UNIVERSITY OF WISCONSIN MILWAUKEE

School of Education
Center for the Analysis of Commercialism in Education

The Hidden Costs of Channel One

Estimates for the Fifty States

Max B. Sawicky
Economic Policy Institute

Alex Molnar
Center for the Analysis of Commercialism in Education
University of Wisconsin--Milwaukee

April 1, 1998

Enderis Hall • PO Box 413 • Milwaukee, WI 53201

414 229 - 6227

The Hidden Costs of Channel One

Estimates for the Fifty States

By Max B. Sawicky and Alex Molnar

Introduction

Children in public schools are the object of advertising campaigns which not only penetrate the physical grounds of the school, but seek a place in the curriculum itself (Molnar, 1997). The best example of using technology to encourage cash-strapped school districts to accept advertising is "Channel One," a ten-minute news broadcast supplemented by two minutes of commercials. Channel One is primarily offered to middle school and high school students. In addition to its television program, Channel One promotes an Internet "web site" with related content. Thus the web site is an integrated component of the service. Although it is described as a "free service," our analysis shows that for practical purposes Channel One is heavily subsidized by taxpayers.

Channel One has been an object of controversy ever since it was unveiled in 1990 by entrepreneur Christopher Whittle. Although appraising the educational value of Channel One is beyond the scope of this analysis, a brief review of the educational issues is offered to provide context for the discussion.

Background

Channel One is now a product of Primedia Inc., formerly known as the K-III Communications Corporation (established in 1989). In 1994, Primedia (then K-III) purchased Channel One from Whittle Communications. Primedia is a publicly-held media conglomerate which claims a firm value of $3.4 billion and revenues of $1.2 billion dollars in 1997. It encompasses many other properties, including such established publications as *The Weekly Reader* and *Seventeen* (Primedia, 1998). Among the founders of K-III and holder of a substantial financial interest in Primedia is the leveraged buy-out firm of Kohlberg, Kravis and Roberts (Primedia, 1998).

Channel One is conveyed to students without charge by hardware which is installed in participating schools. Therefore, the cost of Channel One is essentially a matter of the value of time devoted by schools to the program. According to the company, the program is shown to 8.3 million students in 40 percent of high schools in the U.S. It takes a profit of approximately $30 million annually (Levine, 1997).

The hardware provided for each school consists of a satellite dish, a control panel containing video tape recorders for recording each days program from a satellite feed, television monitors for each classroom, and the requisite wiring. On their Internet web site, Primedia asserts that "More than $200 million worth of equipment has been installed in schools and is regularly serviced free of charge" (1998). It also claims that 12,000 schools subscribe to the service (Primedia, 1998; Honan, 1997). This works out to an average equipment value of almost $17,000 per school. On March 28, 1997 in reports it must file with the Securities and Exchange Commission, known as "10-K's," Primedia (then K-III) listed the value of its "school equipment" as $56 million and "deferred wiring and installation" as $58 million, a good deal less than the $200 million figure cited on the Primedia web site. Presumably, the $56 million figure is for anticipated costs of servicing and maintenance. The $58 million figure for school equipment could reflect the depreciated value of the hardware. In any case, it still appears that $17,000 per school is a generous estimate of the value of the equipment.

Use of the equipment is conditional on subscription to Channel One; if the program is discontinued, Primedia reclaims its property. Primedia has legal ownership of the equipment at all times. To subscribe, schools must usually guarantee that about 80 percent of classrooms will be shown the program on 90 percent of school days.

The extent to which this obligation is adhered to is not clear. School authorities have an incentive to understate the time devoted to Channel One, since questions about the service may be assumed to be motivated by hostility. By contrast, Primedia has an incentive to exaggerate in the other direction to bolster its advertising sales. A half-minute of time on the program costs almost $200,000 (Consumers Union, 1995).

Debates Over Channel One's Educational Value

Few topics provoke more heated debate than the cost of public education in the U.S. The performance and efficiency of our local public schools is a central focus for policy makers, parents, and taxpayers (Rothstein and Miles, 1995).

In addition to concerns about the costs of schools, parents are interested in the role of elementary and secondary schools in imparting values to children. Education is widely considered to be more than the neutral transmission of knowledge and skills. It is often thought of as an incubator of citizenship in service to moral values. Although values are naturally viewed in diverse ways, according to a wide variety of viewpoints, many parents now seem to want schools to assist in supporting what they regard as positive values.

The introduction of commercial activity in schools raises fundamental questions pertaining to both the content and the costs of public education. Markets are fundamentally amoral: business firms aim to sell most anything that is legal to anyone. In contrast, parents often have forthright views about the appropriate content of school curriculum, including textbooks and such non-print media as Channel One. They also have preferences as to what their children eat, the magazines and records they buy, and their use of leisure time. Thus, the content of Channel One's programming and advertisements could contradict the values many parents seek to promote.

Judgements about the content of Channel One have been mixed. The company claims to have won "over 100 news and educational programming awards, including the prestigious George Foster Peabody Award." Jeffrey Cole of the University of California at Los Angeles describes the non-commercial component as a "first-rate newscast" (Honan, 1997; Levine, 1997). In a study commissioned by Primedia, Johnson and Brzezinski found some positive value in Channel One's programming (1994).

