1994

Communication, education, and technology : a critical discourse analysis of the local Channel One controversy

Vanessa Elaine Greenwood
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_theses

Recommended Citation

Greenwood, Vanessa Elaine, "Communication, education, and technology : a critical discourse analysis of the local Channel One controversy" (1994). *Master's Theses*. 911.
DOI: <https://doi.org/10.31979/etd.2p4d-6fpu>
https://scholarworks.sjsu.edu/etd_theses/911

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

**A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600**

COMMUNICATION, EDUCATION, AND TECHNOLOGY:
A CRITICAL DISCOURSE ANALYSIS OF
THE LOCAL CHANNEL ONE CONTROVERSY

A Thesis
Presented to
The Faculty of the Department of Communication Studies
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Vanessa Elaine Greenwood
December, 1994

UMI Number: 1361169

Copyright 1994 by
Greenwood, Vanessa Elaine
All rights reserved.

UMI Microform Edition 1361169
Copyright 1995, by UMI Company. All rights reserved.

This microform edition is protected against unauthorized
copying under Title 17, United States Code.

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

© 1994

Vanessa Elaine Greenwood

ALL RIGHTS RESERVED

APPROVED FOR THE DEPARTMENT OF COMMUNICATION STUDIES

Professor Jo Sprague

Professor J. Michael Sproule

Professor Dennis Jaehne

Professor Victoria Harper

APPROVED FOR THE UNIVERSITY

ABSTRACT

COMMUNICATION, EDUCATION, AND TECHNOLOGY: A CRITICAL DISCOURSE ANALYSIS OF THE LOCAL CHANNEL ONE CONTROVERSY

by Vanessa Elaine Greenwood

This thesis is a critical-interpretive analysis of a naturally occurring body of discourse about Channel One news programming. Literature in the areas of instructional technology and Channel One programming are woven together to provide the foundation and rationale for this study. Three phases comprise this critical discourse analysis: description, interpretation, and critique. In the first phase, discursive features such as themes, metaphors, and dialectical opposition serve as the building blocks for constructing in the second phase dominant assumptions about educational purpose, knowledge and the nature of learning, the establishment of curriculum, power in the classroom, the role of the teacher, and the use of talk in education. The third phase is an examination and critique of the relationships between dominant assumptions. Major tensions and contradictions that emerge pertain specifically to the value of Channel One, education and democracy, education and business, technology in education, and dialogue and decision making.

ACKNOWLEDGMENTS

The following thesis was written during what has turned out to be an incredibly painful—and at the same time joyous—period in my life. While writing this thesis I have experienced an amazing transformation both in mind and spirit, as a writer, critical scholar, teacher, colleague, daughter, sibling, and friend. One of the most valuable lessons I have learned during this extensive literary process is that life, like a thesis, involves constant revision: acknowledging mistakes, learning from them, and moving on (to the next mistake usually). I am told that somewhere in between learning occurs. If this is the case, I must be the smartest person alive. Many years from now when I look back fondly on this period of my life, I will not only reflect on these words I've written, but on some wonderful memories of a few extraordinary people I have had the opportunity to interact with. The following are responsible for making my journey an inspiring and rewarding one:

I must first thank all the members of the East Side Union High School District community in San Jose, California. Without their voices I would not have what has turned out to be an incredibly interesting and thought-provoking study.

My deepest gratitude and respect goes to Professor Jo Sprague, who served as my thesis advisor, teaching supervisor, professor, mentor, and confidante. All of these hats she wore with the utmost style and grace. I thank her for giving me countless hours of her attention and advice on my teaching and writing. I am especially grateful to Professor Sprague for encouraging me to use my critical voice. Jo, you have influenced me greatly in so many ways! I would also like to extend a warm thanks to Professor J.

Michael Sproule for offering poignant words of wisdom, fairly consistent wit, and by far the most cheerful university voice-mail greeting west of the Mississippi. I am also grateful to Professor Dennis Jaehne for offering such extensive and thought provoking comments related to this project, and also for initially planting the seed of critical thought in my undergraduate mind. Thanks, Jaehne, for encouraging me to express my unique views of the world. I've been expressing them ever since (so at this time, I would like to formally release you from any and all liability). To Professors Sproule and Jaehne: I thank you both for injecting much humor and verbal jousting into my academic experience. You have provoked thought and have made me laugh—which I believe are the two most noble acts of humankind, especially when they occur simultaneously. A very special note of thanks is extended to Dr. Victoria Harper. Her willingness to take risks in the classroom, sharing anecdotes about her life, and her genuine love for teaching were a source of inspiration to me—as a woman and as an academician. Her teachings have greatly influenced the course of my graduate education. Thank you, Dr. Harper, for coming aboard this project and generously contributing your wisdom and insight!

Most of all, I am grateful to my mother, Jimmie Greene Greenwood. Her unconditional love, immense sacrifice, and a strong dedication to motherhood have made a major impact on my life. Because of her, I have been blessed with the freedom to pursue an education for the past twenty-five years. Through her example, I learn each day the meaning of inner-strength, unconditional love, and forgiveness of oneself and of others. And lastly, I would like to dedicate this body of work to the memory of my father, the late Richard Dean Greenwood. I hope he is proud.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	v
LIST OF FIGURES	
Chapter	
I. INTRODUCTION.....	1
A Discursive Approach to Communication.....	3
The Instructional Use of Television	5
The National Channel One Controversy.....	8
Whittle Communications, Inc.....	9
.....	10
Proponents of Channel One.....	15
Opponents of Channel One	17
The Local Channel One Controversy.....	22
Questions For This Study.....	26
II. REVIEW OF LITERATURE.....	30
The Evolution of Instructional Television.....	30
Instructional Films.....	31
Teaching Machines	34
Instructional Television.....	37
Modern Instructional Technologies.....	50
Channel One Programming.....	52
An Assessment of the Research.....	58
III. A CRITICAL-INTERPRETIVE RESEARCH FRAMEWORK	61
The Interpretive Paradigm	61
A Critical Orientation.....	62
Critical Pedagogy.....	66
Critical Research On Technology In Education.....	69
A Critical Orientation Towards Channel One.....	72
A Methodological Approach.....	76
The Importance of Language.....	77
The Method of Discourse Analysis.....	79

	Critical Discourse Analysis (CDA).....	82
	Generating a Text For Analysis.....	84
	The First Phase: Describing the Text	86
	The Second Phase: Interpreting the Text	88
	The Third Phase: Reconstituting the Text.....	91
IV.	DISTINCTIVE FEATURES OF THE TEXT.....	95
	Thematic Clusters	95
	Cluster One: Curriculum.....	95
	Cluster Two: Democracy.....	98
	Cluster Three: Business.....	99
	Cluster Four: Technology	100
	Cluster Five: Communication.....	101
	Cluster Six: Learning.....	102
	Cluster Seven: The Role of the Teacher	104
	Metaphors	105
	The Nutritional Value of Channel One.....	105
	Channel One as an Educational "Tool".....	106
	"Slicing Up" the Classroom.....	106
	Grammatical Opposition.....	107
	Category One: The Establishment of Curriculum...	107
	Category Two: The Purpose of Education	109
	Category Three: The Definition of Channel One....	110
V.	DOMINANT ASSUMPTIONS WITHIN THE TEXT.....	112
	Assumptions About The Purpose of Education.....	112
	Assumptions About The Nature of Knowledge and Learning.....	120
	Assumptions About Curriculum and How it is Established.....	123
	Assumptions About Power in the Classroom.....	130
	Assumptions About The Role of the Teacher.....	132
	Assumptions About The Use of Talk in Education.....	135
VI.	DIALOGICAL TENSIONS WITHIN THE TEXT.....	139
	The Value of Channel One.....	139

Education and Democracy	142
Education and Business.....	146
Technology in Education.....	151
Dialogue and Decision Making.....	156
A Summary of Tensions.....	159
VII. CONCLUSION	163
Limitations of This Study.....	164
Suggestions For Future Research.....	165
Pedagogical Applications	167
Implications of This Research.....	170
Implications For Communication	170
Implications For Education.....	173
Implications For Technology.....	173
REFERENCES.....	176
APPENDIX.....	202

CHANNEL ONE RESOLUTION

LIST OF FIGURES

FIGURE	PAGE
1. The First Phase of Analysis.....	92
2. The Second Phase of Analysis.....	93
3. The Third Phase of Analysis.....	94
4. Thematic Clusters	96
5. Categories of Grammatical Opposition.....	108
6. Dominant Assumptions About The Purpose of Education....	113
7. Dominant Assumptions About The Nature of Knowledge and Learning.....	120
8. Dominant Assumptions About Curriculum and How it is Established.....	124
9. Dominant Assumptions About Power in the Classroom.....	131
10. Dominant Assumptions About the Role of the Teacher.....	133
11. Dominant Assumptions About The Use of Talk in Education.....	135
12. The Existing Tensions Related To The Value of Channel One.....	140
13. The Underlying Tensions of Education and Democracy.....	143
14. The Underlying Tensions Between Education And Business..	147
15. The Underlying Tensions Of Technology In Education.....	152
16. The Underlying Tensions Of Dialogue In Decision Making....	157

CHAPTER ONE

INTRODUCTION

In the good old fashioned school
In the days of the golden rule
The teacher said "Good morning class,"
And then they started school
But alas, how things are different now
The school day can't begin
'Til someone finds a socket
And plugs the teacher in.
(cited in Gilman, 1991, p. 5)

When the slateboard was invented in the late 1800s, it marked a major turning point in the history of formalized education. Rather than walking among students instructing them on an individual basis as had always been done, teachers were now able to teach more students through group instruction while standing at the head of the class (George, 1991). Nearly one hundred years have passed since the invention of the slateboard, known today as the chalkboard. During this time period, humans have turned to technology to solve the ever present problems within the United States educational system. The problems include shrunken school budgets, an increased number of students, and an increase in the number of student drop-outs (Armstrong, Yang, & Cuneo, 1994; Kurtzman, 1993). The Heller Report on Educational Technology (1993) reports that the nation's one hundred thousand public elementary, middle, and high schools spend approximately one and a half billion dollars a year on technology and two and a half billion dollars a year on textbooks. The technological bandwagon is gaining momentum in the race towards educational reform. Educators and administrators rush to obtain the latest in computer and video technology, yet without fully exploring the implications of doing so (cf. Chen & Marsh,

1989; Considine, 1990).

Few stop to think about the major role technology plays in our everyday lives—from radios, microwave ovens, cars, electric garage door openers, computers, fax machines, to remote control television sets (Schwoch, White, & Reilly, 1992). Clearly modern technologies have enormous potential to improve the overall quality of life for humans.¹ Yet far less certain is the extent to which technology may (or may not) enhance particular life processes, such as learning for example. After all, as commentators say, "you can use electricity to kill people, to light the room, or to illuminate learning" (Adams & Hamm, 1987, p. 4). As part of an emerging body of critical research that questions the uses of technology in education, this study examines what scholars call a "discreet pedagogy" (Schwoch, White, & Reilly, 1992, p. 102) that teaches students indirectly the unquestionable importance of technology. The present study is conducted not from the standpoint of whether these technologies are good or bad, but rather in terms of the degree to which humans use them to enhance certain life processes (e. g., learning) at the risk of damaging others (e. g., socialization). Specifically, this study looks at the public response to Channel One, a ten-minute instructional news program that includes two minutes of commercial advertising. The programming provides its creator, Whittle Communications, Inc., with profits and revenue to supply schools with "state-of-the-art" technology. Channel One has fueled the debate over commercialism and technology in public schools because of the exposure students receive to commercial advertising in exchange for

¹ For example, *adaptive* or *assistive* technology is said to aid the mentally disabled in the process of deinstitutionalization (Henneberger, 1993).

technological devices such as television sets and video cassette recorders. This bartering of students for equipment has called in to question the purpose of education in the United States—an educational system still "at risk" (Finn, 1989), despite the increased use of technology in the nation's classrooms. The present study looks at the ways in which we communicate our views to one another about education and technology. From the perspective of the communication discipline it seeks to uncover the underlying meanings related to the educational controversies that have surfaced as a result of Channel One. Therefore, this inquiry is positioned at the intersection of communication, education, and technology.

A Discursive Approach To Communication

It was not until the Great Exhibition of 1851 that the word *technology* became almost exclusively associated with machines (cf. Davies, 1978). Literally, technology denotes a methodology, or a process of doing things that lends itself to a particular way of thinking (Ellul, 1980; Finn, 1972; Winner, 1986). Technology is therefore an ideology. As humans, our way of thinking is inextricably linked to our way of speaking. Language is more than just a vehicle for transmitting messages. Embedded within our language are elements of a particular world view (Gramsci, 1971). It is through our everyday manipulation of language that we as humans negotiate our individual identities and navigate through our surrounding environment. Language serves a dual purpose; not only is it the means by which we communicate shared knowledge, but it is also the means by which that knowledge is shaped and transformed (Whorf, 1956). According to this view, humans not only make use of language, but language also makes use of

humans (Gadamer, 1975). This study is grounded in the field of speech communication, emphasizing the importance of language and social interaction in determining a community's roles and norms. The specific focus is how language or, more broadly, discourse shapes one community's views of instructional technology as it is used to educate its citizens.

Although researchers in the field of educational technology argue that technology should be studied within the context of technology rather than education (Heinich, 1984), this study is based on the rationale that since technology encompasses a way of thinking and learning (ultimately expressed through communication), it is therefore appropriate that technology be studied within the context of instructional communication (Greenwood, 1994). Furthermore, the subfield of instructional communication provides scholars with access to the underlying tensions, contradictions, and meanings that are embedded within language in a variety of contexts (Staton-Spicer, 1982). By exposing these elements within spoken discourse, we are better able to understand and evaluate the purpose(s) and goal(s) for technology as well as for education. The focus of this study is on the communication processes that occur among administrator, teacher, student, technology, and curriculum. The question that guides this study is: What does discourse reveal about the use of technology in education? The main thrusts of this study are the ways humans use language to understand the use of Channel One in the classroom and how the discourse of an entire community in turn shapes that understanding.

The Instructional Use of Television

Just as the slateboard revolutionized classroom instruction in the late 1800s, the television served as the catalyst for change in the late 1900s, both inside and outside the classroom. Television officially debuted at the 1939 World's Fair as an "oversized radio with a gray window in the front" (Gilder, 1992, p. 21). During the past fifty years the "electronic box" has evolved into a household amenity and standard classroom fixture. Teachers have been able to teach more students on a mass scale with less emphasis on individualized instruction.¹ Television has opened the classroom up to new forms of curriculum. Whereas the teacher and textbook were the primary sources for slateboard curriculum, now a variety of sources enter into the classroom via television. Because these sources may not be readily identifiable by the viewer, serious implications may arise—especially when television has come to be designated by some as the "common school," replacing the traditional institutions of home, church, and school, as the primary agency of education (Goodlad, 1984; Postman, 1985). Although the global distribution of television has led to its decline in terms of novelty, its incredible power to influence a mass audience has increased dramatically.

As educators face the pedagogical challenges of the twenty-first century, the questions (and potential answers) concerning technology's role in education prove to be more complex than previously imagined. For example,

¹ A current technological innovation in higher education is the *virtual university*. One example is the Stanford Instructional Television Network. It is possible to earn a Master's degree from Stanford University without ever setting foot on the college campus. Modern telecommunications devices transmit (via microwave, satellite, teleconference, and cable) images of professors. Students listen to a professor's lectures over television and have access to two-way video that allows them to ask questions. Homework is transmitted by fax, computer, mail, or courier (Koury, 1994).

television has proven its incredible power, prestige, and potential, yet it is referred to rather nonchalantly by the president of Action for Children's Television as just "another tool like the pencil and the book" (Charren, cited in Graves, 1990a, p. 15). What appears to go unacknowledged is that just as humans use television, television also uses us. As with language, television is more than just a vehicle for transmitting messages (Hobbs, 1991). Because television is a market-driven, for-profit medium, competition is an inherent part of its existence. The question then arises, "Who has the power to define television curriculum?" The following study qualitatively examines the ideological and pedagogical implications of television as an instructional technology used in education. Conducted in accordance with the principles of interpretive research and critical theory, this study analyzes a naturally occurring body of discourse within an educational community, namely the East Side Union High School District in San Jose, California. In an attempt to unravel the intricately woven web of communication, education, and technology, I hope to provide meaning and insight for teachers and teacher educators to draw from in their own efforts to confront the complex pedagogical issues presented by modern instructional technologies.

Currently television plays a primary role in the development of newer technologies; afterall, a computer would not be very useful to humans without the aid of a video monitor.¹ On a wider scale, the use of television and satellite technology enables citizens in even the most remote communities to interact with government leaders in electronic town hall

¹ In addition to the on-line computer networks that are devoted to topics about television programs, new technology is evolving that will integrate the television with the computer, enabling users to talk with other viewers and television network executives (Plotnikoff, 1994).

meetings (Senate to use, 1993). Teachers and students are invited to travel on the 1990s' "information superhighway" as new technologies become more accessible to schools. The roadside attractions on this highway include microcomputers, electronic mail (e-mail), voice mail, on-line database systems, and multimedia networks. For example, two California school districts in conjunction with a local cable company have made plans to develop a television station where students produce their own televised programs. One educator commented, "It'll allow people to control television instead of television controlling them" (Hookey, cited in Aratani, 1994, p. 24). Yet because of widespread financial problems in education, many school districts cannot afford such programs and are instead relying upon private businesses for technological support. For example, Apple Computer and Safeway stores recently joined forces in a program that allows schools to collect cash register receipts in exchange for computers. IBM is another example of a business providing schools with equipment and software at reduced or no cost, if school districts use their "Write to Read" program (Washington Office of the State Superintendent of Public Instruction, 1991). What is often lost among the excitement is that new technologies not only alter teaching methods, but also alter the nature of the classroom environment by changing the source and content of curriculum. As the attention shifts away from television in general as a "state-of-the-art" technology to the computer as more powerful and innovative, the questions concerning the ideological and pedagogical implications of instructional television are left unanswered. An example of this shift in attention emerges from the recent controversy in school classrooms over a twelve-minute

current events and advertising program called Channel One. The remainder of this chapter discusses the Channel One controversy on both national and local levels. Also introduced in this first chapter are the distributors of the program, Whittle Communications, Inc. In addition, the arguments for and against Channel One are discussed. The chapter concludes by posing several research questions that evolve from a discussion of the aforementioned issues.

The National *Channel One* Controversy

Channel One news programming signifies an increased interaction among education and business in the United States. "Partnerships" have developed between schools and businesses, yet it is unclear as to how these relationships constitute partnerships (Reich, 1992) since the term is usually associated with people working together towards a common goal. Clearly schools and businesses have different goals. Yet schools are becoming more dependent upon businesses for technological support. For example, Whittle Communications offers Channel One news programming and equipment for school classrooms. What makes this education-business relationship unique is the "donation" of programming and technology to schools, many of which cannot afford equipment otherwise. The technology is funded through two minutes of commercial advertising. As this portion of the chapter illustrates, there is both opposition and praise in response to Whittle's "partnership" with schools. There are those who argue that the technology received from businesses is well worth requiring students to watch the commercial advertising. On the other hand, there are those who believe commercialism in the classroom is too high a price to pay for mere equipment. Although

Channel One programming is a fairly recent venture (it made its debut in 1990), it is one in a series of many educational marketing ventures developed by Whittle Communications, Inc.

Whittle Communications, Inc.

The corporation known today as Whittle Communications began in 1969 as 13-30 Corporation. Two University of Tennessee students, Chris Whittle and Phillip Moffitt, named the company after their target audience—those between the ages of thirteen and thirty. Their first business venture was *Knoxville in a Nutshell*, a college freshman magazine that provided students with a guide to the locale. Five years later, Whittle and Moffitt published a second college travel magazine entitled, *America*. Sponsored exclusively by Nissan Corporation, *America* established Whittle's trademark—the successful marketing strategy of single-sponsorship.¹ In 1979, 13-30 Corporation acquired the then-failing (but currently successful) *Esquire* magazine. In 1985, the corporation moved into the secondary education market and distributed a series of commercially sponsored wall posters known as *Connections*. One particular issue spotlighting the United States Constitution received the 1988 Educational Press Association of America Award. Following *Connections* was a similar poster series for elementary classrooms entitled, *The Big Picture*. As of 1986, the Whittle-Moffitt partnership dissolved and 13-30 Corporation was renamed Whittle Communications, Inc. Although Chris Whittle remained president, Time-Warner purchased half of the corporation at a reported price of one hundred-eighty five million dollars. It was also reported that Chris Whittle alone

¹ Single-sponsorship is characterized by an advertising medium catering exclusively to a single sponsor.

profited forty million dollars from this sale (Hammer, 1990). Currently Whittle Communications, Inc. is controlled by Time-Warner, Phillips Electronics, Associated Newspapers Holdings, and Whittle and other limited partners (Gannett News Service, 1994b).

In addition to being the pioneer of single-sponsorship and target-specific media marketing, Chris Whittle has been labeled a model entrepreneur by the business community (Hammer, 1990; Solomon, 1993). Both single-sponsorship and target-specific media marketing are used in Whittle's *GO!* magazine, a free distribution to junior and senior high schools. Funded by a single sponsor (Personal Products Corporation), the "educational" magazine targets teenage girls through advertisements of a line of feminine hygiene products (cf. Rudinow, 1990). Another example of these two marketing strategies is Whittle's *Special Reports*, distributed exclusively to doctors' waiting rooms. The magazine is provided free of charge to doctors under the condition that no other magazine is available in the waiting area. In the past, these commercial publications have proved effective for advertisers and profitable for Whittle Communications. The marketing concepts exemplified by these publications have served as the driving force behind one of Whittle's more recent and successful ventures, Channel One programming in the classroom.

Channel One Programming

Channel One marks Whittle's entrance into electronic media (e. g., video) as a channel for place-based educational marketing. Channel One programming consists of ten minutes of news programming and two minutes of commercial advertising. Both the commercials and news

segments are designed for middle school and high school age students.¹

Whittle Communications has designed Channel One programming with five specific educational goals in mind: (1) to enhance cultural literacy; (2) to promote critical thinking; (3) to provide a common language and shared experience; (4) to provide relevance and motivation for students; and (5) to strengthen character and promote a sense of responsibility among students (cf. Haney, 1989). The news is delivered by teenage correspondents reporting world events and special segments on issues of concern to adolescents.

Channel One is a "high energy" show in which "the anchors and reporters. . . could easily pass for VJs on MTV" (Haney, 1989, p. 11). The program begins with three minutes of national and international news:

Each story is preceded by a zoom-in map to identify where the news is happening. The headlines are followed [sic] by a segment that goes into a single story in detail. After a one-minute commercial break, a rotating feature of interest to teens is presented. (p. 11)

In addition, the program is criticized as seducing its adolescent audience:

The fast-paced program was hosted by young, attractive news readers. All the news and feature reporters were young, too. State-of-the-art graphics were used to enhance the visual impact of stories and eye-catching "fast facts" and "pop quizzes" were used to heighten interest. (cited in Endres, Endres, & Miles, 1991, p. 4)

The commercials on Channel One advertise products such as Levi's jeans, Nike athletic shoes, Snickers candy bars, and Burger King fast food (cf. Hollenbert, 1989). Whittle has provided advertisers with additional guidelines for developing commercials. These standards include the

¹ Teenagers have substantial buying power. For example, Moore (1989) reports that Americans under the age of eighteen spend more than five hundred eighty-two billion dollars of their own and their parents' money every year. In addition, young people are the primary influence for the purchase of one hundred forty-two billion dollars in services each year.

presentation of advertising which is neither distasteful nor misleading:

Careful attention will be given to all guidelines to assure that practices and behavior which are inconsistent with the learning environment, as well as the community at large, will be avoided in commercial programming. [Standards and guidelines, (undated)]¹

Whittle encourages specific messages that "provide positive role models for all members of the viewing audience" and that "communicate strong messages against all forms of antisocial behavior, including drug use, violence, prejudice, etc." (Standards and guidelines, undated).

Based on positive results from a 1989 pilot study, Whittle expanded the original concept of Channel One into a programming package called The Educational Network that provides schools with "state-of-the-art in technology and informational resources" (Whittle, 1989). Three programs comprise The Educational Network: Channel One, presenting ten minutes of current events programming and two minutes of commercial advertising to students; The Classroom Channel, providing supplementary instructional video material for teachers; and The Educator's Channel, updating educators about national trends in education.

Since the debut of The Educational Network, Channel One has been honored with several awards. The 1993 George Foster Peabody Award for Excellence and Achievement was awarded to Channel One for the series "A Decade of AIDS." The National Education Film & Video Festival (NEFVF) awarded Channel One its prestigious Apple award. The program also

¹ Whittle Communications excludes the following products or services from being advertised on Channel One: abortion clinics, alcoholic beverages, contraceptives, firearms, ammunition, fireworks, gambling, "head shops," lotteries, motion pictures rated R or NC-17, prescription drugs, political advertisements, religious messages, solicitation of funds, and tobacco products (Washington Office of the State Superintendent of Public Instruction, 1991, p. 9).

received a National Commendation Award from the Association of Women in Radio and Television. This award was offered specifically for fostering a positive and realistic image of women in radio and television. In addition, Channel One has received three Annual Telly Awards for a series on Malcolm X, one on eating disorders, and for journalistic coverage of the crisis in Somalia.

The concept of Channel One emerged in 1989 as an alternative solution to high drop-out rates, low test scores, and the limited funds available to schools. The project was touted as a technological highway that schools could access and build upon (Whittle, 1989). With an initial investment of more than two hundred million dollars, Channel One represents the largest single introduction of television equipment to secondary schools in United States history (Senate Committee on Labor and Human Resource, 1991; Washington Office of the State Superintendent of Public Instruction, 1991). Each school is provided with Channel One programming and fifty thousand dollars worth of television equipment. The technology package includes a satellite dish (receiving only Channel One programming), two video cassette recorders and one-nineteen-inch color television set for each classroom, plus all wiring and maintenance facilities.¹ The programming is transmitted via satellite before six a. m. eastern time from locations in New York City and Los Angeles to schools across the nation. The local school teacher or librarian video tapes the broadcast and shows it in class later that day. The contract between Whittle Communications and each school district states that in exchange for

¹ In November 1989, San Jose Antenna, Inc. provided the East Side Union High School District Board of Trustees with a bid for the cost of installation and equipment comparable to what Whittle would provide. The cost was estimated at over one hundred thousand dollars plus a monthly service contract at an additional cost of three hundred fifty dollars.

the equipment and services provided at no cost, school administrators will ensure that all students watch Channel One at least ninety-two percent of the time.¹ As long as the district fulfills all contractual obligations, the schools may keep the equipment.

The official debut of The Educational Network took place in 1990 in approximately eight thousand schools, and has since expanded to more than eleven thousand school campuses.² During the 1991-1992 school year alone, Channel One was viewed by more than seven million students in public and private high schools spanning forty-five states (Ruling near, 1992). At present count, Whittle has installed more than three hundred fifty thousand televisions in forty percent of the nation's high schools (Solomon, 1993). As of September 1992, sixty-seven public and seventy-five private schools in California were signed up with Whittle to receive Channel One (Judge denies, 1992). As an increasing number of school districts across the nation are contracting with Whittle Communications for services and equipment provided through The Educational Network, much attention has been placed on the "partnership" that allows commercial advertising in the classroom in exchange for technology (Wartella, 1994). The arguments for and against Channel One vary. Although opposition to the program is strong, there also exists a stalwart "grass roots" movement that supports the use of Channel One in the classroom.

¹ Originally, the three-year Channel One contract included this mandatory viewing clause. The contract also stipulated that the use of the equipment for other purposes was restricted (Washington Office of the State Superintendent of Public Instruction, 1991). These conditions have since been altered significantly.

² Between winter 1989 and summer 1991, more than ten thousand schools in forty-seven states requested Whittle's service (Senate Committee on Labor and Human Resources, 1991).

Proponents of Channel One

Since the debut of Channel One in 1990, there has been strong support nationwide for its use. In 1989 Whittle conducted a pilot study of Channel One which revealed that the equipment supplied to schools was being used for other activities, such as the broadcasting of school events and student-produced news shows (c.f. Washington Office of the State Superintendent of Public Instruction, 1991). A similar report revealed parents to be pleased with their children's increased interest in current events, and the push for cultural literacy among teenagers (Haney, 1989; Herrera, 1993a).¹ The strongest support for Channel One has been in Arizona, Arkansas, Michigan, Mississippi, Missouri, New Mexico, Pennsylvania, Tennessee, Utah, and West Virginia.² Public support is based primarily on the quality of the programming and the credible testimony of teachers who attest to its instructional value. While opponents criticize the program for its lack of intellectual depth (Ahlin, 1990), proponents praise Channel One for its award-winning news coverage and high production quality (Herrera, 1993b). Those who support the program believe that two minutes of commercial advertising is a small price to pay for the valuable information and state-of-the-art technology that schools receive "for free." Proponents further argue that the teenagers of today are more critical and sophisticated viewers of commercial television as compared to previous generations, because of their

¹ Current events has been designated a subject area in which students have shown to be deficient (Tiene, 1993).

² The proportion of schools that receive Channel One are: Tennessee (74.6 %), Mississippi (73.3%), Utah (66.7%), New Mexico (63.8%), West Virginia (58.3%), Arkansas (57.3%), Louisiana (50.6%), Pennsylvania (46.1%), Arizona (45.5%), and Michigan (39.7%)(Morgan, 1993, p. 9).

extensive exposure to commercial television since birth (Kids' ad, 1992). Supporters view the commercials on Channel One as comparable to the commercials viewed in their own home, pointing out also that commercial advertising already pervades school campuses in bulletin boards, cafeterias, magazines, newspapers, political posters, public service messages, vending machines, and yearbooks (Chase, 1989; Supovitz, 1991).¹ For example, McDonald's concessions exist in school cafeterias, soft drink companies place vending machines in locker rooms, Honda provides motorcycles to automotive shop classes, and Coca-Cola displays ads on athletic scoreboards. Given these other advertising ventures, those who support Channel One believe the program should not be judged any differently than other advertising media because the educational benefits stemming from Channel One (access to state-of-the-art technology and information) are more valuable and outweigh any possible risk of student exploitation—a fear of those who are opposed to Channel One (Hollenbert, 1989). One middle school principal stated, "Denying students access to technology to help them learn more is a greater ethical risk than controlled exposure to ads" (cited in Kollasch, 1990, p. 66). For proponents of Channel One, the ethical question is therefore one of proportion and degree, and one of value and practicality (Herrera, 1993b). The key issue for supporters is not commercialism itself, but rather maintaining the quality of advertising in the classroom. Educators claim Channel One

¹ Commercialism in schools has been routinely accepted for many years according to a 1991 Report of the Washington Office of the State Superintendent of Public Instruction. Numerous corporations are entering the classroom with learning "tools" that contain sponsored messages. For example, McDonald's, Chef Boyardee, Nutrasweet, Polaroid, and Proctor and Gamble all provide "freebies" in the form of magazines, posters, and/or product samples. Reynold's Wrap, Bird's Eye frozen vegetables, Promise margarine, Baker's chocolate and others also distribute classroom posters that advertise these companies and their products.

represents their democratic right to choose the best educational alternatives for individual school sites (Herrera, 1993a; National Education Association, 1993).

Opponents of Channel One

Despite the high production quality of this award-winning programming and the substantial amount of public support, many consider Channel One the worst thing to happen to American youth since television itself.¹

Opponents characterize the programming as "Let's Make a Deal" education (Graves, 1990b) that wastes valuable instructional time (Ahlin, 1990). The President of the Missouri Board of Education, Tom Davis, issued a news release on August 18, 1989 that expressed concern over what he describes as the indiscriminate use of classroom time:

We support creative uses of new technology, but we are deeply concerned about 'giving away' limited instructional time during the school day. Personally, I am less concerned about the commercial content of this program than I am about its potential for disrupting the curriculum and being inappropriate for some classes.

Opponents see Channel One as entertainment sold in the form of educational material—a "video-game approach to news" (Graves, 1990a, p. 10). This view is based on observations that students attend to homework or engage in other non-related activities during the program (Miner, 1992).

¹ Associations whose executive directors and/or boards have expressed opposition to Channel One include: the American Association of Colleges of Teacher Education (AACTE); the American Association of School Administrators (AASA), the American Federation of Teachers (AFT); the Association for Supervision and Curriculum Development (ASCD); the National Association of Elementary School Principals (NAESP); the National Association of Secondary School Principals (NASSP); the National Association of State Boards of Education (NASBE); the National Council for the Social Studies (NCSS); the National Education Association (NEA); the National Parent Teacher Association (PTA); the National Education Association (NEA), the American Federation of Teachers (AFT), the National Parents and Teachers Association (NPTA), and Action for Children's Television (ACT) (Is the Classroom, 1989; Washington Office of the State Superintendent of Public Instruction, 1991).

