ill-defined.

Section 8 designates the 30th percentile as a “cut score” (or criterion score) for making decisions about a student’s life. No rationale is given for choosing the 30th percentile. Appendix B in my written testimony provides a figure of “the normal curve and its relationship to various derived scores.” Testing and measurement experts understand that the average range of scores on standardized achievement tests is stanines 4, 5, and 6, that is, the 23rd to 77th percentile. Keep in mind that achieving a percentile of 30 indicates that the person scored as well or better than 30 percent of persons who took the test when it was normed. (Whereas, a score of 30 percent indicates a person got 30 percent of the answers correct.) If Montana creates a requirement that students scoring below the 30th percentile must be evaluated for learning disabilities, the state will be requiring students who are performing within the average range to be evaluated for learning disabilities. Research does not support the idea that all students scoring below the 30th percentile are in need of special assessment and special-education services. The 30th percentile is an arbitrary “cut score” (or criterion) that is not justified by sound educational theory or data.

It is remarkable that Section 8 of this bill violates at least 24 standards published by the American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education in their book, *Standards for Educational and Psychological Testing* (1999). I list these 24 standards in Appendix C to my testimony. Here are five notable examples:

- (1) Standard 1.1 states: “A rationale should be presented for each recommended interpretation and use of test scores, together with a comprehensive summary of the evidence and theory bearing on the intended use or interpretation.” There is no evidence that the sponsor of SB 291 has done this.
- (2) Standard 1.4 states: “If the test is used in a way that has not been validated, it is incumbent on the user to justify the new use, collecting new evidence if necessary.” There is no evidence this has been done, that this test is valid and reliable for the purposes in this bill; I know of no test that has been validated for determining the success or failure of homeschooling.
- (3) Standard 4.19 states: “When proposed score interpretations involve one or more cut scores, the rationale and procedures used for establishing cut scores should be clearly documented.” There is no evidence that this has been done for the cut score of the 30th percentile specified in this bill.
- (4) Standard 11.2 states: “When a test is to be used for a purpose for which little or no documentation is available, the user is responsible for obtaining evidence of the test’s validity and reliability for this purpose.” There is no evidence that this has been done. I will add that such a study would likely require years and many thousands of dollars to accomplish.
- (5) The last standard I will mention, Standard 13.7, states: “In educational settings, a decision or characterization that will have major impact on a student should not be made on the basis of a single test score.” SB 291 clearly violates this professional industry standard.

[not read for oral testimony] This bill would not pass muster with graduate students in university courses that I have taught.

Philosophy of Educational and Legal Freedom

I will now address a few concepts at the foundation of this bill. First, calling SB 291 the “Quality Home School and Child Protection Act” is an unfounded insult to the homeschool community of Montana and about two million homeschool students in United States. Like private institutional schools, both homeschoolers of 175 years ago and of the modern movement, have consistently chosen to well-educate their children and have kept their homeschooling of high quality, especially compared to state-run public schools. Neither form of private education, institutional schools nor homeschoolers, need state intrusion into their affairs, legally, philosophically, or pedagogically. Second, the phrase “child protection act” implies that all parents who choose to homeschool are, *ipso facto*, suspected of being educational neglectors, child abusers, or both. “Child protection act” suggests that the purpose of education law is to serve as a pre-emptive dragnet that puts the burden of proof on parents to show that they are doing well enough to keep the government out of their homes, philosophical and religious beliefs, and educational choices. One of the beauties of the history of liberty in America is that the burden of proof is on government to show that someone has done evil and, if so, punish the person. In a free state, the government’s job is not to protect children, it is to punish the person who harms them. There is no empirical evidence that the provisions of SB 291 will ensure the quality of Montana homeschooling or protect children from anything.

Montana law already provides for the prosecution of truants or their parents and child abusers. Let the state use the law to prosecute them.

SB 291 treats private homeschoolers as if they were funded by taxpayers, but they are not, and as if this single class of private education should be accountable to the state. If the sponsor of this bill wishes to hold private home educators accountable to the state, then to be equitable he should insert provisions to this bill or introduce a new bill with the same levels of intrusion and control on all private Catholic, atheist, homeschool, Jewish, evangelical, Lutheran, Mormon, Muslim, and New Age schools, teachers, and students. If a law like SB 291 were applied to these private institutional schools, perhaps 30% of their students would need additional intervention and assessment and control by the government.

