A case study : basis for development of a curriculum based on images of self and environment.

A CASE STUDY: BASIS FOR DEVELOPMENT OF A CURRICULUM BASED ON IMAGES OF SELF AND ENVIRONMENT

A Dissertation Presented

by

Arthur Lloyd France

Submitted to the Graduate School
University of Massachusetts
in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

December 1972

Major Subject--Educational Communications

A CASE STUDY: BASIS FOR DEVELOPMENT OF A CURRICULUM BASED ON IMAGES OF SELF AND ENVIRONMENT

A Dissertation

By

Arthur Lloyd France

Approved as to style and content by:

Raymond Wyman (Chairman)

Gerald Weinstein (Member)

Thomas E. Hutchinson (Member)

Frederick R. Preston (Member)

December 1972

ABSTRACT

This dissertation represents an attempt to provide the basis for development of a new and radical curriculum for urban, black elementary students.

The necessity for a new curriculum is based on the premise that urban, black learners are failing in traditional classrooms because the methods, materials, and teachers are alien to them.

This work should lead to further experimentation that will answer questions that this study will raise--the main question being the desirability of print as a primary medium of instruction for urban, black learners.

The study is basically descriptive, but it is built on an experimental model. The hypothesis is that urban, black learners will find school more interesting and learn more of the traditional subject matter if they use a continuously emerging curriculum based on images of themselves and their environment as recorded and played back on videotape.

Students were given portable one-half inch videotape equipment, were briefed on its operation and then allowed to use this equipment to record activities of their choice or the choice of their teacher. Curriculum was based upon playback of these videotapes. The process was documented on audiotape and still pictures as well as transcribed excerpts that appear in this work.

Only part of the hypothesis is proved by the study--that part related to the development of interest by the students. But the description and analysis of the procedure provide the basis for further testing and subsequent development of a curriculum.

CONTENTS

SECTION I

Introduction and Statement of Problem

Education in urban public schools is deplorable. Almost everyone agrees--even the experts. Education generally is poor, but in the cities it is worse. For black children in cities, it is worst of all. Charles E. Silberman in Crisis in Black and White states, "No city in the United States has even begun to attack the problem involved in educating Negro--or for that matter, white slum youngsters."[1]

Philip H. Coombs, former director of the Ford Foundation's Educational Division states, "Almost everything that the schools and colleges are doing is obsolete and inadequate today. This applies to the curriculum, to the arrangements for teacher training, to text books, to organization, to methods of teaching and learning, and to school architecture."[2]

This study will focus on just one area--curriculum. The dissertation will be concerned with curriculum and black urban students. The assumption is that black, urban students and traditional curriculums are not compatible. Students don't learn nearly as much as anyone would like. Children seldom experience success. There are many reasons for this. In order to succeed in schools as they are not constituted,

---

[1] Charles Silberman, Crisis in Black and White (New York: Random House, 1964), p. 249.

[2] Ibid., p. 252.

black students have to learn how to deal with and manipulate a set of symbols that don't have any meaning or value to them. This set of abstract symbols and alien values is embodied in the traditional curriculum. It is Dick and Jane, the times tables, the capital cities, the principal cities, the "May I leave the room," and a strange person in front of the room with a kind of face these children see only on TV and in that particular room.

Stating this phenomenon in terms of black and white may seem somewhat erroneous because all children face the same problem to some extent. Urban kids, in general, face it when they encounter school curriculums that project a suburban reality, and suburban kids face it in schools that use curriculums based on the values of a past age. Teaching in suburban schools works, when it does, largely because children are fortunate enough to have substituted extrinsic goals and rewards such as presents, trips and allowances. There are varying degrees of alienation from the school curriculum that all students face. Factors that play a role in determining the degree of that alienation are such things as race and socio-economic class. On the college level such factors as degree of idealism and ethics come into play, and because college students have greater proximity to the decision-making machinery, the situation appears to be more threatening

to society, but in the elementary and junior and senior high schools the problem is as severe, if not as explosive, and solutions to the problem are as remote.

Some would say that socio-economic factors are enough to account for the differences in academic achievement between black and white students, but this is not so. Charles Silberman reminds us that " . . . ordinary measures of socio-economic class do not erase the difference between Negro and white academic achievement; lower-class Negro youngsters show twice as much academic lag as lower-class white youngsters."[3] There must be more to it than class.

How Black Students Differ from White Students-- Educational Implications of Differences

Various differences between races, e.g., different socialization processes, are most likely major factors in explaining educational differences between black and white students. What is the relationship between education and race? Do black and Puerto Rican students have a different cognitive structure from whites? Do they learn differently? Do they have to be taught differently?

Some modern educators have tried to perpetuate the notion, if not the fact, of a "de-culturated" education by de-emphasizing or trying not to recognize national, ethnic,

---

[3] Ibid., p. 260.

or racial differences at all. These educators, sometimes in policy-making positions, seem to feel that to be different is to be somehow, un-American. But we would maintain that recognition of cultural differences in terms of curriculum design is one of the major challenges facing educators today. Black children are different than white children, at least culturally, and the differences are significant to their education. Black children and white children have different sets of experiences which create different frames of reference. Being cognizant of and dealing within specific frames of reference is essential to effective education.

Children do not come into existence equipped with a culture. They learn it. Children do not come into the world with a yearning for matzoh balls rather than cuchy-fritos or fried pork rinds. But, by the time they go to school, these tastes and attitudes are the "of-course" things of their lives. What happens when these "of-course" tastes and "of-course" ways of speaking and behaving come in contact with school? There is shock. For schools certainly do not reflect much of a concern for differences in minority cultures. There is not much in method or materials of inner-city schools that match the life-style or environment of the predominantly black and Puerto Rican children who are sent there to be educated. Manufactured curriculum materials are only slowly beginning to reflect a recognition of differences, and to be sure the newer products are clearly and forthrightly designed

to reach educational goals and objectives through identity modeling. There are more pictures of black people in the school books black children use, but aside from the pictures, nothing is changed.

This absence of the primary culture in the curriculum is unfortunate, because meaningful learning only takes place when a new idea or principal is subsumed into a related structure of already existing knowledge.

That "related structure" of an urban black child cannot be found within the school setting. "For all their concern with 'the whole child,' the blunt fact is that the public schools have never paid much attention to anything but the white, middle-class child."[4] Thus wrote Silberman. This is not to romanticize or glorify all that exists within the environment of the black child. There is much in that environment that is destructive and antithetical to effective education and this should not be ignored. But there is much that is positive, and whether positive or negative, that environment is what the child experiences every day and every night; it is what he "knows."

He knows a household in which, say, a half-dozen people are living in two rooms, where the noise level tends to be so high that the child is forced not to listen. If, when in school, a truck rumbles by while the teacher is talking, the

---

[4] Ibid., p. 267.

lower-class youngster hears only one big jumble of sound; the middle-class child has the ability to screen out the irrelevant noise of the truck and listen only to the teacher.