The strongest argument against Channel One is the inappropriateness of commercialism in the public school classroom. Opponents argue that Corporate America should not be allowed to "intrude" upon the educational system (Hammer, 1990; Apple, 1992). Peggy Charren, president of Action for Children's Television (ACT), asserts that Whittle's contribution to education is less than honorable:

Whittle Communications. . . is wheeling a Trojan horse up to the door of the nation's schoolhouses. Schools find Whittle's proposition seductive because they think they will get TV equipment and programming at no cost. But the cost is in the price the guaranteed student audience will ultimately pay for the products it is induced to buy. . . . It's an advertiser's dream to have the message on both sides of your commercial something the kids are going to get tested on. (Action for Children's Television, 1990)

The two minutes of commercials that are interspersed throughout the ten minutes of current events are criticized as being part of a sales transaction: advertisers purchase public classroom time, which in turn transforms students into a captive consumer audience since students are required by state law to attend school. Critics of Channel One castigate educators and administrators for "selling" students to multi-billion dollar corporations in exchange for equipment (California Teachers Association, 1992; DePalma, 1992; Fitzgerald, 1992; Ruling near, 1992). Opponents argue that the metaphor of the classroom as a marketplace should apply exclusively to ideas and not to commercial products (American Association of School Administrators, 1990). Chris Whittle has been verbally attacked (Moore, 1989) with allegations of exploiting the public school system by using education as a sales gimmick for a business venture. Whittle is further criticized for profiting millions from Channel One and neither donating nor circulating these funds back into the

educational system. As of October 1989, Whittle had sold approximately one hundred fifty million dollars worth of commercials in three and four-year contracts. In 1991, a thirty-second commercial spot was selling for approximately one hundred twenty thousand dollars (Barry, 1991). In 1993, a thirty second commercial spot sold for approximately one hundred seventy thousand dollars.

Opponents contest Whittle's offer of programming and technology as a "donation" to schools and instead call it "economic blackmail" (cf. Endres, Endres, & Miles, 1991, p. 3). They argue that Whittle is dangling the proverbial carrot in front of school districts hungry for technology yet virtually bankrupt. Although critics oppose the idea of selling products in the classroom, they argue that the products themselves are "less pernicious than [Whittle's] non-commercial products: an attitude, a set of values, a body of political beliefs" (Kozol, 1992, p. 277).¹

Moral, ethical, and legal questions about commercial television in the classroom have surfaced as a result of Channel One (Miller, 1990). The controversy has reached mythic proportions, having been compared to the deep-rooted historical struggles of prostitution and slavery (Herrera, 1993a). The school-business partnership with Whittle has also been characterized as a "Faustian bargain" (Rist, 1989, p. 21) in which schools "sell their souls" for new technological capability (Molnar, 1992, p. 7).

In response to the strong opposition against Channel One, a number of states have taken legal action. On June 16, 1989, the state of New York's Board

¹ In 1992, at the height of the controversy, opponents launched a boycott of products advertised on Channel One. PepsiCo, Proctor & Gamble, Burger King, Gillette, Gatorade, and M&M Mars all continued to advertise on Channel One despite the boycott (Donaton, 1992).

of Regents voted unanimously to prevent the use of public school property for private gain by banning all commercial television from public classrooms (Verhovek, 1989; Washington Office of the State Superintendent of Public Instruction, 1991). In North Carolina, a judge also ruled against Channel One, characterizing the program as typical of "entertainment which students might enjoy during recess" (State of North Carolina v. Whittle Communications, 1991, p. 567). On October 12, 1990, the California State Board of Education passed a resolution stating, among other things, that decisions concerning the use of commercial products and services are within the decision-making authority of the local governing boards. The Board further encouraged the local governing boards to review on a regular basis the content, quality, presentation, and impact of electronic media through the instructional plans developed by the teachers. However, in 1991, the California Superintendent of Public Instruction, William Honig, and the California Congress of Parents, Teachers, and Students filed a civil suit against the East Side Union High School District in San Jose for the use of Channel One at W. C. Overfelt High School (Judge denies bid, 1992; Ruling near, 1992; Suryaraman, 1993a). The suit was filed on the grounds that students were being coerced into watching both the commercial and non-commercial segments of the program. Superintendent Honig stated, "The problem is they want us to sell access to our kids' minds, and we have no right, morally or ethically, to do that" (Washington Office of the State Superintendent of Public Instruction, 1991, p. 7). A Santa Clara Superior Court Judge ruled in this case that requiring students to watch commercials was not a violation of their free speech rights. Therefore, the East Side Union High School District could continue to show

Channel One under restricted conditions.¹ Other states that have prohibited or restricted the use of Channel One in the classroom are: Alabama, Indiana, Louisiana, Massachusetts, Missouri, and Rhode Island (Adams, 1991; Ruling near, 1992; *State of North Carolina v. Whittle Communications*, 1991). In addition, Channel One is currently shown in none (or very few) of the schools in Alaska, Connecticut, Delaware, Hawaii, Maine, Montana, Nevada, New Hampshire, and Vermont (Morgan, 1993, p. 9).

The foregoing points characterize the Channel One controversy that has developed over the past several years. These points are suggestive of the tensions that exist within the East Side Union High School District in San Jose, California. Although other districts within the vicinity currently receive Channel One programming (e.g. Moreland School District and Newark Unified School District), these districts report satisfaction with the program and have made no plans to remove it from the classroom. In 1990, the East Side Union High School District's W. C. Overfelt High School was the first public school in California to sign a three-year contract with Whittle Communications.² Since that time, the local community has been struggling with the use of Channel One in the classroom.

¹ These conditions were that all teachers must be notified in writing at the beginning of each semester that they have the right to refuse to show Channel One in their classrooms. In addition, students must be notified in writing that they have no obligation to watch the program and must be provided with a supervised alternative to watching Channel One (Judge denies, 1992).

² The district broadcasts The Educational Network exclusively to the Overfelt High School campus.

The Local Channel One Controversy

The population of the East Side community consists of various groups that have differing views about education as well as different roles within the district—as students, teachers, board members, administrators, and parents. There is no clear delineation between those who support and those who oppose the program. For example, not all Board members approve of Channel One and not all parents disapprove of Channel One, and vice versa. When Channel One was first broadcast to Overfelt High School, students were shown the program at the end of third period. If a student chose not to view the program, the school required that (s)he obtain a release form and return it with a parental signature, requesting the student be allowed to go to a separate room during the broadcast to complete other school work (Chamorro, 1992). The initial motivation of Overfelt administrators and educators towards implementing Channel One was the opportunity to use the equipment for other educational activities. For example, administrators proposed broadcasting the daily bulletin, broadcasting guest speakers from universities and the business sector, and increasing its student recognition program using the equipment supplied by Whittle Communications (Chamorro, 1990). It is uncertain, however, whether such activities have evolved, and if so, whether they have justified the amount of conflict that has occurred.

Each school campus within the East Side Union High School District is open to all students within the district and offers individual school programs that comprise a Magnet Program.¹ The goal of the district's Magnet Program

¹ A magnet school is one that provides specialized curricula designed to attract students from all segments of the community.

is to "enhance the educational opportunities for students" (W. C. Overfelt Student/Parent Handbook, 1993, p. 10). Therefore the district offers a variety of programs in the areas of law enforcement, business occupations, communications and leadership, mega-technology, pre-engineering, Air Force ROTC, teaching, and health and industrial technology. The current Magnet Program at Overfelt High School is Advertising and Marketing and "Mega Tech." As the result of a major upgrade in 1990, the Overfelt campus boasts one of the most modern electronics labs in California high schools. The strong influence of advertising and marketing are alluded to on the inside front cover of Overfelt's Student/Parent Handbook. A full-page color advertisement reads, "Pepsi-Cola: Gotta Have It...and a High School Diploma!" In addition to Advertising and Marketing, the district offers an Electronics Academy at the Overfelt campus. This academy is an industry-school partnership that provides students with academic and technical skills. The financial ties between Overfelt and the business community are also manifested by the Student/Parent Handbook: "Thanks to business partnerships and special federal funds we were able to upgrade our student/parent handbook." Being able to rely upon private business for educational material is for some community members a primary motivation for implementing Channel One in the classroom. At least three prominent members of the San Jose Metropolitan Chamber of Commerce have expressed support for Channel One at Overfelt High School, describing the program as "a splendid example of the kind of cooperation in which educators and business people can engage" (Suryaraman, 1993d, p. 1B). The principal of Overfelt High School, Elias Chamorro, Jr., strongly supports the program:

The District School Board has determined that this programming is a valuable educational activity and the two minutes of commercials does not detract or diminish [sic] the merrits [sic] of the program.

(Chamorro, 1992)

Chamorro supported the program on a national level as well, serving on the Whittle Communications advisory board until January 1993, when charges of conflict of interest forced him to step down from the advisory board.¹

Numerous public meetings during 1993 about Channel One have revealed tensions and contradictions about various educational issues. In April 1993, Whittle Communications and Overfelt High School suggested the creation of a task force which would expand their partnership for advancing the state-of-the-art in instructional technology. The goals of the task force were primarily technical:

[Whittle] will contribute the time and effort of our engineers and consultants who are experts in both the existing Channel One system and in the areas of digital compression and fiber optics. (Ritts, 1993)

Whittle also presented the district with a contract renewal, offering a variety of educational incentives: English as a Second Language (ESL) programming, closed captioning, remedial reading, and Student Aptitude Test (SAT) preparatory courses. Despite these incentives, on April 29, 1993, the East Side Union High School District Board of Trustees, in a three to two vote, rejected Whittle's proposal for a contract renewal (Suryaraman, 1993a). The Board's vote against Channel One was based on legal, moral, and ethical grounds and strong opposition within the community. The President of the

¹ The controversy stemmed from the report that while on the advisory board Chamorro received a twelve hundred dollar stipend in addition to travel expenses (Suryaraman, 1993a).

East Side Union High School District Board of Trustees, Jan Becerra, favoring a contract renewal, responded to this defeat: "At some point, you have to acknowledge teachers, parents and students have some clue what's good for them" (Suryaraman, 1993a, p. 1B). Vice President, Manuel Herrera, also favoring a contract renewal, openly criticized the Board's decision, reminding the Board of Trustees of its responsibility to listen to the community and to vote in accordance with community sentiment (Payne, 1993).

On May 6, 1993, in protest of the Board's decision to discontinue the broadcasting of Channel One at Overfelt High School, approximately two hundred students and parents filled the East Side Union High School District Board Room (Suryaraman, 1993b). In response, the members of the Board of Trustees agreed to reconsider their decision by holding at least three additional community meetings during the summer break.¹ In the meantime, the Board would conduct a search for a viable commercial-free replacement for Channel One for the 1993-1994 school year. After these meetings and the search for an alternative, the Board would then take another vote. During the course of the summer months, the community continued its lobbying efforts both for and against Channel One. At the third and final meeting on August 19, 1994, Trustee Cortese (1993) presented to board colleagues and to members of the community a document entitled *Channel One Resolution* composed of specific conditions on which the district would renew a contract with Whittle Communications (see Appendix A). A key provision of the *Resolution* is the implementation of a district-

¹ Public forums were held on April 29, 1993 at Overfelt High School, May 5, 1993 at Overfelt High School, June 14, 1993 at Andrew Hill High School, and August 19, 1993 at the East Side Union High School District offices.

funded alternative current events program for students opting not to view Channel One. Another major proposal in the *Resolution* was the requirement that students who choose to view Channel One participate each school year in four mandatory class sessions on the effects of advertising. In response to Cortese's *Resolution*, Trustee Herrera set forth a counter proposal which allowed for the renewal of the previous contract with Whittle and the continued broadcast of Channel One at Overfelt during the 1993-94 school year. Herrera's motion also included experimentation with a non-commercial alternative to Channel One at a separate school site during the same year. Cortese's *Resolution* and Herrera's motion were the focus of this final three-hour public forum. The meeting resulted in a three-two vote in favor of Cortese's *Channel One Resolution*. The adoption of the *Resolution* by the East Side Union High School District set a national precedent in terms of school districts taking a firm hand in defining the terms of their partnerships with the business sector. A Whittle spokesperson ambiguously responded to the terms as "reasonable" policies the company could live with "after some adjustment" (Suryaraman, 1993f), implying that even after the Channel One decision was made, the negotiations were far from over.

Questions For This Study

The Channel One controversy is a microcosm of the confusion and uncertainty surrounding the use of instructional technology in the classroom. The goal of this particular study is to uncover the meanings of technology within education as it is revealed through the discourse of the East Side Union High School District community. The study focuses specifically on the final Channel One meeting that took place on August 19, 1993. This meeting

provides a rich source of data for analysis since it was the final opportunity for the community to contribute its thoughts, ideas, and opinions on the issue of Channel One in the classroom. In order to elicit the underlying meaning the community attributes to Channel One and educational technology in general, this discourse analysis will focus on specific elements within the discourse of this meeting, such as themes, metaphors, and grammatical oppositions.

As previously mentioned, school districts across the United States are divided in their views of Channel One. Some see the program as representing a mutually beneficial partnership between business and education, providing schools with valuable learning tools (in the form of free technology) and a quality current events curriculum while providing businesses with consumers and prospective employees. Others are more skeptical of Channel One, viewing it as intrusiveness and exploitation on the part of Corporate America. These conflicting interpretations exemplify one of many tensions that emerge from the discourse on Channel One in the classroom. The fundamental question that has been asked by most educators up to this point is: Should Channel One be allowed in public school classrooms? As one can see from a surface glance at the controversy, tensions exist on a variety of levels (i. e., political, social, economical) and within multiple arenas (i. e., parents, administrators, teachers). Therefore, rather than focus on the Channel One controversy itself, this study examines in depth how broader educational controversies related to commercialism, freedom of speech, teaching, and learning manifest themselves through multiple layers of community discourse. As a result, this study will serve not

only as a mirror reflecting how we speak and think about Channel One in the classroom, but it also a reflection of how we view technology as part of the teaching-learning process. The following research questions serve as a guide to unmasking the tensions and complexity that exist on multiple levels and within different groups within the East Side community:

- RQ1: What are the distinctive features of the discourse on Channel One?
- RQ2: What do these discursive features reveal about the dominant assumptions related to education and technology?
- RQ3: What are the major tensions and contradictions implied by this discourse and how are they set up in relation to one other?

As one can see from the brief discussion of Channel One in this chapter, there are many underlying issues linked to this controversy. In order to gain a clearer understanding of these issues that surround technology in education, Chapter Two provides a historical foundation for this study in weaving together two lines of research in the areas of instructional technology and Channel One. Following a review of the literature, Chapter Three introduces a critical-interpretive research framework and explores the method of critical discourse analysis employed in this study. In addition, a detailed description of the methodological steps is given. Also discussed in Chapter Three are six research subquestions that supplement the three main research questions. Chapters Four, Five, and Six explain the descriptive, interpretive, and critical phases of the discourse analysis. Each of these chapters provides specific examples from the discourse and presents numerous figures illustrating the discursive features, dominant assumptions, and dialogical tensions within the text. Chapter Seven looks at some of the

limitations of this study and offers suggestions for further research. The chapter concludes the study with implications of this research in the fields of communication, education, and technology.

CHAPTER TWO

REVIEW OF LITERATURE

Scholars argue that American civilization is fundamentally a technological one (Ellul, 1964; Mumford, 1934/1963; Oliver, 1956). However, recent technological developments have dramatically altered the nature of education. This chapter traces two lines of research relevant to this study of Channel One. The chapter begins with a chronological examination of the research tradition on which instructional television is based, first with the use of instructional film at the turn of the century, and then through the subsequent development of teaching machines and instructional television. The second strand of literature addresses specifically Channel One programming. Emerging from these two bodies of research are six research questions that tighten the focus of this discourse analysis of technology in education.

The Evolution of Instructional Television

Efficiency and productivity were the fundamental way of life in the United States during the industrial revolution of the late 1800s. The goal of efficiency applied not only to business and industry, but also to social relations: "Success and failure in school, or business or in any other aspect of social life was seen as a matter of efficient programming" (*italics added*) (Nelson & Watras, 1981, p. 52). The institution of education was particularly influenced by this way of thinking (Callahan, 1962; Kliebard, 1988). Just as a factory's purpose was to produce "widgets," the purpose of education at this time was to produce the nation's labor force (Spring, 1989). Schools therefore adopted a daily schedule, standardized teaching methods, and standardized

instructional materials. To increase the efficient transfer of knowledge, teachers employed a variety of teaching technologies (i.e., slateboard, easels, and books). The criteria for efficient schooling were based on the amount of knowledge the students received from the teacher on a daily basis (Cuban, 1986). At the turn of the twentieth century, the pool of teaching technologies expanded to include a new, exciting, and potentially more efficient teaching device: the motion picture.

Instructional Films

The invention of motion pictures (film) during the progressive era presented educators with the opportunity to revolutionize classroom teaching (Lacy, 1919; Sumstine, 1918). By 1913 Thomas Alva Edison predicted that one day books would be obsolete and that it would soon be possible "to teach every branch of human knowledge with a motion picture" (cited in Barr, 1989, p. 64). The content of such instructional films consisted of field trips, demonstrations, dramatizations, and recorded lectures. Initially, instructional films were used as supplemental teaching aids. Teachers were encouraged to introduce the films to students, conduct follow-up discussions, and intersperse class activities between sections of a film. However, this supplemental use of instructional film evolved into the use of film as a self-contained instrument of instruction. The new medium of instruction was thought to captivate students accustomed to the traditional and often boring lecture method. Furthermore, it was argued that instructional films would lead to a more efficient production of high school graduates, since it enabled more students to be taught with less individualized instruction from the live teacher. Because teaching was based on the successful and efficient

transmission of information from teacher to student, the live teacher and the instructional film were viewed as comparable and therefore interchangeable. Eventually films were used as a simulation of, and/or a substitute for the live teacher. The roles of teacher and technology were often transposed, the film being the main transmitter of knowledge and the teacher acting as the supplemental aid to instruction.

At this time, the research on teaching was limited to military reports and was approached in terms of technology versus teacher. Studies looked at whether or not filmed lectures could serve as viable alternatives to the expensive and cumbersome mobile training devices normally used for training Air Force mechanics (Shettel, Faison, Roshal, & Lumsdaine, 1956). Live lecture groups were compared with filmed lecture control groups. There were no significant differences between the two groups in terms of oral examination scores. The study did note, however, that filmed lectures were more accessible and could be seen when needed. A similar study revealed that subjects' attitudes towards and opinions of these films improved over time (Hovland, Lumsdaine, & Sheffield, 1949). This contrasted with the previously established law of diminishing effects in terms of the retention of factual knowledge transmitted from live teachers.

During the early 1900s, the learning process was viewed in terms of a stimulus-response model. For example, Hall (1936) found that flashing questions on the screen during a silent film increased the amount of learning that occurred. This type of research during the 1920s and 1930s comprised a large body of propaganda research in which researchers quantitatively measured the hidden social messages covertly transmitted by radio and film

(cf. Sproule, 1989). With the exception of specific propagandistic films, most of the early studies of instructional film evaluated the effects of film, rather than the characteristics of specific films (Lumsdaine, 1960; Lumsdaine, Sulzer, & Kopstein, 1961; Stein, 1952; Weber, 1922). For example, Maccoby, Michael, and Levine (1961) found that in terms of enhanced learning, the instructor's use of questions was more effective following rather than preceding film segments. In terms of motivation, there was no evidence that showing a film version of a novel induced students to read the book or even to withdraw it from the classroom library (May & Lumsdaine, 1958). However, at least one study reported that filmed instruction was "superior" to live instruction (McClure & Peterman, 1956, p. 639). This was demonstrated through the use of film to show students the correct way of marking an answer sheet on a machine-scored test. The results showed a significant reduction in the number of mismarked answer sheets. The use of film to demonstrate was further explored in a series of studies under an Air Force contract at Boston University (Maccoby & Sheffield, 1958). Researchers explored the use of filmed demonstrations for procedural training, the results of which were reported in terms of "performance rate," or the number of correct assembly responses per unit of time. The highest rate of student performance resulted from the demonstration of just one particular segment, followed by student practice, and then a demonstration of the next segment. The lowest student performance rate was reported when the entire task was demonstrated before it was practiced by the students.

Although the research showed no indication that film motivated students to read, research during the 1950s reported that instructional films

motivated students to learn (cf. National Education Association, 1946). The focus of these studies was technical assessment of film, such as pictorial quality (Duva & Lumsdaine, 1956; May & Lumsdaine, 1958; Zuckerman, 1954), and color quality (May & Lumsdaine, 1958; vanderMeer, 1952). Although Twyford (1951) found a negative correlation between how much students liked a film and how much they were reported to have learned from it, other research reported students showing a greater interest in the subject matter of a film that was accompanied by live dialogue rather than a narration (May & Lumsdaine, 1958). In a comparison of two versions of a personal hygiene film, one a "straight lecture film" and the other a "jazzed up version with folk music in elaborate Hollywood style" (Cook, 1960, p. 92), both versions were found to be equally effective and were found to produce some type of change in personal hygiene behavior (vanderMeer, 1953).

Although the novelty of instructional film technology captured the attention of students, the content of these films were limited to demonstrations and lectures—similar to traditional live instruction, only presented through a new medium. The research up to this point failed to reveal if and how instructional film enhanced the learning process.

Teaching Machines

After World War II, the United States educational system was faced with a variety of problems, such as overcrowding, teacher shortages, and inadequate teacher training (Lieber, Sprafkin, & Davidson, 1982). In the continued pursuit for efficiency and productivity in schools, educators relied on newer instructional technologies as they became available. At this time school administrators believed teaching machines to be the key to enhanced

learning. More importantly, they believed these machines would lead to increased educational efficiency:

Efficiency engineers applied specially constructed score cards filled with quantitative measures for school districts hungry to embrace current innovations targeted at cutting costs while boosting productivity. (Cuban, 1986, p. 11)

The first teaching machines were developed as early as the 1920s (Pressey, 1926; 1927; 1950). These machines, characterized by programmed learning, did not become popular until after World War II, however. During this post-war period, an abundance of military equipment was rendered obsolete. Devices that were once used to train technical specialists in the Air Force were adapted to the classroom. These devices, formerly called *phase checks*, taught students skills through individualized self-instruction and the immediate testing of these skills. In the classroom setting, the device was renamed the Subject-Matter Trainer (Besnard, Briggs, Mursch, & Walker, 1957; Lumsdaine, 1959). The student was presented with programmed questions and answers, problems to be solved, or exercises to be performed. Each step of a skill, such as the assembly or disassembly of a piece of equipment, was organized on the assumption that the user would learn through immediate feedback of the pre-programmed responses. A punchboard contained multiple choice test items. The machine would evaluate the student's responses and repeat the answers until the student selected the correct one twice. Not only was it argued that teaching machines saved time, but also that the student learned simply by taking the test and receiving immediate knowledge of those mistakes (Gage, 1963; Knirk & Gustafson, 1986). In this sense, learning was defined as behavioral reinforcement:

Instruction is used as a generic term referring to any specific means of controlling or manipulating a sequence of events to produce modification of behavior through learning. It is applicable whenever the outcomes of learning can be specified in sufficiently explicit terms to permit their measurement. (Lumsdaine, 1960, p. 584)

This philosophy was reflected in the work of behavioral psychologist B. F. Skinner (1958) in the late 1950s and early 1960s. Skinner sought to efficiently control human learning and behavior through "instrumental aid" (p. 72). According to this view, the most productive approach to teaching is the use of stimulus factors as instruments of control. In order to be the most effective, the teacher would need to use techniques of immediate and continuous reinforcement of student behavior. If a teacher or teaching machine acted out the necessary steps, it was argued that the student would learn as a result. The curriculum to be learned consisted of a specific body of knowledge or skills that the student would possess in response to this stimulus from the teacher or machine. Educators and curriculum specialists emphasized the importance of pre-set objectives patterned after a pre-test and post-test instructional model. Learning was based on how accurately the student outcome matched such objectives. Although teaching machines were hailed as the most important educational innovation since the arrival of the textbook (Galanter, 1959), their use was limited for the most part to subjects such as spelling (Porter, 1959) and foreign languages (Brown & Hodgkinson, 1958; Ferster & Sapon, 1958; Morton, 1960).

Similar to instructional film, teaching machines were thought to revolutionize classroom learning. Educational efficiency was the primary goal of educators at this time and programmed learning was thought to solve the technical problems of education (e. g., overcrowding of schools, shortage

of teachers). It was thought that military devices could be adapted to the classroom. The role of the teacher was to transmit a specific body of knowledge or set of skills to the student through behavioral reinforcement techniques.

Instructional Television

Prior to the 1950s, instructional film had enabled teachers to teach students on a mass scale, whereas teaching machines had enabled students to receive more individualized instruction. When the television arrived on the scene, however, it was thought to accomplish both of these tasks simultaneously. Although the medium of television brought more diversity to the classroom in terms of subject matter, the research reveals an uncertainty as to its learning value. Early research on instructional television can be classified into four areas: program content, program use, teaching effects, and learning effects.

Program content.

Experiments with television were conducted as early as 1923 by scholars in the field of engineering at the University of Iowa (Kurtz, 1959). The university's television station W9XK announced the goals of educational broadcasting:

Each program should therefore have sufficient educational and entertainment value to make it worth while to listen and look in on, and so become partners in this interesting experiment with this new instrumentality, which bids fair to become the most potent agency for universal education ever conceived. For in due time, every home will have its own classroom, with professor, blackboard, diagrams, pictures, and students. (p. 72)

The format of these experimental broadcasts consisted of three-parts: a musical program, a short illustrated talk, and a segment from the Speech

Department consisting of either a recitation, dialogue, or a skit with several characters (p. 70). Similar to the research on instructional film, a majority of the experimental research on television was technically oriented and emphasized factors of production quality. For example, researchers studied ghosting phenomena and side band interference. The studies "in progress" announced in the station's first annual report were in the areas of television receiver development, color combinations for televised subjects, and broadcasting techniques (Kurtz, 1959, p. 142). The station's eighth annual report reflected minimal change, as pending research was announced in the areas of electronic equipment design and development, and broadcast training (p. 146).

Although the experimental television research at the University of Iowa was a pioneering effort, similar experiments were conducted at Ohio State University as early as the mid-1930s. Similar to the early instructional films, instructional television programs broadcasted the fundamentals of oral hygiene (an instructor illustrated the correct method for brushing teeth) and French pronunciation (an instructor illustrated correct lip and tongue movement). Between each of these programs producers inserted a musical number and a dramatic number "to give variety and entertainment to the program" (Kurtz, 1959, p. 76). The head of the Electrical Engineering Department, who conducted the study, asserted the intimacy of televised instruction:

An illustrated lecture put on over a [television] broadcast will give you the personal touch which none of these other instrumentalities can provide. . . . I could not but feel that [the professor] was talking to me. I know of no other medium which can duplicate that seeming close relationship. (p. 79)

During a time when new teaching technologies were looked upon to help counteract the effects of an increased school population and the "overall complexity of the world" (President's Commission on National Goals, 1960, p. 6), the "personal touch" asserted by researchers was thought to be one of many assets of televised instruction. In addition, television was looked upon as a new way to accomplish old goals (i. e. the efficient transmission of knowledge) just as the slateboard, books, film, and teaching machines were previously. In the eagerness to implement television into local communities across America, the New York Metropolitan School Study Council in 1951 established the Television Utilization Committee (TUC) (1953). Dealers provided television receivers to various New York school communities. These schools were later surveyed to find out how teachers were integrating television into their curriculum. Reports showed that although some teachers were experimenting with different ways of using the new medium, television was thought of merely as a supplemental aid to already skillful teachers (TUC, 1953, p. 32). The study did, however, report a greater community interest in reading than ever before, according to its survey of libraries and book publishers. The increased interest in reading was thought to be the result of viewing television.

The goal of efficiency was further established by the Soviet's successful launch of Sputnik in 1957. The United States government exerted pressure on the nation's educational system to raise academic standards in the areas of math and science in order to give high school graduates a competitive edge globally. Television was looked upon as an efficient way of helping students achieve higher scores in these areas (Hassur, 1964). Typically, students were

given a standardized written examination following the televised program to determine which points in the lesson had been communicated effectively and which had not (Brown, 1964; Gropper & Lumsdaine, 1961). For example, the Cincinnati Study illustrated the effectiveness of teaching biology using television. The television classes ranked higher in academic achievement than the non-television classes as measured by a comparison of pre-test and post-test questionnaires (Jacobs & Bollenbacher, 1959). However, the researchers noted the television group had higher pre-test scores to begin with.

Program use.

A closed-circuit television experiment at University of California at Los Angeles was established to teach students touch-typing skills. A camera was focused on the instructor's keyboard while the students watched the monitor and imitated the stroking of keys (Kelly, 1964). Instead of the usual three to five class periods required to learn the touch system of typing, the entire keyboard was mastered by students in one fifty-minute class period. A similar experiment used television to teach anatomy lab. A three-hour laboratory demonstration could be completed in approximately fifty minutes. In addition, the instructors reported being able to work with students on an individualized basis (Richter, 1964). Furthermore, television enabled the instructor to "increase the amount of material covered" (p. 14). In terms of student reaction, researchers reported that "in general, students were more attentive to the televised portion of the laboratory periods. The television screen seemed to command more concentration" (p. 15). Television was found to be worthwhile and rewarding when used within the laboratory as a

simple magnification device. Yet researchers found that "television instruction is not as satisfactory when the student is limited to watching the screen and taking notes" (p. 15). In this case, learning called for active student participation.

Efficiency was also the motivating factor for the use of instructional television in an impoverished elementary school district in Utah. At the time, the district suffered teacher shortages in the subject areas of art, music, science, and foreign languages. Television was looked upon as "the most effective and economical means" of providing instruction in these areas (Bell, 1964). Students, teachers, and technicians contributed to the production and development of television programs and supplementary instructional materials. The results of this research show student academic achievement in the area of science (as revealed by standardized test results) to have increased seventeen percent (p. 89). Further results of this study show most of the teachers in the district were enthusiastic about the aid of television in the classroom:

A small number had status problems, since their role was changed from being the focal point of instruction for 100 per cent of the classroom time to sharing the spotlight with the television teachers. Some teachers were skilled at teaching one or more of the special subject areas and resented the intrusion of the teleteacher. (p. 90)

Researchers argued that television was in no sense in competition with the classroom teacher because "an electronic tube obviously cannot stop to repeat when a child raises a hand to ask a question" (Bell, 1964, p. 90). However, the researchers did acknowledge television to be a "powerful tool" that allows for more breadth and depth in terms of curriculum. Best of all, television was considered an economical means for educating students:

Thus we have come to look upon television instruction not as a luxury for a rich district but as a necessity for the poor district that cannot afford large numbers of subject-area specialists. (p. 91)

Soon after the invention of the television, educators voiced an awareness of its usefulness as an educational "tool" (Murray, 1964, p. 93). Soon television was looked upon as a necessity for those schools that could not afford live teachers. Results of a decade of research in public schools during the 1950s reported television to be the main cause of improvements in teaching because it required teachers to be kept up to date with new developments in instructional content and technique (p. 104). Television also offered current events presentations "geared to the child viewer's level of understanding" (p. 104). Researchers reported tremendous success with current events programming:

[Current events programming] has strengthened the district immeasurably by developing a common interest and improving the cooperation between our schools. It has also served as a dynamic public relations tool, communicating school policies, procedures, and program to area viewers. (Murray, 1964, p. 104)

This description highlights the optimism of educators for television and its potential for enhancing social development of students. However, the effective transmission of curriculum was considered top priority. In line with the emergent communication theories of the day, the instructional program was perceived as the *sender* of the information, the television as the *channel*, and the student as the *receiver* (Shannon & Weaver, 1949). This uncontextualized view of knowledge was considered at the time an advantage to using television because "it becomes possible to emphasize a single point, direct the student's attention to a particular area, and avoid unrelated considerations" (Coleman, 1964, p. 23). From this the questions

arise: Who determines what "considerations" are "unrelated?"and Who decides what to teach? In other words, the research at this time was limited to technical issues of how to teach rather than calling attention to who has the authority to teach and for what purpose.

Teaching effects.

In comparison to the traditional classroom lecture format, television was thought to help the teacher in several ways. Because of time spent on basic lesson plans, the traditional lecture format prevented the teacher from developing specialties as a presenter of information as well as developing expertise in a particular area. In addition, the teacher was not able to guide the skill development of individual students using the lecture method (Kemp, 1964). It was argued that using television in the classroom enabled teachers to accomplish more tasks (unrelated to teaching) while guiding students on an individual basis (Watson, 1960). In addition, the teachers who were televised had a number of specialists at their disposal, and were provided with up to seven times more preparation time for their televised course as compared to a traditional lecture course (Erickson, 1964). Despite the advantages related to instructional television, survey research revealed that teachers were not using much television in their classrooms (Lewis, 1962). One teacher explained that instructional television "prods deeply into the traditionally private classroom life of teachers" (p. 564).

In the 1960s, a group of concerned educators in the Midwest formed the Midwest Council on Airborne Television Instruction (MCATI) (1961). The aim of the organization was similar to those of previous years—educational efficiency and productivity. The specific goals of the MCATI program were:

to provide a sufficient quantity of educational opportunity for a fast-growing school population, along with increased quality of instruction, and to provide both quantity and quality within feasible costs. (MCATI, 1961, p. ix)

The project consisted of studio (televised) teachers working with consultants, graphic artists, and production specialists in the development of *talking head* programs. These programs focused on the teacher presenting a lecture in front of a chalkboard, and were broadcast from an airplane flying at high altitude over east-central Indiana to schools and colleges of six Midwestern states. Although an innovative effort for its time, the Midwest Program on Airborne Television Instruction suffered from limited viewership and programs of poor production quality that proved unappealing to viewers. Researchers emphasized the need for clearly stated measurable educational objectives in order to evaluate instructional television programs (Armsey & Dahl, 1973; Brown, 1964; Lumsdaine, 1960). Yet due to the difficulty of defining such objectives at this time, it was virtually impossible for researchers to show any learning advantages in using televised rather than live instruction.