Parents, school officials, and education experts have raised a variety of concerns about the idea of requiring school children to watch commercials, the nature of Channel One's content, and its impact on the ability of schools to control their curriculum. Complaints about Channel One's content have questioned the service's favorable reviews of certain movies, rock music, and 'rap' recordings, as well as the fact that the news component includes time devoted to coverage of

entertainment, sports, and promotion of Channel One itself (Pasnik, 1998). There has also been criticism of an article published on Channel One's Internet site explaining to students how to fake a book review assignment by watching the movie adaptation (Obligation, Inc., 1998; Futa, 1998). And the advertising component of Channel One has included promotions for television talk shows which some find offensive and moronic (Obligation, 1997).

Teachers have objected to Channel One because it can be broadcast into classes in which its programming is disruptive. They have also expressed concern over the implied loss of control over their curriculum that Channel One represents (Knupfer, 1994). Further, the *Wall Street Journal* reported that principals in some Channel One's schools have assisted Channel One's advertisers by passing out discount coupons to students, raising the concern that Channel One diverts the attention of the professional staff from more important matters (Bulkeley, 1997).

A number of research studies of Channel One render critical verdicts (Hoynes, 1993, 1997; Miller, 1997). One sheds doubt on Channel One's claim to being a useful source of knowledge of current events (Knupfer and Hayes, 1994). Another describes the entire twelve-minute program as a uniformly commercial exercise (Hoynes, 1997).

At one point, Channel One set up 'chat rooms' on its web sites. These are ways by which people may converse over the Internet. Safety considerations arose since children were encouraged to disclose personal information accessible to strangers (Napier, 1997; Obligation, 1998).

The opposition to Channel One crosses ideological boundaries. The Mississippi Christian Action Commission was offended by the program's coverage of rock musician Marilyn Manson, among many other topics (Obligation, 1998). And Consumers Union found arguments against the service "compelling" (1995). Other organizations critical of Channel One have included the National PTA, the National Education Association, the Eagle Forum, Action for Children's Television, the American Association of School Administrators, the New York State Board of Regents, the Council of Chief State School Officers, the American Family Association, the National Association of Secondary School Principals, and the National Association of State Boards of Education, among others (Consumers Union, 1995). Channel One has been banned by the New York State Board of Regents and state education officials in California and elsewhere have sought to

discourage the use of the program by schools. Questions have also been raised as to the legality of obliging school students to watch advertisements in school.

Calculating the Cost of Channel One

Arguments over the value of Channel One's content have been conducted largely without reference to the cost of the program. Although the service is widely described as free, to receive the service, a commitment of time is required. Such time could be employed in other, perhaps more important educational pursuits, were it not devoted to watching Channel One. In this paper, we put a monetary value on the time devoted to Channel One.

Time Is Money. A school cannot "cash out" its twelve daily minutes of Channel One for the cost equivalents calculated for this study. On the other hand, a financial commitment is the basis for a school's capacity to provide time for instruction. Therefore, it seems fair to gauge the cost of Channel One by the value of students' time, according to average expenditures per pupil.

We calculate average expenditure per pupil by using data on average daily attendance for 1993-94. Actual enrollment figures exceed average attendance, therefore enrollment figures would understate the resources devoted to a typical student. For the length of a school day, we use data from the National Center for Education Statistics (hereafter, NCES) from *Education in States and Nations* for 1990-91. In all cases, data employed in this study are the most recent available.

Since we make no judgement on the educational value of Channel One, we provide information on the cost of the entire twelve minute program, as well as the two minutes of commercials, and invite the reader to set either of these costs against the perceived benefits of Channel One.

A few points must be kept in mind when costing out Channel One in each state. As explained above, the basic yardstick is per-pupil expenditure. We do not know the number of public schools in which the program is shown in each state, so we can only estimate the costs of an "average" school that subscribes to the program. Nor do we know the extent of private school costs in each state, so we can only provide a national estimate in this dimension. However, in the final section of this report we provide a guide to parents and others interested in calculating the cost of Channel One in their own neighborhood school.

Benefits of the equipment in alternative uses. Primedia touts its loan of equipment to schools on the grounds that it may be used for other things when Channel One is not being broadcast. Since we are not judging educational value, we consider the cost of Channel One's equipment. In other words, what would it cost a school to gain access to the same equipment for a given period of time? In this context, the purchase price of the equipment is not relevant. We should be interested in the cost of *renting* the equipment in comparison to the value of time that might otherwise be devoted to instruction.

We approximate the *rental* value of Channel One's equipment by considering the extent of its depreciation over the course of a year. As noted above, Primedia says it has installed $200 million worth of hardware in 12,000 schools, which averages to slightly less than $17,000 per school. Suppose we round this up to $20,000. Primedia maintains in its 10-K filing with the Securities and Exchange Commission that the equipment has a useful life of ten years. We thus calculate the annual depreciation on a school's Channel One's equipment is ten percent of total value, or $2,000 per year. We further assume, generously, that rent is twice the amount of depreciation, or $4,000 annually. Our $4,000 figure approximates the annual benefit of the equipment, aside from the merits of the program itself, to which a school's annual cost could be compared.