Bernstein in his study of Sociological Determinants of Perception[5] found that a value is placed on early verbalization. Also, the school is an institution where every item in the present is linked to a goal in the distant future; consequently, there is no serious clash of expectations between the school and the middle-class child, but the "now" oriented black child who needs his rewards immediately is often disappointed.

The urban black learner's orientation to time may be closer to how future man will relate to time and indeed, he may be ahead of his school. George Leonard states,

> . . . we of the West have generally regarded time as as a constant, a steadily flowing measure of all events and of life itself. But now time's constancy is under attack within our own civilization--conceptually in relativity physics, artistically in films novels, poems, plays, and personally in widespread time-altering experiments with psychedelic drugs and other methods.[6]

But for now in the world literacy is a key to upward social and economic mobility, and upward socio-economic mobility is among the legitimate goals of an effective

---

[5]B. Bernstein, Some Sociological Determinants of Perception: An Enquiry into Sub-Cultural Differences (New York: Columbia University Press, 1968), p. 2.

[6]George B. Leonard, Education and Ecstasy (New York: Dell Publishing, 1968), p. 58.

educational program.

Black urban children do not need a unique educational experience just because the vocational outlook for them requires that they fill certain jobs. This argument would condemn black children to be hewers of wood and drawers of water. Neither is it suggested that because an educational process has as its basis the child's perception of his real world that the goal of his education should be adjusted to that world as he sees it.

The classroom teacher is the principal force causing the denigration by the school of the black urban child's world of sensed reality. He introduces the sense of alienation that very quickly drives these children from school activities and eventually from school. Silberman says,

> Teachers are no more free from prejudice than any other group in American society; it seems clear that all too many teachers of Negro children believe in their hearts (even if they don't admit in their minds) that their students are intellectually inferior (and) that they are incapable of benefiting from a normal curriculum (because of some innate negative quality). Even when this attitude is unconscious, the teacher cannot avoid communicating it to the children in some way or other. The attitude is not always unconscious.[7]

Children behave toward these teachers in learned ways. Even among four-year-olds their system of race related values are strongly entrenched. Mary Ellen Goodman in Race Awareness in Young Children states that

---

[7] Silberman, op. cit., p. 25.

> Attitudes range widely among the Negroes who have migrated from the south. The habits of overt deference toward whites tends to survive, usually masking degrees of hostility, bitterness, fear, resignation, self-deception admiration, envy or emulation. Sometimes there is even a comfortable acceptance of the status quo, combined with a sense of personal dignity and security.[8]

Children of these parents exhibit these same kinds of learned behaviors when the appropriate stimulus appears before them--the white teacher.

Not just white teachers are guilty of harmful, negative attitudes; black teachers often possess negative attitudes toward black lower-class children. Silberman describes the phenomenon this way, " . . . teachers who have just moved up into the middle class feel threatened by contact with lower-class children; the youngsters remind them too much of their own origins. . . . (If I could do it, why can't they?)"[10]

Finally, black children present a unique educational problem because of segregation. The historic Supreme Court decision, Brown vs. the Board of Education, May 17, 1954, sums it up adequately when it said that separating black children from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone. Unfortunately, much

---

[8]Mary Ellen Goodman, Race Awareness in Young Children (New York: Macmillan Co., 1952), p. 10.

[9]Silberman, op. cit., p. 27.

damage of this sort may have already occurred by the time the black child reaches school. The schools, therefore, have the burden of avoiding further damage (at least) and producing a full recovery (at best).

A list of some of the problems inner-city school children face elicited from a class in Television in Urban and Suburban Education at the School of Education at the School of Education, University of Massachusetts, reads like this:

1) lack of interest·

2) lack of relevancy;

3) lack of curriculum concepts within the child's visual repertory;

4) improper staging point for instruction, ["Most descriptions of the disadvantaged child are stated in terms of his feelings--'negative self-concept, passivity, alienation, emotional style, lack of motivation'--but programs planned for such children are aimed for the most part at his cognitive rather than emotional needs."];[10]

5) lack of realistic educational goals--urban schools emulate suburban reality;

6) inappropriate methods and materials.

---

[10]Mario Fantini and Gerald Weinstein, The Didadvantaged--Challenge to Education (New York: Harper and Row, 1968), p. 340.

Environment as it Relates to Education

It would seem, then, that an important step toward correcting the situation in inner-city schools would be to use as curriculum, environments and materials that inner-city children find meaningful.

Schools in the black community, forced to use culturally alien teachers, should rely heavily on relevant materials, with a great degree of inherent interest that should be designed to be "teacher-proof."

Silberman states, " . . . there is no species in which the environment has so great an effect on learning and subsequent performance as man."[11] George B. Leonard in Education and Ecstasy says, "All living things--paramecium, plant, person--learn through interaction with the environment."[12] David Ausubel states,

> Cognitive drive or intrinsic motivation to learn . . . is probably derived in a general sense from curiosity tendencies and from related predispositions to explore, manipulate and cope with the environment; but these tendencies and predispositions are only actualized as a result of successful exercise, and as a result of internalization of the values of those significant persons in the family and subcultural community with whom the child identifies.[13]

---

[11] Silberman, op. cit., p. 24.

[12] Leonard, op. cit.

[13] David Ausubel, Address to DAVI Convention, Houston, Texas, 1968.

In discussing relevant curriculum for disadvantaged school children, Edgar Friedenberg says,

> The school would have to take lower class life seriously as a condition and a pattern of experience, not just as a contemptible and humiliating set of circumstances from which every decent boy or girl is anxious to escape. It would have to accept their language, their dress, and their values as a point of departure for disciplined exploration to be understood not as a trick for luring them into the middle class, but as a way of helping them to explore the meaning of their own lives. This is the way to encourage and nurture potentialities from any social class.[14]

"The true test of relevance," say Weinstein and Fantini, "is the correspondence of the curriculum to the condition and pattern of experience of the learner."[15]

Curriculum--A Definition

But what is meant by the word "curriculum?" Virgil E. Herrick states that

> students of curriculum and its related problems of instructional methodology do not share a precise definition of curricula, nor do they agree on the nature of the observations to be made or the range of phenomena which are to be incorporated into curriculum planning or theorizing. Many illustrations can be found of individuals who see curriculum in a very limited fashion, whereas others see it so broadly that curriculum becomes synonymous with life itself. Both views may be equally valid.[16]

---

[14] Fantini and Weinstein, op. cit.

[15] Ibid.

[16] James B. MacDonald, Dan W. Anderson, Frank B. Mays, eds., Strategies of Curriculum Development, Selected Writings of the Late Virgil E, Herrick (Columbus, Ohio, 1965), p. 3.

When the word curriculum is used here, it is used to mean any method, material, person or environment purposefully introduced into a child's life under school auspices in order to facilitate or change behavior according to a prescribed, but general set of immediate and/or long range objectives. This definition comes closest to what Herrick calls an "experience" curriculum.