Learning effects.

Instructional television research of the late 1950s and early 1960s revealed a sense of competition between teacher and television: "Does television work as well as the teacher and vice versa?" "Is television effective?" (Dubin & Hedley, 1969; Holmes & Lynch, 1967; Stickell, 1963). Literally hundreds of studies were conducted to determine the effectiveness of information transmission via television as compared to other forms of media (Barrow & Westley, 1959a, 1959b; Holmes, 1959; Kemp, 1964; Schramm, 1962). In a survey of more than four hundred quantitative studies,

researchers compared the effectiveness of televised instruction to that of conventional instruction (Saettler, 1968). It was suggested that in some cases students will learn more through one medium, and in other cases less. At least one study did find the teacher to be a major contributor to the effectiveness of instructional television according to the manner in which (s)he presented the program to the students (cf. Lewis, 1962). Other studies revealed similar results, that students favor small discussion-type classes over one-way televised courses (Holmes, 1959; Kumata, 1956). Without the aid or follow-up from the teacher, instructional television was found to be a largely ineffective teaching method (Gale, 1958; Randall, 1962). Although earlier research had claimed television facilitates student achievement, based on the student's increased motivation towards reading (Himmelweit, Oppenheim, & Vince, 1958; Schramm, Lyle, & Parker, 1961), decades of research comparing student performance on course examinations and achievement tests failed to reveal any significant difference in learning from one instructional medium as compared to another (Chu & Schramm, 1967; Knirk & Gustafson, 1986; Kumata, 1960; Macomber & Siegel, 1960; MCATI, 1961; Schramm, 1962).

The aforementioned studies comprise a large body of work during the 1950s and 1960s known as action research which, by definition, aims to solve a particular localized concern rather than generalizing to a large population. In an effort to make the instructional technology research more meaningful to the entire nation, the Subcommittee on Economic Progress of the Senate-House Joint Economic Committee of Congress conducted a series of hearings on automation and technology in the nation's educational system. The purpose of the committee was to find out how the research could be put to

practical use:

There is already a mountain of research, but we need more, and need especially to learn how to use it...the product of this [research] is a kind of spastic, unconstructive groping which gives up unrelated chunks of data that seem to have value, but which are not created as part of any long-range plan designed to help direct us where we want to go in the future. (National School Public Relations Association, 1967, p. 10)

The committee concluded that it was relatively impossible for students to learn the vast quantities of information in the amount of time allotted to schools. Furthermore, there existed no single technological device that could sufficiently accommodate all the necessary steps in the learning process (p. 15). Therefore, the hearings called for more research on the learning process itself and less emphasis on specific program content. The committee issued a warning to those too eager to exploit new classroom technologies before they were adequately tested.

A national trend of media cynicism emerged during the late 1960s and early 1970s, and the television was looked upon as a powerful, and in most cases negative, agent of socialization (Mander, 1978; Mankiewicz & Swerdlow, 1978; Postman & Weingartner, 1969; Winn, 1977). The attention shifted away from instructional television in the classroom to the influence of television as entertainment on a broader social level. Once again the federal government intervened and in 1968, the National Commission on the Causes and Prevention of Violence conducted hearings on the powerful influence of mass media. The Commission concluded that "the burden of research and proof should be placed squarely on the mass media, especially commercial television, to carry out meaningful research on the psychological and social effects of mass media portrayals of violence" (Baker & Ball, 1969, p.

381). Much of the scholarship on television during the 1970s was devoted specifically to the effects of televised violence on children's behavior (Bandura, 1971; Clark, 1972; Comstock, Rubenstein, & Murray, 1972; Drabman & Thomas, 1974; Liebert, Sprafkin, & Davidson, 1982; Rothenberg, 1975; Surgeon General, 1972). More than two thousand eight hundred studies have been identified in this subject area (Murray, 1980). Meanwhile, social learning theory emerged in academia and asserted that media modeling, whether pro-social or anti-social, resulted in imitation or identification on the part of the subject or viewer (Bandura & Walters, 1963).

In 1971, the Ford Foundation conducted yet another series of studies on the current and future uses of instructional technology. Different interpretations, techniques, and devices of instruction were examined along with some of the major applications of instructional technologies in the developed and developing nations (cf. Armsey & Dahl, 1973). Research concluded that instructional technology was essentially a "moving target" because of its rapid change and development. In addition, the instructional effectiveness as well as importance of television was found to vary among different groups in society. Although scholars expressed at this time uncertainty as to the purpose and value of television in education (cf. Olson, 1974), it was nevertheless promoted as an essential part of the educational process. For example, in 1978 the Library of Congress and the United States Office of Education cosponsored a national seminar entitled, *Television, the Book, and the Classroom* (Cole, 1978). Participants asserted that television could, should, and inevitably would be used effectively in the educational process. High profile advocates such as Walter Cronkite suggested linking

television with the public school system through the installation of satellite antennas on school roofs. This idea eventually led to the creation of Satellite Educational Services, Inc. (Landay, 1989), and later Whittle Communication's Educational Network.

Classroom instruction during the late 1970s and early 1980s reverted "back to the basics." Technologies such as film and television were snubbed by teachers, who labeled them as "trivial add-ons" to curriculum (cited in Shapley, 1991, p. 2). Teachers relied instead upon more established methods, such as the models "skill-and-drill" and "teach-test-teach" (p. 2). Curiously, as the classroom became more simplified in terms of instructional method, the research on instructional television began to address more complex theoretical issues. For example, one study examined the potential uses for instructional television in developing nations and found the effectiveness of television to vary among different groups in society (Armsey & Dahl, 1973). An increased cultural awareness was reflected in research measuring children's attitudes towards different racial groups in educational television programs (Gorn, Goldberg, & Kanungo, 1976). Other studies examined the cognitive ability of subjects in Third World countries who had never been exposed to television prior to the study and found similarities in visual perception (Forbes & Lonner, 1980). Cognitive ability and cognitive achievement were also measured using pre-test and post-test examinations (Morgan & Gross, 1980). While some scholars argued that television was essentially "sleep teaching" and that "very little cognitive, recallable, analyzable, thought-based learning takes place while watching TV" (Mander, 1978, p. 217), other researchers later claimed that a great deal of mental activity

accompanies television viewing (Krendl & Watkins, 1983; Meadowcroft & Reeves, 1989; Thorson, Reeves, & Schleuder, 1985). One particular study reported that children's preconceptions of the effort needed to understand material presented on television and print affect the depth at which they process the information (Salomon & Leigh, 1984). More recently it was discovered that children with learning disabilities work harder to understand television and as a result learn more from television than students without learning disabilities (Hobbs, 1991).

During the 1980s, education was directly influenced by a concern for the economic growth of the United States. The National Commission on Excellence in Education (1983) warned Americans in *A Nation At Risk* that what was happening to the educational system was deplorable: "If an unfriendly foreign power attempted to impose on America the mediocre educational performance that exists today, we might have viewed it as an act of war" (p. 23). The commission blamed the nation's educational system for a decline in the competitiveness of the United States with other countries by allowing students to become deficient in the subject areas of science and mathematics (Finn, 1989; Tanner, 1993). Along a similar vein, the quality of American education was assessed by the Carnegie Commission, asserting the main goal of education to be "the foundation of economic growth, equal opportunity, and a shared national vision" (Ploghoft & Anderson, 1981, p. 7). The Commission mandated a more effective use of technology, which in turn would increase the productivity of the nation's schools (p. 94) thus enabling high school graduates to compete economically at a global level. Responding to this call, instructional technologists demonstrated the cost-effectiveness

and practicality of using technological approaches to curriculum (Heinich, 1984). Despite these efforts to link instructional technologies to the global economy, television was not widely used in classrooms during the early 1980s. A series of case studies in California classrooms revealed television to occupy less than a small portion of the school day and to function as an accessory to or "rest stop" during regular classroom instruction (Cuban, 1986, p. 49).

Modern Instructional Technologies

As we approach the twenty-first century, our goals for education and technology mirror those of the early twentieth century: to increase productivity, to reduce the cost of education, and to respond to teacher shortages (Armstrong, Yang, & Cuneo, 1994; Levinson, 1990). Echoes of the 1890's industrial revolution resonate in the 1990s. The vital link between education and the economy is explained by Scott Thomson, Executive director for the National Association of Secondary School Principals:

The relationships between knowledge and economic growth have become critical in an information-driven world economy. Therefore, whatever social or physical aspirations America may have for its schools, a central priority must be for high school graduates to match the cognitive achievement and job skills of the graduates of other industrial nations. (Thomson, 1989, p. 54)

The aim towards competition is also reflected in the final version of the Clinton Administration's *Goals 2000: Educate America Act* recently passed by Congress. The move is toward a more standardized secondary educational system in general, and specifically within each of the academic disciplines. *Goals 2000* calls for much of the funding for educational research as well as the educational link to the information superhighway (Clinton links, 1994). The goal of the Clinton Administration is to build a National Information

Infrastructure that will link every business, home, school and college in a communications network (cf. Schiller, 1993).¹

Functioning productively in a global society requires more from high school graduates than the technical skills needed to navigate on this metaphorical highway. A working knowledge of news, geography, and historical events is also a necessity. However, most high school students are reportedly *culturally illiterate* in most, if not all, of these areas (cf. Haney, 1989; Kaplan, Wingert, & Chideya, 1993; Tiene, 1993).²

Shapley (1991) asserts that "as we approach the 21st century, the technology will demand that teachers let go of their textbook-driven methods and incorporate as many kinds of popular culture media as possible to get kids to 'tune in' to school" (p. 2). This is the foundation for Whittle Communications' *Channel One* news programming. The program is presented as a service to education that encourages teenagers to become productive and active adult citizens and promotes an awareness among students of the relationship between national and world events and every teen's individual life (Channel One Mission Statement). Once again television is looked upon as an asset to education, despite the well-documented critique of television as "the most expensive and disastrous single failure in the history of educational technology" (National School Public Relations Association, 1967, p. 11). In addition, recent research reveals students prefer traditional classrooms over televised instruction (Chaffin, 1992). As the foregoing literature review suggests, instructional technology,

¹ This is currently known as Internet.

² There exists a debate, however, over the definition and standardization of cultural literacy (cf. Bloom, 1987; Hirsch, 1987; Schwach, White, & Reilly, 1992).

specifically television, has been looked upon to help solve the problems of education in the United States, despite the inconclusiveness of the research. In the next section I present a body of research on Channel One programming that runs parallel to that of instructional technology.

Channel One Programming

In 1989, Whittle Communications, Inc. commissioned the Gallup Organizations, Inc. to survey public reaction towards Channel One. A mall intercept survey measured the attitudes of shoppers that were shown a broadcast of Channel One. Results of this study showed eighty-five percent of teenagers and eighty-seven percent of parents would be interested in having the program shown at their high school (The Gallup study, 1989). Whittle also conducted a pilot-study of Channel One programming in five high schools during the spring of 1989. The study reported that students were "initiating discussions on current events" and "quizzing each other." It was further reported that teachers were able to integrate the program into their classes (Washington Office of the State Superintendent of Public Instruction, 1991, p. 5). The combined results of the Gallup poll and the pilot-study left Chris Whittle with much confidence in the eventual success of Channel One:

These results are exciting to us, and should be exciting to educators. [Channel One] can be a powerful tool for teachers in the classroom. It makes us all the more optimistic about *Channel One*. (cited in Haney, 1989, p. 8)

Since the pilot-study of Channel One, numerous studies have been conducted. The research can be grouped into three general categories: program content, program use, and learning effects.¹ In addition to content

¹ There exists a body of research that approaches Channel One from a critical perspective. These studies will be reviewed in Chapter Three.

descriptions of Channel One, viewer reaction and attitude comprise the program content category. The research on program use also includes studies on how viewers feel about its use in the classroom, in addition to how Channel One is used.

Program Content

The visual style of Channel One is described as similar to other commercial television programs aimed at youth, such as MTV and Nickelodeon, which use "large on-screen lettering, visually exciting graphics, and identifiable and likable personalities" (Carlin, Quiñones, & Yonker, 1992, p. 6). Channel One was also found to capture students' attention through magazine segments, or "soft news," that address teen issues such as music and film, stories about high-achieving teens, and summer jobs (Johnston & Brzezinski, 1992). Although student interest has been shown to be mostly in the area of soft news, additional research has revealed an increase in student awareness in other areas. For example, seventy-seven percent of more than five hundred students surveyed responded that Channel One makes them more aware of other cultures and sixty percent surveyed indicate that the program provides students with positive role models (Carlin, Quiñones, & Yonker, 1992). Another study reported fifty-eight percent of students and eighty-five percent of teachers agree that the information on Channel One is accurate and important (Rossell & Bachen, 1992). It was also found that students are talking more to their parents at home about current events that are presented in daily Channel One broadcasts.

A content analysis of Channel One and CNN Newsroom, a non-commercial classroom current events program, reveals that Channel One

focuses more on United States entertainment, economic, and science news, while Newsroom emphasizes United States government news, education, and cultural diversity problems (Endres, Endres, & Miles, 1991). Researchers found Channel One to "be making a greater effort than Newsroom to reach out to teenagers" because of the personal characteristics of Channel One anchor persons and reporters as well as its use of teens as sources and focal points for stories (p. 17). In addition, Channel One stories were more likely than Newsroom stories to be broadcast by a minority reporter.

The advertising portion of Channel One has received much attention from researchers. The commercials have been found to communicate personal values of having fun, spending time with friends and being attractive (Wulfemeyer & Mueller, 1990). Greenberg and Brand (1993) reported that students who watch Channel One will buy more of the products they see advertised than those who do not watch the program. Furthermore, Channel One viewers indicate more "materialistic" attitudes than nonviewers (p. 149). Although survey research reveals a majority of both students and teachers do not find the commercials on Channel One offensive (Ehman, 1991) or disruptive to the classroom, fifty-one percent of students and sixty-seven percent of teachers indicate they are tired of the commercials (Thompson, Carl, & Hill, 1992). Other studies show, however, that although students tend to be more critical of the quality of Channel One than teachers, neither view the commercials as problematic (Ehman, 1991; Thompson, Carl, & Hill, 1992). Thirty-eight percent of students surveyed at Overfelt High School strongly disagreed with the statement "I wish they would take the

commercials off Channel One" (Rossell & Bachen, 1992, p. 12).¹ Although students do not believe their teacher expects them to watch the commercials, or that the school endorses or wants the students to buy the products advertised on Channel One (Rossell & Bachen, 1992), other research reports almost half of students surveyed are undecided when asked if they think the products advertised on Channel One are approved by the teachers (Thompson, Carl, & Hill, 1992). Essentially the researchers concluded that students tolerate the commercials because they view the advertising as an inherent part of the Channel One programming package, and thus inseparable.

Program Use

Early research reveals teachers are in favor of using Channel One in the classroom. The first part of a three-part study commissioned by Whittle Communications reported that sixty percent of nine hundred teachers surveyed would strongly or very strongly recommend Channel One to other schools and teachers (Johnston & Brzezinski, 1992).² Although it is unclear as to how Channel One has been or is currently used in the classroom, research indicates that students watch the program in a manner similar to the way they watch television at home. For example, they watch Channel One when they feel like watching it, but most of the time engage in other activities (Rossell & Bachen, 1992). The average viewing time for the twelve-minute program was found to be eight minutes for students and ten minutes for

¹ This study revealed that the fifteen percent of students who wanted the advertising removed from Channel One were more likely to have lived in the United States for more than five years and to speak English at home (Rossell & Bachen, 1992, p. 13).

² Survey data were collected between September 1990 and May 1991.

teachers (Carlin, Quiñones, & Yonker, 1992). Researchers concluded a relatively high degree of viewing occurs among teachers as well as students.

A study of the first year of Channel One in junior and senior high school social studies classes reveals that the programming has not been integrated into the curriculum, despite its entry into the nation's classrooms (Ehman, 1991). Data collected using a variety of methods (e. g., interviews with school principals and teachers, observations of Channel One broadcasts, and administration of questionnaires to students, parents, and teachers) reveals that fewer than half of teachers conduct regular classroom discussion of the program, and very few test or assign work on Channel One material (p. 14). Along a similar vein, Yeager and Pandiscio (1993) found three stumbling blocks for teachers who use Channel One in their classrooms: inconsistency in usage, difficulty in linking Channel One material to the classroom, and controversy presented by program content. Data gathered through interviews and participant observation show that teachers have different ways of using Channel One newscasts, and some do not even view the programming as part of the regular classroom curriculum. One teacher felt the need to "discuss the program in order to lend it an academic feel" (p. 52). In addition, "teachers seem unsure about the extent to which they can discuss controversial topics" (p. 53). A question that emerges from the aforementioned study concerns the role of the teacher:

If a newscast is aired, can teachers assume that their principal has monitored and approved the particular program, or do they assume a tacit endorsement of all newscasts with the concomitant freedom to deal with any controversial subject that arises? (p. 53)

There were three conclusions to this study. First, the researchers observed the absence of administrative directives and faculty unity in the

standardized use of Channel One. Furthermore, teachers using the program need to be better informed about its potential use in the classroom and how to better incorporate it into the curriculum. Finally, the researchers suggest schools develop clear guidelines for dealing with controversial topics that may arise in the Channel One classroom.

Learning Effects

As mentioned previously, Whittle Communications commissioned a three-year study in 1991 of the educational effects of Channel One, focusing specifically on student knowledge of current events (Johnston & Brzezinski, 1992).¹ On a thirty-item current events knowledge test, Channel One viewers scored an average of three percentage points higher than non-Channel One viewers.² Subsequent studies on Channel One and student learning have reported small but statistically significant increases in student retention of current events knowledge (Bachen, 1991; Greenberg & Brand, 1993; Kromar, 1991, Tiene, 1993). Students exposed to Channel One are also reportedly more capable of positioning United States locations on a map as compared to students that are not exposed to the program (Thompson, Carl, & Hill, 1992). Although this research seems to indicate that students are learning something from Channel One, at least one study reported that both viewers and non-viewers achieved identical scores of fifty-five percent on a current affairs test (Tate, 1989, p. 52). Along similar lines, Tiene (1993) reported

¹ Whittle requested the researchers refrain from studying the effects of advertising upon students.

² In February 1994 the final installment of Johnston's three-part study was released. It was reported that Channel One viewers scored an average of seven percent higher than non-viewers on current events tests. The researchers characterized this effect on knowledge "small but important" (Gannett News Service, 1994a).

overall scores of current events and history tests to fall below sixty percent for both Channel One viewers and non viewers. Yet students themselves believe that Channel One provides more information than any other news source and they believe they know more about the United States and the world as a result of watching Channel One (Rossell & Bachen, 1992). Forty-seven percent of over three thousand students surveyed responded that they learned something important always or most of the time from Channel One (Johnston, & Brzezinski, 1992). A separate study revealed, however, that seventy-nine percent of students do not seek out more information about the topics shown on Channel One (Carlin, Quiñones, & Yonker, 1992).

An Assessment Of The Research

Since the beginning of the twentieth century, technology (e. g., film, teaching machines, instructional television) has been viewed as revolutionizing the United States educational system. Yet as this chapter has suggested, research provides little support for this claim. It is easy to see, due to the novelty of technological innovation, why much of the educational research at the beginning of this century focused on the technology itself rather than the implications of technology upon education. After all, unlike science, ethics, or language, the discipline of technology was (and still is) relatively new. Furthermore, an emphasis on efficiency and economy is understandable at times when technical adjustments are necessary (during post-war recovery, for example). However, in current post-Cold War America, the goals of efficiency and productivity are still paramount and continue to dominate much of the research. As we embark upon a new millennium, and new technologies emerge, humans are faced with new

challenges and uncertainties. Reflected in this chapter is a foundation of uncertainty on which educational technology is built. As concerned scholars, we are compelled to stop and ask ourselves if this is a path on which we want to continue. After all, technology has proven to be in a constant state of change and will most likely continue to advance into new areas. Meanwhile, our views of communication, education, and technology must also change as well as the questions we seek answers to.

Thus far, the questions that have been asked of instructional technology center on a scientific and efficiency-oriented view of learning: How can more students be taught with less individualized instruction? How can educators increase the amount of information transferred from teacher to student? How can technology help to increase student test scores? Much of the research up to this point has compartmentalized learning into discrete variables. For example, learning has been reduced to the manipulation of bits of information such as "current events," "facts," and geographical names. Similarly, cultural literacy is defined as "knowing the right historical facts" and "being able to answer the right questions" (cf. Kaha, 1990, p. 46) rather than the ability to interact and communicate about a variety of subjects within a variety of contexts. Furthermore, knowledge is measured by the amount of information retained by students and displayed by written, multiple-choice examinations.

The recent controversy over Channel One in the classroom has brought a renewed interest to instructional television research. However, a majority of the Channel One studies reflect those early scientific and technical approaches to instruction. Researchers have expressed difficulty in employing

quantitative methods in the study of Channel One due to confounding variables such as teacher attitudes and behaviors manifested during classroom instruction (Tate, 1989). Despite the general usefulness for securing endorsements and financial support for instructional technologists, the studies reviewed in this chapter contribute little in terms of intellectual insight into the implications of technology in education.

As new theories and ideas about communication and education evolve, a noticeable gap emerges in the literature on instructional technology. This gap omits the view of knowledge as a creative process—one that involves student, teacher, television, and curriculum. In response to this, the present study calls for a reassessment of the role of technology in education, as well as the ways scholars have studied educational technology in the past. In addition, this study examines the issues related to the purpose and meaning of technology in our daily lives. In an effort to expand the research mentioned in this chapter, this study approaches education and technology from a more creative, open, and transformative view of knowledge. The specific goal of this study is to uncover the deeper meanings related to education and technology through a discourse analysis of the Channel One controversy. The next chapter explores on a more theoretical level the critical-interpretive research framework used in this study, and discusses the details of the employed methodology.

CHAPTER THREE

A CRITICAL-INTERPRETIVE RESEARCH FRAMEWORK

To create a sentence is to constitute reality;
to put two sentences together is to create the world.
(Peckham, 1962, p. 33)

This chapter takes an in-depth look at the research framework used for this study of Channel One. A critical-interpretive research framework consists of interpretive research methodology infused with elements of critical theory, both of which will be discussed in this chapter. Also reviewed in this chapter is a separate body of critical research in the areas of instructional technology and Channel One. The theory and method of critical discourse analysis is also discussed and the chapter concludes with a description of the processes involved in generating, describing, interpreting, and analyzing the data.

The Interpretive Paradigm

In recent decades, a major paradigm shift has occurred within the field of education (Salz, 1992). The move has been from a linear-mechanistic view of knowledge to a more creative and transformative view of knowledge (Doll, 1993). Learning has been traditionally viewed in terms of knowledge discovery. From an interpretive perspective, however, learning is viewed as the creation of knowledge. Therefore the interpretive paradigm rejects the idea of a "billiard ball" causal connection between teacher and student behavior (Gage, 1989, p. 4). An interpretive view is based on the understanding that the classroom environment is complex and unpredictable (Kincheloe, 1993). Whereas the dominant scientific view of knowledge resembles a closed system in which knowledge exists separate from human experience and limited to one correct interpretation, the interpretive view is

patterned after an open system. Instead of being guided by external forces, the East Side Union High School District community is seen as creating its own social rules. Knowledge is based on multiple interpretations that are socially constructed through complex communication processes (Fosnot, 1984). Reality therefore exists in a never-ending state of interpretation and re-interpretation as part of an "ongoing conversation" (Doll, 1993). The interpretive paradigm is also described as "ecological" because humans are continuously negotiating their identities according to the surrounding environment and relying upon cultural and contextual cues (Geertz, 1973). The interpretive paradigm is an appropriate framework from which to study instructional technology because it allows for more than just the study of machines, or the learning process, or people—it requires the study of complex interactive relationships of these components within a specific context (Association for Educational Communications and Technology, 1979; Slack, 1989; Staton-Spicer, 1982).

A Critical Orientation

A critical orientation allows the scholar to examine more closely the questions related to the purpose and meaning of technology and education. Although the interpretive paradigm alone provides a meaningful way to look at the active role humans enact in the creation of knowledge, viewing humans as merely actors is not enough. In order to reveal the underlying purpose and meaning of action, humans must also be viewed as social critics. This perspective is grounded in the work of critical theorists.

Critical theory is based on the assumption that humans are constantly struggling against oppression. The theory is historically grounded in

Marxism, which views specific groups (e. g., the labor force) as oppressed as a result of social and political values that are left unchallenged. This in turn leads to the reproduction of dominance and inequality in society. Out of the various systems of social order (i.e., monarchy, elitism, oligarchy), capitalism is one system in particular that critical theorists find problematic:

In capitalism there is always a trade-off of power and privilege with respect to class formations; some gain where others lose. And those who gain are always a small elite. (Agger, 1985, p. 10)

Initially critical theory relied extensively on an economic perspective. However, the focus has recently shifted to include power struggles within the social, historical, and political arenas as well. Termed *neo-Marxism*, this view of society is one of a "complex web of interconnected institutions, cultural customs and values, and individuals that cannot be fully understood in isolation from each other" (Goodman, 1988, p. 205). Of particular interest to these critics are the influence of economic, social, and political institutions upon the formation of knowledge, and the power struggles that occur among societal structures. For example, knowledge is not a value-free process of acquiring information, but rather a social creation used by those in authority for the purpose of empowering and disempowering people (Brummett & Duncan, 1992). Forms of knowledge that are endorsed by modern critical theorists are those that lead to self-empowerment, or *emancipation* (Habermas, 1971). Emancipatory knowledge should set free those who are oppressed and change the social institutions that interfere with democracy:

Emancipatory knowledge increases awareness of the contradictions hidden or distorted by everyday understandings, and in doing so it directs attention to the possibilities for social transformation. . . . (Lather, 1986, p. 259)

Critical theory promotes alternative forms of knowledge that have been

marginalized. Although different interests (i. e., technical, practical, and emancipatory) are considered appropriate within certain contexts, it is when one interest is favored over another that oppression results. For example, when scientific technical forms of knowledge (those that promote values of efficiency, productivity, and cost-effectiveness) are considered superior to others, an imbalance of power occurs. Currently technical interests and values are the foundation for educational reform in the United States. Critics argue in response that "career education" (the production of graduates for the purpose of supplying the nation's workforce) is the dominant curriculum in education today. Consequently, career education ensures that schools participate in maintaining the power of the existing economic structure (Beyer & Apple, 1988; Carlson, 1988).

Although early critical theorists subscribe to a cause-effect model of power (humans are controlled by outside forces), critical scholars have recently taken a less positivistic stance towards research that is more closely aligned with the interpretive paradigm, as reflected in Kleibard's (1988) comment about the power struggles in education: "This is not to say that schools and programs of study in schools are mere reflections of larger social forces over which schools have no control" (p. 27). In addition, critical research has begun to question the designated authority of educational experts and politicians, arguing that one of the ways in which the dominant order silences social criticism is through a facade of neutrality (Posner, 1988) and through representations that most people assume to be normal and inevitable (Gerbner, 1974). Such facades of normalcy are filtered through books, film, television, and other media sources (Apple, 1990). In this way the mass media institutions have

been designated as the propagators of a hidden curriculum (Bernstein, 1977; Jackson, 1968). This is not an actual curriculum, *per se*, but rather the meaning embedded in the manifest messages and social relationships that link each communicative act (Sprague, 1992b). For example, the mere existence of television in the classroom teaches students that not only do knowledge and reality exist outside themselves and outside the classroom, but also that they can be brought to the student through an electronic box plugged into the wall. In this way, the student learns how to be a consumer of knowledge rather than a creator of knowledge. Learning therefore becomes an act of information retrieval that requires little involvement on their part. Another lesson that is part of the hidden curriculum is the deification of technology. Critics view the widespread fascination with technology as "technological determinism" that promotes technological idolatry as a positive value in society (Schwoch, White, & Reilly, 1992, p. 102). Furthermore, the symbolic-economic ties of television (Considine, 1990) make it both a commodity as well as a disseminator of the dominant ideology, and therefore a contradictory institution (Meehan, 1986). Critics are concerned that technology's presence in education will widen the existing gap between rich and poor communities. Since most lower-class children do not have access to computers at home, and middle-class children do, the poorer children are less likely to acquire the technological literacy required to be competitive in the workforce (Mills, 1994).

The task of this study, then, is to unveil those aspects of social institutions (e. g., education) that are portrayed on the surface as rather innocent and unproblematic (e. g., technology). Emancipation of those

oppressed requires a critique of mass media, including the political assumptions, prejudices, and historical interpretations surrounding these ideologies (Doll, 1993; Held, 1980). A critical approach to instructional technology supports the idea that if humans are to use technology in a responsible manner, scholars must not hesitate to frame ethical and critical pedagogical questions regarding the use of these technologies in education (Zajonc, 1985).

Critical Pedagogy

On a macro-level, critical scholars aim for a more democratic relationship between education and government. On a micro-level, critical pedagogues work towards a democratic environment within the classroom. Since learning is viewed as a creative dialogic process, schools function ideally as democratic sites of social and self-empowerment. The classroom should therefore serve as a forum for the voice of the student (Giroux & McLaren, 1986). Teaching in this sense is much more than a linear transmission of information from teacher (or television) to student. The pedagogical process is composed of multiple layers of interaction among various elements, such as the student, teacher, television, and curriculum, for example. The aim of a critical classroom pedagogy is to generate intellectual discussion by problem-posing to students contested social, historical, and political issues (Freire, 1973; Shor, 1992). The teacher occupies a similar role as the critical researcher. Many of the same questions are posed in critical pedagogy as in critical research:

Critical inquiry is a rigorous, time-consuming, collaborative informed, school-based dialectic around general questions such as: What is going on in the name of X?. . . How did it come to be that way? Whose interests are being (and are not being) served by the way things are? What information and knowledge do we have—and need to get—that bear upon the issues?. . . Is this the way we want it? (Sirotnik, 1988, p. 64)

By exploring these questions through classroom discussion, both students and teacher become more aware of the dominant ideologies in society. The classroom itself serves as a microcosm of a democracy, for students and teachers are working together as "co-investigators of meaning" (Shor, 1992, p. 97), each contributing to the classroom as a whole their individual thoughts and ideas.

The primary process of schooling in the United States is to produce and disseminate knowledge, rather than to discuss knowledge in terms of socialization, acculturation, or individual development. As indicated in the previous chapter, the pedagogical uses of instructional television were conceived, planned, and adopted by engineers (Cuban, 1986; Kurtz, 1959).¹ Therefore, the teacher was placed in the role of technician—the possessor and distributor of knowledge.² This technical view of teaching is contested by critical scholars, who emphasize instead the teacher's own unique identity and voice (McDonald, 1988). Only recently has a more humanistic perspective been acknowledged as a valuable pedagogy:

¹ Current educational technologists equate teaching with other technically specialized areas such as medicine and dentistry. Their research on technology in education is based primarily on behavioral reinforcement (Axelrod, 1992). Since educational technologists study technology from the perspective of technology itself, and receive a large portion of the funding for technology in education, technical interests are thus being favored over others.

² Ironically, most teachers do not turn directly to researchers for advice. Instead they rely upon their intuition and common sense (Jackson & Kieslar, 1977).

Good teaching does not come from technique. It comes from identity and integrity of the teacher. If we want to teach well, we must learn more about the human dimensions of our craft—about the claims it makes on our lives, about our relations with our students, about a teacher's wounds and powers. (Palmer, 1991, p. 1)

According to this view, the work of the teacher is more than just a skill, it is a "craft" (Eble, 1976; Greene, 1984) that cannot be technologized (Sprague, 1992b). Among the contested issues are those in which the purpose of technology is to make schools more entertaining, efficient, and cost-effective. Both instructional technologists and educational technologists promote technology from the standpoint that television programs are easier and less expensive to mass produce and distribute than recruiting, training, and "distributing" teachers (cf. Gross, 1974). Although a technological approach to teaching may be the most economical, it contributes to the deskilling and disempowerment of teachers—a major concern of critical scholars (Apple, 1986; Sprague, 1992a, 1992b; Zumwalt, 1988). So although the view of efficiency reflects the interests of technologists (and understandably so), at the same time it has promoted a sharp reduction in the level of teacher autonomy (Kincheloe, 1993). For example, teachers quickly learn that their role requires preparing all students to become media-consuming citizens (Pierce, 1978, p. 11) while at the same time entertaining students (Postman, 1979; 1985). Teachers also learn that classroom issues such as curriculum and pedagogy (both of which technology is a part of) exist outside of their control, and they are overlooked by administrators and principals in the decision-making process. Hlebowitsh (1990) describes the current pedagogy of technology as a passive and linear "plug-in" (p. 159) model of instruction—which describes not only the source of knowledge (technology plugged into

an electrical outlet) but also the epistemology (knowledge is plugged into the student's brain through a linear transfer of information). This "plug-in" model of instruction is set up in opposition to a creative and collaborative "orchestral" model of instruction, that views students (musicians) as the source of their own learning (music). They must interact with one another to create knowledge (a symphony). The source of learning is the teacher (conductor) who directs students in their interaction rather than feeding them information. These two contrasting pedagogical models present technology as restricting rather than enhancing learning:

The machine cannot recognize a puzzled expression or respond to an uplifted hand. It cannot discuss the implications for life of certain ideas or issues as they relate to a specific person. It cannot motivate and inspire on an individualized basis. The most crucial and highly necessary instructional duties must be performed by the teacher/professor. (Bell, 1971, p. 429)

While the research reports television to be an important feature in schools and a welcomed enlivener of curriculum (Cuban, 1986), educators must keep in mind that it has also dramatically changed the power structures of schools (Haigh, 1990). The struggle for power among teachers, administrators, parents, students, and other members of the East Side community in terms of educational technology is the critical focus of this study.