The value of the equipment is separate from the value of Channel One's non-commercial programming. However, it should be noted that commercial-free news and other programming is made available to schools by Cable in the Classroom in the form of Cable News Network's (CNN) Newsroom–World View. Therefore, Channel One's news and current events programming is replaceable. Since a free substitute is available, the logical market value of Channel One's programming is zero.

Conservative Cost Estimates. Our estimates have a downward (i.e., conservative) bias for a number of reasons. Channel One is offered primarily to grades six and above, and per-pupil costs for older students differ from those of younger students. In particular, average teacher salaries in secondary schools exceed those of teachers in primary schools (NCES, 1998). The same holds for principals and assistant principals (ERS, 1997). It would be desirable to know per-pupil expenditures for the grades in which Channel One is broadcast, but such data are not readily available. Many schools include students both above and below sixth

grade level, making the imputation of costs among grades difficult. Also, many types of expenditures are not possible to allocate by grade level (NCES, 1998).

Because we use an average expenditure number for all grades, our estimate of the cost of Channel One will be biased downward.

A second, smaller, source of downward bias stems from the exclusion of state government administrative expenditures from our spending data (NCES, 1997). A third source of downward bias is our use of figures for the school year running from the Fall of 1993 to the Spring of 1994. Per pupil spending typically grows each year, so it is higher today than in 1994. We do take the step of expressing the 1993-94 costs in 1997 dollars in order to adjust for inflation.

A fourth source of downward bias stems from our use of what is called 'current expenditure,' rather than total expenditure. By NCES classification, total expenditure is larger than "current" because it includes capital outlays and interest on debt. Cost in the sense we are using it would logically include the amortized cost of buildings and other capital outlays. However, estimating such costs would require many additional assumptions which would reduce confidence in our findings.

The multiple sources of downward bias noted above mean that our estimates for the costs of Channel One are conservative: the real costs are likely to be higher.

Other Cost Issues

A different set of cost issues stems from Morgan's finding (1993) that Channel One's schools tend to have below-average levels of resources, so on this account the cost of a "Channel One" minute could be seen as less than the average cost of a typical school's minute. We reject this argument because it implies that a school's ability to finance its activities determines the social value of the time spent. In other words, we would have to conclude that a minute of a student's time in a "poor" school is worth less than a minute elsewhere. Rather, we prefer to use the average cost in a state without regard to the incomes of students' families or of specific school districts.

Another issue that has been raised in regard to Channel One is the tax implications of the televised advertisements. Insofar as the advertisements expand total

business expenditures of that type, there is an implied drain on business income tax revenues. The reason is that the costs of such advertisements are deductible to the business firm. For a large corporation, for instance, a dollar of advertising reduces its Federal corporate income tax liability by 35 cents. A conservative estimate of Channel One's revenues is $300 million, which implies a revenue loss to the Federal government of about $100 million annually.

The Problem of Proprietary Information in the Public Sector

Primedia refused to release data that would clarify our calculations, such as the number of public and private schools in each state receiving the program.[1] The proprietary nature of information about Channel One points to a more general problem in contracting out for public services. To make intelligent decisions, voters and policy-makers need information on the nature of private vendors seeking public business. In a democratic society, such information is the basis for open evaluation and discussion. Confidentiality of such information is thus the bane of informed, effective, democratic decision-making. Despite the fact that the bulk of Channel One's revenue derives from its access to public schools, important information about Channel One is concealed behind a proprietary curtain.

Results

Our cost estimates can only be approximations because of data limitations. However, in our judgement they are conservative. The final section of this paper, entitled "Using This Report," explains how the reader may calculate the cost of Channel One for a school in his or her community. Here we discuss the results of our analysis in more general terms. We begin with the basic results in the table entitled "Channel One Public School Costs by State" on the following page.

Column 1 shows the average per pupil cost of Channel One by state for public schools. As discussed above, this is based on each state's current expenditures for all grades, its average daily attendance, and the time devoted to instruction in the state's school year. Twelve minutes of this time are devoted to Channel One, and Column 1 puts a dollar value on this time.

---

[1]Sawicky phone calls to Susan Tick and Amy Voll of Primedia, March 1998.