> The experience curriculum emphasizes the immediate conditions surrounding the child and his concerns or purposes as the central basis for educational planning. It suggests that the teacher and his group of children are the major planning unit. . . . Such planning by the teacher and the group is a continuous examination and study of the group's ongoing experiences. . . . . Such specific items cannot be anticipated in advance, and therefore, all planning of this nature which is done by agencies other than the learners themselves imposes restrictions without knowledge of the situation.[17]

As mentioned earlier, there are general inadequacies in school curriculums leading to educational failure that have nothing to do with race or social class at all. First of all, what is learned in the traditional school in the traditional way, even when it is learned well, may not be that important. Marshall McLuhan tells us that today most learning occurs outside of the classroom. The sheer quantity of information conveyed by press-magazines, films, TV and radio far exceed the quantity of information conveyed by school instruction texts. If a major portion of a child's information is

---

[17] Ibid.

received via media other than print, what are the implications for educators? Shouldn't the educator attempt to match the perceptual mode of his students? Shouldn't TV be much more a part of the school program?

McLuhan says,

> Today these new media threaten . . . the procedures of the traditional classroom. It is customary to answer this threat with denunciations of the unfortunate character and effect of movies and TV just as the comic book was feared and scorned and rejected from the classroom. But television is not just a gimmick for creating illusory dream worlds but is a powerful means of moving and shaping people using a specialized language that is learned and can be taught.[18]

Who is teaching it--and where?

A characteristic of life in this electric age is that we can no longer see the changes that most affect our lives. R. Buckminster Fuller elaborates,

> Man recognizes a very limited range of motions in the spectrum of motion. He cannot see the motions of atoms, molecules, cell growth, hair or toenail growth--he cannot see the motions of planets, stras and galaxies--he cannot see the movement of the hands of a clock. Most of the important trends and surprise events in the life of man are invisible, inexorable motion patterns creeping up surprisingly upon him.[19]

TV can help students to see not only the isolated moment or fact but the movement of things. Videotape makes it possible for students to perceive, store, and replay the motion

---

[18] Marshall McLuhan, Understanding Media (New York: New American Library, Inc., 1964), p. 25.

[19] R. Buckminster Fuller, Inventory of World Resources Human Trends and Needs Phase I (Carbondale, Ill.: Southern Illinois University, 1963), p. 3.

patterns of the universe.

The use of newer media will facilitate other new teaching strategies. Today there is the new math, the new social studies, the new English grammar. Centering around the work of Jerome Bruner at Harvard, all of these "news" have at least one thing in common; they all presuppose an inductive teaching method. Inquiry, discovery,call it what you will, the learning process is enhanced by pupil autonomy and self-direction. The student as a consumer of dispensed knowledge has given way to a new orientation which conceives of the student as a producer, with many learning options and with as many as possible of his senses involved in the process.

Hypothesis

A constantly emerging curriculum based on images of self and environment recorded by students on videotape might make for a relevant learning experience that should raise substantially and observably the level of interest in school and school related activities. It would be a sensible way of bringing the outside in. It would be a way of making the child's living environment his learning environment and would lead to the development of interest in school by:

- breaking down outmoded traditional curriculum areas
- breaking down structured learning time sequences
- facilitating inductive learning
- using present interest

- using student perceptions
- using highly motivating modern media
- using a producer-oriented rather than consumer-oriented learning style.

Review of Related Research

A review of film and television research from 1950 to 1967, some 350 abstracts, reveals that nothing like the approach described here has ever been done. The research falls generally into these categories:

1) comparison of televised with direct or face-to-face instruction;

2) comparisons of filmed or kinescoped courses with direct instruction;

3) studies of attitudes related to instructional television; and

4) studies of effects of production variables in instructional television.

None of these studies deals with television curriculum materials produced by the students themselves.

A review of the literature concerning the use of media in the education of the disadvantaged commissioned by ERIC tends to show a positive correlation between the use of media and the development of interest. Reviewing ERIC one finds in part that New York public schools have devoted E.S.E.A. funds to teacher training in the use of audio-visual equipment, and

as a result, have improved pupil interest in school. Teachers who participate in the training programs stated that the effects of audio-visual instruction on students were increased attentiveness, greater willingness to practice oral communications skills, and more student question-and-answer exchanges in the classroom.

Also, in New York, when selected schools participated in a project designed to provide maximum flexibility of supplies and personnel (media specialists), normally high teacher turnover dropped, student attendance increased, and disciplinary suspensions decreased. Staff and student morale were high. Similarly, the introduction of audio-visual aids, including TV, in an Arkansas junior high school increased interest in school as shown by increased attendance.[20]

ERIC also cites Sesame Street, the Children's Television Workshop production, which in only a small way relates to what we are considering here since it deals with children in a passive, receptive mode rather than in a producing orientation that we will examine in this study. Two other references to the ERIC surveys are worth mentioning. ERIC researchers concluded that the disadvantaged generally are not "time" oriented. Consequently, verbal (written) materials as temporary ordered sources of abstraction, description and

---

[20]Serena E. Wade, Media and the Disadvantaged--A Review of the Literature, ERIC Information Retrieval Center on the Disadvantaged at Teachers College (New York: Columbia University, 1963), p. 3.

interpretation of experience are not realistic in educational programs designed for the disadvantaged. They summarize the common uses of media in the education of the disadvantaged this way:

> A sampling of urban ghetto schools shows only sporadic use of programmed learning materials, ETV, CAI, 8mm loop projectors (etc.) . . . such conventional andio-visual techniques as film and slide projection and audio tape usage. . . . Furthermore, most programs are distributed and evaluated in a hit or miss manner. They are often completely irrelevant to the needs and desires of ghetto youngsters leading ghetto lives. They are print oriented and dull, used primarily as supplementary material with uniquely gifted or handicapped students.[21]

Some studies using inexpensive still camera equipment have been made, but these are not like the use of videotape which provides the student with first-hand experience with processes and which allows for instant replay.

Conclusion

A continuously emerging school curriculum based on images of self and environment as recorded by black urban youngsters might make for a relevant learning experience that will raise substantially and observably the level of interest in school and school activities such as math, social studies, language arts, and science. This is a way of bringing the outside in. This is a way of starting from the known and moving to the unknown. This is a way of starting where black urban children are "at".

---

[21] Ibid., p. 5.

SECTION II

Design

The overall design format of this study is development, field test and evaluation. Students took video tape recorders into the streets and into their homes. Their videotaped product provided the basis for the curriculum.

Initially, the TV activity was to have taken place twice weekly. In one session the students would discuss operations, shoot, then play back. In the second session the students would play back, discuss, and build transitions into standard curriculum.

The media specialist was to meet with the teacher during her preparation period preceding the first class session of the week, during her preparation period after the first session, and again after the playback and discussion with the class. These discussions with the teacher would be recorded on audiotape, indexed by footage number and made available as an appendix to the dissertation. The videotape that the students shot would also be presented.