Critical Research On Technology In Education

A major topic of critical educational research in recent decades has been the influence of mass media upon public education (Apple, 1990; Carnegie Commission on Educational Television, 1967; Murphy & Gross, 1966; Pierce, 1978; Postman, 1985, 1992; Slack, 1989; Sullivan, 1987; Tehranian, 1990; Woodward, 1993; Zajonc, 1985). Recently, critical scholars have called for the

study of technology within a particular social context and not as something "out there" that can be inserted and removed as desired by humans (Slack, 1989). According to this view, not only is television a medium for curriculum, but its use is itself a curriculum:

The new technology is not just an assemblage of machines and their accompanying software. It embodies a form of thinking that orients a person to approach the world in a particular way. (Beyer & Apple, 1988, p. 305)

A critical perspective questions the sole purpose of instructional television as technical. For example, one teacher uses television as a rest stop during the day: "Sometimes the motor needs to idle before it is put back in gear" (cf. Cuban, 1986, p. 69). This machine metaphor reveals television to be separate from the "real" curriculum, and frames it as a time-filler or "pedagogical putty" (p. 66). It is ironic that a highly regarded teaching "tool" is not considered a legitimate part of the curriculum, yet at the same time receives much funding. Critical scholars advise educators to address the ideologies that are produced along with the new technologies that are produced. If certain technologies are privileged over others, it follows that certain warrants for knowledge are privileged over others. Through discussion of the ideological aspects of television, a process of demystification occurs and television's power is reduced because it therefore becomes a possession of all (Lewis, 1991). A conflict emerges, however, in that technology is a vital part of the military and business in the United States. Since science and technology are considered paramount, schools are pressured to promote technical literacy in order to supply the work force with a certain number of scientists and technicians (Finn, 1972, p. 142). Critical scholars are concerned that humanism will eventually give way to scientific

and technical training because the environment in which the student and teacher are immersed is fundamentally a technological one (Ellul, 1964; Oliver, 1956; Postman, 1992). Thus the need for human interaction is de-emphasized. This concern has developed into fear that critical, political, and ethical understanding will be replaced by an overly-mechanistic, technical, and efficiency-oriented environment (Apple, 1986). Haynes (1988) argues that technology has already rendered children totally insensitive to interactivity, to feedback, and to the importance of orality as the "unifying medium of the human condition" (p. 98). Similarly, Kahane and Oram (1989) suggest that the existence of schools as social institutions must be questioned because they have been dramatically altered by the human desire for technology. As a counter curriculum, Scholes (1991) advocates the critique of video in schools. He argues that just as educators have cultivated an appreciation and understanding for the classic books over the years, today's educators must design a curriculum oriented towards a video-culture. Such a curriculum addresses the packaging and dispensing of information consumed by teachers and students as "facts" (Arnheim, 1974, p. 181). Teachers can also help students become critical consumers of television by using self-reflexive television texts (Aden, 1991). This normative-contextualist view teaches students how to understand the context surrounding television texts, analyze its parts, and "synthesize the parts for a greater comprehension of the whole" (p. 401). These are just a few of the reasons why scholars argue that television should not be brought into the classroom as an ally, but rather as a "specimen to analyze, evaluate, and criticize" (Postman, 1979, p. 188).

Other scholars have called for a more critical and contextualized approach

to research in educational technology—one that includes deeper, more creative layers of meaning (Tamborini & Zillman, 1985; Zillman, Williams, Bryant, Boynton, & Wolf, 1980). Woodward (1993) emphasizes the importance of contextualizing technology by first identifying the social norms its use is based upon. Kerr (1990) has called for educational technologists to explore the ways in which gender influences the application of technology in schools: "Is technology little used in schools because most teachers are still women, and because educational technology (as it has been conceived by its proponents) addresses concerns that are primarily male concerns?" (p. 9). Kerr further suggests that teachers (mostly women) may view their classroom tasks more in terms of care—that is, approaching instruction from a cooperative standpoint rather than a competitive one. The author argues that the essence of care is desirable, but has been lost in the race for efficiency in education.

Despite numerous calls for critical research, there have been few studies of instructional technology employing the qualitative methods characteristic of interpretive research. A similar problem emerges in terms of Channel One research. There have been numerous ideological critiques of the programming and its use in public school classrooms as well as critically-oriented studies using quantitative research methods. However, there are few critical studies that employ qualitative research methods. The following section reviews the body of critical research on Channel One in juxtaposition to the Channel One literature review mentioned previously in Chapter Two.

A Critical Orientation Towards Channel One

Channel One programming is considered by some teachers as valuable

current events curriculum, while others see it as a rest stop during the day. Critical scholars view the program as more than just a supplement to curriculum. Channel One is curriculum that requires study. Apple (1992) foregrounds the power struggles inherent in society by contextualizing Channel One:

The important point is to see the ideological reconstruction that is going on, to understand that in the process of making the school (or in the case of Channel One, the students) into a product to be bought and sold, we are radically altering our definitions of what it means to participate in our institutions. (p. 13)

Implicit in Apple's critique is a hegemonic function of Channel One. Students are commodities to be owned by advertisers. For example, Morgan (1993) concluded that the target audience of advertisers are those students who are least likely to be able to afford the products advertised. According to comparative profiles of schools across the country, the most underfunded schools in the United States are six times more likely to use Channel One than the richest schools (Morgan, 1993; Suryaraman, 1993g). Cultural implications also arise at the report of Channel One being most likely to be found in schools with large proportions of African-American students, and less likely to be in schools with a large population of Asian students. Morgan also asserts that the use of Channel One excludes many voices and perspectives that are vital to upholding a democracy:

The commercialization of the culture—and increasingly perhaps of the schools—means that other voices and interests, less able to generate profits, are being shut out of the educational system. It seems inevitable that Channel One will further entrench and legitimize the power of massive private commercial interests in those public arenas where a diversity of voices is most badly needed. (p. 10)

Critics argue the best defense against Channel One is discussion about the

program. For example, Rudinow (1990) argues that protection from a "remote corporate hierarchy" represented by Channel One requires "organized, informed, and most of all sustained resistance by educators, particularly classroom teachers" (p. 73). Such resistance is maintained through dialogue among students, teachers, and other news sources. In addition to sustained resistance, Haney (1989) advises teachers to acknowledge and discuss the limitations of television:

Certainly, TV can be a powerful teaching tool. But, television news, even at its best, is compressed and simplified into a headline service. Educated Americans must do more than watch the evening news to be informed. They must be more diversified news consumers. Using television in a classroom is fine, but if it becomes our only conduit for the news of the world we have done young people a great disservice. If the headlines on TV prompt students to read more about current events, geography and history, the services will have succeeded—with or without the commercials. Yet, if TV news is the only role model provided for information seekers, we haven't given them very much. (p. 18)

Critics of Channel One in the classroom have pointed out the imbalance of power not only between education and business (capitalism), but also the inequality that is created and sustained among citizens according to age, race, ethnic background, and socio-economic status.

Other critical questions that scholars have asked include: "For school boards, what are the implications of selling target school populations to advertisers in the private sector?" "Can the privatization of information and discourse ever be compatible with public discourse?" "Should impoverished school budgets limit teachers and learners to so-called free sources of information?" (Knupfer, et al., 1992, p. 4-5). These were the types of issues addressed by a six-member research team during the first year of Channel One broadcasting using a variety of research methods (e.g., survey research, case

study, in-depth interviews, policy issue analysis, argumentation analysis, structural analysis of the program). Another qualitative approach to Channel One was taken by Adams (1991) in a rhetorical analysis of the corporate discourse of Whittle Communications and its influence upon public opinion. Adams analyzed the strategies of innovation used in 1989 advertisements to gain acceptance for the program in the New York school system. The main focus was on the message features that make an innovation like Channel One accepted by a mass audience. Adams found three rhetorical strategies used by Whittle in shaping public discourse: denial of controversy, subtle criticism of existing institutions, and projection of a rhetorical vision.

On a policy level, Mueller & Wulfemeyer (1992) posed the question, "Who is minding the classroom when it comes to commercial messages and just how are they minding it?" Census telephone surveys and content-analyses of state-supplied curriculum guides, memos, and policy statements were examined. The results showed only eleven states to have formal policies governing advertising in public schools.¹ Of particular interest in this study was the researchers' discussion of the implications of government policies and specific policy guidelines that encourage the teaching of critical viewing skills.

A recently published compilation of cultural studies research on Channel One (DeVaney, 1994) addresses deeper issues of concern (as compared to previous studies of Channel One):

¹ These eleven states are Alabama, Arkansas, California, Georgia, Indiana, Kentucky, Michigan, New York, Oregon, Pennsylvania, and Rhode Island (Mueller & Wulfemeyer, 1992, p. 9).

Some key concerns are the incursion of a private-sector entrepreneur in public school curriculum; the implications of private-sector wiring of public school buildings; the production and reception of Channel One commercial and noncommercial messages, and the attitudes of all the Channel One participants, including students, teachers, administrators, school boards, and parents. (p. 2)

Numerous methods were used to study Channel One, such as narratology, structural and poststructural techniques for reading the news program, rhetorical analysis, political and ideological approaches, and quasi-experimental design. As the most recent studies reveal, research on Channel One has expanded to include the critical perspective as well as qualitative research methods. This study reinforces this ontological move by contributing a critical-interpretive study of Channel One. What makes this contribution unique is its grounding in the field of Speech Communication. From this perspective, then, it is the way a community discursively constructs meanings about Channel One (not the technology or the program itself) that is of primary interest.

A Methodological Approach

A critical-interpretive study of Channel One adds another perspective to the research bases of instructional technology and Channel One. This study is based on the assumption that knowledge rests on multiple interpretations and not on the basis of one identifiable truth. Since humans do not experience reality directly, but in a symbolic context that gives meaning to our experience (Gerbner, 1981), it is relatively impossible for humans (and researchers in particular) to achieve what scholars call "purity of experience" (Pinar & Reynolds, 1992). Scholars must instead rely upon sources of data. This study does not rely upon survey or experimental data, but relies instead

upon discourse as a resource for meaning. It is through the analysis of discourse that scholars can uncover the meaning "latent in experience but inarticulated" (p. 5). Furthermore, this study takes a qualitative approach to discourse because "quantitative methods alone do not deal with the complexities of discourse, usually are not helpful in analyzing the social context in which discourse arises, do not clarify underlying themes and structures, and are costly and tedious to use" (Waitzkin, 1993, p. 128).

Although there are numerous disadvantages to quantitative research, there are also several stumbling blocks to qualitative research. For example, emancipatory forms of knowledge are impossible to measure and difficult to evaluate. In addition, studying social interaction among interlocutors is time-consuming. It is not surprising, then, that critical-interpretive studies of instructional technology are rare. Despite the ambiguity or potential difficulties of the chosen methodology, the task of this study is to expose the tensions and struggles that reside at the point where communication, education and technology intersect.

The Importance of Language

As previously mentioned, communication is a creative and complex process and not simply a linear transfer of information from a sender to a receiver. Humans exist in a "cluster of social conversations" (Pearce, 1989, p. 11) or what Philipsen (1992) calls a "universe of discourse" that is "finely organized" and composed of "a distinctive pattern of meaning and action" (p. 4). In this sense, we as humans play an active role as communicators; however, our thoughts and assumptions are not exclusively our own:

The word in language is half someone else's. It becomes "one's own" only when the speaker populates it with his own intention, his own accent, when he appropriates the word, adapting it to his own semantic and expressive intention. Prior to this moment of appropriation, the word does not exist in a neutral and impersonal language (it is not, after all, out of a dictionary that the speaker gets his words!), but rather it exists in other people's mouths, in other people's contexts, serving other people's intentions: It is from there that one must take the word, and make it one's own. (Bakhtin, 1981, p. 293-294)

Therefore, as we use language, we also reveal our own thoughts and assumptions about the world. As speakers we "weave the words of others into the fabric of [our] own discourse, the thread of which is, in turn, picked up and rewoven into the pattern" (Tannen, 1989, p. 58). The interlocutor contributes to the creation of social knowledge by actively participating with others in dialogue. In this sense, language is reflective of our own interests and purposes, yet it is also a product of the social institutions of which we are a part (Foucault, 1981). Talking, then, can never be just talk, but rather must be a creative, purposeful activity (Peckham, 1962). Bruner (1986) explains the non-neutrality of language within the context of education:

The medium of exchange in which education is conducted—language—can never be neutral. . . it imposes a point of view not only about the world to which it refers but toward the use of mind in respect of this world. (p. 121)

Since language can never be neutral, critical scholars in the fields of communication and education are committed to looking not only at the language within the curriculum, but also the curriculum within the language. Furthermore, because the form and content of language are inseparable, it is imperative that the researcher address the political, social, and cultural aspects of discursive texts (van Dijk, 1993). These aspects are

embedded within deeper, more complex forms of knowledge and cannot be accessed using quantitative research methods alone. Of prime interest to the researcher, then, is the meaning that lies beyond the words themselves. Since language is a combination of other people's meanings and the speaker's own unique interpretation, realities must therefore depend upon the gaining of consent from others—what Lincoln and Guba (1985) refer to as "consensual language." Inherent in consensual language are tensions and power struggles. Therefore, research methods such as ethnography and case-study, those that rely upon "thick description" (Geertz, 1973; van Manen, 1990), are appropriate for this type of inquiry.

For these reasons, the method of critical discourse analysis is an appropriate method for this study of Channel One. For example, Channel One programming is talked about in terms of economy (e. g., free equipment that enables the teaching of more students at a lower cost to the district), politics (e. g., the partnership between schools and businesses has altered the power structure of schools), and within a social context (e. g., minority and ESL students are targeted by advertisers via Channel One). Channel One is discussed in these multiple contexts by members of the East Side community. Yet the members of the community (i. e., teachers, parents, students, administrators) view these issues differently. Of primary importance to this study is how the talk about Channel One reveals tensions and power struggles about the uses of technology in education.

The Method of Discourse Analysis

Discourse analysis is the generic term used to describe the phenomenological study of language use, texts, conversational interaction, or

communicative events (van Dijk, 1985a). The method does not involve posing questions in search of definitive answers, but rather involves intellectual inquiry for the purpose of developing a deeper understanding of the complexities of communication phenomena (van Manen, 1990). Discourse analysis is not a theoretical perspective or even a methodological framework, but simply a description of the object of study: "language beyond the sentence" (Tannen, 1989, p. 6). The focus is on language "in use" (van Dijk, 1985a, p. 1), specifically that which is normally taken for granted in everyday conversation. Therefore, discourse analysis does not merely describe language, but attends to the deeper structures and layers of meaning within language. In addition to accommodating the complexity of language, discourse analysis acknowledges the context in which discourse occurs (Coulthard, 1985). The researcher is more likely to uncover hidden meaning through the process of contextualization (Coulthard, 1985; Hymes, 1974). This is accomplished through developing a background knowledge of the speakers, the speaking situation, and the specific purpose for the speech event.

Discourse analysis evolved from similar origins as linguistics and conversational analysis. However, discourse analysis is much more vague in terms of methodology. According to van Manen (1990), "there is not really a 'method' understood as a set of investigative procedures that one can master relatively quickly" (p. 29). The researcher is therefore left to his or her own skills and integrity. Essentially the discourse analyst engages in a conversation with the text. This entails handling both discursive form and content not as two separate genres, but as overlapping aspects of a single entity (Tannen, 1985, p. ix). Discourse analysis differs from rhetorical

criticism in that the goal of the researcher is not to assess persuasive strategies, but rather to develop an understanding of the multiple links at various levels within the discourse. Discourse analysis also differs significantly from the method of content analysis. The latter focuses on assigning data to predetermined categories (imposing meaning upon the text) while the former focuses on meaning that emerges from the text. Furthermore, a quantitative approach such as content analysis is not very meaningful for the present study since the discursive complexities may emerge in qualitative forms (i. e., themes, metaphors, and grammatical opposition). In these ways, discourse analysis allows for more flexibility on the part of the researcher.

Discourse analysis operates under its own criteria for precision, exactness, and rigor, those being the "fullness and completeness" of detail (van Manen, 1990, p. 17). The method is rigorous in a "moral and spirited sense" (p. 18) in that it seeks to describe and interpret meanings in specific contexts. However the interpretation can be difficult to evaluate and the textual presentation can be less than clear-cut (Waitzkin, 1993). Essentially the researcher occupies the role of interpreter and author in dissecting and then rebuilding a text. Because a qualitative approach to research does not pretend neutrality or detached observation (Lazar, 1993; van Dijk, 1993), the social and political views of the researcher play a significant role in the analysis of discourse. The researcher must constantly be aware of and account for a priori assumptions that may be placed on the text. As an interpreter and critic, I am engaged in a continual process of self awareness, paying particular attention to any preconceptions that might have influenced the rebuilding of the text (cf.

Lather, 1986). To further preserve the methodological rigor of this study, I continuously refrained from imposing my own voice upon the text while at the same time making an effort to preserve my own passionate interest in this area.

A limitation to analyzing naturally occurring discourse is that it occurs at one (and only one) point in time. Foucault (1972) states, "Discourse must not be referred to the distant presence of the origin, but treated as and when it occurs" (p. 25). Thus, even if the discourse is recorded it is relatively impossible to recapture its exact context. In addition, the quality and accuracy of recorded discourse is also difficult to assess. In order to grasp the subtle shades of meaning and nuances of the discourse, the researcher must engage in a process of constant self-reflection. This includes making thoughtful decisions in instances where discursive categories may overlap and words or sentence fragments are ambiguous. Therefore, I made a scholarly commitment to rebuilding the text in an inductive, rather than a deductive manner—to reassemble the text according to emergent rather than imposed meaning.

Critical Discourse Analysis (CDA)

The method of critical discourse analysis (CDA) is defined as "a detailed description, explanation and critique of the ways dominant discourses (indirectly) influence socially shared knowledge, attitudes and ideologies, namely through their role in the manufacture of concrete models" (van Dijk, 1993, p. 258). According to this perspective, it is not the discursive features themselves that are significant, but the "dialogical angles" at which these features are "juxtaposed and counterposed" (Bakhtin, 1986). Solomon (1993)

adds that "rather than construing the meaning in a work as unitary and fixed, critics should expose the tensions within works that open up possibilities for distinct interpretations" (p. 64). Furthermore, critical discourse analysis emphasizes the "responsible agency of powerful social actors in the events represented in the text" (van Dijk, 1993, p. 250). It also promotes the exploration of assumptions within the text. As with most qualitative research, this method requires much from the researcher in terms of creativity, insight, and reflection:

Critical discourse analysis is far from easy. In my opinion it is by far the toughest challenge in the discipline . . . it requires true multidisciplinary, and an account of intricate relationships between text, talk, social cognition, power, society and culture. (van Dijk, 1993, p. 253)

So although the form and surface structure of language are of concern to the researcher, it is the content, function, and shared significance of the language that make it socially relevant. For example, situations exist in which power and dominance are not directly imposed upon others, but paradoxically "jointly produced" (van Dijk, 1993, p. 250). In this respect, dominance may be enacted and reproduced by "subtle, routine, everyday forms of text and talk that appear 'natural' and quite acceptable" (p. 254). It is here that the underlying structures of the discourse may legitimize or conceal dominance among interlocutors. Critical discourse analysis poses a significant challenge to the researcher because language is "laced with human purposes and crosspurposes, motives and countermotives—what is stated and what is not" (Pinar & Reynolds, 1992, p. 6). Therefore, in addition to examining closely what is said, the researcher must also pay attention to what is left unsaid.

Generating A Text For Analysis

The discourse for analysis occurs approximately three years after the initial debut of Channel One in the classroom. Prior to obtaining the data for analysis, I developed what Burton (1980) terms "user's competence." This was accomplished through various information-seeking missions. For example, I was able to obtain much of the Channel One literature and research reports that were supplied to the East Side Union High School District Board of Trustees by Whittle Communications. In addition, I surveyed local media coverage of Channel One and other issues of concern within the district. Furthermore, I conversed with individual members of the Board of Trustees and attended one other public meeting on Channel One before collecting the data for this research. This information as a whole provided me with a context and a frame of reference for understanding technical and political issues that arose during the final board meeting.

The August 19, 1994 meeting was chosen as the data for this study because it occurred at a pivotal time for the East Side Union High School District community. The meeting is situated in what Philipsen (1986) calls an "episodic sequence" (p. 257), meaning that it is one in a series of meetings held on the issue of Channel One. This particular meeting was the final opportunity for the community and the Board of Trustees to discuss Channel One. The eight-member Board of Trustees and members of the East Side community negotiated the fate of Channel One at Overfelt High School for more than three hours. There were a total of twenty-four speakers that identified themselves within the groups of board members, administrators,

principals, teachers, students, parents, and Overfelt graduates.¹ The East Side Union High School District board room was arranged such that the board members were seated at the front of the room behind one continuous desk with microphones and name plates. The president of the Board of Trustees was positioned in the middle of the other five board members. To the left of the Board of Trustees sat the District Superintendent, Joe Coto, and his secretary. Further left was a standing microphone that community members would use to address the Board of Trustees. The audience sat in fold-up chairs that directly faced the Board of Trustees. Several members of the San Jose Chamber of Commerce sat together on the left side of the audience and to the right were seated a group of principals from within the district.

Each speaker was required to submit a request approval from the Board of Trustees. This meant (s)he had to fill out a pink sheet requesting a name and occupation. The speaker would then be called forward by the President of the Board of Trustees in order of request and allotted three minutes in which to speak about the topic on the agenda (e. g., Channel One at Overfelt High School).

In addition to audio-taping the meeting, I took extensive notes during the live speech event. The audio-tapes were professionally transcribed; however, due to the poor quality of the transcription, I re-transcribed the text myself—relying upon extensive notes and recollection of the meeting. As a result, I was able to achieve a high degree of accuracy. This second transcription

¹ Statements by six parents, five board members, four principals, two administrators, two former Overfelt students, one teacher, one private citizen, and one student comprised the discursive text. These categories overlap, however. For example, several teachers identified themselves primarily as parents, voters, and taxpayers.

served as the working text for the analysis.¹ Once a text was generated, I then developed a coding system in order to keep track of the discourse. I accomplished this by numbering each line of the transcript and added to it the initials of the speaker. For example, the first line of the text was coded "JB0001."

The First Phase: Describing the Text

Once I had a working text, I then conducted several exhaustive readings of the texts, posing the question: What are the distinctive features of the discourse? For each reading, I employed a detailed, line-by-line approach, noting themes, metaphors, and grammatical opposition. Using colored markers, I highlighted general themes that emerged from the text. Owen's (1984) criteria for identifying themes provided the basis for locating these threads of meaning. The first criterion, recurrence, was observed when the same thread of meaning appeared in at least two parts of the discourse (even though different language may have been used). The second criterion, repetition, was identified by the continuous appearance of specific words, phrases, or sentences. Thirdly, forcefulness was recognized by vocal inflection, volume, or verbal "underlining" of words or phrases (p. 275). As an accompaniment to Owen's explicit criteria for understanding and identifying themes, I incorporated van Manen's (1990) idea that grasping and formulating a thematic understanding is not a rule-bound process, but a free act of "seeing meaning" (p. 79). Therefore, in addition to Owen's systematic process, I also noted freely in the margins of the text any discursive features that I sensed were meaningful and pertinent to this inquiry, but did not fulfill

¹ Audio tapes and written transcripts are available for listening and viewing.

all of the specific criteria.

In subsequent readings of the text I paid particular attention to recurring metaphors. As defined by Dickmeyer (1989), a metaphor is simply "a characterization of a phenomenon in familiar terms" (p. 151). Metaphors are an important part of language because humans use them "not only to experience the new in terms that resonate with [our] past, but also to reveal these experiences vividly to others" (Jorgensen-Earp & Staton, 1993, p. 125). Metaphors also structure the way in which we perceive situations and events (Marshall, 1990). Because our language is metaphorical in nature (Lakoff & Johnson, 1980), each comparison of one entity to another brings with it a set of assumptions (Collins & Green, 1990; Jorgensen-Earp & Staton, 1993). Therefore, meaning can be uncovered by examining the types of metaphors used by individuals. With this in mind, I paid particular attention to the language used to describe Channel One—for example, what speakers compared the program to and what ideas they draw from that enable them to express their views about the program.

Another distinctive feature that emerged from the discourse was grammatical opposition—when ideas are set up in opposition to one another (Philipsen, 1992). Grammatical opposition provides insight into the meaning of an idea or concept by referring to its opposite, or defining it by a negative. I therefore paid close attention to the language before and after the words *not*, *but*, *either*, and *or*.

Once I recorded these discursive features, I then grouped them into six general thematic categories. Each category was represented by a different color highlighted within the text. This color-coded version of the text served as my

master copy (which I referred to many times to recontextualize the discourse). I then took an unmarked copy of the text and produced six additional copies, each in a different color—pink, green, yellow, violet, orange, and white, corresponding to the colors highlighted in the master text. By generating multiple copies of the text, I was able to keep a record of discursive fragments that were placed in more than one thematic category. Working separately with each set of colored transcripts, I literally deconstructed the text, both on a macro- and micro-level. This process consisted of first breaking down the general thematic categories into sub themes. The subthemes were dissected further into sentence fragments, phrases, and words. The end result was six piles, each composed of discursive fragments (subcategories). I then selected thirty-three of these general themes and reorganized them into seven thematic clusters. Working within each thematic cluster, I then began to rebuild the text, addressing the second research question: What do these discursive features reveal about the dominant assumptions related to education and technology?

The Second Phase: Interpreting the Text

Within each of the seven thematic clusters, I began to inductively rebuild the text. To help get at the underlying assumptions within the discourse, I posed six research subquestions adapted from Sprague's (1992a) work on expanding the instructional communication research agenda. These questions pertain to various educational issues and served as an aid to capturing, uncovering, and analyzing discursive meaning. The questions that follow the subquestions are offered as possible elaborations of each idea. The list is by no means exhaustive, but was merely suggestive of what may

have been found in the discourse:

SQ₁: What does the discourse reveal about the purpose of education?

Is the purpose of education in the East Side Union High School District to prepare students for the labor force? Is the purpose to create socially and/or politically literate students? How does the use of Channel One reflect these educational purposes? How is money and/or technology the key to improving education?

SQ₂: What does the discourse reveal about knowledge and the nature of learning?

Does knowledge exist outside the knower? Is it fixed or socially constructed through communication? Is learning a linear transmission of information? Does learning occur through watching television? Is learning an individual occurrence that happens when students build cognitive constructions? Does learning occur through interaction with the surrounding environment? How do social, economic, and political factors existing in the classroom and on television influence a student's intellectual growth?

SQ₃: What does the discourse reveal about curriculum and how it is established?

Is curriculum designed to teach students information they need to know? Is curriculum designed to stimulate student thinking and encourage them to ask questions? Is Channel One considered curriculum? How is curriculum defined and what are the criteria used to evaluate curriculum? Who has the power to define curriculum? Which voices are heard and which voices are silenced in the curriculum decision-making process?

SQ₄: What does the discourse reveal about the function of power in the classroom?

What is the power structure of the classroom? Are there existing power struggles? Who determines the use of Channel One? What form(s) of knowledge do teachers and students view as empowering? How do the economic, political, and social structures presented on Channel One affect the classroom environment? How does the East Side Community view advertising in schools and in the classroom?

SQ₅: What does the discourse reveal about the role of the teacher?

Is the teacher a disseminator of curriculum? Is the teacher a technician, carrying out educational goals according to specifically defined curricular objectives? Is the teacher a cultivator of learning? Does the teacher encourage students to share ideas and actively participate in the classroom? Is the teacher a facilitator of classroom activity?

SQ₆: What does the discourse reveal about the use of talk in education?

How do members of the East Side community talk about the use of language and communication? What role does discourse play in educational decision-making? Are there established rules for communicating within an educational context? What are the consequences for violating these linguistic rules?

These six subquestions were applied to the the discursive text. From this interrogation, I elicited several dominant assumptions about a variety of educational issues. Drawing also from the pool of discursive features, I was able to construct numerous propositional statements that reflect these assumptions (also taking into account the speakers' roles, the constraints of

the speaking situation, and additional notes I took during the live speech event).

The Third Phase: Reconstituting the Text

Moving from the interpretive phase of rebuilding the text to the critical phase of the analysis, I addressed the third research question: What are the major tensions and contradictions implied by this discourse and how are they set up in relation to one another? I examined closely the relationship between the dominant assumptions in the reconstituted text. In addition, I noted tensions and contradictions existing in the form of bipolar oppositions and hierarchical relations. I essentially wove together the discursive features and dominant assumptions that were elicited in the first two phases of the analysis, and reconstituted the discourse from a critical perspective. The result is a series of diagrams that illustrate the dialogical angles at which these issues are juxtaposed and counterposed.

In summary, this discourse analysis consists of three phases. The first phase was characterized by textual description and provided the building blocks for the subsequent phases of analysis. This phase consisted of deconstructing the text, and reducing the discourse to sentence fragments, phrases, and words. These data were categorized by discursive feature (e. g., theme, metaphor, grammatical opposition) and examples were illustratively drawn from the text (see Figure 1). For example, "standardization" emerged as one thematic unit (within a broader category, labeled "curriculum"). Once I had categories of themes, metaphors, and grammatical oppositions, I then moved into the interpretive phase of the study. Drawing from the pool of discursive features, I constructed a set of propositional statements that are

Figure 1. The first phase of analysis

representative of the dominant assumptions within the text (see Figure 2). For example, the theme of standardization was woven together with other discursive features to create the statement: "The state government should have the final say in determining classroom curriculum." The move to the next level of analysis—the critical phase—consisted of examining the logical order and unstated links between ideas. I gathered the propositional statements constructed in phase two and critically examined them in relation to one another, noting the tensions and contradictions among the dominant assumptions. The third phase is displayed in a series of diagrams that outline the relationships, tensions, and contradictions within the discourse (see Figure 3).

Figure 2. The second phase of analysis

PHASE TWO: INTERPRETING THE TEXT
The Dominant Assumptions

[Example:] The state government should have the final say in determining classroom curriculum.

[Derived from statements such as the following:]

If it's acceptable to do that based on educational standards of this state, then that's all right with me.

And I think the Resolution that Dave read, what it effectively is saying is that the State Department of Education must have the right to approve that curriculum. . . .

Teachers here in this audience and in this district and outside of this district, we are required—mandated by the State Department of Education—for a number of minutes of instruction, direct instruction on a daily basis.

Figure 3. The third phase of analysis

RECONSTITUTING THE TEXT

Dialectical tensions

CHAPTER FOUR

DISTINCTIVE FEATURES OF THE TEXT

This chapter presents the discursive features uncovered during the first phase of this discourse analysis. Elicited from multiple readings of the text are three distinctive features: themes, metaphors, and grammatical oppositions. Textual examples that illustrate each discursive feature are provided in this chapter. For the purpose of this study, I have chosen to elaborate on the most intriguing elements within each category.

Thematic Clusters

The themes that were captured from both macro and micro analyses cluster around seven major categories: Curriculum, Democracy, Business, Technology, Communication, Learning, and The Role of the Teacher (see Figure 4).

Cluster One: Curriculum

This large cluster contains themes relevant to the establishment of curriculum: criteria used to evaluate curriculum, characteristics of curriculum itself, and the people involved in making curricular decisions. The following concepts of fragmentation, standardization, and affordability are representative themes from this cluster.

Fragmentation. Curriculum is broken down and organized into subject areas of study. These subjects occupy a certain portion of the school day, which in turn is divided into instructional minutes:

Current events of anything that is happening around the world is geography. Anything that is happening historical, that's history. Anything that's happening with people, that's sociology.

Figure 4. Thematic clusters

[What] kids seem to remember the most are what's clearly advertised on those commercials in two minutes as opposed to those ten minutes of news program.

They're pumping in one hour every week of information into the public schools, as I calculate it—twelve minutes of information, five days a week.

Standardization. Much of the discourse on curriculum focuses on the need for rules or standards to guide the curriculum decision-making process and render it less problematic. Specific standards were not the focus of this body of discourse, but rather the focus was upholding standards for their own sake rather than for what they produce, as well as the source for those standards (e. g., federal, state, local community):

I support the standards being held high.

I have a concern again that different standards are applied depending on the discussion.

If we apply the same standards to that curriculum that we apply to our own teachers in our school district, then I'm sure that that's acceptable. If it's acceptable to do that based on educational standards of this state, then that's all right with me.

