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The Effectiveness of Channel One in Denver, IA, Secondary School

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Abstract

This study evaluated the effectiveness of Channel One programming in the Denver, Iowa, Secondary School. The seventh grade class was divided into three groups for the study. One group was selected as a control group and did not view Channel One. The other two groups viewed the programming daily. One of the two groups that viewed the programming also participated in brief follow-up discussions each day. Weekly current events quizzes were administered covering news stories from both Channel One programming and from other common news sources. The data were tabulated and analyzed in an attempt to determine if Channel One raised student current event awareness, if discussion enhanced student current event awareness, and if Channel One stimulated student awareness of events from external sources. Results indicate an increase in awareness of events presented by Channel One. The data are inconclusive with respect to the value of discussion and awareness of events from external news sources.

The Effectiveness of Channel One in the Denver, IA, Secondary School

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Chapter 1

Introduction

In 1989 Whittle Communications announced the creation of a satellite news service for schools called Channel One. Shortly thereafter the debate began. What is Channel One and why is there a debate?

Channel One, as outlined by Laura Eshbaugh (U. S. Congress, Senate, 1991) of Whittle Communication, is the first component of a package known as the Whittle Educational Network. The other components include the Classroom Channel, which features noncommercial educational programs and the Educators' Channel, which offers programs designed for educators. The final component is approximately $50,000 worth of equipment that is provided when a school subscribes to the service. The package was developed by Chris Whittle, company chairman, to address what he sees as political and cultural illiteracy of our high school students.

Each day the 12 minute Channel One news program, which includes two minutes of advertising, is beamed via satellite to the participating schools. The program uses a fast pace and youthful reporters in order to appeal to the students. Also broadcast each day is one to two hours of programming from the Classroom Channel or the Educators Channel. In return for the use of the equipment and daily programming, the school promises to show the entire 12 minutes of Channel One to the students daily.

Educators generally agree that daily exposure to current events can enhance geographic awareness and sensitivity to

other cultures(Rowell, 1990). Many also believe Whittle's program is providing the kind of exposure to current events that otherwise would be lacking due to budget constraints. Many schools can not afford the equipment required to broadcast programming to the entire student body. Whittle provides the equipment and the programming with the only restriction being that the equipment may not be used for a competitive news program (U. S. Cong. Senate, 1991). This means that other than the 12 minutes a day in which the Channel One news program is aired, the equipment may be used by the school for other purposes.

The debate does not center on the value of the news programming but rather on the two minutes of commercial advertising which must be shown each day. Critics across the country claim we are selling our students in return for television equipment (Southwest Educational…, 1990). Others question the propriety of using two minutes a day of taxpayer time for commercial purposes. Still others wonder if the next step will be advertisements in textbooks. New York and California state education departments have banned the program from their public schools. Additional states are either considering banning the program or are encouraging their schools to say no to Channel One (Hammer, 1990). The debate will undoubtedly continue for some time. It is an emotional debate with logical arguments on both sides of the issue.

The fixation on the advertising has blocked what should be the real question relative to Channel One. Do the students viewing Channel One have an increased awareness of the world

and current events? Many educators feel the programming is too superficial and lacks enough depth to have any significant value (Tate, 1989). If this is the case, the issue of advertising in the schools is irrelevant. The real issue becomes appropriateness of using valuable time to show a program that is educationally unsound.

Purpose

The purpose of this study was to determine the effectiveness of Channel One in a limited situation. The Denver, Iowa, Secondary School is in the second year of a three year contract with the Whittle Educational Network. Sometime during the third year the Board of Education must decide whether or not to renew the contract. One of the questions asked will be if the time invested each day is reaping significant benefits. Another question will be if follow up activities after viewing the Channel One programming would increase the benefits to the students. This study focused on three questions in an attempt to provide the Board with quantitative data: Does viewing Channel One programming increase current events awareness in the areas presented by Channel One? Does viewing Channel One programming stimulate current events awareness beyond the areas presented by Channel One? Does discussion following the viewing of Channel One affect current events awareness?

One can look at these three questions and make some assumptions based on current educational theory. First of all, any exposure to current events will raise student awareness of those events presented. This would be true regardless of the medium used to present the events. Next,

the majority of students will not be stimulated to seek out information about other current events, especially if the presentation requires the students to be only passive receptors. Finally, as with all areas, discussing a topic leads to better understanding and retention.

Hypotheses

The following three hypotheses were tested in this study.

1. There will be no significant difference at the .05 level in current events awareness among groups of students who view Channel One programming and those who do not view Channel One.

2. There will be no significant difference at the .05 level in current events awareness of students who view Channel One and have a follow up discussion and those who do not have a follow up discussion.

3. There will be no significant difference at the .05 level in awareness of current events presented by Channel One and current events not presented by Channel One.

Limitations

1. The subjects for this study were limited to 59 seventh grade students from the Denver Secondary School who viewed Channel One during a 9 week time period.