Observations would take place for one hour prior to the first class session of the week. The study would continue for one month or eight class sessions.

The class chosen after consultation with staff at the Center for Urban Education in New York City was a non-graded group of what would normally be third and fourth graders.

The school is an experimental non-graded elementary school in the Ocean Hill-Brownsville community of Brooklyn, New York. The class population was 100 per cent black. There was an indigenous paraprofessional in the classroom.

General Design Problems

The design of this study presented some general problems:

- What age group should be chosen?
- How should a transition from "play" to hard core learning be effected?
- Should there be a small group or whole class manner of working?
- How long should the project last?
- Should students be aware of learning outcome?

The answers to these questions, it was decided, would result from the interchange between the teacher and the author (media specialist). The decision to use the particular class and teacher was based on availability. A basic assumption was made that any classroom technique would be doomed without the cooperation of the teacher. Using the above mentioned questions as pegs in a discussion with the teacher seemed to be a good way to bring about the necessary involvement.

Threats to Validity

More specific threats to the validity of the study can be best elucidated by relating our study to quotes from the book, Non-Obtrusive Measures: Nonreactive Research in the Social Sciences by Webb, Campbell, Schwartz and Sechrest. "The control effect is present when the measurement process itself becomes an agent working for change."[1]

In our study much of the behavior change that we expected to see and hear by monitoring video and audiotape would be motivated by the presence of the television recording instruments in the classroom.

> Surreptitiously being on the scene often means a necessary exposure to a large body of irrelevant information. Because one cannot predict when a critical event will be produced, it is necessary to wait around, observe, and complain about the high dross rate of such a procedure.[2]

One could forsee at the beginning of the study many feet of tape used to record material that would not be relevant to the study.

"Not only does task demandingness create population restrictions, differential volunteering provides similar effects."[3] It was clear that the nature of the equipment and

---

[1]Eugene J. Webb, Donald T. Campbell, Richard D. Schwartz and Lee Sechrest, Non-Obtrusive Measures: Nonreactive Research in the Social Sciences (Chicago: Rand McNally & Co., 1966), p.114.

[2]Ibid., p. 116.

[3]Ibid.

the nature of the tasks required to make it function would make for a biased reaction in the group.

> By singling out an individual to be tested (assuming that being tested is a normal condition), the experimeter forces upon the subject a role-defining decision. What kind of person should I be as I answer these questions or do these tasks?
>
> Validity decreased as the role assumed in the research setting varies from the usual role present in comparable behavior beyond the research setting.[4]

By the very act of using this equipment, these students were forced out of the role of student as they traditionally defined that role.

> We know that systematic biases exist among editors.
>
> A television interviewer once told Malcolm X-- the late Black Nationalist leader, that he was surprised at how much Malcolm smiled. The Negro leader said that newspapers refused to print smiling pictures of him.[5]

The author was aware at the outset of how easy it would be to choose only the portions of tape that supported the thesis. Aside from monitoring everything, there seemed no way to avoid this.

"(Earlier work) demonstrated the differential effect of the race of the interviewer."[6] Should the study be designed so that the investigator, or in this case, media specialist, function be rotated between two or among several persons?

---

[4] Ibid., p. 16.

[5] Ibid., pp. 55, 79.

[6] Ibid., p. 21.

Perhaps racial bias as a factor would have been eliminated, but what about personality factors and variation in individual skills? Wouldn't it have been just as important to randomize the teaching?

In any study, the question of replication must be considered, and in this study, without randomization of the media specialist, the ability to replicate is left very much to question.

So many of the separate circumstances in the TV activity might be considered treatments. The presence of the media specialist, the race of the media specialist, in this case black, the presence of the equipment, the departure from normal school routines all may be considered separate treatments, but they all present themselves simultaneously. What causes what? What leads to what? Again, in remedial education, one finds that any change at all may bring about positive reactions. Campbell and Stanley in their book, Experimental and Quasi-Experimental Designs for Research, say that, " . . . a process of 'spontaneous remission' analogous to wound healing may be mistaken for the specific effect of a remedial x."[7]

The author realizes from the outset that the aforementioned difficulties make measurement difficult, if not

---

[7] Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally & Co., 1963), p. 8.

impossible. But this is a contemporary problem, not unique to this study.

"The replacement of Newtonian theory by relatively and quantum mechanics shows us that even the best of physical science experimentation probes theory rather than proves it."[8]

Evaluation Design

The intent of this work is not to conduct an experiment in the classical sense, but to design and facilitate a new process and to document that process using three forms of media--videotape, audiotape and print. The objective is to gather data to provide the basis for development of curriculum that is interesting to students and from which they will profit in the traditional academic sense as well in other ways.

Interest as the independent variable is important because it signifies a value change in the learner. Herrick says,

> Workers in child study programs and in programs of in-service teacher education recognize that any significant long-term change in educational orientation and behavior comes as a result of changes in value and not as a result of accumulated information.[9]

The study is also designed to reveal and record the choices students make in determining what their activities

---

[8]Webb, Campbell, Schwartz, and Sechrest, op. cit., p. 10.

[9]MacDonald, Anderson and May, op. cit., p. 10.

will be in a situation where television is an educational factor. Carl Rogers in Freedom to Learn cites an experiment in which youngsters made food choices that enhanced their physical well-being. It would be valuable to find out if a child's free education choices would enhance his educational development.

No pre-test, post-test evaluation of academic achievement is intended. The teacher's evaluation of the television activity will be recorded on audiotape.

The objective of interest will be operationalized this way:

Variable X Defined:

X = language arts or mathematics or science or social studies.

Procedure:

1) Quantify number of questions asked about X.
2) Quantify number of defined positive statements about X.
3) Quantify length of time students will be involved with X as a regular classroom activity.
4) Quantify number of times X will be discussed when involved in TV activity.
5) Compare attendance records before and during TV activity.
6) Evaluate teacher evaluation of TV activity.
7) Compare referral record (disciplinary) before and

during TV activity.

8) Quantify number of times students ask to be excused from from during TV activity.

Summary

Realizing that exact measurement is improbable in this kind of study, the research is designed so that a model can be designed, field tested, and evaluated without numerical measurement of pupil achievement. The author believes that measurable academic achievement will result from the treatment, but the situation in which the treatment occurs so alters the situation that a cause and effect relationship would be difficult to demonstrate. Designing the experiment so that a cause and effect relationship would be demonstrated would cause the research to become unwieldly and unreal. The demonstration of academic achievement as a result of TV use in the manner prescribed in this study will have to be the subject of another study.

The design of this study should result in an observable increase in the amount of interest students show in academic studies and in an increase in the amount of interest students show in school generally.

Students will use portable TV to tape themselves and their environment beyond the classroom. The activity itself as well as these tapes will provide the basic structure and materials of instruction.

SECTION III

History of Project

Available from the author of this study is an audiotape and a videotape which constitute an edited version of what actually transpired in the field. What is edited out is material that is inaudible (audiotape) or indiscernible (videotape) due to unsuitable conditions or lack of technical competency on the part of the author or the students. What is also edited out is material that is so totally irrelevant to the study that it constitutes "noise."