Affordability. This theme refers to the costs and benefits of Channel One in the classroom. The term *affordability* has a dual meaning within this text. In one sense it is used to refer to the pedagogical value of Channel One in the classroom. It is also used to denote financial capability of the East Side Union High School District:

We cannot afford to be afraid to try new methods in our effort to encourage our children. . .

Education leaders cannot afford to be inflexible and unwilling to try new ideas and new concepts.

Can we afford to provide some of this type of programming for other sites that are requesting it?

Cluster Two: Democracy

Democracy is at the center of the second thematic cluster. Representative of the themes within this category are the ideals of community involvement, multiculturalism, and site-based management.

Community Involvement. Essential to maintaining a democracy is the participation of all its members in making decisions that affect the whole of society. Involvement of the community is a major theme that emerged from the discourse about Channel One:

[This meeting is] an opportunity for people to participate at some depth on the issue before the Board conclusively decided.

I think we had more than forty percent of the parents involved at Overfelt making a critical decision about their children and I'm so impressed with that.

I'm here to support the continuing involvement of our community.

Multiculturalism. Another characteristic of a democracy is the cultural diversity of its membership. The East Side Union High School District is recognized as a culturally diverse educational community. A major concern of educators is working with students from a variety of cultural and ethnic backgrounds:

Meeting the needs of a diverse student population requires more than an add-on program approach such as Channel One.

To find a way to help our clients, especially minorities. . .

This district is rich in culture. . .

Site-based management. This terminology has become part of the educational reform jargon of the 1990s. It refers specifically to the

decentralization of power from federal and state governments and the increased autonomy of the school campus in terms of curriculum decisions:

I'm here to say that what happened at Overfelt is site-based management in its best form. That site-based management is the way it should be.

Channel One on our campus is central to the larger issue. . . and the focus of that concern is site-based decision-making.

The concept of site-based management is based on the people that you as a Board have put in those positions to lead.

Cluster Three: Business

This cluster is composed of themes that pertain to the business sector. Thematic units such as partnership, clientele, and profit describe the educational system in terms of business:

Partnership. The link that exists between business and education is described in terms of a "partnership." The relationship between business persons and educators is described as similar to that of co-workers:

[Channel One] is a classical partnership. . . . one that the private sector put out almost one hundred percent investment at no cost to the district.

We welcome [KLIV Radio] as a partner in education.

I would ask us to open up our minds to how we work with the private sector.

Clientele. The student is frequently referred to as the *client* of the educator. Whereas the term *customer* is frequently used in business world to denote a relationship between supplier and consumer that consists of a short term economical exchange of goods or services, the use of the term *client* refers to an ongoing relationship between educator (or administrator) and the client being served:

TV in the classroom is not my idea of a sound way to improve the academic and social development of our clients.

I cannot sit here and say that I can agree with giving up any form of educational time to something that is not going to help our clients.

So [The Channel One Resolution] is student driven. It's student-as-the-client driven.

Profit. In business, a major motive for serving one's client is to make a profit. The community discourse reveals a profit theme in the sense of a (financial) gain from a business deal. The interlocutors also use this term in reference to profiteering, which refers to the taking of an unreasonably large profit:

I would like to have us profit by our own advertising.

Inevitably we will get to the point where we get to keep the equipment and to increase the value of the equipment and increase the revenue that actually comes to the schools.

Our own kids should profiteer.

Cluster Four: Technology

The value and purpose of technology in the classroom is another central idea that emerges from the discourse on Channel One. The program is talked about in terms of innovation, technical quality, and as a vehicle for curriculum.

Innovation. The theme of innovation refers to a new discovery or development. It appears frequently in the discourse in reference to Channel One programming:

Channel One is a novel concept, an innovative concept and should be given the chance to succeed or fail. . .

Let's encourage innovative ideas like [Channel One].

I was one of the Board members that voted a few years ago to move forward with this innovative effort at Overfelt.

Technical quality. From the discussion of the educational value of technology emerged the theme of quality. Quality was specifically talked about in terms of the production or technical aspects of Channel One:

The way Channel One is produced. . . we are in fact adding very high standards to the classroom.

It was high-quality programming.

The production is excellent. It is young people doing a classy, high-profile program for young people.

Curriculum vehicle. Channel One programming was also frequently described as a vehicle for curriculum. According to interlocutors, the primary function of the programming is to transport curriculum from an outside source into the classroom:

It's not being done by any other vehicle in this country.

They're pumping in one hour every week of information into the public schools. . .

We use film to bring [curriculum] to the classroom to teach, to add to whatever concept that we are taught.

Cluster Five: Communication

The fifth cluster is composed of elements related to communication. Concepts such as dialogue, voice, and role identification emerge as distinctive features of the educational decision-making process.

Dialogue. The text refers to the importance of community participation, specifically in the form of dialogic interaction:

My motion is about keeping the debate open.

Rather than deny them those opportunities, I think it would be healthy for us to have a forum for that.

There was a spirit of discussion that was communicated to the people.

Voice. Frequent references were made to the speaker's own voice and the voice of the community as a whole:

What about the voices of the people you have heard? It seems to me if I was one of those voices, that I'm not being considered.

If we let market forces work, schools will eventually have a voice in working with the marketplace through an intermediary, whether it's Channel One or another intermediary.

Role identification. The speakers were directed by the Board of Trustees to state their full name and occupation before speaking. Rather interesting, however, is the way in which each speaker introduced himself or herself by selectively describing their roles within community. As indicated by the following examples, some speakers went far beyond this initial request and outlined their credentials:

I am a parent in this community, a long-time resident of East Side San Jose. A few years back, when I sat as a member of this Board I was one of those Trustees that voted against Whittle Communications' Channel One contract. I'm an Overfelt graduate. . .

I am a taxpayer just as well as everybody else. I am also a voter, as well as everybody else.

And so instead of speaking of this as a teacher at Overfelt, which I am, I can speak of this as a parent in the system.

Cluster Six: Learning

The East Side community discourse reflects a concept of learning that is linear, passive, and peer-oriented. Student learning is talked about in terms

of what Channel One can literally bring to the classroom environment.

Transmission of knowledge. The community talks about learning as a linear transfer of information from a source to a receiver. A major idea emerging from this discourse is that knowledge is a separate entity that educators possess and transmit to the student:

They received that education for the most part because teachers that this district employs went above and beyond what they were paid for in order to make sure that my kids got a good education.

. . . in our effort to encourage our children to receive the kind of education that they need to be competitive in today's society.

They were going to tailor an education to the Overfelt students at the Overfelt community.

Passive learning. Consistent with the theme of knowledge transmission, learning is also described as something that happens to students, rather than generated by the student's own thought and action:

[Let's teach students] the constructive way of looking at [Channel One] rather than sitting there as presumably vegetables and being destroyed by it.

Kids that come in to the classroom expect that these adults, these responsible educators, are going to teach them things they can absorb without question.

Anytime you teach anything, expose children to any form of learning. . .

Peer learning. One of the unique characteristics of Channel One programming is that the news is broadcast by teenagers. There is much praise from the community for the use of adolescents as role models for students. In this sense, identifying with one's peers on television characterizes enhancing learning:

[Channel One] was actually pretty daring, pretty creative, very inspiring communication of kids to kids.

[Channel One] is his first wake-up call because the news was presented by a peer.

You cannot imagine the power of teenage correspondents stationed around the country and around the world interpreting the events of the day to their peers.

Cluster Seven: The Role of the Teacher

The themes in this category cluster around the multiple roles of the teacher. Channel One is spoken about in terms of how it can enhance the work of the teacher. The following discursive examples describe the teacher's work as a technician, trainer, and as equal to that of administrator:

Teacher as technician. The teacher's work is spoken about in terms of pedagogical technique. Channel One is praised for being able to provide technical assistance to teachers:

. . . providing programming to help our teachers work with a population that is quickly increasing and is very difficult to work with.

[Technology] would allow our teachers to program within their classroom their own educational format.

Teacher as trainer. From the discussion of the benefits of Channel One, the teacher's role emerges as one of training students to think or perform in a specific manner:

We would conduct training sessions with students so they understand the mentality or understand the concept of captured audiences in terms of advertising.

This is an excellent opportunity to work the students and train them to be critical, constructive consumers.

Teacher and administrator. Although the teacher and administrator occupy two very different roles, there emerged a sense of sameness and also equality between the two as the roles were mentioned simultaneously during the discussion of educational success. Speakers praised the work of teachers and administrators equally:

This school district is very fortunate. It has some of the most respected and forward-thinking teachers and administrators to be found anywhere in this valley.

And I believe teachers and administrators have the right to [use Channel One] as a supplement, not as curriculum.

And it happened because those parents and dedicated teachers and dedicated administrators did put that extra effort out.

Metaphors

As mentioned in Chapter Three, metaphors provide insight into how a speaker constructs reality, by using comparisons to explain an ambiguous or complex concept. In this section of the chapter, I discuss specifically three metaphors that were widely used by members of the Board of Trustees. The first two metaphors that will be discussed pertain to the discussion of the educational value of Channel One programming, and the third one pertains to curriculum in general.

The Nutritional Value of Channel One

Channel One is praised by interlocutors as a program of extremely high quality. However, other speakers express a different viewpoint, referring to Channel One as junk food. In this sense, the program is characterized as entertaining but lacking in educational substance:¹

¹ Ironically, the commercials themselves on Channel One advertise products commonly referred to as junk food, such as Burger King fast food and Snickers candy bars.

Channel One has been like a peanut butter and jelly sandwich with a little peanut butter. That's the taste of education, that is, in part. But the flavor that is lasting is the revenue that is received. That's the sweetness of it.

One of the criticisms of Channel One is that it is not much more than cotton candy and fluff.

[Channel One] was not lightweight video fluff.

Channel One As An Educational "Tool"

The word *tool* appears frequently in the debate over the use of Channel One programming in the classroom. Since *tool* refers to an object that is used to shape or manipulate another object, Channel One is frequently spoken about in terms of its utility:

As a high school teacher for twelve years, I saw this as a tremendous tool to assist us in a very changing world.

We don't want them to shut off Channel One if [Whittle Communications] go out of business. . . . And now you've lost your tool, you've lost your Channel One, you've lost everything.

It is incomprehensible to me that this Board may be unwilling to allow these professional educators the latitude to employ the tools they feel will assist them in educating our children.

"Slicing Up" The Classroom

The metaphor of "slicing" is used by community members in reference to establishing and implementing curriculum. Implied by this metaphor is the notion that classroom time is finite—there is a limit to the number of time segments that can be divided and filled with instruction. Therefore, choices must be made in determining how classroom time should be divided:

Slicing off minutes or however, whatever quantity of time—of classroom time— and donating it off to advertisers. . .

We have an issue that has to be decided: Is it okay for us to start slicing up the school day?

But is it okay for us to take a slice of classroom time and trade it for equipment we need?

Grammatical Opposition

An additional feature of this discourse is grammatical opposition, occurring when the speaker defines a concept or an idea by its negative. In other words, speakers had the tendency to say what something is not, rather than what it is. The following examples represent five sets of opposing ideas that comprise three main categories of grammatical oppositions (see Figure 5).

Category One: The Establishment of Curriculum

Issues related to curriculum decision-making comprise a large category of grammatical opposition. These issues include the dichotomies of politics versus education, product versus process, and individualism versus community. Opposition occurred most frequently during a discussion of what the most important issue was at the meeting.

Politics versus education. The two major issues of debate at this meeting are the content of curriculum, and the policy-making process related to the construction and implementation of curriculum. Politics and education have blended together, becoming a problem for the members of the East Side Community.

Is the real issue politics? Or is the real issue educating our kids?

We are not here about politics. This is an educational arena.

[The Board] should be able to say that "I'm not an expert in education, I am your representative"

Figure 5. Categories of grammatical opposition

[Increased GPA, Increased attendance, decreased drop-out rate, largest graduating class] These are the things we want our kids to remember most, not Channel One, not politics.

Product versus process. Another dichotomy appears in terms of the goals and the methods for establishing curriculum. The following examples illustrate the oppositional relationship constructed between curricular decisions and the process of making those decisions:

[Trustee West] was really wanting us to understand that this is not a debate about commercialism. . . this is a discussion where we can all understand each other better.

I've heard testimonies on how good [Channel One] is. But I have yet to receive any documentation on how this program has helped to raise the grade point average in any subject area.

Individualism versus community. The members of this community express their individual concerns as being in competition with the needs of the larger community:

It's either/or. And as far as I'm concerned either [the contract] satisfies all 21,000 [students in the district] or it satisfies none.

The Board does not conclude, despite any compromise with the Overfelt Administration, that this is a site-based issue. It has much broader implications.

Each of you guys play their own personal agenda. Not the agenda of us [the community].

Category Two: The Purpose of Education

Educational purpose and the processes of schooling are the focus of this category. For example, the discourse contains opposing ideas about the ways in which a student learns (from Channel One). Opposition is set up between the ideas of active involvement versus passive acceptance. The members of this community have ideas about the good ways and bad ways of educating

students. The following examples of opposition illustrate the ways in which the speakers view learning:

[Let's teach students] the constructive way of looking at [Channel One] rather than sitting there as presumably vegetables and be destroyed by it.

I was not persuaded by the arguments that we somehow had captive students here. We are going to be seeing these commercials somehow ruin...In fact I was persuaded in the other direction—that this is an excellent opportunity to work with students and to train them to be critical, constructive consumers and not just captive people with commercials.

I'm not going to stand up and say I want my son to see commercials, but I am going to stand up and say my son is planning to take a full six class period load in high school...I believe you are placing an additional burden on the students [by requiring them to study advertising]

Category Three: The Definition of Channel One

A major educational controversy is the contested definition of Channel One. A standard definition greatly facilitates the development of policies governing (or prohibiting) its use within the classroom. The discrepancy lies between the definitions of Channel One as a curriculum and Channel One as merely a supplement to curriculum. In this case, speakers define the programming in terms of what it is not, rather than in what it is:

This current events in class, it is not curriculum. It is at best, a supplemental material brought into the class at the request of the administration and the teachers to supplement their courses.

I want to make sure that it is understood that I do not see this as curriculum, I see it as supplemental materials brought into the classroom.

There is a tremendous amount of supplemental material. It is not just TVs and coaxial cables I'm concerned about.

In summary, this chapter has described the data elicited from the first phase of the discourse analysis. Thus far I have uncovered numerous themes, metaphors, and grammatical oppositions from the deconstructed text. To illustrate these discursive features, I have provided several examples of the elements within each category. Furthermore, I have explained the significance of each one, using discursive examples drawn from the text. The data presented in this chapter will serve as the building blocks for the second phase of the research discussed in the next chapter.

CHAPTER FIVE

DOMINANT ASSUMPTIONS WITHIN THE TEXT

The discursive features described in Chapter Four serve as the foundation for the level of analysis presented in this chapter. The discourse is examined in this chapter on an interpretive level. First I explore the dominant assumptions undergirding the educational controversies central to the Channel One controversy. I then weave together selected features of the discourse in addition to other discursive elements not mentioned in the previous chapter. The data are presented in this chapter in the form of propositional statements. Since the move from the descriptive to the interpretive phase increases the complexity of this discourse analysis, I have organized the assumptions in this chapter according to the six research subquestions. For the purpose of this study, I will discuss the strongest, most prevalent assumptions within each category.

Assumptions About The Purpose Of Education

The underlying assumptions about the purpose of education within the East Side community fall into three specific categories: politics, technology, and business (see Figure 6).

Education and Politics

This category consists of educational issues pertaining to governing processes, social equality, and the economic system. I have constructed from the discourse the following set of assumptions that reveal the community's views on education and politics.

Education should resemble a democracy. There exists a belief among the community that the decision-making processes in education should be

Figure 6. Dominant assumptions about the purpose of education

EDUCATION AND POLITICS

Education Should Resemble A Democracy
Education And Politics Should Be Separate
Educating A Diverse Student Population Should Be A Top Priority
The Purpose Of Education Is To Provide A Work Force

EDUCATION AND TECHNOLOGY

Education Should Be Innovative
Technology Should Be A Major Part of Education
Channel One is An Asset to Education
Channel One is Harmful To Education
Educational Value Should Be Assessed According To Technology

EDUCATION AND BUSINESS

Partnerships Between Business And Education Are Desireable
Education And Business Should Compete
Education Should Function Like A Business
Students Should Be Viewed As Clients
Educators Should Be Like Business Leaders
Schools Should Generate Their Own Profits
Commercialism In The Classroom Is A Positive Thing

democratic. One parent in the audience has tried to model for her son "involvement and participation and the belief that the system can work." There is a general sense among the community that everyone should have an equal say on the issues. For example, a community member pointed out to the Board of Trustees that the actions of the board could be interpreted by the community as anti-democratic: "I don't think you want to exclude children at large, or play favoritism or single out any said groups or anything." The members of the Board of Trustees in turn express a desire for democratic decision-making: "We've been trying to figure out how we can expand these meetings, get more people to participate, more parents, more community participation." The consensus among the members of the community is that education should be governed by the people who comprise the community.

Education and politics should be separate. The community also expresses a view of education as separate from the political sphere. Speakers from the audience frequently remind board members of the purpose for the meeting: "We are not here about politics, this is an educational arena." Another frustrated audience member asked the Board of Trustees, "What is the real issue here? Is the real issue politics? Or is the real issue educating our kids?" Community members support the site-based decision-making method of governing, but express that they would "like the politics taken out."

Educating a diverse student population should be a top priority. A large portion of the discourse reflects the purpose of Channel One as an effective "tool" for teachers to work with a culturally diverse student population. One board member called attention to the achievement of the "newest citizens" in

the East Side community, those of Vietnamese origin: "They [were] the top achievers. This district is rich in culture and [the Vietnamese students] were some of the top achievers at our graduation and we are very proud of that." Even those who oppose Channel One agree that multiculturalism is an important educational issue that calls for attention: "Meeting the needs of a diverse student population requires more than an add-on program approach" such as Channel One.

The purpose of education is to provide a work force. A key issue at this meeting is the educational value of Channel One. Within this context, several references were made that reveal the community's views on the purpose of education. For example, a board member expressed concern about "the problems of educating our future work force, which will be required to work in an increasingly complex workplace." In addition, educators must teach students "occupational competencies" and ensure that students "receive the kind of education that they need to be competitive in today's society." Furthermore, the community holds accountable any technology used in the classroom "for our children being well-prepared for the workplace."

Education and Technology

The set of assumptions within this category is organized according to the community discourse about technology. In the following I discuss several of these assumptions that link technology specifically to Channel One and the concept of innovation.

Technology should be a major part of education. There is unanimity among the East Side community that technology should be a major part of the educational process. One board member declared, "Certainly TVs and

technology are gonna be in the classroom. We want it to be there!" In addition, the discourse mirrors a sense of normalcy about technology. In other words, not having technology in education is considered outside the norm. For example, at the idea of installing an integrated system of communications technology in the East Side Union High School District, the president of the Board of Trustees responded, "I can't imagine a teacher not wanting to be able to be involved with that!" Furthermore, several members of the community believe that there is not enough concern expressed for technology in education. One private citizen commented, "In terms of priorities for television sets or for the things that appeal to current events, there is no priority. And I think there is something very wrong with that." Although the community may not agree on the exact form of technology or how much money the district should spend, most operate from the assumption that technology should be a part of education.

Education should be innovative. The desire for technology is fueled by the community's assumption that education should be innovative. A former Overfelt student in the audience remarked, "I hope that after all these years between when I graduated from high school and now, that there's more innovation going on in our classrooms." Other members of the community also express a desire for the new and the unfamiliar in education. Another former student of Overfelt recalls, "Overfelt was gonna be a new school, new things were gonna happen! New ideas were gonna come about! And that's what our kids still carry with them!" The push towards innovation in turn fuels the overwhelming community support for Channel One in the classroom: "Channel One is a novel concept, an innovative concept and

should be given the chance to succeed or fail where it really counts and that's in the classroom." One teacher disclosed her fantasy that the results of this meeting would make news headlines: "East Side Union High School District Makes Innovative Step In Mutual Respect and Cooperation For Educational Leadership: Channel One Is A Go!" In response to the strong support for Channel One the Board of Trustees clarifies its position: "We are not anti-new, innovative ways of education!"

Channel One is an asset to education. Because Channel One fulfills the community's desire for technology and innovation, it is considered an asset to education. The community is particularly optimistic about the "instructional opportunities" indirectly associated with Channel One. One principal remarked, "I saw the tremendous potential of the uses of this [Channel One] equipment for all sorts of other efforts." For example, the equipment supplied with Channel One is able to link the whole district with each school site. In addition, the president of the Board of Trustees noted, "if we did have the fiber optics, that will allow us to use those TVs as computers." A teacher referred to Channel One in terms of instructional opportunity as well: "We want to educate kids. Let's take advantage of the instructional leadership opportunities to do this." One community member asked that the district continue Channel One because it was "doing a great deal of goodness for education." The community's goal, according to one board member, is to "see what we can pull out of this. . . enterprise in terms of equipment and revenue."

Education and Business

Emerging from the discourse on educational purpose is a code of business. As revealed in Figure 6, the assumptions within this category center around the the ideas that education should function like a business.

Education should function like a business. There exists a business code in education. A board member and former teacher commented on the educational priorities of the district: "Integration of academic skills and occupational competencies must become a serious business on our part." Within the "business" of education, the administrators are the business leaders. The District Superintendent was referred to as "fulfilling his professional responsibilities to this community" as "your chief executive officer." In addition, the community views educators and administrators in a service role to the students, who are viewed as the clients. During the discussion of Channel One programming and classroom time, one board member replied, "I cannot sit here and say that I can agree with giving up any form of educational time to something that is not going to help our clients." Furthermore, the *Channel One Resolution* is written with the purpose of being "student-as-the-client driven," or acknowledging the needs of the student as a top priority in education.

Partnerships between business and education are desireable. Educators and administrators encourage "partnerships" between schools and businesses. At one point during the meeting, a board member referred to the attendance of a local radio station and the city's Chamber of Commerce:

I believe this meeting is being broadcast on KLIV. We are delighted! I think it is a great partnership. We welcome the Chamber. We want to be their partners in education. I hope your presence here tonight indicates that you want some partnership with us.

The desirability of this "partnership" stems from the "private sector [putting] out almost one hundred percent investment at no cost to the district." In this sense, one member of the Board of Trustees calls the business sector "the goose that lays the golden egg in an era where we are suffering from inadequate resources." Those who oppose business-education partnerships are asked to "open up [their] minds to how we work with the private sector."

Commercialism in the classroom is a positive thing. Based on the discourse of this meeting, a majority of the community members are not opposed to the idea of commercialism. According to their view, commercialism is a natural part of life in the United States. Commercialism is "a part of us. . . . What we eat, what we think, what we wear, what you drive, came about by one ingredient—commercialism." For example, a former Overfelt student was applauded after passionately stating, "And if we're making a profit off of [commercialism], God bless you. That's our enterprise. That's America." The community expresses gratitude for commercialism, because it has enabled individuals to obtain material goods in their own personal lives as well as in the educational arena. This sentiment has fostered a strong desire among community members to use commercialism to their advantage. One teacher suggested that the district "set up our own television and collect that money and keep it within the district." Another audience member remarked, "I would like to have us

profit by our own advertising." One teacher argued, "Our own kids should profiteer." In this sense, commercialism is considered valuable curriculum and pedagogy. For example, the community wants to use Whittle's marketing strategies—especially since Overfelt is a magnet school in Advertising and Marketing and Mega-Tech. One teacher suggested, "Let's teach students that making a profit isn't necessarily a bad thing." Another community member was of the belief that commercialism "could be a very constructive way of teaching our students." She added, "commercialism could be a very, very positive thing. It's becoming a very positive thing right on our campus."

Assumptions About The Nature of Knowledge And Learning

This section focuses on the assumptions about knowledge and the process of learning. Four assumptions are presented that subscribe to a logical positivistic view of knowledge, passive learning, peer learning, and the idea of learning as entertainment (see Figure 7).

Figure 7. Dominant assumptions about the nature of knowledge and learning

Knowledge Exists Separate From The Knower
Quantitative Methods Are Good Ways Of Measuring Learning
Students Are Passive Learners
Student Learning Is Enhanced If The Source Of Learning Is A Peer
Students Should Be Entertained
Channel One Can Turn Students Into Active Learners

Knowledge exists separate from the knower. The community views knowledge as something students receive as a result of going to school. The role of educators is to help students "receive the kind of education" that will allow them to compete in the workforce. The first step in helping students gain knowledge is to "expose" them to it. An efficient and effective vehicle for transporting knowledge into the classroom is Channel One programming. One board member described the program as "pumping in one hour every week of information into the public schools." According to the president of the Board of Trustees, the programming and technology have resulted in "a great improvement to our district and our district's ability to deliver curriculum." One parent praised the work of educators within the district for the education her children received: "They received [a fine] education for the most part because teachers. . . went above and beyond what they were paid for in order to make sure that my kids got a good education." In this context, an education is viewed as something that exists separate from the student. The student's accumulation of information through schooling produces an education that graduates "carry" with them.

Students are passive learners. Linked with this positivistic view of knowledge is the assumption that students are not active, but rather passive learners. For example, a board member gave his views on student learning: "Kids that come into the classroom expect that these adults, these responsible educators, are going to teach them things that they can absorb without question." Channel One is useful to educators in this sense, according to the Board president, "All we're doing is letting them know what's important and what's going on in the world around us." The student is in the role of

passive receiver, while educators are the senders of knowledge.

Student learning is enhanced if the source of learning is a peer. One of the unique features of Channel One programming is that the news is presented by adolescents. Described by a board member as "communication from kids to kids," Channel One is praised for relating to a teen audience. One parent praised the program for helping her son become a better student: "It is was his first wake-up call because the news was presented by a peer." A board member related his positive experience with the program to the audience, " You cannot imagine the power of teenage correspondents stationed around the country and around the world interpreting the events of the day to their peers." The information on Channel One is presented by teenagers "asking questions the way a teenager would." The community views the program as a useful way to help students learn more because of its power to capture students' attention.

Students should be entertained.

An important aspect related to learning is getting students to pay attention to the classroom curriculum. Channel One is praised for capturing students' attention, and therefore increasing the amount of knowledge the students receive. This in turn contributes to the educational value of Channel One. This is the rationale behind one parent's argument to keep the programming in the classroom:

I have watched CNN's Newsroom. It is a snooze! It is boring. it is adults talkin' down to kids! It is like watching MacNeil/Lehrer and my daughter will tell you that she's not really interested in MacNeil/Lehrer. But she likes Channel One.

Channel One is unique compared to other instructional news programs because of its "vision" and "impact." One member of the Board of Trustees

describes Channel One as a "kind of Marshall McLuhan's global village come to life" in which teenagers have "the controls of the Starship Enterprise looking at their world dynamically." The discourse reveals the learning value of Channel One in terms of the students' enjoyment of the broadcasts.

Assumptions About Curriculum And How It Is Established

The focus of this section is the definition of curriculum and the criteria used to evaluate curriculum. Included in this discussion are rules for decision-making and several issues that are related to power and authority in determining curriculum (see Figure 8).

Criteria For Establishing Curriculum

This category is composed of a set of assumptions related to the characteristics of and criteria for curriculum. A major issue of debate during this meeting is the nature of curriculum. One board member argues that Channel One programming is not curriculum, but is "at best supplemental material brought into the class at the request of the administration and the teachers to supplement their courses." Others dispute this definition of Channel One, as reflected by another board member's statement:

Science, social studies. . . . current events of anything that is happening around the world is geography. Anything that is happening historical, that's history. Anything that's happening with people, that's sociology. It's curriculum!

Although the nature of Channel One is contested, both sides base their views on the assumption that curriculum should consist of discrete, moveable parts, and that it should be judged according to affordability—both in terms of money and pedagogy.

Figure 8. Dominant assumptions about curriculum and how it is established

CRITERIA FOR ESTABLISHING CURRICULUM

Curriculum Should Exist Within A Framework
Curriculum Should Consist of Discrete, Moveable Parts
The Value of Channel One Should Be Determined Through
Quantitative Measurement
Curricular Decisions Should Be Made According To Affordability

RULES FOR MAKING CURRICULAR DECISIONS

Curriculum Should Be Governed By Established Laws
Decisions Must Be Balanced
Rules Must Be Consistent
Compromise Is Essential
Money Is An Acceptable Trade-Off For Principle

POWER TO DETERMINE CURRICULUM

The State Government Has Ultimate Authority
The Board of Trustees Respects The Judgment Of The Local Community
The Board of Trustees Has More Authority Than The Local Community
The Local Community Has Power Over The Board of Trustees
The Local Community Has More Authority than The State And Federal
Governments
Board Members Respect The Judgment of Their Colleagues

Curriculum should consist of discrete, moveable parts. This assumption is reflected in a discourse of fragmentation that exists among educators. For example, the Channel One controversy is discussed in terms of two minutes of commercial advertising and ten minutes of news programming. Educators approach decisions concerning classroom curriculum as "slicing up" the school day into instructional minutes. Stated in the *Channel One Resolution* is the idea that the school day can be broken down into fragments of time and then manipulated as desired:

To the extent extra time has been added to the school day (at Overfelt) to accommodate Channel One or any other current events curriculum, students and their parents may opt to use this twelve minute period as a recess as opposed to viewing the program.

The focus of discussion is the number of instructional minutes, rather than the quality of instruction. The principal of Overfelt expressed frustration over adding instructional minutes to the school day in the event Channel One was taken out: "We have two minutes of commercials, that we take as regular instructional minutes of the day, which really makes a tremendous difference." A board member expressed a similar concern over the number of minutes of instruction, "We are required—mandated by the State Department of Education—for a number of minutes of instruction, direct instruction, on a daily basis." Although the community is divided on the issue of how to use classroom time, there is unity in terms of the fragmented nature of their language. A board member opposed to Channel One sarcastically remarked, "Why don't we bump that time up if it's a good thing to do? We've got a lot more classroom time than two or twelve minutes, you know. Where do we stop? Or where do we begin?" How to

divide curriculum resonates as the primary concern in terms of curricular decision-making.

Curricular decisions should be made according to affordability.

The criteria for curricular decision-making pertain to two types of affordability. The first type relates to finances. For example, a board member asked, "Can we afford to provide some of this type of programming for other sites that are requesting it?" The second type of affordability relates to pedagogical risk. A former Overfelt student addressed the Board: "We cannot afford to be afraid to try new methods in our effort to encourage our children." Another member of the community stated that "education leaders cannot afford to be inflexible and unwilling to try new ideas and concepts." Within this context, affordability is a dual criterion that evaluates curriculum in terms of both financial and pedagogical resources.

Rules For Making Curricular Decisions

This category of assumptions consists of rules constructed by the community to help establish curriculum. Emerging from the discourse is a desire for consistency, monetary exchange, and power in determining curriculum.

Rules must be consistent. The community expresses unanimity that the decisions concerning curriculum be consistent. For example, the definition of curriculum must be applied consistently to all issues. A board member noted the inconsistency in defining Channel One: "If we're going to call this curriculum, and that's what I've been told—I want to try to stay non-contradictory here. . ." After much debate over the nature of Channel One, the same board member responded, "I have a concern again that different

standards are applied depending upon the discussion." Consistency is also required in terms of rule enforcement. For example, several members of the community argue that if commercialism is the basis for banning Channel One from the classroom, then those same standards should be applied to other commercial materials in education:

If you are going to be worrying about [commercialism in the classroom] you better get every newspaper, and every magazine out of every classroom and out of every library. You better strip down the walls of your lockers, of your PE rooms, and your lounges. You better not say "yes" to a computer company who wants to give you computers. . . 'cause you're gonna have to use their computers.

A teacher from the community also pointed out the inconsistency in rule enforcement: "Are we going to then say that textbook companies cannot make a profit? That Pepsi can't sell to our campus and make a profit?"

Money is an acceptable trade-off for principle. Monetary concerns are another determining factor for curriculum. A board member provides a rationalization for the use of Channel One in the classroom: "Two minutes of daily advertising is not an ethical violation of communication standards. . . there is an acceptable trade-off here in that our kids are benefiting." The technology gained as a result of showing Channel One in schools is the main factor in the district's decision to allow commercialism in the classroom.

This is explicitly stated in the *Channel One Resolution*:

The Overfelt community has determined that we, as a district, cannot afford to acquire television equipment for our classrooms; that therefore we are allowing commercial television interests to market and target our students during hours in which they are required by state law to be in school and the classroom, in exchange for the right to continue to use televideo equipment which we cannot afford to acquire on our own.

Although a majority of the board members oppose the use of commercial television in the classroom, they yield to the community's desire to keep Channel One. The compromise, as stated in the *Channel One Resolution*, at the same time reveals the disapproval of the Board of Trustees in keeping Channel One: "The public should know that the majority [of the board members] will continue to support efforts statewide. . . to permanently ban the bartering of mandatory commercial classroom time for materials and equipment." So although the Board of Trustees disapproves of the use of Channel One as a matter of principle, the community's desire for technology (fed by the lack of finances) ultimately proves to be an acceptable trade-off.

Power To Determine Curriculum

The assumptions within this category relate to the ideas of the community as to who has the power to make curricular decisions. The following are several assumptions that comprise the different levels of decision- making authority.