Channel One Public School Costs by State

State or other area	(1) Average Annual Per Pupil Cost	(2) Percent of Time to Channel One	(3) Average Cost for Secondary School
U.S. Average	$229	3.60%	$157,989
Alabama	148	3.33%	102,960
Alaska	355	3.64%	164,030
Arizona	184	3.64%	179,032
Arkansas	162	3.45%	71,328
California	208	3.85%	195,156
Colorado	200	3.57%	115,726
Connecticut	345	3.70%	241,265
Delaware	255	3.51%	229,128
District of Columbia	430	3.85%	276,567
Florida	212	3.51%	235,443
Georgia	186	3.45%	204,092
Hawaii	244	3.77%	324,589
Idaho	162	3.85%	77,435
Illinois	240	3.70%	167,632
Indiana	217	3.51%	171,724
Iowa	197	3.39%	79,827
Kansas	218	3.51%	80,133
Kentucky	197	3.51%	127,261
Louisiana	174	3.51%	132,615
Maine	247	3.70%	123,169
Maryland	278	3.64%	293,587
Massachusetts	294	3.85%	228,440
Michigan	276	3.77%	185,414
Minnesota	224	3.57%	104,344
Mississippi	134	3.33%	89,408
Missouri	197	3.51%	104,006
Montana	223	3.64%	39,595
Nebraska	218	3.51%	69,678
Nevada	209	3.77%	167,898
New Hampshire	228	3.64%	128,625
New Jersey	401	3.77%	364,623
New Mexico	167	3.57%	106,962
New York	366	3.64%	345,557
North Carolina	192	3.57%	167,284
North Dakota	187	3.64%	43,448
Ohio	238	3.64%	168,785
Oklahoma	188	3.64%	61,255
Oregon	250	3.64%	168,802
Pennsylvania	274	3.57%	232,766
Rhode Island	304	3.77%	259,152
South Carolina	180	3.45%	148,634
South Dakota	180	3.57%	30,174
Tennessee	157	3.45%	135,660
Texas	173	3.23%	121,285
Utah	137	3.64%	127,964
Vermont	263	3.64%	158,435
Virginia	204	3.64%	200,133
Washington	234	3.70%	148,356
West Virginia	216	3.45%	137,593
Wisconsin	250	3.39%	140,713
Wyoming	236	3.64%	79,775

Column 2 reports the share of a student's instructional time devoted to Channel One.

Column 3 reports the cost of Channel One for the typical secondary school in a state, based on the average size of such schools. Similar numbers for elementary schools are not available because such schools may include some or all of grades six through twelve. The average size of such schools would overstate the number of students who could be shown the program.

The average annual cost per pupil of Channel One in public schools is $229 (Column 1). Primedia estimates its program to reach 8.3 million students, but not all of these students attend public schools. According to the company, in 1993 the split was 94 percent public, 6 percent private (Ritts, 1993). Assuming this has not changed, the annual, national cost to taxpayers of Channel One in public schools is about $1.8 billion. By the same reasoning, the average cost per public secondary school is about $158,000 per year. If we consider nothing but the time spent watching Channel One's commercials, the annual cost to taxpayers is $300 million nationally, and $26,333 per public school.

If six percent of Channel One's 12,000 schools are private, that amounts to 720 schools. In the same vein, six percent of their audience is 498,000 students. The average tuition paid by students in private secondary schools in 1993 was $4,578 (NCES, 1996), or $5,026 in 1997 dollars. Thus the average annual cost of Channel One in terms of private school tuition is roughly $90 million, or about $125,000 per school and $181 per student. Time spent watching Channel One's commercials accounts for $15 million of total private school tuition, or about $21,000 per school. It should be noted that private school tuition varies significantly by type of private school. We do not know the distribution of Channel One across types private schools, thus the calculations above can only provide averages and must be interpreted with caution.

Conclusions

Broadcasting Channel One takes up six or seven days of instruction over the school year.

The twelve minute Channel One program costs American taxpayers $1.8 billion annually.

It costs $300 million a year of the public's money to require students to watch Channel One's two minutes of commercials.

The value of the schools' foregone time exceeds the rental value of the equipment Channel One provides by a huge margin. On average, twelve daily minutes of a secondary school's time costs almost $158,000 a year. This cost is far in excess of both the total value of Channel One's equipment ($17,000) and the annual rental value of the equipment ($4,000) in every state.

Our finding holds even if we narrow our consideration to the time students spend watching commercials on Channel One: two daily minutes in a single year is worth an average of $26,000 of a secondary school's time. This alone exceeds the cost of Channel One's equipment over its entire useful life of ten years ($17,000) and far exceeds even a generous estimate of the equipment's annual rental value of $4,000.

How to Use This Report

You may be able to obtain some information relevant to your own situation not available for this report. For instance, we cannot provide the costs of Channel One for every school in the nation. But if you know the enrollment of your own children's school, you can calculate the cost for that school by following the directions below. You may also be able to obtain figures on the number of schools in your state subscribing to Channel One from your state government. You could then calculate your state's total cost of Channel One. Note that "cost" below follows the definition used in the study and the calculations are based on the same assumptions employed in the study.

1. How much does Channel One cost annually for each public school student in my state?

See Column 1 of the table for your state.

2. How much does Channel One cost for my children in private school?

Unfortunately, data on private school spending by state was not available for this study. It is possible to base such a calculation on your private school tuition, although tuition may not cover all of the costs of your private school. (It may receive subsidies from outside parties.) Channel One consumes a fixed percentage of the school year in your state. This is shown in Column 2 in the table. Simply multiply this percentage times your annual tuition to estimate your direct cost of Channel One.

3. How much does Channel One cost annually for the average public secondary school in my state?

See Column 3 in the table. We cannot provide a comparable figure for elementary schools because we do not have data on the average number of students in grades six and above for schools classified as elementary.