2. The validity of the results of this study was limited by the histories and abilities of the students involved.

3. The validity of the results of this study was further limited by the abilities of the discussion leader.

Definition of Terms

Current Events Awareness: knowledge of contemporary news and the effect it has on daily

life.

Geographic Awareness: knowledge of the locations in the world where events are occurring.

Chapter 2

Literature Review

The review of literature is divided into two sections. Section one examines the literature related specifically to Channel One. The second section examines literature related to the effects of television on learning and behavior.

Channel One

Much of the literature found specific to Channel One can be classified as opinion. Perhaps due to the relative newness of the program, little substantive writing has surfaced. The articles published in journals and periodicals have focused either on the controversial nature of advertising in the public schools or the value of the programming.

Advertising

Rudinow (1989/1990) in warning educators to beware if Whittle's offer sounds too good to be true says, "…advertising within the required curriculum thoroughly compromises the integrity of public education" (p. 71). Bella Rosenberg, an official at the American Federation of Teachers, as quoted by Gallagher (1989) adds, "By showing commercials, schools are implicitly endorsing the product" (p. 88).

Rowell (1990) counters by pointing out that advertising is already in schools. "School newspapers with advertising, courtesy cars for driver training from automobile dealerships, candy sales with slick advertising flyers, yearbooks with advertisements, and even gifts such as

yardsticks from neighborhood hardware stores--all are examples of advertising in the schools. Students who view the Whittle program will be no more adversely affected by the two minutes of advertising than by commercials they see at other times" (p. 52).

Rudd, as presented by Gottlieb, (1991) points out that advertising is found in some of the free curriculum materials which businesses supply to schools.

> A content analysis of materials within the areas of nutrition, energy, and economics education revealed that business-sponsored materials were found to contain significantly more advertising statements than did non-business-sponsored materials. Additionally, sponsored materials contained significantly more references to brand names/models and more company/brand logos and names than did non-sponsored materials. (p. 1)

Considine (1990) in promoting Channel One as a means of preparing students to become critical consumers says,

> Yet despite the high visibility of advertising and other mass media beyond the classroom, the American curriculum has done little to acknowledge its power or to teach students about its ethical, economic, and educational impacts. The Channel One commercials could have been utilized as part of the instructional sequence. That opportunity was lost by those educators and administrators who lacked the vision and creativity to see Channel One as anything other than the "intrusion" of corporate America into the classroom. (p. 28)

Wulfemeyer and Mueller (1991) conducted a content analysis of Channel One advertisements. The researchers used a coding scheme to evaluate the format, appeal, value, and theme of the commercials that appeared during the Channel One programming over a five week period. The analysis of the study showed that most of the commercials were aimed at teenagers, emphasized positive aspects about products that

teenagers use or focused on issues teenagers are concerned about, featured young people having fun and enjoying advertised products, included rock music and lasted 30 seconds. About 15% of the advertising messages were not for commercial products or services, but were instead public service announcements. Well over 75% of the characters used in the commercials were Caucasian. The product values seem to tell students that products are worthy of purchase because they are effective rather than because they are unique or ornamental. Personal values expressed in the commercial messages focused primarily on leisure/pleasure, appearance/sexuality and belonging. The researchers concluded by saying, "The debate concerning the ethics of advertising in the classroom is likely to continue for some time. This investigation did not attempt to resolve the debate. Instead, it simply attempted to outline objectively the characteristics of the commercial messages aired on Channel One" (p. 14).

Programming Value

Although most of the discussion has centered on the issue of advertising, the substance of the program has not been totally ignored. Supporters and critics alike have voiced their opinions.

Graves (1990) reports the National Council for the Social Studies is taking the position that current events programming for schools should have depth, be commercial free, and be available for teachers to use when and how they choose. "Channel One would not meet the council's standards, not only because it includes commercials, but also because it

delivers a fast-paced program crammed with short stories tailored for teenagers" (p. 10). John A. Brunner, associate communications director for Cincinnati Public Schools, reported in the same article that after trying Channel One for five weeks at Withrow High School performance gains were modest. "Although the students at Withrow did score better than the control school, the correct response rate was only 45 percent." Said Brunner, "It wasn't educationally significant" (p. 10).

Rist (1989) reports that, Scott Thomson, executive director of the National Association of Secondary School Principals, says the organization's board is concerned about the superficial nature of the program. He calls it "social studies by 90-second sound bites" (p. 24).

Rudinow (1990) says,

> Initial suspicions concerning Channel One's depth and educational value are quickly confirmed upon viewing any of the pilot programs. MTV production values predominate: the emphasis is on superficial polish and lightning-fast pace. The three main program segments (separated by the commercial breaks), averaging roughly three minutes in length, are subdivided into story-packages averaging a minute or less each. (p. 72)

Rowell (1990) counters, "The value of the 10 minutes of news, which contains some documentary footage, is immense. Without question, geographic awareness and sensitivity to other cultures will be greatly enhanced as places around the world are highlighted, mapped, and traveled" (p. 53).