The state government has ultimate authority. The *Channel One Resolution* and the Board of Trustees support the idea of state mandated rules to govern curriculum. The *Channel One Resolution* calls for the State Department of Education to have the right to approve Channel One according to its guidelines for curriculum. One board member responded to a question with "if it's acceptable to do that based on the educational standard of this state, then that's all right with me." In response to the community's plea for keeping Channel One at Overfelt High School, one board member explained:

We're not saying, "We don't want [Channel One] in the classroom." We're saying "It's time for the state or for the district to look at that curriculum and get some approval for it." Is it appropriate? That's what [the *Channel One Resolution*] is saying.

In addition, the district superintendent contributed to the discussion of a proposed technology plan by advising the Board of Trustees to "make sure that we are in compliance with whatever state and federal regulations we might have been in violation of."

The Board of Trustees has more authority than the local community.

The power of the Board of Trustees is revealed by the assertiveness of its members at several points during the meeting. For example, one board member prefaced the meeting with a specific purpose: "Today this Board meets to rethink how we can restructure our educational system program." Not only do the members of the Board of Trustees view themselves as having the power to restructure the system, but they also express their ultimate decision-making authority: "This [meeting] is an opportunity for people to participate at some depth on the issue before the Board conclusively decided." In addition, the members of the Board of Trustees view their decisions as effecting everyone in the community. The president of the Board of Trustees warned the other members to take careful consideration in their decision regarding Channel One:

It is up to this Board to make a decision whether we're going to have confidence in our teachers and our students and in our parents to work together to provide a better educational opportunity for our students, or whether we're going to nip it in the bud for whatever reason we find is necessary to do.

The local community has power over the Board of Trustees and the state and federal governments. There is a strong belief among the community that curricular decisions should be made at the local level. One teacher remarked, "I think ultimately the source of our standards and our values is the community." The assumption of local autonomy is based on site-based

management, which is, according to one community member, "based on the people that you as a board have put in those positions to lead." So although the community acknowledges the power of the Board of Trustees, they also believe that the local leadership (e. g., principals, administrators, teachers) has ultimate authority within their own school site:

Right now, we have legislators in Southern California, some distant politician in Beverly Hills proposing to say that they know better what works for our kids than you—than we do. The concept of site-based management and local control should work away from Sacramento and it should work here at Overfelt, too.

Members of the community believe they have authority over the Board of Trustees in some cases. For example, one citizen suggested: "As a Board, I think you need to listen to the community. They're the voters. They're the taxpayers." In one sense the community acknowledges the power of the Board of Trustees to take away Channel One. However, community members assert their own power indirectly by calling attention to the Board's obligation to serve the community. One member of the community stated: "Be our representatives. Don't take away what has worked."

Assumptions About Power In The Classroom

As Figure 9 reveals, there are several assumptions within the East Side community that reveal the struggle for power in the classroom. I address in the following three assumptions pertaining to the issues of capitalism, democracy, and authority within the Channel One classroom.

The classroom should not be a marketplace. Although the idea of commercialism is acceptable to the community at large, the concept of "selling" classroom time to advertisers is problematic. One community

Figure 9. Dominant assumptions about power in the classroom

The Classroom Should Not Be A Marketplace

The Classroom Should Resemble A Democracy

Administrators Should Monitor Classroom Activity

member stated, "Somebody could walk away with pocketfuls of money, you know, exploiting our classroom situation." In a proposal to establish a long range technology plan for the district, the *Channel One Resolution* suggests that schools "rely exclusively on district resources and traditional public-private partnerships which do not depend on using the coercive powers of the State to turn our classrooms into a marketplace for commercial advertising interests."

The classroom should resemble a democracy. The classroom should be conducive to equal opportunity and freedom of choice. The Board of Trustees has worked hard "to accommodate these individual teachers and students who do not wish to view Channel One." This equality of opportunity is explicitly stated in the *Channel One Resolution*:

Students who have opted not to subject themselves to the advertising/televideo barter involving the Whittle contract shall have access to these classrooms, equipment and instructional materials during what would otherwise be Whittle classroom time in order to provide them equal opportunity.

Given equal opportunity, students should have the freedom to choose, particularly in the case of Channel One. One teacher expressed concern that educators and administrators are taking away students' freedom to choose:

"Are we serving [the students] as surrogate parents here? Making moral, philosophical decisions about how these kids should have certain things, like you have to deal with certain things?" In support of the students' ability to make choices concerning Channel One, one member of the community added that students make the same type of choices everyday:

If the problem is the commercials themselves, and the kids being, uh, subjected or exposed to those commercials, I'd only like to comment that we're talking about teenage kids here who are subjected to commercials every single day by choice.

According to the East Side community, a democratic classroom environment is a place where students should be given the opportunity to be exposed to a variety of curricula, and make their own choices based on that exposure.

Administrators should monitor classroom activity. There emerges an expectation from the community that administrators will monitor what occurs in the classroom. One parent commented, "We believe that [the Board of Trustees] will challenge new [teaching] methodologies." Another concerned parent stated, "We believe that you will . . . monitor things that are going to affect our children. I compliment you on that. I think this is healthy." The members of the Board of Trustees also express the assumption that the activities within the classroom, particularly those related to the use of Channel One, should be monitored by an administrator: "It shall be the responsibility of the site principal to ensure that these requirements [pertaining to the *Channel One Resolution*] are met."

Assumptions About The Role Of The Teacher

The discourse reveals several assumptions pertaining to the role of the teacher. This section outlines a set of assumptions about the teacher's role as

technician, trainer, and of equal status as administrator (see Figure 10).

Figure 10. Dominant assumptions about the role of the teacher

The Teacher Is A Technician

The Teacher Is A Trainer

Teachers And Administrators Are Equals

The teacher is a technician. Although several teachers expressed their concerns at this meeting, a majority of them identified their primary role as that of a parent within the community. One teacher did express her views of the program, identifying her role as one who works directly with Channel One and with the students:

As a teacher at Overfelt. . . I am in favor of Channel One. I work with it, I record the programs, I distribute the programs. Being the librarian, I push the buttons and I see the reactions of the students.

The teacher's description emphasizes the technical aspects of her role as a teacher and presenter of Channel One and excludes what happens after she "pushes the buttons" and "sees the reactions of the students." The technical role of the teacher is reinforced by a comment from the president of the Board of Trustees: "[Technology] would allow our teachers to program within their classroom their own educational format." Although teachers have the autonomy to choose their own classroom "format," their role is still portrayed as one of a programmer. Ironically, the teacher's role has become more technical, and the technology is looked upon as more humanistic. For example, one student enjoys the way Channel One "teaches": "CNN may be a great program but does it offer the same programs? Does it offer the same

one-on-one teaching as Channel One does?"

The teacher is a trainer. The teacher also serves as a trainer of students. One rationale for the use of Channel One is the opportunity for teachers to "work with students and train them to be critical, constructive consumers." The purpose of the teacher is not only to train students, but to instill in them "the proper perspective and viewpoint." According to one board member, the district should require teachers to "conduct training sessions with students so they understand the mentality, or uh, understand the concept of captured audiences in terms of advertising." The community views the teacher as one who instills practical skills in students.

Teachers and administrators are equals. When the district is praised by the community for its educational achievement, teachers and administrators are considered of equal importance. Overfelt High School received national and state honors and it happened in part because of "dedicated teachers and administrators that did put that extra effort out." In addition, teachers are considered equally ambitious and accomplished as administrators within the district. One community member commented, "This school district is very fortunate. It has some of the most respected and forward-thinking teachers and administrators to be found anywhere in this valley." One speaker prefaced his remarks to the Board of Trustees by saying, "I think you are fortunate to have the caliber of people teaching and administering in this district that you have." In terms of educational accomplishment, teachers and administrators are considered equals.

Assumptions About The Use of Talk In Education

Although the discourse did not reveal much information about language or the power of language, the members of the East Side community talked a lot about talk itself. This section describes the aspects of meta-talk that emerge from the discourse and also the community's views of dialogue as a part of the educational decision-making process (see Figure 11).

Figure 11. Dominant assumptions about the use of talk in education

Dialogue Is An Important Part of Decision-Making

There Are Rules For Dialogue

Participation In Dialogue Is Sanctioned By Board Members

At Some Point Issues Are Closed For Discussion

The Voice Of The Community Has Not Been Heard

The Board Has Listened Sufficiently To The Community

Dialogue is an important part of decision-making. A consensus exists among members of the community that dialogue is essential to making decisions about educational issues. There is a "spirit of discussion" that is communicated by the board members to the community that emphasizes the need for the community's voice in the decision-making process: "Please do not just sit in the audience during this discussion. Please step to the microphone and say something about this. . . . I'm intensely curious." The stated purpose of the meeting, according to one board member, is for the purpose of open dialogue: "I ask that. . . we bring [Channel One] back to a public discussion. . . . I just felt that we needed to come back to a public discussion on the issue." Dialogue with the community appears to be a way

for the Board of Trustees to resolve issues. A board member explains: "Basically the thrust of my thinking at the moment is to keep the debate open because I think there are still a lot of issues that are unresolved." The community is in agreement with the Board of Trustees on the issue of discussion. One member of the community echoes the idea of open dialogue as an essential part of the decision-making process: "I say it's healthy that we debate these issues." There is agreement in the community in terms of the importance of dialogue. This is reflected in the way its members talk about communication.

Participation in dialogue is sanctioned by board members. The participation of the community in the discussion about Channel One requires approval by the Board of Trustees. As a matter of formality, each person who desires to speak must request approval from the Board. For example, a person must fill out a pink sheet that asks for the speaker's name and occupation. The speakers are then called forward by the president of the Board of Trustees in a specific order and are allotted three minutes in which to express their views. The president of the Board reiterated the instructions: "For those of you who have arrived late, if you do wish to address the Board, you do need to fill out those little pink sheets. Thank you." In addition, only certain issues are discussed at these board meetings. If a community member wants a particular issue addressed, it must be "agendized" prior to the meeting through the Board of Trustees. Channel One came to be the topic of this particular meeting because one of the board members "asked that we properly agendize the item and bring it in again, for public discussion." The community is then given notice of the meeting. On the issue of Channel

One, the members of the Board feel they have accommodated the community more than what is required: "We've given sufficient notice I believe. We went out to Overfelt once, we went out to Andrew Hill. It's been in the newspaper. It was announced today. There were notices mailed out."

During the meeting, the members of the Board of Trustees are guided by its president through a series of formal procedures. Limits are imposed upon the meeting according to the discretion of the Board: "If you've had discussions at your school sites [about Channel One] and if you have something new to add to the conversation and think it might help. . . . Otherwise, we're going to wind up listening to everyone in the audience." Although the community's voice is requested at public meetings such as this one, there are restrictions placed upon their participation.

At some point issues are closed for discussion. The Board of Trustees expresses the concern that issues will not be resolved in a timely manner because of the desire for continued discussion: "I'm concerned about resurrecting issues, time and time again. . . . At some point [the Board has to say] the decision has been made." Another member of the board echoes this concern and assures the others that this will not be a problem: "No, I don't see that just because people are still wanting to debate [the issue of Channel One], that we bring it back and/or hash it again." Yet another board member expresses the need for clarification on this issue:

I just wanted to clarify that this won't, that what I was hearing is not the philosophy that things can be brought back as long as there are all these people out there in the community that, that need to hear more. That we just can't do that.

Although the issues need to be debated, the Board of Trustees also notes that at times it may be necessary to enforce closure upon issues that cannot be

easily or quickly resolved.

In summary, this chapter has presented a few of the dominant assumptions about issues related to those outlined in the six research subquestions: the purpose of education, the nature of knowledge and learning, curriculum and how it is established, power in the classroom, the role of the teacher, and the use of talk in education. The construction of these assumptions is grounded in the discursive features presented in Chapter Four and the additional textual elements that emerged as a result of the first phase of analysis. From this chapter, some of the dominant controversies relating to Channel One in the classroom have surfaced. Chapter Six moves from this interpretive phase to the critical phase of the discourse analysis. In the next chapter I continue the process of reconstructing the discourse, only on a more abstract and critical level. I illustrate the dialectical tensions and contradictions that underline the dominant assumptions discussed in this chapter and present a critical analysis of these emergent educational controversies.

CHAPTER SIX

DIALOGICAL TENSIONS WITHIN THE TEXT

Moving from the levels of description and interpretation as presented in Chapters Four and Five, the present chapter comprises the critical phase of this discourse analysis. Revealed in this chapter are underlying tensions and contradictions between the dominant assumptions presented in Chapter Five. In this chapter, I discuss five areas that emerge as controversial: the educational value of Channel One, education and democracy, education and business, technology in education, and dialogue and decision-making.¹

The Value of Channel One

The educational value of Channel One emerges as uncontested at this particular meeting. In addition, the assumptions that undergird its use are filled with discursive tensions (see Figure 12). Channel One is described as providing educational "opportunity." Yet this opportunity is defined exclusively in the technical sense: students get a "hands on" feel for technology and that teacher has the opportunity to work with technology. The primary role of the teacher is that of technician—administering Channel One programming to the students. In this case, Channel One is considered a useful pedagogical "tool" for teachers to use in training students and programming classroom formats. Problems arise, however, when technology becomes the focus of teaching and is considered the primary source of

¹ Reader's Note: In each of the figures within this chapter, the shaded circle represents the main assumption central to the discussion. The ovals indicate distinctive features that emerged from the discourse during the first phase of the analysis (Chapter 4). The rectangles represent dominant assumptions that were derived from an analysis of the discursive features comprising phase two of the analysis (Chapter Five). A solid line indicates a positive or non-problematic relationship. A solid zig-zag indicates a contradictory relationship, and a broken zig-zag indicates a potentially problematic relationship.

Figure 12. The existing tensions related to the value of Channel One

classroom curriculum. For example, many students consider Channel One to be "one on one" teaching. This form of teaching implies that the teacher interacts and adjusts according to the learner, which is not possible with programming such as Channel One. A standardized television program broadcast to millions of students nationwide is purported to be an adequate replacement for the craft-like nature of teaching. Since there is a lack of emphasis in the community discourse about if and how the live teacher makes the Channel One broadcasts meaningful for the students, it is assumed that knowledge, experience, and credibility are attributed by the community to outside media sources rather than the live teacher. From this perspective of knowledge, a form of learning emerges that is passive—watching television and accumulating knowledge (e. g., news "facts" or current events), rather than active—questioning and discussing what information is presented in Channel One. In addition, students learn more than just the fragmented information presented on the program (e. g., the capitol of Bosnia). Students also learn that important information will be served to them daily through an electronic box plugged into the wall. Even more dangerous is the assumption that the information presented via television in the classroom is complete and accurate in news segments of three to four minutes in length. Absent from the discourse on Channel One is how the program is presented to students and what the teacher's purpose and/or responsibilities are. The assumed educational value of Channel One is based on its high technical "quality" that pertains to aspects of production, dissemination, and utility of the programming and equipment. Since the motivation for receiving Channel One is grounded in technique (i.e., to get five hundred television

channels, to use televisions as computers), the program is thought of as a useful "tool." This implies, however, that educators can control the use of technology and therefore use it solely to advantage. The potential danger of this way of thinking is that although we as humans think we are controlling technology, at the same time we are relying heavily upon it to supply our lives with information, skills, and convenience. Although humans may be able to control technology to a certain degree, it is dangerous (and inaccurate) to view technology solely in terms of "opportunity."

Education And Democracy

Another assumption within this body of discourse that resonates is the idea that education should resemble a democracy. Based on the principles of democracy, students should graduate from high school with the ability to critique social, political, and economic institutions. Furthermore, students must first know how to participate knowledgeably in society in order to change it. Channel One is considered by the East Side Union High School District community as a potential means by which to spark student interest in thinking critically. The way the program is currently being used, however, suggests the occurrence of a different form of learning. As shown in Figure 13, several underlying assumptions directly contradict this democratic ideal. For example, the community believes that all students should have an equal opportunity to view (or not to view) Channel One. Although students are seen as having a voice in determining curriculum, in reality there exists competition for control of classroom time. Not only do businesses want a "slice" of the school day, but state educational leaders, local administrators and teachers are all competing for classroom time as well. So although it

Figure 13. The underlying tensions of education and democracy.

appears on the surface that students have a choice in terms of curriculum, there are other voices that override theirs. In addition, the school district accounts for each minute of classroom time, thus creating an "administrator's nightmare" in terms of accommodating the students that choose not to view Channel One. Administrators in turn must compensate for the twelve minutes of instruction by providing those students who do not view the program with an additional twelve minutes of instruction. Although education is looked upon ideally as a democracy, educators and administrators exhibit a willingness to sacrifice this democratic model of education for a more cost-efficient, capitalistic model of education.

Another assumption related to democracy that pervades the discourse is community involvement. Although the active participation of citizens in community affairs is encouraged, the community feels that education and politics should be separate. Yet, the members of the community are in effect participating in educational decision-making—itsself an influence on policy and therefore a political process. Another democratic ideal that emerges from the discourse is equality among community members. For example, teachers and administrators are praised equally. Both are mentioned simultaneously in regards to educational achievement, yet this equality is contradicted by the favoritism shown towards administrators by members of the Board of Trustees. Although it is the teacher who works closely with Channel One and witnesses the reactions of the students, and the potential problems associated with the program; however, it is the voice and opinion of the administrator that the Board deems as vital to this discussion. Most surprising were the teachers in the audience that signed up to speak. Instead of asserting

authority as teachers with knowledge and experience on the issue of Channel One, these teachers asserted their rights as concerned parents within the East Side community. One can assume from this set of tensions that teaching and learning are not the primary concern when it comes to making a decision about Channel One in the classroom.

In addition to the qualities of equal opportunity, community involvement, and equality of voice, another democratic theme found in the discourse is cultural diversity. The population of the East Side community is composed of students and educators from a variety of cultural and ethnic backgrounds. Not only does the community feel this diversity should be acknowledged, but also that educators should work towards tailoring an education to the specific needs of this population. The tension surfaces not around the challenge this presents to educators, but rather at the primary purpose for educating students: to provide a work force. In a democracy, the power (and choice) is vested in the people and exercised indirectly through a system of representation. Therefore, if students are educated primarily to become part of the work force, many choices have already been made for them before they even enter the classroom. The importance is placed on the economy, rather than on the individual interests of the student. Schooling therefore becomes focused on supplying students with the skills they will presumably need to compete and survive in the workforce. Furthermore, since Overfelt High School, in addition to receiving Channel One, is a Magnet school in advertising and marketing and "Mega Tech," students are more likely to learn about the processes of commercialism and competition. Most students within the East Side Union High School District are provided with

information about college. However, the message aimed at students states that whether directly from high school or college, a graduate's ultimate contribution to society will be in terms of the economy. A "good" education is therefore limited to one that emphasizes technical skills such as computer literacy, for example. Intellectual skills such as critical thinking and oral communication are marginalized while school districts operate in a factory-like manner—employing technological capital to produce skilled workers.

Education And Business

Within the discourse of the East Side community resides a business code. Business is looked upon as the model for education. Five supporting assumptions are linked to the existing "partnership" between education and business: Business and education should be partners, schools should generate their own profits, commercialism should be used pedagogically, students should be viewed as clients, and educators should be viewed as business leaders (see Figure 14).

Like many schools today, the East Side community has formed a "partnership" with the business sector of society. However, the term *partnership* is misleading in this case. The term implies that both members cooperate and have joint rights and responsibilities. A closer look at the partnership between Whittle Communications and The East Side Union High School District reveals inequality among education and business. For example, Whittle is said to provide equipment and programming "free" to Overfelt High School. However, the term *free* is used in a misleading way. The cost of Channel One to educators is the requirement that students watch

Figure 14. The underlying tensions between education and business.

the commercials on Channel One at least ninety percent of the time.¹ The question that emerges from this is: Is this education-business partnership beneficial to both parties? Educators in the East Side community view school partnerships with business as beneficial. In fact, schools desire to follow the example set by businesses by generating their own profits through the production of "educational" programs and supplying their own commercial sponsors. Educators rationalize the commercialization of schools by saying the ends justify the means, since the money stays within the school district. Yet if school districts generate their own profits, this directly violates their partnership with business; education has thus become a competitor of business.

The East Side community believes that commercialism should be used as a teaching methodology. This belief is based on the assumption that since commercialism is the foundation of the United States (e. g., capitalism), students should therefore learn to use it to their advantage—following the example set by Whittle Communications and Channel One in the classroom. Although teaching students about commercialism and how to make a profit is viewed as a positive thing, the East Side community also expresses the belief that the classroom should not be a marketplace for commercial interests. A tension exists in that if commercialism is used within the educational arena and students are learning something from it—it is a positive thing. However, when an outside source profits at the expense of education, commercialism is a negative thing. What are students learning from this pedagogy of commercialism? The message created by this

¹ This mandatory clause was a part of the initial Whittle contract with the East Side Union High School District. It has since been omitted from the contract.

inconsistency is that students should assess worthwhile causes according to how they themselves benefit. After all, teaching students about commercialism involves the teaching of market competition. Students learn that to be successful in society, they must compete with others. A sense of competition may drive some students to do their best and become actively involved. However, too much competition may stunt the intellectual growth of a student and prevent him or her from developing the sense of community and concern for the common good that is vital to upholding a democracy. Ultimately, educators have the responsibility to question that which is good for business—is it also good for education? Are students learning that the best method of accomplishment is that which "makes a buck" or puts the individual ahead of everyone else in society? Although a business metaphor may be useful in examining some aspects of the schooling process, serious implications arise when the metaphor is extended to the teaching and learning processes.

The East Side community also view schools as places where educators are business leaders and students are clients. The concept of a student clientele signifies an ongoing relationship (as compared to a short-term customer service relationship) and the emphasis is placed upon the individual needs of that particular client. This harmonizes with other educational goals, such as tailoring education to a culturally diverse student population, for example. However, the term *client* also has the connotation of a person that relies on the professional services or advice of another. This dependency of the student (client) upon the educator (business leader) is potentially problematic in the sense that in the business world, the decisions ultimately rest on what

will be most profitable for the company. Therefore, the needs of the individual client are at best secondary to economical concerns. Furthermore, the student-as-client relationship implies that top priority is satisfying the client is top priority, rather than focusing on subject matter or curriculum. In this sense, the client indirectly competes with external factors that are out of his or her control (i. e., profit making, budgetary concerns, political wars). It is suggested that educators re-examine the language used to express such educational philosophy.

Managing schools in a similar way to business may be beneficial in terms of cost-efficiency—in an era where there are limited resources available to educators. Although education and business may share similar concerns (i. e., budgetary concerns, political wars), an underlying tension surfaces when "education as a business" is taken as more than just a metaphor. It is potentially disastrous when educational institutions focus on making a profit rather than developing students' knowledge. The code of business reveals a blurring together of the institutions of education and business. The result is an ideal of "education-for-profit" that is potentially disastrous—especially when a parent asserts, "our own kids should profiteer." It is unlikely that the parent intended that students should make an unreasonable profit at the expense of others in need (as the traditional meaning of the word suggests); her probable meaning was that schools have the potential to be self-sufficient rather than relying solely on businesses for technological and financial needs. The latter meaning contradicts the initial assumption that business and education should be partners.

From these examples emerge the idea that educators should closely examine the language they use to describe the goals and purposes of education. Terms that have been borrowed from the business world (e. g., *partnership, commercialism, profiteer*) have lost their original meaning. As a result, it is unclear what the goals, responsibilities, rewards, and potential problems are in the relationship between business and education.

Technology In Education

Another major educational controversy that emerges from the discourse of the East Side community is the uncontested use of technology in education. This is illustrated by the debate over the purpose of Channel One programming. For example, some members of the community consider Channel One to be curriculum, while others view it as merely a supplement to curriculum. Clearly these two definitions directly contradict one another. Less obvious, however, are the underlying tensions related to knowledge, learning, and curriculum (see Figure 15).

The idea that Channel One programming is curriculum complies with the community's definition of curriculum: fragmented knowledge that exists in some sort of framework. For example, the news programming on Channel One is divided into short segments of news stories, or current events. On a wider scale, the classroom is the "framework" for the fragmented curriculum (e. g., history, social studies, English). In addition, the school day is something to be divided up into instructional minutes which are filled with subject matter. It appears that learning is determined by students receiving the discrete bits of information and retaining them in their memory. The idea that Channel One is a supplement rather than a curriculum is also reflective

Figure 15. The underlying tensions of technology in education

of this fragmented view of learning. Channel One transports curriculum from across the world and into the classroom. The major tension here is the claim made by those in the East Side community that Channel One can transform passive students into active learners. The programming itself is inherently a passive medium: students view the program for the purpose of absorbing information. Active learning, on the other hand, involves the student as well as the teacher interacting with one another and with Channel One. Curiously absent from the discourse is talk about the teacher's role as it relates to learning and Channel One. In addition, the concept of *peer learning* as used by members of the Board of Trustees does not refer to collaborative learning in which students interact with one another, as the educational definition suggests. Just as education has adopted a business code, business has co-opted peer learning from education and uses it as a marketing strategy. For example, *peer learning* in this context refers to the teenage news correspondents on Channel One serving as role models for student viewers. Both definitions of Channel One operate on the assumption that learning is a linear, one-way, process of obtaining knowledge from an outside source. The interest in Channel One is primarily technical. In other words, how students receive knowledge (via state-of-the-art technology), receives more attention than what the students are actually "absorbing." The motives behind the use of Channel One as a supplement are questionable. If the program is considered curriculum, by definition it is subject to the state educational code. However, if it is considered a supplement, then it is not subject to state standards. Since Channel One is viewed by the community as "high quality," then why would the community disagree with handling the program as

curriculum?

As revealed in Figure 15, the assumptions that undergird the use of Channel One are divided in terms of product versus process. The end result (product) of using Channel One in the classroom is the equipment received and consequently the money saved by the district. However, potential problems arise when money is considered an acceptable trade-off for principle. For example, although a majority of the Board of Trustees firmly objects to the use of commercial television in the classroom, they nonetheless sacrifice principle for money at the demand of the community. This compromise is openly stated in the *Channel One Resolution* (see Appendix A):

[We are] allowing commercial television interests to market and target our students during hours in which they are required by state law to be in school and in the classroom, in exchange for the right to continue to use televideo equipment which we cannot afford to acquire on our own; (p. 2)

As this portion of the *Resolution* illustrates, not only is money an acceptable trade-off for principle, but the trade-off is legitimized by supplying written disclaimers (e. g., a note sent home to parents, a clause in a contract). Monetary rewards (as opposed to intellectual enrichment) emerge from the discourse as the primary motivator for using Channel One programming. An opportunity exists for educators to obtain fiber optic technology, which would then allow students to use televisions as computers, and allow the district to have a communications link with each school campus. In addition, parents will be able to "attend" meetings via electronic mail without coming to the school. As these examples illustrate, the community is not concerned about the implications of using technology in education, but rather how to

obtain the equipment itself.

Another assumption related to the use of technology in education is that education should be "innovative." The concept of innovation generally refers to the introduction of something new, such as an idea, method, or device. However, in the context of Channel One, innovation does not refer to pedagogy, but rather to equipment (e. g., televisions, video recorders) such as that provided through Channel One. As the literature review in Chapter Two suggests, television is neither "high tech" nor innovative. In essence, Channel One is not innovative instructional technology, but rather an innovative marketing strategy. In addition to the belief that education should be innovative, is the assumption that the learning process should be exciting and entertaining for students. A tension that emerges is best expressed by one critic's view of technology in the classroom: "a candy-coated presentation, multimedia is guaranteed to sour them on unsweetened reading. It makes the printed page look even more boring than it used to look" (Gelernter, 1994, p. 6).

Affordability is another criterion for technology in education. In the context of Channel One, affordability refers to monetary rewards and pedagogical approach. The school district cannot afford technology. It also cannot afford to turn away innovative methods of instruction. The assumption that curriculum should be "affordable" is potentially problematic because innovative methods of instruction are assumed to be directly linked with state-of-the-art technological devices—which cost money. The unchecked desire for newer technologies fuels the use of technology and increases the production of such equipment. It is generally much easier for

the teacher to turn on a television or a computer and have students "interact" with equipment than for teachers to interact with students. In addition, in order for educators to achieve their fundamental goal of preparing students for the workforce, students must have the technical skills associated with "computer literacy." Absent from the community discourse, however, is that students must also possess oral communication skills and the ability to interact with others in order to obtain employment initially. This requires the teacher to facilitate interaction among students in the classroom, which is not an easy task. In terms of educational priorities, the funding is directed more towards technological innovation than pedagogical innovation (i. e., teacher education). Computers and television sets may be "user-friendly" and thus help students to achieve job skills, but ultimately it is the live teacher that has the ability (and responsibility) to help students develop their voices as participants in a democratic society.

Dialogue And Decision Making

The East Side community views dialogue as an important part of educational decision-making. However, several underlying tensions emerge from this body of discourse (see Figure 16). The importance of dialogue is indicated by the community's development of its own rules for communicating. For example, in order to establish credibility, a speaker identifies the specific roles that link him or her to the rest of the community (i. e., "I am a parent, teacher, and voter"). In addition, there must be "mutual respect" among the members of the community. Furthermore, everyone in the community must listen to one another. The tensions emerge when the community interprets the actions of the Board of Trustees as a violation of

Figure 16. The underlying tensions of dialogue and decision making

the unwritten rules for communication: the community feels that the members of the Board of Trustees are not listening to them. Contrary to this assumption, however, is the belief that the members of the Board of Trustees have listened sufficiently to the community. As one board member states, "We have listened to all the pros and cons, and we have heard and heard and heard and heard." This supports the Board's initial statement that the community's voice plays an important role in discussions regarding Channel One. However, certain voices within the community are valued more highly than others. For example, although teachers and administrators are praised equally in their roles, it is administrators that are asked to share their expertise and "wisdom" about Channel One. One board member called forward administrators by name and asked them to give their opinions of Channel One. In addition, the *Channel One Resolution* states that administrators are responsible for monitoring classroom activity in terms of what is happening with *Channel One* broadcasts. In this case, the teacher's voice is silenced. After all, it is the teacher who experiences directly what occurs in the Channel One classroom. Yet, administrators have the authority to override their decisions with regards to Channel One.

Although discussion and debate are encouraged, there is a point where issues should not be brought back for discussion. At the beginning of this meeting, there was much dialogue about why Channel One had been brought back again for discussion (there were many meetings prior to this one). So although dialogue and participation are encouraged ("let's keep the debate open"), there is a point where issues are closed for discussion. There appears a shift in the power structure of the East Side Union High School District.

Despite the demands of the community to hear more about the issue, the Board of Trustees has established its authority to determine what items merit discussion and whether these issues are "properly agendized." Even though the community is invited to participate in the discussion, there are sanctions that they must comply with. For example, in order to address the members of the Board of Trustees, speakers must fill out pink sheets that indicate their name, occupation, and the issue they would like to address. The speaker must also wait until the president of the Board of Trustees calls him or her forward to speak. Community members are then allotted exactly three minutes to express their views. So although the board members verbally express that they value the judgment of the community (e. g., "we need the wisdom of the community," "that carries a lot of weight for me," "I'm interested in what we all have to say"), a contradictory and more subtle message prevails—one that contains and controls the voice of the community.

A Summary of Tensions

Taken together, these five tensions illustrate the complexity of the underlying issues related to communication, education, and technology that have emerged from this discourse analysis of the Channel One controversy. The uncontested use of technology has permeated the educational and business institutions in the United States. The Channel One controversy serves as one example of this. Nearly twenty years have passed since two college students formed what has since become the marketing empire, Whittle Communications. Yet the corporation is currently on the verge of

bankruptcy.¹ Although it is reported that Chris Whittle will remain chairperson of The Educational Network, losses in profits and revenue over the past two years have forced him to shut down many of his other formerly successful projects, such as *Special Reports* (the magazine for doctors' waiting rooms). In a comment to the press Chris Whittle stated: "[Place-based marketing] has succeeded in supermarkets and schools. I'm convinced that it will succeed in health, although not with us" (p. 7). A similar remark was made by a board member of the East Side Union School District: "We have a curriculum that is being advanced by Whittle. And it's not just going to be left to Whittle. In the future it's going to be with other companies." As reflected by these two statements—one from business, and the other from education—it appears as if the partnership between education and business will continue.

As schools approach the twenty-first century, new ideas of how to educate youth are emerging as non-educators (private firms) are hired to operate public schools. Instead of educators leading schools down the paths to knowledge, managers and financial experts are leading students down the aisles of supermarkets, in what one school board official calls, "a new look at how we are delivering services to kids" (Jordan, 1993, p. 5). Commercialism has now become both the practice and the pedagogy in education. As a result, students have access to state-of-the-art technologies; yet, at the same time they are learning the values associated with commercialism, materialism, competition, and technological determinism. Students also learn that what is

¹ Whittle Communications is reportedly in the process of being sold to K-III Communications Corporation, run by leverage buyout specialists Kohlberg, Kravis, Roberts, & Co, for three hundred million dollars (Gannett News Service, 1994b).

important is not the quality of knowledge generated within the classroom, but rather the quantity of knowledge received, and the quality of the technology that transmits it. In the case of Channel One, technical interests are favored over intellectual ones. Therefore, questions of how to use technology are asked in place of ones that question why we use technology in the first place. Perhaps most detrimental is the lack of authority and credibility among teachers who are the ones who spend the most time with students (and Channel One). Suprisingly, the topic of teachers and how they teach was not discussed in this body of educational discourse. By not acknowledging the teacher, school officials are not only promoting the de-skilling of teachers, but they are also throwing away the key to understanding the use and influence of Channel One (and other instructional technologies) in education.