4. How much does Channel One cost in my children's school?

If you can find out the enrollment of your school for grades six and above, simply multiply this number by the average cost per pupil in Column 1.

5. What is the total cost of Channel One to taxpayers in my state?

This is the $64 dollar question. Unfortunately, we do not have data on the number of public schools in each state subscribing to Channel One. Primedia refused to supply this information to us. If you can secure the information from your state government, along with the number of students in grades six and above, simply multiply this number by the average per pupil cost in Column 1 of Table 1 in the Appendix.

6. How much are the Channel One's commercials costing me, my school, or my state?

If you calculate the total cost of Channel One for your school (Questions 2 and 4 above), for your state (Question 5), to find the cost of the commercial time alone simply take the answer you got for the program as a whole (which runs for twelve minutes) and divide by six, since two out of the twelve minutes consist of commercials.

7. How should I compare the value of the equipment in my school to the cost of Channel One?

The company implies that the equipment costs an average of $17,000 per school. If we round this up, generously, to $20,000, we need to consider the cost of renting something worth $20,000. The company says in its 10-K statements filed with the Securities and Exchange Commission that its school equipment has a useful life of ten years, so we could say it depreciates by roughly $2,000 per year. Being generous again, we could assume a rental value of double that, say $4,000 per year. This approximates the annual benefit of the equipment, aside from the merits of the program itself, to which your school's annual cost could be compared.

Supporting Data

Data used to arrive at these results are presented in the Appendix.

Appendix Table 1 shows the data on expenditures and average daily attendance used to derive the results above. The expenditures are for the school year 1993-94 and are adjusted for inflation. As noted above, "current" does not mean 1997 or 1998 spending, but spending apart from capital outlays and interest on debt, roughly akin to operating costs. The levels for the 1993-94 school year have been adjusted with the Consumer Price Index to their 1997 dollar equivalents. The 1993-94 data were used for this report because they were the most recent available.

Appendix Table 2 shows time devoted to instruction by state, given the length of school day and school year in each state. Thus on average, reading across any line, for a given state we have the minutes and hours of instruction per day, the number of days in each school year, and the annual hours and minutes implied. The U.S. figures are simple arithmetic averages. We use time devoted to instruction because the issue is the comparative value of Channel One as an educational service.

Appendix Table 3 shows the costs of instruction in terms of minutes, hours, and days by state, given our data in the preceding two tables. These figures follow regardless of whether or not Channel One is used by schools. For example, in the state of Alabama the cost of supporting a minute of instruction every day is $12.31. An hour a day, every day, costs $738.59. Alternatively, the cost of a single school day is $25.04 for each student, a single hour is $4.17, and a single minute is seven cents.

Channel One is shown for twelve minutes daily, so we could derive its annual cost with either of the first two columns in Appendix Table 3. We could take the "cost per daily minute" and multiply by twelve. Or we could take the cost per daily hour and multiply by 1/5th (12/60). To use the other columns, we would need information in other tables.

Note that here as elsewhere, dollar amounts are expressed in cents, dollars, and tens of dollars, but any implied precision here is exaggerated. The reader is advised to round off the figures for the sake of greater realism.

Appendix Table 4 shows the share, number of hours, and number of days of instructional time devoted to Channel One in a school subscribing to the program in each state. Thus for most states the annual time commitment is between six and seven days.

References

Consumers Union. *Captive Kids: Commercial Pressures on Kids at School.* Yonkers, NY: Consumers Union, 1995.

Bulkeley, William M. "Channel One Taps Principals as Promoters." *Wall Street Journal*, September 15, 1997, p. B1.

De Vaney, Ann (ed). *Watching Channel One: The Convergence of Students, Technology, and Private Business*. Albany, NY: State University of New York Press, 1994.

Educational Research Service. *National Survey of Salaries and Wages in Public Schools*. Arlington, Va., 1997, quoted in *Statistical Abstract of the United States, 1997.*

Futa, Darren. "When Movies Become Book Reports," Channel One Online, 1/29/98, http://www.channelone.com/entertainment/feature/98/91/980129/index.html.

Hoffman, Lawrence M., "The Meanings of Channel One: Curriculum. Instruction, and Ethics; History, Control, and Rhetoric". (Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, April 3-7, 1991).

Honan, William H. "Scholars Attack Public School TV Program: Say It is Biased and Has a Commercial, Not Educational, Function." *New York Times*, January 22, 1997.

Hoynes, William. *Public television for sale: media, the market, and the public sphere.* Boulder, Co. : Westview Press, 1994.

Hoynes, William. "News for a Captive Audience: The Case of Channel One." Fairness and Accuracy in Reporting, January 1997.

Johnson, Jerome and Evelyn Brzezinski, "Taking the Measure of Channel One: A Three Year Perspective." A study for K-III Communications. Ann Arbor, MI: University of Michigan, Institute for Social Research, January 1994.

K-III Communications Corporation. "Channel One Network." Http://www.k-iii.com/education/channel1/CHANNEL1.HTML, 1998.

Knupfer, Nancy N. "Channel One: Reactions of Students, Teachers, and Parents," in DeVaney (1994), pp. 61-86.