Rukeyser (1989/1990), Editor in Chief of Whittle Communications writes, "Channel One presents serious-minded news and information designed to relate the news to the

concerns and studies of teenagers and paced to hold the attention of a generation that has demonstrated an aversion to the news. We believe we have created an especially powerful tool to help teachers remedy the woeful ignorance of American teenagers about current events, geography, and related subjects" (p.75).

Wulfemeyer and Mueller (1990) listed the reactions to the Channel One concept after the initial five-week test. Reactions related to program content included the following:

> (a) Most of the students and teachers who took part in the test liked Channel One, (b) the current events knowledge of students increased after watching Channel One, (c) many students reported that Channel One helped them gain a better understanding of the world and helped them in some of their other academic subjects, (d) educators and critics believe that showing Channel One results in a loss of control over curriculum matters and that the airing of commercials is an inappropriate use of class time, and (e) some critics are troubled by what they perceive to be a MTV, video-game approach to the news on Channel One. (p.4)

Zuckerman (1989) in an article for Time quotes Stanley Jasinskas, principal of Eisenhower Middle School in Kansas City, Kansas, "We saw positive changes in our students. They became much more knowledgeable, and they took positions on issues." Elaine Green, assistant principal of Mumford High School in Detroit, added, "The teachers, the students, the parents were all pleased with the quality and the content of the show" (p. 56).

Johnston and Brzezinski (1992), funded by a grant from Whittle Communications, began a three year study of the Whittle Communications' Educational Network in 1990. Eleven sites around the country were selected for the study. The

sites were selected to be representative of a broad range of community and school types. Each site had a Channel One school and a matched non-viewing school. The researchers included a number of observations in a summary of the first year results.

General reaction to the program was surveyed. Sixty percent of the teachers would strongly recommend Channel One to other schools and teachers. An additional twenty-seven percent would recommend the program with some reservations. Student reaction was evenly divided when forty-seven percent reported they learned something either "always" or "most of the time" and fifty-three percent reported something learned either "never" or only "some of the time".

Attempting to gain quantitative data, the researchers administered current events tests in September, January, and May. Each test covered news from the previous four month period. Questions ranged from simple identifications to items requiring more in-depth knowledge. Results revealed that on average, Channel One viewers knew more about current events than non-viewers. The advantage, however, was only 3.3 percent on a 30-item test. Based on the data collected, the researchers concluded, "Channel One students did not show increased interest in following the news outside of school--reading the newspaper, following the news on television at home, or talking about news with parents and friends. But, by the end of the school year Channel One students did indicate that there was a little more discussion of world events in their classes" (p.4).

Effects of Television

This section examines the effects of television on children and the potentials of television as an educational medium.

Salomon and Leigh (1984) investigated predispositions about learning from print and television. Central to their investigation was the concept of AIME (Amount of Invested Mental Effort). AIME is defined as the number of non-automatic mental elaborations applied to a unit of material. The human mind is said to have a pool of available mental effort that can be allocated to tasks. The employment of non-automatic processing demands effort, and therefore, taps that pool. Tasks which are familiar would take little AIME whereas unfamiliar tasks would require greater AIME. Generally print materials require more AIME to process than do programs presented on television. The researchers conducted two investigations into the effects of predispositions on learning from print and television.

The first study involved 60 fourth grade students in a Jerusalem public school. The students were given a survey to determine the effort expended with watching television as opposed to reading. Results revealed the lower ability students tend to work harder than the more able students in comprehending materials presented through television and consequently performed quite well. The higher ability students tended to look down on television, perceiving less effort demand, and learned less from the materials (p. 128).

The second study involved 87 sixth grade students. A pretest was administered two weeks before the experiment to

measure pre-exposure AIME and general AIME in television. Story materials were presented, a survey of AIME taken, and a post test administered. The researchers concluded that one learns what to expect from television and then uses this knowledge to contextulize the viewing experience. Students will expend the amount of effort they expect will be required for comprehension (p. 133).

The effect of television on a child's attention span was addressed by Collins (1991) in her investigation of the impact of television on preschooler's perseverance, impulsivity and restlessness. Subjects of the study were 328 preschoolers within three months of their fifth birthday. Each five-year-old visited the laboratory with a parent, on two occasions, approximately five weeks apart. During the first visit the Peabody Picture Vocabulary Test was administered. The parent was instructed in how to complete a Nielsen-like ten day home-viewing diary. During the second session the parent filled out three surveys. The activity level, persistence and distractibility were included in the analyses.

The child began the visit by playing an experimenter designed video game for ten minutes. This was followed by trying to solve Banta's difficult wooden puzzle for five minutes. The puzzle task tested three measures of the child's perseverance when faced with a difficult problem.