There is also available from the author a taped speech by Mr. Rhody McCoy who was, at the time of this study, unit administrator for the Ocean-Hill Brownsville experimental school district in New York City.

Mr. McCoy in his address gives a brief history of the district. Admittedly, Mr. McCoy's view is just one side of a many-faceted story, but it serves the purpose of indicating, at least, the degree of decay and confusion that exists even now in the district.

The author had had some previous experience in the Ocean-Hill Brownsville district when in 1968 he accompanied a group of students and faculty in a project documenting the New York City teacher strike on one-half videotape for the School of Education at the University of Massachusetts. It was coincidental that when this author went to the Center for

Urban Education in New York City to inquire of friends there about a possible site for the field work that a research fellow would suggest a school in Ocean-Hill Brownsville. He suggested P.S. 144 for these reasons: 1) the school population was virtually all black; 2) the school, being experimental, was non-graded so that there would be no institutional push to reach traditional curriculum goals by any certain date; and 3) the teacher of the anticipated group and the principal of the school would be amenable to such a project.

The author went to see the principal and the teacher, and within two weeks, the work was underway. The plan of operation as described in Section II was followed as closely as possible. However, each day some new classroom situation or technical problem caused a departure from the original method of operation so that at the end of the month so much of the original plan had been eroded away that the author was forced to modify the design, choose a new site, and begin again. The modification of the project design will be discussed further in this section, but let it be said at this point that the modification was not entered into with any sense of regret or feeling of disappointment. It just became apparent that so many variables and uncontrollable elements existed that as the project developed, and ways and means of controlling these elements were discovered that a fresh start would be required. The problems that led to modification of the design will become apparent as the history of the

project is revealed.

Before work could begin with the class, the principal insisted that we make a visit to the unit administrator's office. We met with unit administrator Rhody McCoy who inquired about the nature of the project, expressed displeasure over the fact that "of all the classes in the district, the only one we could find to work with was one with Mrs. G. as teacher." I later learned that Mrs. G. was a union chapter chairman in the district. Mrs. G. happened to be one of the very teachers in the district that Mr. McCoy was, at that moment, attempting to fire. Firing of teachers by unit administrators in the experimental districts was a major point of contention in the union-community board disputes. We were soon to find out that Mrs. G. was a focal point of extremely strong feelings in the school. Only two people who we came in contact with in the school regarded her in any other capacity than union chapter chairman. Everyone in the school was either strongly union or strongly anti-union. Their feelings and attitudes toward Mrs. G. carried over and affected her class and the author. Sometimes we were openly and hostilely questioned about our association with her. Some teachers who had greeted us cordially at first, stopped speaking when they learned of our association with Mrs. G. Mr. McCoy made us promise that the tapes made in the classroom would only be used for the dissertation and furthermore that Mrs. G.'s image would not appear on any videotape.

The portable videotape recorder was introduced to the class this way: First, the author was introduced to the class by the teacher. It was explained to the students that there was television equipment available for use with them. They were told that there was not a set plan for its use, and that the author would be willing to use it in any way the class suggested. It was explained to the class that the author would act as a technical consultant and that he would have final say only in cases where the safety of the students or the equipment was concerned. It was also explained that the author was benefiting from the experience by receiving a higher degree in education. The class was told that they were not being tested; that all the author wanted to do was observe how they would use the equipment. The author asked their names, conversed with the class generally, then left promising to return the following Monday with the equipment. Working days were set for Mondays and Wednesdays.

The author returned the following Monday with the equipment. The classroom was on the third floor of the building. The front entrance to the school remained locked at all times, so the author was forced to enter through the basement and then carry the equipment weighing at least one hundred pounds up four flights of stairs. This necessitated at least two trips and proved to be a formidable task. The school, being located in what is considered the highest crime area in New York City and having a record of being burglarized

every weekend, it was unthinkable that the equipment be left overnight. The class population was so young that the author could count on only a minimum of physical help in transporting the equipment.

The recording of classroom discussion on the audiotape proved to be a major problem. Unless a very expensive microphone were used, one with an omni-directional pattern and extreme sensitivity, then half of the classroom discussion would be lost. Even if a very sensitive microphone were available, then the problem of unwanted sounds--scraping of feet, giggling, etc. would be increased. This kind of noise proved to be a problem even with the primitive equipment that was used.

The conduct of the class in the P.S. 144 "experiment" was rather wild by conventional standards. The non-structured classroom which was an integral part of the teacher's technique caused problems in terms of working with the television equipment. Even though "jobs" were assigned, there were constant fights over who would do what and when. Electrical lines were tripped over. Anonymous voices would whisper obscenities into the audiotape recorder. Students who were selected to perform tasks were brutalized by students who weren't. When the class was using the equipment in the street, they were the object of much public scrutiny. This seemed to make the students behave better in public than in the classroom. The author had made a point of telling the students at the beginning that nothing they would do so short

of breaking the equipment would prevent the project from continuing. This was done in order to elicit the most natural behavior possible. Natural behavior in this case almost made for an unmanageable situation.

The class was envied by all the other classes in the school. The other students asked their teachers why they couldn't use TV in their school work. Other teachers showed interest in the work; some watched during the playback sessions. An assistant principal visited on one of the playback days. Working with the class on a twice-weekly basis had the effect of maintaining the novelty effect of the study. Children in the class cheered wildly when the equipment appeared. Each appearance seemed like a first appearance.

When the class decided to take the equipment to a class member's house, there was total involvement in the project on the part of the student's family. The teacher and the author could notice that the floors were freshly waxed, that the living room furniture was still damp as a result of a very recent shampooing, and an aunt was present when the class visited. The mother and a cousin came to school on the playback day.

The class trip to Henry's (a student) house was the most pronounced demonstration of the hypothesis. This will be discussed in Section IV, but it should be noted here, in a historical context, that map-making skills, reading, writing, and social skills were directly taught by the teacher

centering around the activity of the trip and arising out of its motivation.

The meetings of the author (media specialist) and the teacher took place on schedule for the most part, but these meetings, too, presented problems. On at least two occasions, the room designated for this meeting was being occupied by another teacher or used for another purpose as a result of a school schedule change. This resulted in a loss of our ability to tape these sessions and in an inability to meet for the length of time called for in the design.

In the I.S. 10 experiment, the project design was radically changed. The evaluation design was not changed because the evaluation procedures produced no problems. But certain of the procedural problems enumerated in the beginning of this chapter were eliminated in a new design.

1) The problem of security was circumvented by having the equipment locked up in a walk-in safe. A cart capable of transporting all of the equipment was provided by the school, and each morning an assistant principal unlocked the safe and two "technicians" from Mrs. W.'s class wheeled the equipment into the classroom which was located on the ground floor of the building.

2) The larger size of the children in Mrs. W.'s class made the handling and management of the equipment much easier than it was in Ocean-Hill Brownsville.