The language used by those in the fields of business and education has been co-opted. Furthermore, the words have become distorted such that the meanings of the words *partnership*, *profiteering*, *commercialism*, and *peer learning* seem to be unclear even to those who use them. Such ambiguity makes it difficult to address important issues and controversies related to societal institutions, such as business and education. It is suggested that educational leaders discuss separately the concerns of the East Side Union High School District and Whittle Communications. On a macro-level, it is suggested that educators examine closely their relationships with business, especially since school administrators more than ever are turning to (and are being approached by) the business sector for technological support. It is potentially disastrous when teachers are judged according to their technical

skills, or when the quality of learning that occurs in the classroom is judged according to the technology it contains. In the meantime, the full effect of the costs and benefits of the education and business "partnership" remain to be seen.

Clearly this study has raised more questions than it has answers. The most intriguing aspects of Channel One are not the fragmented bits of information comprising the program itself, but rather the questions raised about the assumptions, beliefs, and arguments that undergird the use of Channel One programming in schools. By discussing the underlying meanings related to the purpose and value of Channel One in education, the program itself may become more meaningful for all those involved.

CHAPTER SEVEN

CONCLUSION

Curriculum is Latin for race. In ancient Rome it also referred to a race track; a curricule was a two horse racing chariot and a courser was a sleek, spirited horse. The root meanings of our educational vehicles derive from racing. Would it not be wise then, before building superhighways for higher tech chariots, to ask where we are going, who's driving, what we win, why we're running? (Glickman, 1994, p. 23)

The focus of this study has been the point at which communication, education, and technology intersect. This study has shown how humans use language to express and shape their reality, specifically within the context of the use of technology in education. As the first chapter of this study has revealed, Channel One news programming has been the topic of educational controversy for more than five years. The debate has centered around the two minutes of commercial advertising that is interspersed throughout ten minutes of news or current events. In exchange for "state-of-the-art" in video technology, Whittle Communications requires students to view the commercials. This student-for-technology barter has raised numerous questions and concerns related to the uncontested value of technology in education. In this sense, the Channel One controversy has served as a microcosm of the larger issues involved in the uses of technology in education. Yet as Chapter Two reveals, technology is a relatively new field of study and is constantly evolving. In addition, much of the research on instructional technology, including Channel One, has been approached using mainly quantitative methods (such as experimental design, for example). This study has approached instructional technology from an interpretive view of knowledge as a human creation that occurs through dialogical

interaction, rather than a passive view of knowledge that situates humans as receivers of information. Through the method of critical discourse analysis, this study has elicited from a naturally occurring body of discourse some of the larger controversies that currently face the educational system in the United States. A few of these controversies presented in Chapter Six pertain to the educational value of Channel One, democracy in education, business-education partnerships, the content and process of determining classroom curriculum, and participation and dialogue in educational decision-making. This concluding chapter discusses the implications, limitations, applications of this study, and presents suggestions for future research.

Limitations of This Study

Previous descriptive studies of Channel One have provided scholars with a useful knowledge base for understanding Channel One in the classroom. This critical-interpretive study has added to the research base a speech communication perspective—one that reinforces the importance and power of language and social interaction in determining a community's rules and norms—more specifically, the East Side community. Along with this insight, there are several limitations to this study that will be discussed in the following section.

In terms of methodology, it was relatively impossible for me to capture and express the spirit of this live communication setting. In many ways the spoken words were overridden by the spirit and presence of the community. For example, paralinguistic cues related to joking, teasing, and sarcasm all contributed to the meanings behind this board meeting. Yet for the purposes of this study, these aspects were not addressed. In addition, the physical

characteristics of the board room (the placing of the chairs, the position of the Board in relation to the community members) itself revealed important information about power within the community. Furthermore, the composition and interaction of the audience were significant (e. g., most of the principals within the district congregated in one area). Contextual issues such as these could have been addressed and perhaps have generated more insight into the speakers' intentions.

In addition, I was unable to address all of the interesting discursive features that emerged in the descriptive phase of the analysis. For example, the board members frequently teased one another in regards to their roles and relationships to the community. There appeared to be a strong sense of camaraderie among the board members and the community. In addition, speakers tended to set up hypothetical situations in an attempt to illustrate their views. I would also have liked to address the narrative accounts of the speakers. For example, community members often engaged in storytelling and personal accounts related to Channel One. The richness of this data raised more questions than answers. In response to this, I outline in the following section some specific suggestions for future research.

Suggestions For Future Research

As speakers, not only are we required to understand language, but also to understand how language works within specific contexts. Although the language used to discuss Channel One has been the focus of this study, more research is needed into the relationship between business and education. For example, what do the words *commercialism* and *profiteering* mean to educators? Scholars could conduct both face-to-face and focus group

interviews with members of the East Side community and ask questions about these and other ambiguous terms that emerged from this study. Did interlocutors convey what they intended to convey? What would they have added or taken away from their speech had they had more time to speak or if they could go back and recreate the meeting? Not only would this provide insight into their use of language, but it would also provide additional discourse (data) on the meanings ascribed to the business-education "partnerships."

Ethnographic research combined with survey research would bring valuable insight as to how teachers present Channel One to their students. For example, what materials, if any, do they use? Do teachers use the supplemental materials supplied by Whittle Communications in presenting Channel One? If not, how do the instructional materials supplied by Whittle differ from the teachers' own curriculum in terms of content and method? Additional questions emerge regarding how Channel One is integrated into the classroom conversation. How does student involvement in other activities during a Channel One broadcast influence their viewing of the program? One suggestion for further research on Channel One is adapted from Beck's (1994) ethnographic study of interactional achievement and consequences of talking back to television. Scholars could observe Channel One viewers, not only at how they talk about the news programming and commercials, but also their talk that is "rhetorically directed" to the television set (p. 4).

Another question that emerged from this study of Channel One programming is: If the use of Channel One programming in the classroom

teaches students a hidden curriculum that promotes fragmentation of knowledge, economic competitiveness, and technological determinism, then what do its counterparts, The Educator's Channel and The Classroom Channel teach educators about pedagogy? A rich source of insight could be generated by focus group interviews involving teachers's discussion of Whittle's curriculum materials and their own approaches to presenting Channel One in the classroom.

Pedagogical Applications

All teaching is political. Both the pedagogy and content of a class are shaped—consciously or not— by visions of the kind of society one is attempting to create, or recreate. (Bigelow, 1988, p. 4)

As revealed by the discourse about the incorporation of technology into the classroom, the teacher's role is paramount to this process. The full participation of teachers is required if this transition is to be successful, meaning that all members of the community benefit in some way by the use of technology in the classroom. After all, it is the teacher that the student sees everyday—not the principal or the members of the Board of Trustees. This section of the chapter presents several teaching ideas that have emerged from this study of *Channel One*. These applications stem from the results of this study as well as the methodological framework employed in the process. These ideas relate specifically to Channel One as the curriculum for study, dialogical learning, and the use of critical discourse analysis in the classroom.

Channel One As The Curriculum For Study

It is generally agreed upon among educators that teaching students to think critically about all aspects of society is vital. Yet an attitude exists that views mass media and popular culture as non-academic subjects that take

time away from the "real" curriculum. I suggest that questions about Channel One and other learning technologies not only be allowed in the classroom, but are promoted. If contractual obligations prohibit such discussion, then these contractual obligations themselves should be subject to discussion. One idea is for teachers to construct their own supplement guide to Channel One (a "counter curriculum") that consists of critical questions and problem-posing ideas that can be used after each broadcast to stimulate discussion among students. The discursive themes and clusters as well as the seven subquestions from this study are suggestive of issues that can be used as a springboard to problem-posing and discussions related to Channel One and technology in general. Perhaps teachers might expose students first to an auditory version of Channel One and then the video, and compare the two broadcasts in terms of news content, visual content, and the different interpretations related to each viewing. The concept of commercialism can play an integral role in class discussion, in terms of analyzing the packaging of products as well as the "packaging" of ideology that accompanies it. How would students evaluate Channel One if they were the teacher? Would they think it is useful? How would they present it to their class? Another idea would be to divide the class into small groups and ask each group to select a particular news or advertising segment from a Channel One broadcast. The group must then research the accuracy of the presentation by consulting a variety of alternative news/consumer sources, and employ critical thinking skills to determine not only what the program is saying, but what it is not saying. The final phase would be the groups' hypothesis on the inclusion and exclusion of selected information in terms of the Channel One broadcast.

Dialogical Learning

The results of this study indicate that dialogue is fundamental to educational decision-making as well as to the establishment of a community. The ideas elicited from the discourse of the East Side Union High School District Board meeting can be applied to a classroom context. Just as decision-making power is negotiated among the community and its educational leaders, teachers can foster a sense of orality and critical thinking among students. This entails the student constructing logical arguments and being able to effectively communicate his or her ideas and beliefs. A starting point for classroom discussion, for example, can be drawn from the dialectical tension of orality and literacy. Related to the issue of Channel One and technology, one question might be "How has technology changed the way we communicate with one another?" "What would you do if you had to spend a month without writing anything down or keeping a written record? How would this change your actions? How would this change your way of thinking?" This wholistic approach is expressed by one educator: "Just as musicians must get beyond technical mastery of their instruments, students have to get beyond facts and categorization. They have to learn to feel the harmony of the whole" (Glickman, 1994, p. 26).

Critical Discourse Analysis in the Classroom

In terms of methodology, critical discourse analysis is a meaningful way for teacher and students to generate knowledge within the classroom context. For example, a critical discourse analysis of a Channel One broadcast could generate much discussion in terms of what is included and excluded in the news programming as well as the language that is used to report world

events. Issues that have gone unaddressed include the source of curriculum in the classroom. Who writes the news stories on Channel One? How does the technology get into the classroom? Who provides it? Why are the advertisements on Channel One for those specific products? How are the Channel One commercials different than those viewed at home? Other learning technologies such as multimedia and hypermedia can be the focus of critical discourse analysis.

Implications of This Research

As this study suggests, the uncontested use of technology, and more specifically Channel One, in our daily lives has far reaching implications both for how we think and for how we communicate with one another. The following are implications of this study in the specific areas of communication, education, and technology.

Implications For Communication

This meeting on Channel One has drawn attention to the process of communication in terms of educational decision-making. Although written forms of documentation, such as the *Channel One Resolution* serve as records and artifacts, it is ultimately the orality and immediacy of personal testimony and expressed judgment that influence educators and administrators. In this sense language is powerful. The discourse of the East Side community hints at the importance of orality in educational decision-making. The members of the community are viewed as having an equal voice in decision-making; however as the previous chapter has revealed, there are underlying factors that discourage participation in discussion. One possible explanation is the mixture of speaking genres, or styles of speech, that

comprise the board meeting. The members of the Board of Trustees are lined up in a panel that directly faces the audience. Theoretically, everyone in the audience has the opportunity to speak; however, the speaker must fill out slips of paper, the president of the Board must call the speaker forward, and trustees may interrupt the speaker at any time. Because of these constraints imposed upon the discourse, it is unclear whether the meeting elicits an accurate representation of the diversity of voices within the community. For example, non-native speakers may be intimidated at the idea of formally addressing the Board of Trustees in front of other community members. In addition, the debate is centered around a specific language code (e. g., the code of business), it is likely that other groups will be alienated from the discussion. It is through this segregation of discourse that dominant groups maintain power (van Dijk, 1993). In this sense, the genre, setting, and tone of the speaking situation should reflect the diversity of speaking styles that comprise a community.¹

There appears to be a power struggle over the control of communication. The question arises: At what point are decisions conclusive and therefore closed for discussion? In addition, who gets to decide when issues are closed for discussion? Although the concepts of time, turn-taking, and agendizing are constraints that are imposed upon discourse (and are necessary evils), it is suggested that we as critical communication scholars ask, What constraints *can* be changed? What re-prioritizing can be done within such constraints? It would be beneficial for all members within the community to learn to be

¹ It should be noted by the reader that the Board of Trustees attempted to create different forums for discussion in this series of meetings on Channel One. For example, the meeting prior to this one was organized around small discussion/focus groups. However, because of low attendance, the meeting was conducted as a large discussion group.

competent communicators, and to develop the ability to adapt to any situation that requires them to express their viewpoint in brief and concise ways.

The discourse of the East Side community reveals the importance of orality in educational decision-making. The importance of oral communication skills is noticeably absent in the discussion of curricular issues, however. Emphasis is placed upon teaching students technical skills, such as computer literacy, for example. During the meeting a high school senior nervously stepped to the microphone to voice his support for Channel One. Appearing shy, stuttering, and lacking confidence, he stated, " I might not be eloquent. I know that. But I'm tryin." Although the members of the Board of Trustees and the audience were visibly touched by this young man's display of conviction and humility, his words carried little weight in terms of convincing leaders to keep Channel One in the classroom. According to the discourse of the community, the purpose of education is to prepare students to enter the workforce; yet how can students lacking in oral communication skills compete in the workforce? In contrast, the discourse also reveals that education should resemble a democracy. Yet how can students who graduate from high school without learning oral communication skills (or the importance thereof) function as useful citizens? The board meeting exemplifies the type of speaking situations and community involvement that require public speaking skills. Those who do not possess the skills will be more than hesitant to express their views. On the other hand, those who are able to express their views more coherently and effectively will be more likely to participate and get involved in the community.

Implications For Education

Although the learning technologies have become more sophisticated and innovative in the 1990s as compared to the 1890s, little has changed in terms of educational purpose. A mechanistic and efficiency-oriented view of schooling continues to exist in the United States. The economy has become an even greater influence on education, as manifested by the increasing number of business-education partnerships. Although a surface glance reveals this relationship to be potentially beneficial to both parties, competition (the opposite of partnership) is what ties the two together. The fostering of competitiveness in schools has the potential to do harm to those students that have developed different learning styles. For example, televised learning is viewed as the transmission of messages via the teacher (or television) and the accumulation of knowledge (by the student) in the context of Channel One. A student who learns by getting actively involved, rather than by watching, may not learn from instructional technologies such as Channel One. In addition, if students are tested on the information using objective exams, these students will most likely do poorly. It is suggested that the assessment of learning from technology incorporate the ability to ask meaningful questions and to discuss issues that require a higher level of thinking than simple recall of factual information.

Implications For Technology

This body of discourse presents the view that technology should be accountable for educating students. In addition, more technology will enable the United States to compete in the global marketplace—a primary concern of educators today. More technology in turn requires students to learn more

technical skills. Meanwhile, technology continues to change and evolve, making it increasingly difficult for humans to establish a clear understanding of how such technologies should be used and to what end. Moreover, the question arises: Who is held accountable for technology? If technology continues to be looked upon as just another educational "tool" that can be controlled with each specific task, then educators are ultimately responsible for how it is used. If technology continues to be viewed from the perspective of technology itself, then pertinent issues such as those revealed in this study will remain addressed. Therefore, I suggest that in addition to teaching students technical skills, educators also foster students' intellectual curiosity by encouraging them to ask critical questions about technology and the ideologies associated with it. On a wider scale, this study suggests that scholars question the types of learning that are achieved through the use of instructional technologies. For example: Is interactive multimedia conducive to interactive learning? How is the term *interactive* defined within these two separate contexts? What are the implications of using computer video (pictures and images) instead of books (written language) to teach? How is learning influenced by multimedia (the combination of text, sound, and images)? In terms of Channel One, there appears no definite answer to the question of whether the programming and technology that comes with it are harmful or valuable to education. However, with further research in the fields of communication, education, and particularly technology, the dialogue about Channel One and other instructional technologies will continue. Furthermore, with more critically based scholarship in these areas, instructional technology might someday be talked

about as a way of thinking and speaking, and not just as a black box plugged into the wall.

References

- Action for Children's Television. (1990, March 5). ACT's Hall of Fame Award to CNN Newsroom. (Press Release).
- Adams, D. M., & Hamm, M. (1987). Electronic learning: Issues and teaching ideas for educational computing, television, and visual literacy. Springfield, IL: Charles C. Thomas.
- Adams, S. (1991, November). Whittle Communications and Channel One: Rhetorical strategies of innovation. Paper presented at the annual meeting of the Speech Communication Association, Atlanta, GA.
- Aden, R. C. (1991, October). Teaching critical consumption of television through analysis of self-reflexive programming. Communication Education, 40(4), 401-406.
- Agger, B. (1985). The dialectic of deindustrialization: An essay on advanced capitalism. In J. Forester (Ed.), Critical theory and public life (pp. 3-21). Cambridge, MA: The MIT Press.
- Ahlin, J. (1990, September 23). Channel One: Fargo North student protest teaches all of us a lesson. The Forum, p. 5.
- American Association of School Administrators (AASA). (1990, March). AASA Position on Whittle Communications' Channel One. The School Administrator, 47(3), 16.
- Apple, M. W. (1986). Teachers and texts. New York: Routledge and Kegan Paul.
- Apple, M. W. (1990). Ideology and curriculum (2nd ed.). New York: Routledge.
- Apple, M. W. (1992). Channel One invades schools. Rethinking Schools, 6(4), 12-13.
- Aratani, L. (1994, May 13). Sunnyvale education may hit TV. San Jose Mercury News, p. 1, 24.
- Armsey, J. W., & Dahl, N. C. (1973). An inquiry into the uses of instructional technology. New York: The Ford Foundation.

- Armstrong, L., Yang, D. J., & Cuneo, A. (1994, February 28). Special Report: The learning revolution: Technology is reshaping education—at home and at school. Business Week, pp. 80-88.
- Arnheim, R. (1974). Virtues and vices of the visual media. The seventy-third yearbook of the National Society for the study of education (pp. 180-210). Chicago: National Society for the Study of Education.
- Association for Educational Communications and Technology (AECT). (1979). The definition of educational technology. Washington, D. C.: Association for Educational Communications and Technology.
- Axelrod, S. (1992). The education crisis: Issues, perspectives, solutions. Journal of Applied Behavioral Analysis, 25(1), 31-35.
- Bachen, C. M. (1991, May). Tuning into Channel One: TV news comes into the classroom. Paper presented at the annual meeting of the International Communication Association, Chicago, IL.
- Baker, R. K., & Ball, S. J. (1969). Mass media and violence: Staff report to the National Commission on the Causes and Prevention of Violence, (Vol. 9). Washington, D. C.: United States Government Printing Office.
- Bakhtin, M. M. (1981). The dialogic imagination (C. Emerson & M. Holquist Trans.). Austin: University of Texas Press.
- Bandura, A. (1971). Psychological modeling: Conflicting theories. Chicago: Aldine-Atherton.
- Bandura, A., & Walters, R. H. (1963). Social learning and personality development. New York: Holt, Rinehart, & Winston.
- Barr, D. (1989). Computers cannot replace teachers. In H. Holz, I. Marcus, J. Dougherty, J. Michaels, & R. Peduzzi (Eds.), Education and the American dream (pp. 63-69). New York: Bergin & Garvey.
- Barrow, L. C., & Westley, B. H. (1959a). Comparative teaching effectiveness of radio and television. AV Communication Review, 7(1), 14-23.
- Barrow, L. C., & Westley, B. H. (1959b). Intelligence and the effectiveness of radio and television. AV Communication Review, 7(3), 193-208.

- Barry, A. M. (1991). Channel One: Controversial partnership of business and education. Unpublished manuscript, Boston College, Department of Communications and Theater.
- Beck, C. S. (1994, February). Talking back to television: The interactional achievement and consequences of marking the television as "recipient" of "questions" during joint television viewing. Paper presented at the annual meeting of the Western Speech Communication Association, San Jose, CA.
- Bell, T. H. (1964). "Shoestring" television. In R. M. Diamond (Ed.), A guide to instructional television (pp. 87-91). New York: McGraw-Hill Book Company.
- Bernstein, B. (1977). Class, codes, and control: Volume 3. London: Routledge.
- Besnard, G. G., Briggs, L. J., Mursch, G. A., & Walker, E. S. (1957, June). Development of the subject-matter trainer. Washington, D. C.: Air Force Personnel and Training Research Center.
- Beyer, L. E., & Apple, M. W. (1988). The curriculum: Problems, politics, and possibilities (pp. 98-115). New York: State University of New York Press.
- Bigelow, B. (1988, October/November). A new kind of classroom: Critical pedagogy in action. Rethinking schools, 3(1), 4-5.
- Bloom, A. (1987). The closing of the American mind. New York: Simon & Schuster.
- Brown, R. C., Jr. (1964). Evaluation of instructional television. In R. M. Diamond (Ed.), A guide to instructional television (pp. 163-171). New York: McGraw-Hill Book Company.
- Brown, G. I., & Hodgkinson, H. L. (1958). A note concerning: *An application of recent developments in psychology to the teaching of German* by C. B. Ferster & S. M. Sapon. Harvard Educational Review, 28, 156-157.
- Brummett, B., & Duncan, M. C. (1992, September). Toward a discursive ontology of media. Critical Studies in Mass Communication, 9(3), 229-249.

- Bruner, J. S. (1986). Actual minds, possible worlds. Cambridge: Harvard University Press.
- Burton, D. (1980). Dialogue and discourse: A sociolinguistic approach to modern drama dialogue and naturally occurring conversation. London: Routledge & Kegan Paul.
- California Teachers Association (CTA). (1992, September). Channel One gets an "F." Chalk Talk, 4(1), 1-2.
- Callahan, R. E. (1962). Education and the cult of efficiency. Chicago: University of Chicago Press.
- Carlin, T., Quiñones, Z., & Yonker, R. (1992). The perception of the educational value of Channel One among secondary level teachers and students. Washington, D. C.: Proceedings of the annual meeting of the Association for Educational Communications and Technology.
- Carlson, D. L. (1988). Curriculum planning and the state: The dynamics of control in education. In L. E. Beyer, & M. W. Apple (Eds.), The curriculum: Problems, politics, and possibilities (pp. 98-115). New York: State University of New York Press.
- Carnegie Commission on Educational Television (1967). Public television: A program for action. New York: Harper & Row.
- Chaffin, W. W. (1992). Students' motivation in choosing classes with televised instructional delivery. Psychological Reports, 71(3), 1105-1106.
- Chamorro, E., Jr. (1990, April 19). Overfelt letter to parents. San Jose, CA: W. C. Overfelt High School, Office of the Principal.
- Chamorro, E., Jr. (1992, October 21). Memorandum: Clarification for students who may opt not to view Channel One. San Jose, CA: W. C. Overfelt High School, Office of the Principal.
- Chase, D. (1989, March 20). Kids give Channel One thumbs up. Advertising Age, p. 64.
- Chen, M., & Marsh, W. (1989). Belying the myths about instructional television. Education Digest, 55(4), 61-64.

- Chu, G. C., & Schramm, W. (1967). Learning from television: What the research says. Washington: National Association of Educational Broadcasters.
- Clark, C. C. (1972). Race, identification, and television violence. In G. A. Comstock, E. A. Rubinstein, & J. P. Murray (Eds.), Television and social behavior volume 5, television's effects: Further explorations. Washington, D. C.: United States Government Printing Office.
- Clinton links education, jobs. (1994, February 23). San Jose Mercury News, p. 2.
- Cole, J. Y. (Ed.). (1978). Television, the book, and the classroom. Washington, D. C.: Library of Congress.
- Coleman, R. R. (1964). Television in the art class. In R. M. Diamond (Ed.), A guide to instructional television (pp. 21-30). New York: McGraw Hill Book Company.
- Collins, E. C., & Green, J. L. (1990). Metaphors: The construction of a perspective. Theory Into Practice, 29(2), 71-77.
- Comstock, G. A., Rubinstein, E. A., & Murray, J. P. (Eds.). (1972). Television and social behavior volume 5, Television's effects: Further explorations. Washington, D. C.: United States Government Printing Office.
- Considine, D. M. (1990, December). Media literacy: Can we get there from here? Educational Technology, 30, 27-32.
- Cook, J. O. (1960). Research in audio-visual communication. In J. Ball & F. C. Byrnes (Eds.), Research, principles, and practices in visual communication (pp. 91-106). East Lansing: Michigan State University National Project in Agricultural Communications.
- Cortese, D. (1993, August 19). Channel One Resolution. Document presented at a meeting of the East Side Union High School District Board of Trustees, San Jose, CA.
- Coulthard, M. (1985). Introduction to discourse analysis. London: Longman.
- Cuban, L. (1986). Teachers and machines: The classroom use of technology since 1920. New York: Teachers College Press.

- Cuban, L. (1993, November 14). Listen to the teachers. San Jose Mercury News, p. 1, 5.
- Davies, I. K. (1978). Educational technology: Archetypes, paradigms, and models. In J. Hartley, I. K. Davies (Eds.), Contributions to an educational technology: Volume 2 (pp. 9-24). London: Kogan Page.
- DePalma, A. (1992, June 25). Judge rejects school TV with ads: An advisory ruling assails commercials. New York Times, 141, 8.
- DeVaney, A. (Ed.). (1994). Watching Channel One: The convergence of students, technology, and private business. Albany: State University of New York Press.
- Dickmeyer, N. (1989). Metaphor, model, and theory in education research. Teachers College Record, 91(2), 151-160.
- Doll, W. E., Jr. (1993). A post-modern perspective on curriculum. New York: Teachers College Press.
- Donaton, S. (1992, August 17). Whittle wrestles to control his four-headed Hydra. Advertising Age, 63(33), 32-34.
- Drabman, R. S., & Thomas, M. H. (1974). Does media violence increase children's toleration of real-life aggression? Developmental Psychology, 10, 418-421.
- Dubin, R., & Hedley, R. (1969). The medium may be related to the message: College instruction by TV. Eugene, OR: University of Oregon Press.
- Duva, J. S., & Lumsdaine, A. A. (1956, March). The influence of image quality on the teaching effectiveness of the kinescope. Unpublished HFORL Report. United States Air Force Human Factors Operations Research Labs, Washington, D. C.
- Eble, K. W. (1976). The craft of teaching. San Francisco: Jossey-Bass Publishers.
- Ehman, L. H. (1991, November). Using Channel One in social studies classrooms: A first look. Paper presented at the annual meeting of the National Council for the Social Studies, Washington, D. C.

- Ellul, J. (1964). The technological society. New York: Knopf.
- Ellul, J. (1980). The technological system. New York: Continuum.
- Endres, K. L., Endres, F. F., & Miles, T. (1991, August). Whittle's Channel One and CNN's Newsroom: A systematic pilot study of teen-oriented news content. Paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Boston, MA.
- Erickson, C. G. (1964). The administrator, educational problems, and instructional television. In R. M. Diamond (Ed.), A guide to instructional television (pp. 172-179). New York: McGraw-Hill Book Company.
- Ferster, C. B., & Sapon, S. M. (1958). An application of recent developments in psychology to the teaching of German. Harvard Educational Review, 28, 58-69.
- Finn, J. D. (1972). Automation and education: Technology and the instructional process. In R. J. McBeath (Ed.), Extending education through technology: Selected writings by James D. Finn on instructional technology (pp. 141-160). Washington, D. C.: Association for Educational Communications and Technology.
- Finn, C. E. (1989). A nation still at risk. Commentary, 87, 17-23.
- Fitzgerald, M. (1992, May 16). Classroom TV has negligible effect: Study examines Whittle Communications' Channel One. Editor & Publisher, 125(20), 20-21.
- Forbes, N. E., & Lonner, W. J. (1980). The sociocultural and cognitive effects of commercial television on previously television-naïve rural Alaskan children. Final Report the National Science Foundation (Grant No. BNS-78-25687).
- Fosnot, C. T. (1984). Media and technology in education: A constructivist view. Educational Communications and Technology Journal, 32(4), 195-205.
- Foucault, M. (1972). The archaeology of knowledge (A. M. Sheridan Smith Trans.). New York: Pantheon Books.
- Foucault, M. (1981). Power/knowledge: Selected interviews and other writings, 1972-1977. Brighton, UK: Harvester Press.

- Freire, P. (1973). Education for critical consciousness (M. B. Ramos. Trans.). New York: Continuum.
- Gadamer, H. G. (1975). Truth and method (G. Barden & J. Cumming, Trans.). London: Sheed & Ward.
- Gage, N. L. (Ed.). (1963). Paradigms for research on teaching. Handbook of research on teaching. Chicago: The American Educational Research Association.
- Gage, N. L. (1989). The paradigm wars and their aftermath: A "historical" sketch of research on teaching since 1989. Educational Researcher, 18, 4-10.
- Galanter, E. H. (Ed.). (1959). Automatic teaching: The state of the art. New York: Wiley.
- Gale, G. O. (1958). Teaching of physics by film and television. New York: American Institute of Physics.
- The Gallup study of attitudes toward Channel One. (1989, May). Princeton, NJ: Gallop Organizations, Inc.
- Gannett News Service. (1994a, February 7). Students more informed with Channel One, report says. San Jose Mercury News, p. 2C.
- Gannett News Service. (1994b, August 16). Whittle's empire splintered. San Jose Mercury News, p. 1D.
- Geertz, C. (1973). The interpretation of cultures. New York: Basic Books.
- Gelernter, D. (1994, September 4). Computers do more harm than good in classrooms. San Jose Mercury News, p. 6.
- George, R. G. (1991). Technology and teaching methodology. Contemporary Education, 63(1), 62-64.
- Gerbner, G. (1974). Teacher image in mass culture: Symbolic functions of the hidden curriculum. In D. R. Olson (Ed.), The seventy-third yearbook of the National Society for the Study of Education (pp. 470-497). Chicago: National Society for the Study of Education.

- Gerbner, G. (1981). Education for the age of television. In M. E. Ploghoft, & J. A. Anderson (Eds.), Education for the television age (pp. 173-178). Athens, OH: The Cooperative Center for Social Science Education.
- Gilder, G. (1992). Life after television. New York: Norton & Company.
- Gilman, D. A. (1991). This issue. . . . Contemporary Education, 63(1), 5.
- Giroux, H. A., & McLaren, P. (1986). Teacher education and the politics of engagement: The case for democratic schooling. Harvard Educational Review, 56(3), 213-238.
- Glickman, W. (1994). How do we help our students to be human? Rethinking Schools, 8(4), pp. 23, 26.
- Goodlad, J. (1984). A place called school: Prospects for the future. New York: McGraw-Hill.
- Goodman, J. (1988). The disenfranchisement of elementary teachers and strategies for resistance. Journal of Curriculum and Supervision, 3(3), 201-220.
- Gorn, G. J., Goldberg, M. E., & Kanungo, R. N. (1976). The role of educational television in changing the intergroup attitudes of children. Child Development, 47(1), 277-280.
- Gramsci, A. (1971). Selections from prison notebooks. New York: International Publications.
- Graves, B. (1990a, March). Classrooms tune in! TV offers vast spectrum of programs to teach public affairs. The School Administrator, 47(3), 8-15.
- Graves, B. (1990b, September 18). Students tune in to TV program. The Oregonian.
- Greenberg, B. S., & Brand, J. E. (1993). Television news and advertising in schools: The Channel One controversy. Journal of Communication, 43(1), 143-151.
- Greene, M. (1984). How do we think about our craft? Teachers College Record, 86(1), 55-67.

- Greenwood, V. (1994, February). Instructional communication: Bridging the gap between education and technology. Paper presented at the annual meeting of the Western Speech Communication Association, San Jose, CA.
- Gropper, G. L., & Lumsdaine, A. A. (1961). The use of student response to improve televised instruction: An overview (Report No. AIR-C13-61-FR-245) Pittsburgh, PA: American Institute for Research.
- Gross, L. (1974). Modes of communication and the acquisition of symbolic competence. In D. R. Olson (Ed.), The seventy-third yearbook of the National Society for the Study of Education (pp. 56-80). Chicago: National Society for the Study of Education.
- Habermas, J. (1971). Knowledge and human interests (J. J. Shapiro, Trans.). Boston: Beacon Press.
- Haigh, G. (1990). The age of TV. Times Educational Supplement, 3878, p. 10.
- Hall, W. H. (1936). A study of three methods of teaching science with classroom films. School Science Mathematics, 26, 968-973.
- Hammer, J. (1990). A golden boy's toughest sell. Newsweek, 115(8), 52-53.
- Haney, J. M. (1989, November). TV 101: Good broadcast journalism for the classroom? Paper presented at the annual meeting of the Speech Communication Association, San Francisco, CA.
- Hassur, R. L. (1964). Television in large-group science instruction. In R. M. Diamond (Ed.), A guide to instructional television (pp. 31-41). New York: McGraw-Hill Book Company.
- Haynes, W. L. (1988). Of that which we cannot write: Some notes on the phenomenology of media. Quarterly Journal of Speech, 74(1), 92-99.
- Heinich, R. (1984). The proper study of instructional technology. Educational Communications and Technology Journal, 32(2), 67-88.
- Held, D. (1980). Introduction to critical theory: Horkheimer to Habermas. Berkeley: University of California Press.
- The Heller Report on Educational Technology. (1993). Highland Park, IL: Nelson B. Heller.