Next, the Kansas Reflection-Impulsivity Scale for Preschoolers (KRISP) was administered. Children who respond with longer latencies and fewer errors are described as reflective, those with shorter latencies and more errors as

impulsive.

Analysis of the results indicated correlations did not exist between the children's television viewing and the attributes being tested. Collins concludes by saying, "In sum, while correlational methods cannot eliminate the possibility of non-linear relations, or establish the direction of causality, the overwhelming lack of 'negative' findings provides cause for optimism" (p. 8). Collins also adds, "Moreover, the overall pattern of results casts some doubt on the claims that television in general has a negative impact on preschooler's attention span, perseverance, and impulsivity" (p. 8).

A review of research on the effects of television and children was conducted by Comstock and Paik (1987). Two areas of the review have direct implications to this study.

Considering the use of television news they report, "Studies in the use of television news by children and teenagers lead to a number of tentative conclusions about information acquisition from television" (p. 17).

> They include: (a) a large majority of children and teenagers believe they get most of their information about public events from television, ranking television far above teachers, parents, peers, or other media; (b) exposure to news programs increase: factual knowledge, as does exposure to newspapers and other print media; but children and teenagers are far more likely to see news than to read news, so television is the primary information provider; (c) children and teenagers typically are not much exposed to the news by any means; (d) exposure to news programs was increased when parents had a high interest in topics being covered or when parents strongly encouraged their offspring to express their opinions; (e) the opinions of children and teenagers were correlated with the perceived opinions of parents and not with those of favored

> newspersons, indicating that while television may supply information, parents influence opinions; and (f) learning from news increased when information was repeated, and when items had a high emotional content. (p. 18)

Regarding television and learning the reviewers say, "Ample evidence exists that children and teenagers will acquire and retain information disseminated by television in a format intended to teach" (p.17).

In their conclusion the reviewers say,

> "The negative correlations between television viewing and scholastic achievement in arithmetic, reading, and writing certainly are consistent with the view that television has reduced reading ability and interfered with achievement by suppressing attention span and creativity. However, some and conceivably most or all of these relationships are certainly explained by the greater attention of less able or less disciplined pupils to television, leaving any causal contribution minor at best." (p. 45)

Egan (1991) investigated effective television teaching. Participants who had experienced several different kinds of televised instructional formats were identified. Twenty individuals were invited to participate and were interviewed to determine what really makes a difference in the effectiveness of televised instruction. Respondents felt that feedback regarding assignments, exams, and other projects was critical to their effective learning (p. 9).

Summary

The ethics of advertising in public schools has dominated the early literature relative to Channel One. Arguments addressing program value have been based heavily on individual opinion. The first year results from the Johnston and Brzezinski (1992) study indicate only marginal benefit to

the students.

In the area of television in general, studies conclude that television and learning and the effects of television on children are both harmful and beneficial. Students can learn from television if the message is well suited to the medium and if the students view the programming as being worthy of their attention.

Chapter 3

Methodology

The fifty-nine students in the seventh grade class of the Denver Secondary School were randomly divided into three sections by a computer scheduling program before the beginning of the academic year. The use of these randomly selected groups reduced the effects of subject history and subject ability on the validity of the data gathered.

One section was selected to be the control group and did not view Channel One programming. Another section viewed Channel One programming on a daily basis with no additional discussion. The third section viewed Channel One daily and was led in a current events discussion immediately following each program. The group's previously assigned supervising teacher led the discussion. The discussion focused on, but was not limited to, the topics presented in the Channel One programming for the day.

Each Friday, during the nine week study period, all three groups were given a ten question multiple choice quiz to test awareness of current events. The quizzes were prepared by the researcher and were based on events presented during the week. Five questions were based on news stories examined on Channel One programming. The remaining questions were based on major local, state, national, and world events not presented on Channel One. This set of remaining questions was compiled from newspapers and weekly news periodicals available in the school media center and from television newscasts.

Chapter 4

Analysis of Data

The correct responses from the quizzes were tallied each week and sorted into three categories for tabulation to test the three hypotheses. The tabulated data for the three categories are presented in Tables 5 and 6 in Appendix A. The number of student scores may vary each week due to student absenses.

Category number one is composed of the correct responses of all three student groups, sorted by student group. The mean score for each group was calculated weekly. At the conclusion of the nine week testing period the means were entered into MYSTAT 2.1 statistical program for the Macintosh to calculate analysis of variance to test hypothesis number one, "There will be no significant difference at the .05 level in current events awareness among groups of students who view Channel One programming and those who do not view Channel One." The analysis produced an F-ratio of 10.763 as shown in Table 1.

Table 1

ANOVA for Test Results of Two Viewing Groups and One Non-Viewing Group

Source	Sum-of-squares	DF	Mean-square	F-ratio	P
GROUP	10.690	2	5.345	10.763	0.000
Error	11.918	24	0.497		

Using a standard table of critical values of F^a, the F-ratio calculated is significant at greater than the .01

level. The hypotheses is therefore rejected. Based upon the data gathered in this study, there is a significant difference in the current events awareness among the groups of students who view Channel One programming and those who do not view Channel One.