3) The novelty factor was somewhat eliminated because

of our continual presence in the classroom.

We arranged to use Mrs. W.'s all-black fifth grade class at I.S. 10 by calling an acquaintance in the I.S. 201 school district and asking him to recommend a school in the district that might be suitable for such a project. I.S. 201 has a history somewhat similar to Ocean-Hill Brownsville. I.S. 201, along with Ocean-Hill Brownsville and Two Bridges, was one of the three experimental school districts in New York City financed by the Ford Foundation and the New York City Board of Education to test the concept of decentralization. To be sure, the battles in Ocean-Hill Brownsville between the Teachers Union and the community board were more severe and lasted longer, but there were many similarities in the two situations.

The principal of I.S. 10, whose name was McMurrin, welcomed and allowed us to work with any fifth grade teacher who would volunteer. We decided to work with Mrs. W.'s class because she used a style of teaching in which a great deal of teacher control was a factor, and because her classroom was on the ground floor of the building.

The equipment was introduced this way: The author brought the equipment to class on the Monday of the week set aside for the "experiment". Rather than work for short periods of time on two given days for one month, the design was changed so that the class could work all day for one full week. The equipment was used by the teacher as she saw fit. She assigned students to the various tasks that had to be

performed largely on the basis of their behavior. The author explained to the class the way the equipment worked and then assumed the role of a technician and resource person. Since Mrs. W.'s class was scheduled to perform a play for the school during the week following the TV activity, she decided to use the equipment mainly to rehearse the play. She also used it on a walk around the neighborhood with the class.

Mrs. W.'s colleagues generally regarded her and her class as being fortunate for having the opportunity to work with TV. The author heard one teacher ask Mrs. W. how it was that all the "fun" things happened to her. Several teachers asked to see playback of the activity.

Since the procedure in the I.S. 10 experiment was to allow the teacher to dictate the way in which the TV equipment was to be used, it was deemed unnecessary and unwise to meet with the teacher in any kind of planning session. Such a meeting might have had the effect of imposing the author's (media specialist) standards or desires on the teacher. Of course, no fixed observation periods were set up since the TV activity took up the entire day.

Summary

The use of TV in an elementary school classroom was such a departure from any conceivable type of school work, that no pattern for its use existed anywhere. Problems encountered in just making the gear functional and secure were so severe

as to force a departure from the original design. A modified design was executed in a new sample on a new site. Not only were operational procedures changed, but the nature of the sample was changed, too.

SECTION IV

Empirical Evaluation

Section II of this dissertation, which deals with design, states outright that the intent of the work was not to conduct an experiment in the classical sense, but to facilitate a new process and document that process using an experimental design and four forms of media--audiotape, videotape, print and still pictures.

The objective of the study, providing the basis for a process curriculum that is interesting to students and from which they will profit in the traditional academic sense, was realized only partially. In fact, two structures and processes were demonstrated, one in which the teacher allows the class to make all of the decisions concerning the recording of videotape, and then teacher and media specialist (author) determine what can be used to realize traditional curriculum goals by enlarging and expanding on student generated questions and comments arising out of TV related activities.

Another model demonstrated is one in which the classroom teacher uses the equipment and the media specialist to her own advantage according to her own personal goals and unique style of teaching.

The basic hypothesis was not fully realized because the effect of TV activity on traditional academic learning could not be clearly measured.

For purposes of monitoring verbal and non-verbal behavior which could have contributed data on both the independent variable, interest, and quantification of the academic concerns denoted as X in the research design, some method of watching and listening to the class constantly would have been necessary.

This problem of not having a full-time class observational system made the gathering of data difficult for several reasons. All of the questions the class asked about the variable X (language arts, mathematics, science, or social studies) had to have been asked during the designated observation periods or they were not recorded. This is also true of positive statements the class made about X. Therefore, the whole area of the work dealing with the transition from student-initiated TV activity to traditional academic work could be measured only in a very generalized and informal way based mainly on recall.

The I.S. 10 TV activity did not relate to the part of the hypothesis dealing with traditional curriculum at all, because the method of operation at I.S. 10 was dependent wholly on the classroom teacher's prerogatives. This is not to say, however, that the original hypothesis is untrue; it is to say that it is unmeasured. But in education, researchers are beginning to accept the usefulness of particular data even when the level of analysis available for them is markedly below that available for other data in the empirical area.

What data does exist to be evaluated quantitatively are the class attendance figures. If increased attendance during the period of TV activity can be said to indicate an increase in interest in school, then certainly the attendance figures for both classes indicates that the use of television increases interest. (See appendix, p. 80.)

Of course, it could also indicate that the presence of the author increases interest in school. It is for this reason that the participation of the author (media specialist) was kept minimal.

In both classes the percentage of the class attending school during the period of TV activity was higher than during the period when TV was not present. In the case of Mrs. G.'s class in P.S. 144, average attendance rose to 90 per cent from the yearly average of 84 per cent. What may be even more significant is that on the actual days of TV activity, class attendance averaged 98 per cent.

In I.S. 10, average class attendance during the period TV activity was 100 per cent as compared with an 86 per cent average for the school year.

Subjective Evaluation and Interpretation

Monitoring the videotape indicates some activities of direct educational value that stem from the TV activity. Mrs. G.'s class P.S. 144, at 152 on the videotape index, is actively deciding on how they should use the videotape

equipment. This is one example where social skills were taught. The democratic process used to determine the class's course of action, although disorderly, was no theoretical academic lesson in decision making, but a real-life process having real-life consequences that would affect the students' lives in ways that were important to them in that moment.

(Video Excerpt #1)

(1)	Students sitting in seats. Teacher in front of room.	(Mrs. G.) What do you want to do? If you would like to take a walk to the church, raise your hand--if you'd like to take a walk to the playground, raise your hand.

Also see Audiotape Index 1--Red Leader Out.

015	162
073	193
083	201
091	257
129	656
130	670
133	694
141	701

In that instance, the procedure of voting was imposed by the teacher. It is conceivable that alternative ways of reaching decisions might have been either suggested to the class by the teacher, or the teacher might have chosen to use an inductive method in which case she would have elicited alternate

ways of reaching decisions from the class. What is indicated here is that there is a tremendously high output from this kind of learning activity. One "ounce" of self-motivation can yield "pounds" of lesson material.

Counting up the number of instances of direct instruction (number 4 in the audiotape index) reveals only seven in Mrs. G's. P.S. 144 class and nine in Mrs. W.'s I.S. 10 class. All of those instances, except four, are directly concerned with making the equipment function.

However, if one counts up the number of potential instances where traditional curriculum might have been injected in connection with, or out of some TV activity (1 and 12) one finds six instances in Mrs. G.'s P.S. 144 class and six in Mrs. W.'s I.S. 10 class. Sometimes the relationship to traditional curriculum is difficult to see; sometimes it is quite easy to see.