Knupfer, Nancy N. and Peter Hayes. "The Effects of Channel One Broadcasting on Student Knowledge of Current Events," in DeVaney (1994), pp. 42-60.

Levine, Joshua. "TV in the classroom," *Forbes*, 1/27/97.

Miller, Mark Crispin. How to Be Stupid: The Teachings of Channel One." Fairness and Accuracy in Reporting, January 1997.

Molnar, Alex. *Giving Kids the Business: The Commercialization of America's Schools*. Boulder, Co.: Westview Press, 1996.

Morgan, Michael. "Channel One in the Public Schools: Widening the Gaps." A Research Report for Unplug. University of Massachusetts, Department of Communications, 1993.

Napier, Kristine. "Antidotes to Pop Culture Poison." *Policy Review*, No. 86, November-December 1997.

Obligation, Inc. "Channel One's Guide on How to Cheat on Book Reports," 2/18/98, http://www.obligation.org/pressreleasesandnews.html.

Pasnik, Shelley. "Channel One Online: Advertising Not Educating." Center for Media Education, January 1997.

Pasnik, Shelley. "Web of Deception: Threats to Children from Online Marketing." Center for Media Education, 1998.

Primedia. "Company Overview." Www.primediainc.com, 1998.

Ritts, Jim. Letter on behalf of Whittle Communications, 1993.

Rothstein, Richard and Karen Miles. *Where's the Money Gone? Changes in the*

Appendix Table 1

School Expenditures and Attendance by State, 1993-94

State or other area	Current Expenditures (000's)	Average Daily Attendance	Current Expenditures per Average Daily Attendance
United States	$254,176,697	40,146,393	$6,331
Alabama	3,084,653	696,071	4,432
Alaska	1,100,614	112,869	9,751
Arizona	3,196,186	631,450	5,062
Arkansas	1,957,083	416,479	4,699
California	27,600,740	5,108,907	5,402
Colorado	3,243,930	579,682	5,596
Connecticut	4,329,818	465,487	9,302
Delaware	706,924	97,247	7,269
District of Columbia	783,239	70,079	11,177
Florida	11,342,908	1,873,199	6,055
Georgia	6,196,113	1,148,319	5,396
Hawaii	1,095,815	169,779	6,454
Idaho	943,153	223,489	4,220
Illinois	11,062,948	1,709,915	6,470
Indiana	5,560,282	899,585	6,181
Iowa	2,774,753	477,916	5,806
Kansas	2,552,781	410,862	6,213
Kentucky	3,240,994	578,020	5,607
Louisiana	3,632,820	732,202	4,961
Maine	1,326,658	199,125	6,662
Maryland	5,251,059	687,455	7,638
Massachusetts	6,188,970	810,028	7,640
Michigan	10,777,442	1,474,413	7,310
Minnesota	4,751,612	756,725	6,279
Mississippi	1,894,221	471,367	4,019
Missouri	4,371,229	778,605	5,614
Montana	902,452	146,849	6,145
Nebraska	1,662,118	267,931	6,204
Nevada	1,206,605	217,681	5,543
New Hampshire	1,105,681	175,968	6,283
New Jersey	11,470,479	1,079,653	10,624
New Mexico	1,452,964	310,610	4,678
New York	24,218,593	2,404,426	10,073
North Carolina	5,648,918	1,051,295	5,373
North Dakota	573,493	111,770	5,131
Ohio	10,553,313	1,609,855	6,555
Oklahoma	2,919,698	566,155	5,157
Oregon	3,131,872	455,492	6,876
Pennsylvania	12,335,940	1,609,125	7,666
Rhode Island	1,086,978	135,016	8,051
South Carolina	3,063,975	586,178	5,227
South Dakota	642,128	127,550	5,034
Tennessee	3,629,041	796,744	4,555
Texas	17,778,335	3,306,297	5,377
Utah	1,659,082	439,484	3,775
Vermont	706,828	97,550	7,246
Virginia	5,973,848	1,065,071	5,609
Washington	5,371,458	850,813	6,313
West Virginia	1,826,683	291,238	6,272
Wisconsin	5,676,279	769,717	7,375
Wyoming	612,989	94,650	6,476

Appendix Table 2.