Category number two is a subset of category number one formed by excluding the scores of the non-viewing group. The mean score for each week was again used for analysis of variance this time to test hypothesis number two, "There will be no significant difference at the .05 level in current events awareness of students who view Channel One and have a follow up discussion and those who do not have a follow up discussion." This analysis produced an F-ratio of 1.378 as shown in Table 2.

Table 2

ANOVA for Test Results for Two Viewing Groups

Source	Sum-of-squares	DF	Mean-square	F-ratio	P
GROUP	0.902	1	0.902	1.378	0.258
Error	10.477	16	0.655		

The F-ratio calculated from this group of data is not significant at the .05 level. Hypothesis number two is accepted. The data collected suggest that discussion does not make a significant difference in current events awareness between the two groups of students who viewed the Channel One programming.

Category number three is composed of the correct responses of all three student groups sorted by Channel One and other

current events question categories. The mean score for each category was calculated weekly and used for analysis of variance to test the third hypothesis, "There will be no significant difference at the .05 level in awareness of current events presented by Channel One and current events not presented by Channel One." The F-ratio produced by this analysis was 3.859 as shown Table 3.

Table 3

ANOVA for Three Groups Test Results by Question Categories

Source	Sum-of-squares	DF	Mean-square	F-ratio	P
GROUP	96.883	1	96.883	3.859	0.067
Error	401.653	16	25.103		

This analysis indicates a difference in the awareness between the events presented on Channel One and the events not presented on Channel One, but the difference is not significant at the .05 level. Hypothesis number three is also accepted.

Examination of the raw data and mean scores after the fourth week appeared to contradict reasonable expectations of the results. As expected, the non-viewing group's scores were lowest. Unexpectedly, the scores of the non-discussion group were better than the scores of the group participating in the follow up discussions. Two areas were examined in an attempt to determine why the group of students that simply viewed the programming were scoring better on the quizzes.

First the student's composite scores on the Iowa Test of Basic Skills were obtained. The scores were sorted by

student group and analysis of variance used to determine if there was a significant difference of ability among the groups. The analysis produced an F-ratio of .262 which is not significant at the .05 level. The sorted scores and analysis are presented in Appendix C, Table 7.

Classroom decorum during the viewing of the program was the other area examined. Three separate observations of both groups were made to gain some insight into classroom procedures. The observations revealed a considerable difference in attentiveness which may have contributed to the outcome of the study.

Chapter 5

Conclusions, Recommendations, Summary

Conclusions

The data and analysis appear to convincingly reject the first hypothesis. The students viewing the Channel One programming scored significantly better on the current events quizzes then did the students who did not view Channel One. This result is reasonable considering the students who viewed the programming were assured of being exposed to material from which fifty percent of the questions were based. The students in the non-viewing group could have obtained some of the same information but were required to do so from external sources.

The analysis of the data relevant to the second hypothesis reveals results which are contradictory to accepted educational thinking. Most educators, including this researcher, subscribe to the concept that discussing an item enhances student learning. Discussion is thought to reinforce what the student has seen or heard so the new information will leave a lasting imprint. The data collected in this study do not support such thinking.

As mentioned in the analysis section, the raw data indicated a possible contradiction before the study was completed. The first assumption of the researcher was the possibility that the groups were not representative of the entire population. Perhaps the group not participating in discussion contained more students of higher ability or the discussion group contained more students of lower ability.

The analysis of the ITBS scores revealed little evidence to support such an assumption.

The second assumption of the researcher was that the discussion was not conducted effectively. The observations of the two groups support this assumption. The discussion not only appeared to be ineffective, but the difference in general classroom atmosphere between the two groups may have contributed to the difference in quiz scores. The teacher of the group which was not participating in the discussion turned the room lights off while the programming was viewed. The students were also not allowed to speak except while the commercials were being aired. The atmosphere in the classroom whose students were participating in the discussion was much different. There appeared to be little structure to the group. Students were allowed to read, talk to one another, and wander about the room as the program and the discussion were in progress. In the opinion of the researcher, the difference in classroom decorum explains why the group expected to score higher did not.

The purpose of the third hypothesis was to determine if viewing Channel One programming would stimulate students to become more aware of events taking place around them. The relevant data from the entire population appear to support this concept. The difference was not significant at the .05 level, leading to an assumption that the students were aware of events from sources other than Channel One programming. Further examination contradicts such an assumption. An examination of the data indicates the number of correct responses for the group not viewing the Channel One

programming are low for the questions based on Channel One. At the same time the number of correct responses for the questions not based on Channel One programming appear to be about the same as the other two groups. The effect is a lowering of the mean scores for the Channel One based questions while maintaining the mean scores for the questions based on other sources. Removing the scores of the non-viewing group and doing an analysis of variance on the mean scores of the two viewing groups provided the results shown in Table 4.