The state has enough challenges of its own in tax-funded public schools, with dropouts, illiteracy, drugs and alcohol, teachers and coaches mistreating students, and submitting to mandates from Washington DC. Montana taxpayers do not need to get into the business of trying to improve private institutional schools and private homeschoolers.

[not read for oral testimony] Section 8 would deny educational choice for families with special-needs students. This violates the Fourteenth Amendment to the United States Constitution and denies home-based, individualized education to those who might most benefit from it.

Finally, Section 11, as amended, only gives parents the appearance of authority and responsibility over the homeschool child's education. In reality, Sections 1 through 8 make impotent parental authority and responsibility. These earlier sections, including provisions about registration, monitoring, and testing, give to the government, *de facto*, the authority and responsibility over educational philosophy, instructional materials, curriculum, and evaluation of instruction. The conflict between sections 1 through 8 and 11 are irreconcilable and make SB 291 fatally internally inconsistent. Experts in curriculum and instruction or philosophy of education can easily see the lack of integrity within this bill.

I urge you vote against Senate Bill 291.

Thank you.

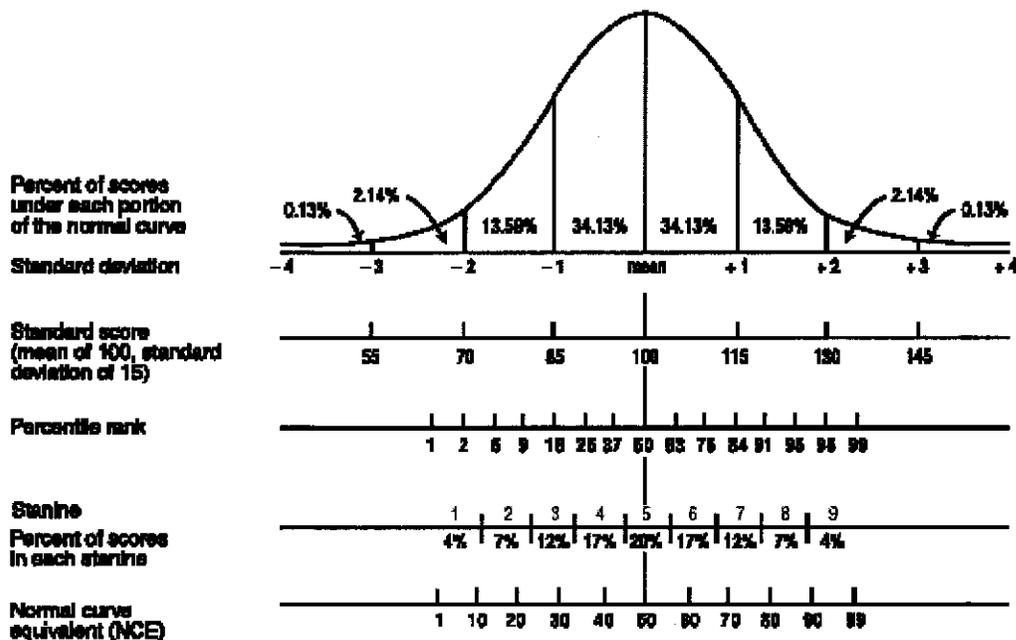
Appendices

Appendix A – No correlation between state control/regulation and homeschool achievement

Nationwide study by Ray (1997, 2000) shows:
 High State-Control States – 86th percentile average
 Medium State-Control States – 85th percentile average
 Low State-Control States – 86th percentile average

Appendix B – The normal curve and its relationship to various derived scores

The Normal Curve and Its Relationship to Various Derived Scores



After norms have been established, an individual's raw score can be converted to "derived scores" which communicate that individual's performance to the standardization sample. This chart shows the relationship of derived scores in a normal distribution.

Source: Retrieved 2/12/05 online
<http://www83.homepage.villanova.edu/richard.jacobs/EDU%208603/normal.htm>
 Stanines 4, 5, and 6 (i.e., percentiles 23 to 76) are considered "average."

Appendix C – Standards for Educational and Psychological Testing violated

This is a non-exhaustive list of standards violated by SB 291. The cited standards are found in *Standards for Educational and Psychological Testing*, by the American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education, published in 1999 by the American Educational Research Association, Washington, DC. Following is the non-exhaustive list:

1.1, 1.2, 1.3, 1.4, 1.8, 1.15, 1.19, 1.22, 1.23, 4.19, 7.5, 7.9, 7.10, 11.1, 11.2, 11.4, 13.1, 13.2, 13.5, 13.7, 13.9, 15.1, 15.7, and 15.8.

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