Time Devoted to Instruction by State, 1990-91

State or other area	Daily Instructional Minutes	Daily Instructional Hours	Annual School Days	Annual Instructional Hours	Annual Instructional Minutes
U.S. Average	334	5.6	180	1,000	60,001
Alabama	360	6.0	177	1,062	63,720
Alaska	330	5.5	181	996	59,760
Arizona	330	5.5	176	968	58,080
Arkansas	348	5.8	179	1,038	62,280
California	312	5.2	181	941	56,460
Colorado	336	5.6	177	991	59,460
Connecticut	324	5.4	182	983	58,980
Delaware	342	5.7	180	1,026	61,560
District of Columbia	312	5.2	182	946	56,760
Florida	342	5.7	181	1,032	61,920
Georgia	348	5.8	180	1,044	62,640
Hawaii	318	5.3	178	943	56,580
Idaho	312	5.2	180	936	56,160
Illinois	324	5.4	181	977	58,620
Indiana	342	5.7	181	1,032	61,920
Iowa	354	5.9	180	1,062	63,720
Kansas	342	5.7	179	1,020	61,200
Kentucky	342	5.7	180	1,026	61,560
Louisiana	342	5.7	180	1,026	61,560
Maine	324	5.4	176	950	57,000
Maryland	330	5.5	181	996	59,760
Massachusetts	312	5.2	180	936	56,160
Michigan	318	5.3	182	965	57,900
Minnesota	336	5.6	175	980	58,800
Mississippi	360	6.0	182	1,092	65,520
Missouri	342	5.7	177	1,009	60,540
Montana	330	5.5	181	996	59,760
Nebraska	342	5.7	178	1,015	60,900
Nevada	318	5.3	180	954	57,240
New Hampshire	330	5.5	180	990	59,400
New Jersey	318	5.3	181	959	57,540
New Mexico	336	5.6	181	1,014	60,840
New York	330	5.5	183	1,007	60,420
North Carolina	336	5.6	181	1,014	60,840
North Dakota	330	5.5	179	985	59,100
Ohio	330	5.5	180	990	59,400
Oklahoma	330	5.5	177	974	58,440
Oregon	330	5.5	177	974	58,440
Pennsylvania	336	5.6	181	1,014	60,840
Rhode Island	318	5.3	180	954	57,240
South Carolina	348	5.8	181	1,050	63,000
South Dakota	336	5.6	176	986	59,160
Tennessee	348	5.8	181	1,050	63,000
Texas	372	6.2	176	1,091	65,460
Utah	330	5.5	179	985	59,100
Vermont	330	5.5	176	968	58,080
Virginia	330	5.5	181	996	59,760
Washington	324	5.4	180	972	58,320
West Virginia	348	5.8	181	1,050	63,000
Wisconsin	354	5.9	181	1,068	64,080
Wyoming	330	5.5	176	968	58,080

Appendix Table 3.

Cost of Time for Instruction by State

State or other area	Cost Per Daily Instructional Minute Per Pupil	Cost Per Daily Instructional Hour Per Pupil	Cost Per Annual School Day Per Pupil	Cost Per Annual Instructional Hour Per Pupil	Cost Per Annual Instructional Minute Per Pupil
U.S. Average	$19.05	$1,142.88	$35.23	$6.36	$0.11
Alabama	12.31	738.59	25.04	4.17	0.07
Alaska	29.55	1,772.96	53.87	9.79	0.16
Arizona	15.34	920.30	28.76	5.23	0.09
Arkansas	13.50	810.19	26.25	4.53	0.08
California	17.32	1,038.94	29.85	5.74	0.10
Colorado	16.65	999.29	31.62	5.65	0.09
Connecticut	28.71	1,722.54	51.11	9.46	0.16
Delaware	21.26	1,275.33	40.39	7.09	0.12
District of Columbia	35.82	2,149.33	61.41	11.81	0.20
Florida	17.71	1,062.35	33.46	5.87	0.10
Georgia	15.51	930.31	29.98	5.17	0.09
Hawaii	20.30	1,217.80	36.26	6.84	0.11
Idaho	13.53	811.56	23.45	4.51	0.08
Illinois	19.97	1,198.13	35.75	6.62	0.11
Indiana	18.07	1,084.38	34.15	5.99	0.10
Iowa	16.40	984.06	32.26	5.47	0.09
Kansas	18.17	1,090.04	34.71	6.09	0.10
Kentucky	16.39	983.70	31.15	5.46	0.09
Louisiana	14.51	870.44	27.56	4.84	0.08
Maine	20.56	1,233.79	37.85	7.01	0.12
Maryland	23.15	1,388.80	42.20	7.67	0.13
Massachusetts	24.49	1,469.32	42.45	8.16	0.14
Michigan	22.99	1,379.18	40.16	7.57	0.13
Minnesota	18.69	1,121.28	35.88	6.41	0.11
Mississippi	11.16	669.76	22.08	3.68	0.06
Missouri	16.42	984.94	31.72	5.56	0.09
Montana	18.62	1,117.35	33.95	6.17	0.10
Nebraska	18.14	1,088.34	34.85	6.11	0.10
Nevada	17.43	1,045.85	30.79	5.81	0.10
New Hampshire	19.04	1,142.44	34.91	6.35	0.11
New Jersey	33.41	2,004.57	58.70	11.08	0.18
New Mexico	13.92	835.32	25.84	4.61	0.08
New York	30.52	1,831.36	55.04	10.00	0.17
North Carolina	15.99	959.52	29.69	5.30	0.09
North Dakota	15.55	932.91	28.66	5.21	0.09
Ohio	19.86	1,191.90	36.42	6.62	0.11
Oklahoma	15.63	937.65	29.14	5.29	0.09
Oregon	20.84	1,250.15	38.85	7.06	0.12
Pennsylvania	22.82	1,368.97	42.35	7.56	0.13
Rhode Island	25.32	1,519.01	44.73	8.44	0.14
South Carolina	15.02	901.21	28.88	4.98	0.08
South Dakota	14.98	898.99	28.60	5.11	0.09
Tennessee	13.09	785.32	25.16	4.34	0.07
Texas	14.45	867.28	30.55	4.93	0.08
Utah	11.44	686.38	21.09	3.83	0.06
Vermont	21.96	1,317.42	41.17	7.49	0.12
Virginia	17.00	1,019.80	30.99	5.63	0.09
Washington	19.49	1,169.13	35.07	6.50	0.11
West Virginia	18.02	1,081.40	34.65	5.97	0.10
Wisconsin	20.83	1,249.92	40.74	6.90	0.12
Wyoming	19.63	1,177.52	36.80	6.69	0.11

Appendix Table 4.