Table 4

ANOVA for Test Results of Two Viewing Groups by Question Categories

Source	Sum-of-squares	DF	Mean-square	F-ratio	P
GROUP	132.302	1	132.302	7.153	0.017
Error	295.938	16	18.496		

The F-ratio of 7.153 is significant at greater than the .05 level. Hypothesis number three would be rejected using this analysis. The rejection of hypothesis number three, with the difference being due to a greater awareness of events presented on Channel One, suggests the students are not seeking out additional information but are merely absorbing the material presented in the controlled environment.

Recommendations

If the study is repeated, the researcher recommends three changes. The participation of the groups should be rotated, the length of the study should be extended to facilitate the rotation of the groups, and the population should be larger.

One of the problems with this study, as it was conducted, was the effect the discussion leader had on the group. Rotating the groups and analyzing the data at the end of each rotation would enable the researcher to draw a more accurate conclusion on the effects of the discussion. The groups should be assigned as viewing only, viewing with discussion, and non-viewing. At the end of a fifth week the assignments would rotate.

The length of the study should be increased from nine weeks to fifteen weeks to enable a larger data sample in connection with the rotation of the groups. The present nine week time frame would limit each group assignment to only three weeks. The data sample gathered would not be large enough to be considered representative.

The size and makeup of the student population should be changed for the same reason. This study was limited to the fifty-nine students of the seventh grade class. Expanding the study to include students from other grade levels would result in a larger and more diverse data sample. The results of the study would then have broader application value.

Determining whether or not to renew the contract with Whittle Communications should not be decided solely on the results of this study. The data do suggest the students who viewed the programming were receiving information they might not have otherwise obtained. The data do not address to what level the students are benefiting. The decision to renew the contract will probably be based on more than the daily news programming. The benefits of the total Whittle Communications package to the school will have to be

considered.

Summary

The purpose of this study was to gain information that would aid the Board of Education of the Denver Secondary Schools in deciding whether to renew the Channel One contract with Whittle Communications. Part of the Board's decision will be based on the effectiveness of the programming in relation to the time taken from each school day to view the program. The study also attempted to determine if follow up activities would increase the benefits to the students. The seventh grade class of Denver Secondary School was divided into three groups. One group served as a control group and did not view Channel One programming. The other two groups viewed the programming, with one participating in follow-up discussions. All three groups were administered weekly quizzes covering events presented from both Channel One and from other available news sources. The results of the data analysis suggest that students viewing Channel One did have an increased awareness of the current events presented in the programming. Awareness of events not presented by Channel One was also greater but was not significant. Statistically the follow-up discussions did not appear to increase student awareness. There were, however, external forces which may have skewed the results in this category.

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Appendix A

Table 5

Correct Test Responses Sorted By Student Group

Week 1 Correct Responses			Week 2 Correct Responses		
Group A	Group B	Group C	Group A	Group B	Group C
7	6	6	8	7	6
6	6	5	6	7	6
5	5	4	6	6	5
5	5	4	6	5	5
4	4	4	5	5	4
4	4	4	5	5	4
4	3	4	4	5	4
4	3	3	4	4	4
4	3	3	4	4	3
3	3	3	3	4	3
3	2	2	3	3	3
3	2	2	3	3	3
3	1	1	2	3	3
2	1	1	2	3	3
2	0	1	2	3	2
2		1	2	1	2
2		0	1		2
0		0	1		2
					0
No. of Students 18	15	18	**No. of Students** 18	16	19

Table 5 (continued)

Week 3 Correct Responses				Week 4 Correct Responses		
Group	A Group	B Group	C	Group	A Group	B Group	C
8	8	5		9	10	8	
8	7	5		8	9	6	
7	7	5		8	7	6	
6	7	4		7	7	6	
6	7	4		7	7	6	
6	7	4		7	7	5	
5	6	4		7	7	4	
5	6	3		6	6	4	
4	5	3		6	6	4	
4	5	3		6	6	3	
4	5	3		6	6	3	
4	5	2		6	6	3	
3	4	2		5	6	3	
3	4	2		4	5	2	
3	4	2		3	5	2	
2	4	2		3	5	2	
2	4	1		3	4	2	
1	3	1		3	4	2	
1	3	0		0	4	2	
No. of	1	0		No. of	4	0	
Students 19	20	20		Students 19	20	20	

Table 5 (continued)

Week 5 Correct Responses				Week 6 Correct Responses			
	Group A	Group B	Group C		Group A	Group B	Group C
	9	9	6		8	9	6
	7	8	5		7	8	6
	7	8	4		6	7	5
	7	7	4		5	6	5
	6	7	4		5	6	5
	6	7	4		5	5	5
	6	6	4		5	5	4
	6	6	4		5	5	4
	5	6	3		5	5	4
	5	6	3		4	5	4
	5	5	3		4	5	3
	4	5	3		4	5	3
	4	5	3		4	4	3
	4	5	3		4	4	2
	3	5	2		4	4	2
	3	4	2		3	4	2
	3	4	1		2	4	1
	3	4	1		1	4	1
		4				4	
No. of		3		No. of		3	
Students	18	20	18	Students	18	20	18