- Henneberger, M. (1993, September 7). Technology helps retarded communicate: Research could bring new world to mentally disabled people. San Jose Mercury News, p. 3C.
- Herrera, J. M. (1993a, May 30). On or off, Channel One tunes into morality. San Jose Mercury News, p. 7C.
- Herrera, J. M. (1993b, June 3). Channel One—Whittle Communications. Unpublished document.
- Himmelweit, H. T., Oppenheim, A. N., & Vince, P. (1958). Television and the child. London: Oxford University Press.
- Hirsch, E. D. (1987). Cultural literacy: What every American needs to know. Boston: Houghton Mifflin.
- Hlebowitsh, P. S. (1990). The teacher technician: Causes and consequences. The Journal of Educational Thought, 24(3), 147-160.
- Hobbs, R. (1991). Television and the shaping of cognitive skills. In A. M. Olson, S. Parr, & D. Parr (Eds.), Video icons and values (pp. 33-44). Albany: State University of New York Press.
- Hollenbert, S. (1989, March 9). High schoolers like controversial new TV news program at its debut. Californian, p. 10.
- Holmes, P. D., Jr. (1959). Television research in the teaching-learning process. Detroit, MI: Wayne State University.
- Holmes, P. D., Jr., & Lynch, J. E. (1967). Research: Methods, trends, ideas. In K. Brooks (Ed.), The communicative arts and sciences of speech (pp. 411-429). Columbus, OH: Charles E. Merrill Books, Inc.
- Hovland, C. I., Lumsdaine, A. A., & Sheffield, F. D. (1949). Experiments on mass communication. Princeton, NJ: Princeton University Press.
- Hymes, D. (1974). Foundations in sociolinguistics: An ethnographic approach. Philadelphia: University of Pennsylvania Press.
- Is the classroom for blackboards or billboards? (1989, May). Consumer Reports, p. 286.

- Jackson, P. (1968). Life in classrooms. New York: Holt, Rinehart, & Winston.
- Jackson, P., & Kieslar, S. B. (1977). Fundamental research and education. Educational Researcher, 6, 13-18.
- Jacobs, J. N., & Bollenbacher, J. (1959). Experimental study in teaching high school biology by television in the Cincinnati public schools. Science Education, 43, 399-405.
- Johnston, J., & Brzezinski, E. J. (1992, April). Taking the measure of Channel One: The first year. Ann Arbor: University of Michigan Institute for Social Research.
- Jordan, M. (1993, November 5). Minneapolis hires firm to run schools. San Jose Mercury News, p. 5.
- Jorgensen-Earp, C. R., & Staton, A. Q. (1993, April). Student metaphors for the college freshman experience. Communication Education, 42(2), 123-141.
- Judge denies bid to close in-school TV program. (1992, September 10). New York Times, p. 19.
- Kaha, C. W. (1990). Learning environments for the twenty-first century. Educational Horizons, 69(1), 45-49.
- Kahane, E., & Oram, A. D. (1989). Where computers are taking us in the education field. In C. M. Shea, E. Kahane, & P. Sola (Eds.), The new servants of power: A critique of the 1980s school reform movement. New York: Praeger.
- Kaplan, D. A., Wingert, P., & Chideya, F. (1993, September 20). Dumber than we thought. Newsweek, 122(12), 44-45.
- Kelly, E. C. (1964). Television and the teaching of typing. In R. M. Diamond (Ed.), A guide to instructional television (pp. 7-11). New York: McGraw-Hill Book Company.
- Kemp, J. E. (1964). Television: Part of the answer. In R. M. Diamond (Ed.), A guide to instructional television (pp. 180-191). New York: McGraw-Hill Book Company.
- Kerr, S. T. (1990, November). Technology : Education :: Justice : Care, or thoughts on reading Carol Gilligan. Educational Technology, 30(11), 7-12.

- Kids' ad special raises some eyebrows of critics. (1992, February 10). Advertising Age, pp. 5-14.
- Kincheloe, J. L. (1993). Toward a critical politics of teacher thinking: Mapping the postmodern. Westport, CT: Bergin & Garvey.
- Kliebard, H. M. (1988). Fads, fashion, and rituals: The instability of curriculum change. In L. N. Tanner (Ed.), Critical issues in curriculum: Eighty-seventh yearbook of the National Society for the Study of Education (pp. 16-34). Chicago, IL: University of Chicago Press.
- Knirk, F. G., & Gustafson, K. L. (1986). Instructional technology: A systematic approach to education. New York: Holt, Rinehart, & Winston.
- Knupfer, N. N., DeVaney, A., Robinson, R., Muffoletto, R., Erdman, B., & Belland, J. (1993). The significance of the *Channel One* experiment: Report on the first year. Proceedings of the annual convention of the Association for Educational Communications & Technology. New Orleans, LA. (ERIC Document Reproduction Service No. ED 348 006)
- Kollasch, M. (1990). Switching channels: Using TV to teach about TV. Wilson Library Bulletin, 65(1), 66-68.
- Koury, R. (1994, July 31). Beam up the professor, avoid classroom crowds. San Jose Mercury News, p. 29.
- Kozol, J. (1992). Whittle and the privateers. The Nation, 255(8), 272-278.
- Krendl, K. A., & Watkins, B. (1983). Understanding television: An exploratory inquiry into the reconstruction of narrative content. Educational Communications and Technology Journal, 31(4), 201-212.
- Kromar, M. B. (1991). Channel One: The effects on middle school students of commercials and news in a classroom context. Philadelphia: University of Pennsylvania, Annenberg School for Communication.
- Kumata, H. (1956). An inventory of instructional television research. Ann Arbor, MI: Educational Television and Radio Center.
- Kumata, H. (1960). A decade of teaching by television. In W. Schramm (Ed.), The impact of educational television. Urbana: University of Illinois Press.

- Kurtz, E. B. (1959). Pioneering in educational television 1932-1939: A documentary presentation. Des Moines: State University of Iowa Press.
- Kurtzman, L. (1993, October 28). Report: Boost technology to help teach. San Jose Mercury News, p. 12.
- Lacy, J. V. (1919). The relative value of motion pictures as an educational agency. Teachers College Record, 20, 452-465.
- Lakoff, G., & Johnson, M. (1980). Metaphors we live by. Chicago: The University of Chicago Press.
- Landay, J. M. (1989, March). Battle for vidkids. Human Communication, 68, 61-68.
- Lather, P. (1986). Research as praxis. Harvard Educational Review, 56(3), 257-273.
- Lazar, M. M. (1993). Equalizing gender relations: A case of double-talk. Discourse & Society, 4(4), 443-465.
- Levinson, E. (1990). Will technology transform education or will the schools co-opt technology? Phi Delta Kappan, 72(2), 121-126.
- Lewis, R. B. (1962). TV, or not TV? That is the question. Teachers College Record, 63(7), 564-569.
- Lewis, T. (1991). Introducing technology into school curricula. Journal of Curriculum Studies, 23(2), 141-154.
- Liebert, R. M., Sprafkin, J. N., & Davidson, E. S. (1982). The early window: Effects of television on children and youth (2nd ed.). New York: Pergamon Press.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills: Sage Publications.
- Lumsdaine, A. A. (1959). Teaching machines and self-instructional materials. AV Communication Review, 7(3), 163-181.
- Lumsdaine, A. A. (1960). Instruments and media of instruction. In N. L. Gage (Ed.), Handbook of research on teaching (pp. 583-682). Chicago: The American Educational Research Association.

- Lumsdaine, A. A., Sulzer, R. L., & Kopstein, F. F. (1961). The effect of animation cues and repetition of examples on learning from an instructional film (HRRL Report No. 24). Washington, D. C.: United States Air Force Human Factors Research Lab.
- Maccoby, N., Michael, D. N., & Levine, S. (1961). Further studies of student participation procedures in film instruction: Review and preview covert practice, and motivational interactions (Report No. 24). Washington, D. C.: United States Air Force Human Factors Research Lab.
- Maccoby, N., & Sheffield, F. D. (1958). Theory and experimental research on the teaching of complex sequential procedures by alternate demonstration and practice. In G. Finch & F. Cameron (Eds.), Symposium on Air Force human engineering, personnel, and training research (Report No. 516). Washington, D. C.: National Academy of Sciences Research Council.
- Macomber, F. G., & Siegel, L. (1960). Final report of the experimental study in instructional procedures. Oxford, OH: Miami University.
- Mander, G. (1978). Four arguments for the elimination of television. New York: Morrow Quill.
- Mankiewicz, F., & Swerdlow, J. (1978). Remote control: Television and the manipulation of American life. New York: Ballantine Books.
- Marshall, H. H. (1990). Metaphor as an instructional tool in encouraging student teacher reflection. Theory Into Practice, 29(2), 128-132.
- May, M. A., & Lumsdaine, A. A. (1958). Learning from films. New Haven, CT: Yale University Press.
- McClure, A. H., & Peterman, J. N. (1956, January). Filmed instructions for marking machine-scored test forms (Report No. TARL-LN-56-7). Washington, D. C.: Air Force Personnel and Training Research Center, Training Aids Research Lab.
- McDonald, J. P. (1988). The emergence of the teacher's voice. Teachers College Record, 89(4), 471-486.
- Meadowcroft, J. M., & Reeves, B. (1989). Influence of story schema development on children's attention to television. Communication Research, 16(3), 352-374.

- Meehan, E. R. (1986, December). Conceptualizing culture as commodity: The problem of television. Critical Studies in Mass Communication, 3(4), 448-457.
- Midwest Council on Airborne Television Instruction (MCATI). (1961). Using television in the classroom. New York: McGraw-Hill Book Company.
- Miller, C. (1990, September 17). Marketing in the classroom raises a furor: Scholastic Inc. says a sound education must be a primary goal. Marketing News, p. 2.
- Mills, J. (1994, February 27). Tools for tots. San Jose Mercury News, p. 1C.
- Miner, B. (1992). A visit to a Channel One classroom. Rethinking Schools, 6(4), 13.
- Molnar, A. (1992). Fears about business involvement. Rethinking Schools, 7(1), 7.
- Moore, T. (1989, November 6). The bleeding of Chris Whittle. U. S. News & World Report, pp. 42-43.
- Morgan, M. (1993, October 13). Channel One in the public schools: Widening the gaps (A Research Report Prepared for UNPLUG). Amherst: University of Massachusetts, Department of Communication.
- Morgan, M., & Gross, L. (1980). Television viewing, IQ and academic achievement. Journal of Broadcasting, 24(2), 117-133.
- Morton, F. R. (1960). The language laboratory as a teaching machine. Ann Arbor: University of Michigan Language Laboratory.
- Mueller, B., & Wulfemeyer, K. T. (1992, August). Commercial speech and captive minds: Regulating advertising in public high schools. Paper presented at the Association for Education in Journalism and Mass Communication Conference, Montreal, Canada.
- Mumford, L. (1963). Technics and civilization. New York: Harcourt Brace Jovanovich. (Original work published in 1934).
- Murphy, J., & Gross, R. (1966). Learning by television. New York: Academy for Educational Development, Inc.

- Murray, R. (1964). The Schenectady approach: Using the educational station. In R. M. Diamond (Ed.), A guide to instructional television (pp. 92-107). New York: McGraw-Hill Book Company.
- Murray, J. P. (1980). Television and youth. Boys Town, NE: Boys Town Center for the Study of Youth Development.
- National Commission on Excellence in Education (1983). A nation at risk: The imperative for educational reform. Washington, D. C.: United States Government Printing Office.
- National Education Association. (1946, December). Audio-visual education in city school systems. Research Bulletin, 24, 131-170.
- National Education Association. (1993, April). Are we still a nation at risk? NEA Today, 11(8), 4-6.
- National School Public Relations Association. (1967). Education, U.S.A. special report: Technology in education. Washington, D. C.: National School Public Relations Association.
- Nelson, R., & Watras, J. (1981). The scientific movement: American education and the emergence of the technological society. Journal of Thought, 16(1), 49-72.
- Oliver, J. W. (1956). History of American technology. New York: The Ronald Press Company.
- Olson, D. R. (Ed.). (1974). Media and symbols: The forms of expression, communication, and education. The seventy-third yearbook of the National Society for the Study of Education (pp. 1-24). Chicago: University of Chicago Press.
- Owen, W. F. (1984). Interpretive themes in relational communication. Quarterly Journal of Speech, 70(3), 274-287.
- Palmer, P. (1991). The courage to teach. The National Teaching and Learning Forum, 1(2), 1-3.
- Payne, A. (1993, May 5). Parents want Channel One at Overfelt. San Jose Mercury News, p. 1.

- Pearce, W. B. (1989). Communication and the human condition. Carbondale: Southern Illinois University Press.
- Peckham, M. (1962). Beyond the tragic vision: The quest for identity in the nineteenth century. New York: Braziller.
- Philipsen, G. (1986). Mayor Daley's council speech: A cultural analysis. Quarterly Journal of Speech, 72(3), 247-260.
- Philipsen, G. (1992). Speaking culturally. New York: State University of New York Press.
- Pierce, C. M. (Ed.). (1978). Television and education. Beverly Hills, CA: Sage Publications.
- Pinar, W. F., & Reynolds, W. M. (Eds.). (1992). Introduction: Curriculum as text. Understanding curriculum as phenomenological and deconstructed text (pp. 1-14). New York: Teachers College Press.
- Ploghoft, M. E., & Anderson, J. A. (Eds.). (1981). Education for the television age: The proceedings of a national conference on the subject of children and television. Athens: Ohio University Cooperative Center for Social Science Education.
- Plotnikoff, D. (1994, May 17). The TV network. San Jose Mercury News, p. 1.
- Porter, D. A. (1959). Some effects of year long teaching machine instruction. In E. H. Galanter (Ed.), Automatic teaching: The state of the art (pp. 85-90). New York: Wiley.
- Posner, G. J. (1988). Models of curriculum planning. In L. E. Beyer, & M. W. Apple (Eds.), The curriculum: Problems, politics, and possibilities (pp. 77-97). New York: State University of New York Press.
- Postman, N. (1979). Teaching as a conserving activity. New York: Delacorte Press.
- Postman, N. (1985). Amusing ourselves to death. New York: Penguin Books.
- Postman, N. (1992). Technopoly. New York: Random House.

- Postman, N., & Weingartner, C. (1969). Teaching as a subversive activity. New York: Delacorte Press.
- President's Commission on National Goals. (1960). Goals for Americans: Report of the President's Commission on National Goals. New York: Columbia University, The American Assembly.
- Pressey, S. L. (1926). A simple apparatus which gives tests and scores—and teaches. School & Society, 23(586), 373-376.
- Pressey, S. L. (1927). A machine for automatic teaching of drill material. School & Society, 25(645), 549-552.
- Pressey, S. L. (1950). Development and appraisal of devices providing immediate automatic scoring of objective tests and concomitant self instruction. Journal of Psychology, 29, 417-447.
- Randall, E. S. (1962). What have we learned about foreign languages in the elementary school? Audiovisual Instruction, 7, 628.
- Reich, R. B. (1992). Business talks big, does little. Rethinking Schools, 7(1), 6.
- Richter, R. E. (1964). Television in the anatomy laboratory. In R. M. Diamond (Ed.), A guide to instructional television (pp. 12-20). New York: McGraw-Hill Book Company.
- Rist, M. (1989, September). Cashing in on kids. The American School Board Journal, 39, 20-24.
- Ritts, J. (1993, April 26). Letter to Principal Elias Chamorro, Jr. W. C. Overfelt High School. Knoxville, TN: Whittle Communications, Inc.
- Rossell, C. H., & Bachen, C. M. (1992). Advertising on Channel One: Are students a captive audience? Manuscript submitted for publication.
- Rothenberg, M. (1975). Effects of television violence on children and youth. Journal of the American Medical Association, 234, 1043-1046.
- Rudinow, J. (1990). Channel One whittles away at education. Educational Leadership, 47(4), 70-73.
- Ruling near on TV in school. (1992, September 3). New York Times, 141, p. 10.

- Saettler, P. (1968). A history of instructional technology. New York: McGraw-Hill Book Company.
- Salomon, G., & Leigh, T. (1984). Media effects on the young: Predispositions about learning from print and television. Journal of Communication, 34(2), 119-135.
- Salz, A. (1992). Brother, can you paradigm? Quantum mechanics and the first grade reading test. Theory Into Practice, 31(2), 107-115.
- Schiller, H. I. (1993, July 12). The information highway: Public way or private road? The Nation, 257(2), 64-66.
- Scholes, R. (1991). Power and pleasure in video texts. In A. M. Olson, C. Parr, & D. Parr (Eds.), Video icons and values (pp. 81-95). Albany: State University of New York Press.
- Schramm, W. (Ed.). (1962). Educational television: The next ten years. Stanford, CA: Institute for Communication Research.
- Schramm, W., Lyle, J., & Parker, E. (1961). Television in the lives of our children. Stanford, CA: Stanford University Press.
- Schwoch, J., White, M., & Reilly, S. (Eds.). (1992). Media knowledge: Readings in popular culture, pedagogy, and critical citizenship. Albany: State University of New York Press.
- Senate Committee on Labor and Human Resources. (1991). Channel One, Educational Television and Technology: A hearing on examining current educational television programming and to examine new technologies which could impact the future of educational television. Washington, D.C.: United States Government Printing Office. (ERIC Document Reproduction Service No. ED 341 374)
- Senate to use a TV hearing to get feedback. (1993, February 1). San Jose Mercury News, p. 3B.
- Shannon, C., & Weaver, W. (1949). The mathematical theory of communication. Chicago: University of Illinois Press.

- Shapley, B. (1991, May). Integrating mass media instruction: "Connecting" NIE and TV programs for the 21st century. Paper presented at the Conference on Newspapers in Education and Literacy, New Orleans, LA.
- Shettel, H. H., Faison, E. J., Roshal, S. M., & Lumsdaine, A. A. (1956). An experimental comparison of "live" and filmed lectures employing mobile training devices. AV Communication Review, 4, 216-222.
- Shor, I. (1992). Empowering education. Chicago, IL: University of Chicago Press.
- Sirotnik, K. A. (1988). What goes on in classrooms? In L. E. Beyer, & M. W. Apple (Eds.), The curriculum: Problems, politics, and possibilities (pp. 56-74). New York: State University of New York Press.
- Skinner, B. F. (1958). Teaching machines. Science, 128, 969-977.
- Slack, J. (1989). Contextualizing technology. In B. Dervin, L. Grossberg, B. J. O'Keefe, & E. Wartella (Eds.), Rethinking communication, Volume 2: Paradigm exemplars (pp. 329-345). Newbury Park, CA: Sage Publications.
- Solomon, J. (1993, August 16). Mr. Vision, meet Mr. Reality. Newsweek, 122(7), 62-65.
- Solomon, M. (1993, March). The things we study: Texts and their interactions. Communication Monographs, 60(1), 62-68.
- Sprague, J. (1992a). Expanding the research agenda for instructional communication: Raising some unasked questions. Communication Education, 41(1), 1-25.
- Sprague, J. (1992b). Critical perspectives on teacher empowerment. Communication Education, 41(2), 181-203.
- Spring, J. (1989). American education: An introduction to social and political aspects (4th ed.). New York: Longman.
- Sproule, J. M. (1989). Social responses to twentieth-century propaganda. In T. J. Smith, III (Ed.), Propaganda: A pluralistic perspective (pp. 5-22). New York: Praeger.

- Standards and guidelines to govern the advertising that will appear in Channel One, (undated). Whittle Communications Unpublished document.
- State of North Carolina v. Whittle Communications, 402 S. E. 2d 556 (N. C. 1991).
- State Superintendent of Public Instruction. (1991). Report to the legislature on commercialism in schools. Olympia, WA. (ERIC Document Reproduction Service No. ED 332 301)
- Staton-Spicer, A. Q. (1982). Qualitative inquiries in instructional communication: Applications and directions. The Communicator, 12, 35-46.
- Stein, J. J. (1952). The effect of a pre-film test on learning from an educational sound motion picture (Tech. Rep. No. SDC 269-7-35). Port Washington, NY: United States Naval Training Device Center, Office of Naval Research.
- Stickell, D. W. (1963). A critical review of the methodology and results of research comparing televised and face-to-face instruction. Unpublished doctoral dissertation, Pennsylvania State University.
- Sullivan, E. V. (1987). Critical pedagogy and television. In D. W. Livingstone (Ed.), Critical pedagogy and cultural power (pp. 57-75). South Hadley, MA: Bergin & Garvey Publishers, Inc.
- Sumstine, D. R. (1918). A comparative study of visual instruction in the high school. School & Society, 7, 235-238.
- Supovitz, J. (1991, March 15). Tuning in on current events: The uses and effects of video news programs in high schools in Mississippi and North Carolina. Research Triangle Park, North Carolina.
- Surgeon General's Scientific Advisory Committee on Television and Social Behavior. (1972). Television and growing up: The impact of televised violence. Washington, D. C.: United States Government Printing Office.
- Suryaraman, M. (1993a, May 1). Channel One to go off the air at Overfelt. San Jose Mercury News, p. 1B.

- Suryaraman, M. (1993b, May 7). Board to reconsider Channel One. San Jose Mercury News, p. 1B.
- Suryaraman, M. (1993c, July 17). Pulling the plug on Channel One. San Jose Mercury News, p. 1B.
- Suryaraman, M. (1993d, August 19). San Jose Chamber backs Channel One. San Jose Mercury News, p. 1B.
- Suryaraman, M. (1993e, August 20). Channel One's reprieve: Board enacts tight conditions. San Jose Mercury News, p. 1B.
- Suryaraman, M. (1993f, August 21). Channel One to face competition. San Jose Mercury News, p. 1B.
- Suryaraman, M. (1993g, October 20). Poor schools tuning in to Channel One. San Jose Mercury News, p. 1E.
- Tamborini, R., & Zillman, D. (1985). Effects of questions, personalized communication style, and pauses for reflection in children's educational programs. Journal of Educational Research, 79(1), 19-26.
- Tannen, D. (1985). Introduction. In D. T. Tannen, & J. E. Alatis (Eds.), Georgetown University Round Table on Language and Linguistics. Washington, D. C.: Georgetown University Press.
- Tannen, D. (1989). Talking voices: Repetition, dialogue, and imagery in conversational discourse. New York: Cambridge University Press.
- Tanner, D. (1993). A nation truly at risk. Phi Delta Kappan, 75(4), 288-297.
- Tate, C. (1989). Opinion: On Chris Whittle's school-news scheme. The Columbia Journalism Review, 28(1), 52.
- Tehrani, M. (1990). Technologies of power. Norwood, NJ: Ablex.
- Television Utilization Committee (TUC). (1953). How to use television in school and in the home. New York: Metropolitan School Study Council.
- Thompson, M. E., Carl, D., & Hill, F. (1992). Channel One news in the classroom: Does it make a difference? Paper presented at the annual meeting of the Association for Educational Communications and Technology, Washington, D. C.

- Thomson, S. D. (1989, October). How much do Americans value schooling? NASSP Bulletin, 73(519), 51-67.
- Thorson, E., Reeves, B., & Schleuder, J. (1985). Message complexity and attention to television. Communication Research, 12(4), 427-454.
- Tiene, D. (1993, May). Channel One: Good or bad news for our schools? Educational Leadership, 50(8), 46-51.
- Twyford, L. (1951). Film profiles: Pennsylvania State University instructional film research program (Tech. Rep. No. SDC 269-7-23). Port Washington, NY: United States Naval Training Device Center, Office of Naval Research.
- vanderMeer, A. W. (1952). Relative effectiveness of color and black and white in instructional films (Tech. Rep. No. SDC 269-7-28). Port Washington, NY: United States Naval Training Device Center, Office of Naval Research.
- vanderMeer, A. W. (1953, October). Training film evaluation: Comparison between two films on personal hygiene, TF8-155 and TF8-1665. (Tech. Rep. No. SDC 269-7-50). Port Washington, NY: United States Naval Training Device Center, Office of Naval Research.
- van Dijk, T. A. (1985a). Handbook of discourse analysis volume one: Disciplines of discourse. London: Academic Press.
- van Dijk, T. A. (1985b). Handbook of discourse analysis volume four: Discourse analysis in society. London: Academic Press.
- van Dijk, T. A. (1993, April). Principles of critical discourse analysis. Discourse & Society, 4(2), 249-283.
- van Manen, M. (1990). Researching lived experience. New York: State University of New York Press.
- Verhovek, S. H. (1989, June 17). New York bans sponsored TV from its schools. New York Times, p. A1, A28.
- Waitzkin, H. (1993). Interpretive analysis of spoken discourse: Dealing with the limitations of quantitative and qualitative methods. The Southern Communication Journal, 58(2), 128-146.

- Wartella, E. A. (1994, March). The changing consumer environment and the commercialization of youth: Whittle in context. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Washington Office of the State Superintendent of Public Instruction. (1991, January). Report to the legislature on commercialism in schools. Olympia, WA: State Superintendent of Public Instruction. (ERIC Document Reproduction Service No. ED 332 301)
- Watson, F. G. (1960). Research on teaching science. In N. L. Gage (Ed.), Handbook of research on teaching (pp. 1031-1059). Chicago: The American Educational Research Association.
- W. C. Overfelt Student Parent Handbook 1993-94. (1993). San Jose, CA: East Side Union High School District.
- Weber, J. J. (1922). Comparative effectiveness of some visual aids in seventh grade instruction. Educational Screen (entire issue).
- Whittle, C. (1989, June 13). An open letter to the members of the New York State Board of Regents. The New York Times, p. 28.
- Whorf, B. L. (1956). Linguistic reality and the relation of linguistic process to perception and recognition. In J. Carroll (Ed.), Language, thought and reality (pp. 207-219). Cambridge, MA: The Technology Press & John Wiley and Sons.
- Winn, M. (1977). The plug-in drug. New York: Viking Press.
- Winner, L. (1986). The whale and the reactor: A search for limits in an age of high technology. Chicago: University of Chicago Press.
- Woodward, W. (1993). Toward a normative-contextualist theory of technology. Critical Studies in Mass Communication, 10,(2), 158-178.
- Wulfemeyer, K. T., & Mueller, B. (1990, August). Commercials in the classroom: A content analysis of Channel One advertisements. Paper presented at the annual convention of the Association for Education in Journalism and Mass Communication, Minneapolis, MN.

- Yeager, E. A., & Pandiscio, E. A. (1993). Newscasts in the classroom. Educational Leadership, 50(8), 52-53.
- Zajonc, A. G. (1985). Computer pedagogy? Questions concerning the new educational technology. In D. Sloan (Ed.), The computer in education: A critical perspective (pp. 31-39). New York: Teachers College Press.
- Zillman, D., Williams, B. R., Bryant, J., Boynton, K. R., & Wolf, M. A. (1980). Acquisition of information from educational television programs as a function of differently paced humorous inserts. Journal of Educational Psychology, 72, 170-180.
- Zuckerman, J. V. (1954). Predicting film learning by pre-release testing. AV Communication Review, 2(1), 49-56.
- Zumwalt, K. K. (1988). Are we improving or undermining teaching? In L. N. Tanner (Ed.), Critical issues in curriculum: Eighty-seventh yearbook of the National Society for the Study of Education (pp. 148-174). Chicago, IL: University of Chicago Press.

APPENDIX

CHANNEL ONE "RESOLUTION"

The Board of Trustees hereby approves a continuing but revised contract with Channel One/Whittle Communications at Overfelt High School, subject to the following conditions (paragraphs 1-4. a. shall be made express conditions of the Whittle Contract):

1. A new contract with Whittle Communications shall be entered into which shall supersede any prior contracts and which shall include the new non-mandatory language outlined in the sample contract received by the District on 8/5/93. Pursuant to that contract, certain classrooms shall be identified as non-Whittle classrooms prior to execution of the revised contract. Whittle shall be so advised and allowed to remove their equipment from these classrooms at their option. These classrooms shall be re-equipped with 25" monitors provided by the District and shall be made available to students as non-commercial alternatives to Channel One such as *CNN Newsroom*, *Cable in the Classroom*, or equivalent. Students who have opted not to subject themselves to the advertising/televideo barter involving the Whittle contract shall have access to these classrooms, equipment and instructional materials during what would otherwise be Whittle classroom time in order to provide them equal opportunity. To the extent extra time has been added to the school day to accommodate Channel One (or any other current events curriculum) students and their parents may opt to use this twelve minute period as a recess as opposed to viewing the program.

1. a. It will be considered a breach of contract by Channel One/Whittle Communications to exceed the two minute maximum commercial time limitation set out in the contract at any time for any reason.

2. The contract shall be amended so that in the event the contract is terminated for cause by the District, Whittle will forfeit all equipment and wiring to the District as liquidated damages. (In this way our site will not be penalized for enforcing the terms of the contract by having the equipment pulled out by Whittle mid-year in the event of a Whittle breach). The District shall legally assert any such breach immediately upon its discovery without further consultation with the Board of Trustees.

3. That under no circumstances in the future shall Whittle have the right to remove any wiring (coaxial or otherwise) which has been installed at Overfelt.

4. That although Channel One has not been adopted and approved by the State Board of Education, the Channel One material shall at all times comply with the State of California *Criteria for Evaluating Instructional Materials*, the *California Education Code*, and the requirements of the State's 1986 edition of the *Standards for Evaluation of Instructional Materials with Respect to Social Content*. It shall be the responsibility of Whittle to meet these state requirements on a continuous basis prior the use of instructional materials in the classroom. It shall be the responsibility of the Site Principal to ensure that these requirements are met and kept current prior to classroom showings of Channel One at Overfelt High School.

4. a. As described in the sample contract received by the District on 8/5/93 the District may terminate the contract at any time without penalty to the school or the ESUHSD by written notification or by non-use.

5. That the District, in coordination with the site and The Board of Trustees, shall immediately prepare a disclosure statement and a multiple choice student registration form to be distributed to every parent (legal guardian), student and teacher as a pre-condition to watching Channel One. A copy of this resolution shall be made available to each party. Any student not having signed a multiple choice registration form which voluntarily indicates his/her choice of a twelve minute elective shall not be scheduled by the Overfelt administration for Channel One instructional material. As noted herewith, one of the alternatives offered the students shall be a break/recess in the event twelve minutes has been added to the school day. Said disclosure shall include the following information and shall not be modified in any substantive way:

A. That the Overfelt community has determined that we, as a District, cannot afford to acquire television equipment for our classrooms;

B. That therefore we are allowing commercial television interests to market and target our students during hours in which they are required by state law to be in school and in the classroom, in exchange for the right to continue to use televideo equipment which we cannot afford to acquire on our own;

C. That the District does not wish to be liable for the content of Channel One and related materials and shall be held harmless from liability therefrom as well as civil liberties suits by parties disputing the bartering of student's time as a violation of the right to a "free" public education;

D. That the Board of Trustees is hereby informing Overfelt High School parents and families that in its opinion current events curriculum can be taught and television equipment can be acquired by the District without bartering away classroom time to advertisers.

E. That the students and those legally responsible for them know and fully understand that Channel One is an elective and that if they would like to opt for alternatives which do not involve the otherwise mandatory viewing of Channel One and its targeted commercial spots as a financing mechanism, that such a schedule is readily available.

6. The Board/District shall express its intent, as a policy statement, not to enter into any further contracts with Whittle/Channel One at other sites within the District under these terms and conditions on the basis that generally, private partnerships and contracts which hold as an underlying premise the bartering of student's classroom time to commercial advertisers in exchange for equipment and instructional materials are unacceptable and should be discouraged, and that the District should not become inextricably dependent on such arrangements as a means to finance public education as it has in the situation involving Overfelt High School.

7. That, the District should develop instead, a long-term comprehensive technology plan which focuses on the "state of the art" including fiber optic technology, individual workstations, multi-media, and individual approaches to learning, etc. That is, technology built on real capital and infrastructure and not on outdated "borrowed" equipment. Such a plan should rely exclusively on District resources and traditional public/private partnerships which do not depend on using the coercive powers of the State to turn our classrooms into a marketplace for commercial advertising interests.

8. The district shall implement corresponding plenary sessions on advertising at least four times per year utilizing professionals or mentors from the community. These sessions shall be mandatory for those students opting to view Channel One at Overfelt High School. The District's intent shall be to educate the students in the areas of targeted advertising, "captive audiences" as a term of art, advertising's influence and benefits, as well as to provide an understanding of the impacts on product marketing through the medium of television. The District shall establish and seek final Board approval of the format/scheduling of these sessions no later than the regular Board meeting of September 1993.

9. Finally, the Overfelt community is hereby advised that the majority of this Board still strongly encourages the site to implement non-commercial televised curriculum in lieu of Channel One. That the Board has deep concerns as to the continuing use of Channel One and as such will continue to independently monitor its use at the site from time-to-time on an unannounced basis. The public should know that the majority will continue to support efforts statewide such as those of the CSBA, the California PTA Association, the CTA, the CSEA, State Legislators, the California Department of Education, Governor Wilson's Secretary of Education, and others to permanently ban the bartering of mandatory commercial classroom time for materials and equipment. Furthermore, the Board does not conclude, despite any compromise with the Overfelt administration, that this is a site-based issue. It has much broader implications.

Should Whittle Communications refuse to comply or cooperate with the contractual conditions outlined in paragraphs 1, 2, 3, 4 and 4. a. above, then any present contract with Whittle shall be terminated and the District shall, but only at Overfelt's request, provide the site with sufficient quantities of 19" or 25" monitors and video equipment to replace that which has been provided under the Whittle contract. Such replacement shall occur no later than August 31, 1993.