Channel One Annual Time in Public Schools

State or other area	Channel One Time Share	Channel One Hours Per Pupil	Channel One Days Per Pupil
U.S. Average	0.036	35.9	6.5
Alabama	0.033	35.4	5.9
Alaska	0.036	36.2	6.6
Arizona	0.036	35.2	6.4
Arkansas	0.034	35.8	6.2
California	0.038	36.2	7.0
Colorado	0.036	35.4	6.3
Connecticut	0.037	36.4	6.7
Delaware	0.035	36.0	6.3
District of Columbia	0.038	36.4	7.0
Florida	0.035	36.2	6.4
Georgia	0.034	36.0	6.2
Hawaii	0.038	35.6	6.7
Idaho	0.038	36.0	6.9
Illinois	0.037	36.2	6.7
Indiana	0.035	36.2	6.4
Iowa	0.034	36.0	6.1
Kansas	0.035	35.8	6.3
Kentucky	0.035	36.0	6.3
Louisiana	0.035	36.0	6.3
Maine	0.037	35.2	6.5
Maryland	0.036	36.2	6.6
Massachusetts	0.038	36.0	6.9
Michigan	0.038	36.4	6.9
Minnesota	0.036	35.0	6.3
Mississippi	0.033	36.4	6.1
Missouri	0.035	35.4	6.2
Montana	0.036	36.2	6.6
Nebraska	0.035	35.6	6.2
Nevada	0.038	36.0	6.8
New Hampshire	0.036	36.0	6.5
New Jersey	0.038	36.2	6.8
New Mexico	0.036	36.2	6.5
New York	0.036	36.6	6.7
North Carolina	0.036	36.2	6.5
North Dakota	0.036	35.8	6.5
Ohio	0.036	36.0	6.5
Oklahoma	0.036	35.4	6.4
Oregon	0.036	35.4	6.4
Pennsylvania	0.036	36.2	6.5
Rhode Island	0.038	36.0	6.8
South Carolina	0.034	36.2	6.2
South Dakota	0.036	35.2	6.3
Tennessee	0.034	36.2	6.2
Texas	0.032	35.2	5.7
Utah	0.036	35.8	6.5
Vermont	0.036	35.2	6.4
Virginia	0.036	36.2	6.6
Washington	0.037	36.0	6.7
West Virginia	0.034	36.2	6.2
Wisconsin	0.034	36.2	6.1
Wyoming	0.036	35.2	6.4

Level and Composition of Education Spending. Washington, D.C.: Economic Policy Institute, 1995.

U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 1997.* NCES 97-388, by Thomas M. Smith, Beth Aronstamm Young, Yupin Bae, Susan P. Choy, and Nabeel Alsalam. Washington, D.C.: U.S. Government Printing Office, 1997.

U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics, 1996.* NCES 96-133, by Thomas D. Snyder. Washington, D.C.: U.S. Government Printing Office, 1997.

U.S. Department of Education, National Center for Education Statistics. *Education in States and Nations, 1991.* http://nces.ed.gov/pubs/esn/n20cb.html.

Walsh, David. *Selling Out America's Children: How America Puts Profits Before Values–and What Parents Can Do.* National Institute on Media and the Family. Fairview Press, 1997.

Max B. Sawicky has a Ph.D. in Economics. Alex Molnar has a Ph.D. in Urban Education.

Sawicky is an economist at the Economic Policy Institute in Washington, D.C. He is an at-large member of the national board of Americans for Democratic Action. He has contributed to Newsday, *the* Houston Chronicle, Dissent, In These Times, Challenge, New Economy, *and* Social Policy. *With Craig E. Richards and Rima Shore, he is a co-author of* Risky Business: Private Management of Public Schools. *This report on Channel One does not necessarily represent the views of the Economic Policy Institute or anyone associated with the Institute other than the author.*

Molnar is director of the Center for the Analysis of Commercialism in Education and a professor in the School of Education at the University of Wisconsin-Milwaukee. He also serves as a member of the evaluation team for Wisconsin's Student Achievement Guarantee in Education program. His work has appeared in Phi Delta Kappan, Educational Leadership, Education Week, The Wall Street Journal *and* The New Republic. *His latest books are:* Giving Kids the Business: The Commercialization of America's Schools *(Westview/HarperCollins, 1996) and* The Construction of Children's Character *(National Society for the Study of Education, 1977).*