Table 5 (continued)

Week 7 Correct Responses				Week 8 Correct Responses			
	Group A	Group B	Group C		Group A	Group B	Group C
	6	8	6		9	9	5
	5	6	5		8	7	5
	5	6	5		8	7	5
	4	6	5		7	6	4
	4	5	5		5	6	4
	4	5	4		5	6	4
	4	5	4		5	6	4
	3	5	4		5	6	3
	3	5	3		5	5	3
	3	5	3		5	4	3
	3	4	3		5	4	3
	3	4	3		5	4	3
	2	4	3		4	4	2
	2	4	2		4	4	2
	2	4	2		4	4	2
	2	4	2		3	3	2
	2	4	1		2	3	1
	1	3	0		1	2	1
	0	1			0	2	1
No. of		0		No. of		0	
Students	19	20	18	Students	19	20	19

Table 5 (continued)

Week 9	Correct Responses		
	Group A	Group B	Group C
	8	10	6
	8	9	6
	8	8	6
	7	7	6
	6	7	5
	6	6	5
	6	6	5
	6	6	5
	5	6	4
	5	5	4
	5	5	4
	5	5	4
	4	4	4
	4	4	3
	3	3	3
	3	3	3
	2	2	2
	2	2	2
	1	1	1
No. of			1
Students	19	19	20

Table 6

Test Responses Sorted by Group and Question Categories

	Week 1 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1	13		11		6	
2	2		5		8	
3		5		2		5
4	6		5		5	
5		8		3		6
6		7		2		6
7	3		3		3	
8	8		3		2	
9		8		7		5
10		3		5		2
Sum	32	31	27	19	24	24
C1+ Oth	63		46		48	
Avg	3.5		3.07		2.67	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1	30	
2	15	
3		12
4	16	
5		17
6		15
7	9	
8	13	
9		20
10		10
Sum	83	74
Avg	16.60	14.8

Table 6 (continued)

	Week 2 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1		6		7		4
2		6		5		8
3	11		14		13	
4	4		3		5	
5		8		4		3
6		6		6		4
7	7		10		9	
8	11		11		4	
9	5		3		5	
10		2		5		11
Sum	38	28	41	27	36	30
C1+ Oth	66		68		66	
Avg	3.67		4.25		3.47	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1		17
2		19
3	38	
4	12	
5		15
6		16
7	26	
8	26	
9	13	
10		18
Sum	115	85
Avg	23	17

Table 6 (continued)

	Week 3 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1		6		2		4
2	10		8		7	
3	12		19		15	
4		7		4		4
5	8		10		2	
6	12		17		2	
7	9		14		2	
8		7		5		8
9		3		9		8
10		6		13		4
Sum	51	29	68	33	28	28
C1+ Oth	80		101		56	
Avg	4.21		5.05		2.8	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1		12
2	25	
3	46	
4		15
5	20	
6	31	
7	25	
8		20
9		20
10		23
Sum	147	90
Avg	29.4	18

Table 6 (continued)

	Week 4 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1	10		11		6	
2	16		16		9	
3		2		5		2
4	7		6		2	
5	11		14		5	
6		8		5		5
7	13		16		11	
8		13		17		9
9		17		17		15
10		9		6		9
Sum	57	49	63	50	33	40
C1+ Oth	106		113		73	
Avg	5.58		5.65		3.65	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1	27	
2	41	
3		9
4	15	
5	30	
6		18
7	40	
8		39
9		49
10		24
Sum	153	139
Avg	30.6	27.8

Table 6 (continued)

	Week 5 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1	9		8		3	
2	10		14		2	
3		9		15		6
4	11		15		5	
5		2		5		5
6		15		18		8
7		9		9		11
8	14		14		10	
9		6		4		4
10	7		11		5	
Sum	51	41	62	51	25	34
C1+ Oth	92		113		59	
Avg	5.11		5.65		3.28	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1	20	
2	26	
3		30
4	31	
5		12
6		41
7		29
8	38	
9		14
10	23	
Sum	138	126
Avg	27.6	25.2

Table 6 (continued)

	Week 6 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1	9		14		1	
2		1		4		4
3		8		11		9
4	2		6		5	
5		8		9		8
6	16		15		13	
7		3		3		8
8		7		8		5
9	13		15		4	
10	14		17		8	
Sum	54	27	67	35	31	34
C1+ Oth	81		102		65	
Avg	4.5		5.1		3.61	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1	24	
2		9
3		28
4	13	
5		25
6	44	
7		14
8		20
9	32	
10	39	
Sum	152	96
Avg	30.4	19.2