(Video Excerpt #2)

(2)A	At Henry's house--Henry introduces class to his mother--children lined up outside door.	(Henry--a student) Mom, this is my friend, Michael Butler.
(2)B	Mrs. W.'s class seated in classroom for instruction.	(Mrs. W.) I have one more word--what do you use a tripod for? Can you show me a tripod in this room? Get up and

> point to it. You can do it faster than that--show me a tripod--say it! This is a tripod--O.K. then--that's a fairly good review on words we have learned. Next time we'll be putting them on paper--O.K. backwards from the bottom up--camera, monitor, tripod.

Actually, how many of these potential motivations into curriculum, traditional or otherwise, will be realized depends on the creativity of the teacher. Indeed, it could be argued that these motivations are not any more genuine than the options that would arise out of a free-wheeling classroom discussion. This may be true. It is argued here, however, that these motivations are more significant because they arise not merely as a result of cerebration, but out of a physical activity, and because of this they are more substantive and educationally valid.

One could say that the teacher is the most important variable, since a creative teacher would find many motivations, and a less creative teacher, few. One teacher might take a "soft" approach and lead the class into a discussion on why you should ask permission to visit someone's house. Another

teacher might develop a traditional lesson in formal letter writing. But, regardless of any given teacher's abilities or creativity, the raw material is there--generated by genuine interests and physical involvement.

Regarding, once again, 152 on the videotape index, an academically motivated class could use these jumping off points not just for single lessons, but for lesson units or for independent study or research. It is possible, though, for a teacher to go too far with even these genuinely motivated learning experiences. If students perceive that any burst of creativity or curiosity on their part is going to result in a lesson or an assignment, the wellsprings are going to dry up. Even if the students accept the assignment or volunteer for it, it might just be an indication of trying to curry favor with the teacher.

Once a class sees that a teacher is really going to discuss their possible activities with them, really delegate or even give up all this wonderful authority the school system has endowed him with; once the teacher allows kids in a class to do only what they themselves want to do even if this doesn't happen to turn out to be what he wants them to do--once this happens, you can't ever take charge and order them around again with any success. Many teachers who enter into this kind of thing with a class by way of experiment to see if it will work suffer disappointment because of this fact. But that is because they've somehow been led to expect that

a class of kids will, if left to make their own decisions, decide to do what the teacher planned to do--read the text, do sentences and exercises, number drills. The class won't. Why should it, if it doesn't find those things interesting?

The broad question of whether students lead or whether leadership is the teacher's function opens a complex pedagogical controversy. Does democracy work in all cases, in all classes, or does democracy presuppose an informational level, or intellectual level, or maturity level? Isn't it possible for youngsters to vote in some measures that will cause real pain to minority members of their groups? Should the teacher allow this to happen? What if the children in Mrs. G.'s P.S. 144 group had decided to go to Kenny's house because it was a better house--showed greater affluence? Might not this have been a place for the teacher to move in with a lesson on values?

The hypothesis of this experiment states that learners using videotape equipment in the described manner will increase interest in school and achieve more in traditional school subjects. But attention should be paid to the fact that a significant amount of important learning also takes place in the area of technical skills.

(Video Excerpt #3)

(3)A Mrs. W.'s class seated. (Author)

Class technicians getting You know how to focus,

	instructions.	don't you--this thing here . . . (Student) She didn't focus it yet . . .
(3)B	Mrs. W.'s class seated. Class technicians preparing to record play rehearsal.	(Mrs. W.) Do you want to be my stage manager? . . . (Student) Video ready--roll camera!
(3)C	Mrs. G.'s class at Henry's house--student cameraman moves about apartment.	(Student) Keep it on!--Don't keep pressing it . . . Keep it on!
(3)D	Mrs. G.'s class seated preparing for playback session.	(Student) Mr. France, can I work it this time? Last time you said I could work it . . . Mr. France showed me how to work it.
(3)E	Mrs. G.'s class at Henry's house--student cameraman moves about apartment.	(Author) Are you pushin' that thing in? . . . Wilson, don't keep pushing it in and out--keep it in all the time.

Also see Audiotape Index: Tape 1-Red Leader Out

027	167
033	257
038	269
127	362
131	483
135	699
142	

Tape 1-Green Leader Out

011	933
015	947
025	950
917	960
923	967

Tape 2-Green Leader Out

111	241

Perhaps more important is the way this learning takes place. As was mentioned in Section III, the purpose and functioning of the equipment was explained at the beginning of the experiment. Specific details and refinements were explained to the students throughout the experiment, but the bulk of the instruction took place at the beginning. From then on it was largely a case of one student teaching another his job as roles changed. And the teaching was effective. Recording and playback was mastered by each of the classes.

Trying to analyze the audiotape in a comparative manner is a useless task--compared to what? Compared to the class when TV was not present? This comparison would be meaningless since the presence of the TV equipment makes for such a totally different environment.

What one might legitimately do is observe and isolate some patterns of class behavior that evolve when a class is involved in TV related activity. Certain categories might be used to examine and classify those behaviors. Choice making might be such a category. Choice making by the class seems to be a function of the teacher's individual teaching style. In this study, choice making opportunities are more numerous in Mrs. G.'s "laissez-faire" class than with Mrs. W.'s fifth graders.

(Video Excerpt #4)

(4) Mrs. W.'s class--standing, milling about preparing to rehearse class play.

(Mrs. W.) Class, let's get ready for our play, now . . . I will do the talking now . . .

Also see Audiotape Index:

Tape 1-Red Leader Out

015	141
073	162
083	193
091	201
120	257
129	656
130	670
133	701

Tape 1-Green Leader Out

917	950
923	960
933	967

Tape 2- Green Leader Out

111	188
034	365
083	365

Self-regulating behavior might be another category. A paraphrase of a Jerome Bruner statement indicates that the skill of a teacher might be measured in terms of the time it takes that teacher to render himself obsolete or unnecessary to his class. The speed at which this happens is a function of the degree to which that teacher can develop self-regulating behavior in his students. The nature of the television medium lends itself to the development of self-regulating behavior. Instant replay proves to be valuable in this regard. Analysis of the tapes indicate the degree to which self-regulating behavior arose out of the TV activity or instances where TV could be used to develop this kind of behavior.

(Video Excerpt #5)

(5)A	Mrs. C.'s class seated watching replay of taped classroom activity.	(Student) Show me if I'm on there . . . that's me . . . Watch what I'm doing--I bet you I'm balling up my fist in a few more minutes . . . Wilson, do you see me?
(5)B	Mrs. C.'s class on trip to museum and park--students climbing on rocks.	(Author) Are you getting a good picture? Kenny, I see you, Kenny . . . Hey Thomas, stop that dancing up there

		. . . Stop that dancing, Mark.
(5)C	Mrs. C.'s class on visit to Henry's house--student operates camera.	(Student) I ain't showin' you on there--'cause you ain't showin' me on there.
(5)D	Mrs. W.'s class standing rehearsing singing, dancing for class play.	(Mrs. W.) You can be silly if you want. It shows up.