Table 6 (continued)

	Week 7 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1		6		9		9
2		8		14		9
3		13		14		13
4	6		7		1	
5	1		8		4	
6	12		13		6	
7	6		11		4	
8	3		4		5	
9		1		3		5
10		4		13		7
Sum	28	32	43	53	20	43
C1+ Oth	60		96		63	
Avg	3.16		4.8		3.5	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1		24
2		31
3		40
4	14	
5	13	
6	31	
7	21	
8	12	
9		9
10		24
Sum	91	128
Avg	18.2	25.6

Table 6 (continued)

	Week 8 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1	3		3		5	
2	16		14		7	
3		5		7		9
4	6		10		5	
5	9		9		5	
6	16		17		5	
7		4		2		1
8		5		8		8
9		15		10		9
10		10		11		3
Sum	50	39	53	38	27	30
C1+ Oth	89		91		57	
Avg	4.68		4.55		3	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1	11	
2	37	
3		21
4	21	
5	23	
6	38	
7		7
8		21
9		34
10		24
Sum	130	107
Avg	26	21.4

Table 6 (continued)

	Week 9 Correct Responses					
	Group A		Group B		Group C	
Question	Chan 1	Other	Chan 1	Other	Chan 1	Other
1		4		6		4
2		11		7		12
3	16		16		19	
4	14		18		10	
5	9		8		2	
6		3		3		4
7		15		15		13
8	6		8		2	
9	12		14		7	
10		5		6		6
Sum	57	38	64	37	40	39
C1+ Oth	95		101		79	
Avg	5		5.32		3.95	

Combined Correct Responses by Question Categories

Question	Chan 1	Other
1		14
2		30
3	51	
4	42	
5	19	
6		10
7		43
8	16	
9	33	
10		17
Sum	161	114
Avg	32.2	22.8

Appendix B

Table 7

Iowa Test of Basic Skills Composite Scores

Group A	Group B	Group C
4	3	3
13	22	11
25	34	12
25	36	20
25	39	28
35	44	36
36	46	46
39	48	46
44	48	64
50	53	64
53	57	64
62	57	71
68	68	77
71	71	78
75	73	78
77	77	82
87	82	83
88	93	93
92	94	96
	97	
No. of Students 19	20	19

Analysis of Variance

Source	Sum-of-squares	DF	Mean-square	F-ratio	P
GROUP	382.21	2	191.105	0.262	0.771
Error	40176.221	55	730.477		

Appendix C

Sample Quiz

Circle the number of your home room : 83 91 92

Choose the word or phrase that most correctly answers or completes each statement. Print the letter that corresponds to your choice on the line next to the statement.

_____ What was the intended target of the Tomahawk missiles launched by the U.S. Navy on January 17?

a. Saddam Hussein's presidential palace.
b. A suspected nuclear weapons site.
c. A SCUD missile launching site.
d. An anti-aircraft weapons site.

_____ What country that formally supported our gulf actions, voiced objection to the latest U. S. bombings?

a. Russia
b. France
c. Turkey
d. Saudi Arabia

_____ President Clinton's middle name is:

a. Washington
b. Abraham
c. Jefferson
d. Patrick

_____ The Clinton inauguration cost about:

a. $250,000
b. $5,000,000
c. $50,000,000
d. $25,000,000

_____ President Bush departed Washington for the final time aboard what airplane?

a. Air Force One
b. TWA 101
c. Pan Am 401
d. Executive One

_____ Which of President Clinton's cabinet nominations is being challenged as being worthy of a cabinet position?

a. John Major
b. Les Aspen
c. Zoe Baird
d. Thomas McLarty

_____ Computer display terminals have most recently been associated with:

a. muscle spasms
b. arthritis
c. vision problems
d. sleep problems

_____ The Michigan doctor who has become prominent for assisting elderly people in committing suicide is:

a. Jack Miller
b. John O'Hair
c. Michael Johanek
d. Jack Kevorkian

_____ While Iowa has been battling ice and snow storms, parts of California have been suffering from:

a. drought
b. unusually high temperatures
c. heavy rains
d. sand storms

_____ The "Special Olympics" began this week in:

a. Dubuque
b. Ames
c. Decorah
d. Mason City

Abstract

This study evaluated the effectiveness of Channel One programming in the Denver, Iowa, Secondary School. The seventh grade class was divided into three groups for the study. One group was selected as a control group and did not view Channel One. The other two groups viewed the programming daily. One of the two groups that viewed the programming also participated in brief follow-up discussions each day. Weekly current events quizzes were administered covering news stories from both Channel One programming and from other common news sources. The data were tabulated and analyzed in an attempt to determine if Channel One raised student current event awareness, if discussion enhanced student current event awareness, and if Channel One stimulated student awareness of events from external sources. Results indicate an increase in awareness of events presented by Channel One. The data are inconclusive with respect to the value of discussion and awareness of events from external news sources.