Also see Audiotape Index

Tape 2-Red Leader Out

010 083
034 326

Notes on Teacher Comments--I.S. 10

Mrs. W. says black children do not have a characteristic learning pattern common to their racial group. The reason for this statement might be related to her previous statement that she had never taught an all-white class. Perhaps if she had taught an all-white class, she would have been able to detect differences. Even though Mrs. W. had gone to integrated schools herself, her perceptions at that time were on a different level than in her present teaching role.

The fact is that black students do have different learning characteristics. The argument for this statement is set forth in Section I of this work. A teacher with Mrs. W.'s outlook on this particular point might inadvertently increase

learning problems for black youngsters. She could be guilty of trying to make square pegs fit into round holes.

Mrs. W. said that she thought a media specialist should be present in the beginning stages of the work with TV. The specialist's work should not be aimed at getting the teacher to give up her curriculum goals, however traditional they may be, but to get the teacher to rely on the perception of the students for motivation into the learning experiences that will permit those goals to be realized.

Relating to learning other than traditional, an important observation can be made. When the I.S. 10 class took their walk in the neighborhood, the subject matter they recorded was a bust of Dr. Martin Luther King and a plaque commemorating Matthew Henson, black explorer and first man to reach the North Pole. These are ideal subjects for students to focus on, and they are of undoubtable educational value. But one wonders if these would have been choices of the class. And one wonders about the value of choices the class might have made. What if the class would have chosen a bar, a "junkie," a policeman? One wonders if Alvin Toffler may not be right when he says that in most situations we can help individuals adapt better if we simply provide them with advance information about what lies ahead. A discussion resulting from that advance information, that data, might prove to be a valuable lesson.

In fairness to the record and Mrs. W., it must be

pointed out that when the "experiment" began at I.S. 10, she had already an obligation to present a play. With only one week left, it would be unreasonable to expect her to allow the class to choose its own activities. And in the evaluation conversation, she does say that it would be best to allow the class to choose its own activities through some kind of democratic process.

Notes on Teacher Comments--P.S. 144

Mrs. G. comments on the importance of having the equipment work properly. This is certainly important with groups where short attention spans are characteristic and where gratification should not be too long delayed.

Mrs. G. feels the value of having the TV experience is more directly related to the emotional and social development of the children than to their academic achievement. She also emphasizes the role TV can play in bridging the gap between home and school--especially in an area where that gap may be maximal due to social and cultural factors.

Summary

So then, one may conclude that the use of television to record their own images and environment has the measurable effect of raising students' interest in school and school related activities. This observation is true if the assumption is made that interest is a function of attendance.

It was not proved in this study that the recording of their images and environment for videotape playback leads to better performance in the traditional subject areas such as reading, math, social studies and science. The study does show, however, that using videotape in the way described does promote opportunities to motivate the learning of those traditional subjects--motivation that seems more natural, child centered in terms of interest and involving more of a student's sensory apparatus. The study also seems to indicate that the transition from TV activity to traditional academic curriculum works if the teacher initiates it.

The two teachers' reactions to this use of videotape is extremely positive, not only in terms of how effective it is for teaching children, but in terms of its effect on the teachers themselves. Their comments indicate that using television this way increases and enhances the resources already at hand. They say that the use of television makes for an invaluable bridge into the home and the community.

These teachers did show some reluctance to working with portable videotape equipment because of supposed technical incompetency. The degree to which the teachers relied on the media specialist (author) to operate the equipment is, of course, a function of unfamiliarity that could be expected to pass quickly. But beyond that initial unfamiliarity, there is a mystique that surrounds the use of any and all audio-visual equipment. It is characterized by phrases such as,

"I'm just the most un-mechanical person in the world," and ends with a simple request like asking the school AV person to plug a line cord into an outlet.

At the other extreme, children's eagerness and lack of trepidation often has a disastrous effect when working with videotape. The equipment is, to some degree, delicate. Ideally, in a close working relationship, the negative inclinations of the students and their teachers should cancel each other out.

SECTION V

Implications for Curriculum Design

Perhaps the most fundamental result of this study is not the statement of any conclusion but the posing of certain significant questions. What happens to the intellectual development of a learner as the ratio of vicarious experience to real experience rises? And if the step-up of vicariousness does lead to intellectual growth, does it contribute to the emotional maturity of the child? Or does it in fact retard it? How will black urban children deal with a self and environment that they've been able to abstract and project on a screen? A strict diet of reality might disorient, traumatize and contribute to learning problems. Herndon, in describing a painting activity in which he had a class of black urban learners participating, says,

> . . . like all kids, they tend to paint like pictures they've seen. I don't mean particularly copy--some do and some don't--but they're influenced when they paint, by the painting and posters they've seen, not by real life. They all want to paint pictures that look like real pictures, the kind they always see.[1]

In Non-Verbal Learning, we are reminded that

> The nature of action is inherently transitory, and our very familiarity with our everyday surroundings prohibits us from forming an accurate estimate of them. The highly consequential act of putting a "frame" around a person or group or an object concentrates and

---

[1]James Herndon, The Way It's S'pozed to Be (New York: Bantam Books, 1965), p. 69.

> emphasizes and there are not many films that deal honestly and directly with real events--films that permit us to look at human beings as they actually are.[2]

Maybe the need to escape a harsh reality is more than childish fantasy. Maybe it's a technique for survival. Who knows with what we are dealing here?

But even more basic questions might be asked. Perhaps it is time to question the domination of print in our schools. It was Socrates in a dialogue with Phaedrus who said,

> You who are the father of letters, from a paternal love of your own children, have been led to attribute to them (letters) a quality which they cannot have; for this discovery of yours will create forgetfulness in the learner's souls, because they will not use their memories, they will trust to external characters and not remember of themselves . . . they will be the hearers of many things and will have learned nothing.[3]

The idea that men could learn truth from the written word was contrary to Socrates' notion that, in addition to a theoretical understanding of something, the learner must have first hand experience or he could never know more than his teacher--in this case, the manuscript.

Extending Socrates' argument by making the argument political, one might say that the student could never know more than his manipularor or his oppressor. This is not a far-fetched equation; teacher-oppressor. It is central to

---

[2] Jurgen Ruesh and Weldon Kees, Non-Verbal Communication (Berkeley and Los Angeles: University of California Press, 1956), p. 11.

[3] Benjamin Jowett, trans., The Dialogues of Plato (Chicago: Encyclopedia Brittanica, 1952), pp. 138-139.

the issue of community control and stems from a feeling that all of the institutionswithin a community; schools, churches and police that are run by people who live outside the community do represent and perpetuate the institutionalized racism of the society at large. And that it is in these institutions, schools, churches, police that the power of their racist oppression is made manifest.

In their study of Muncie, Indiana, Robert and Helen Lynd described in some detail the ways in which the schools, reflecting the dominant middle-class ethos, served to suppress the educational aspirations of children from the lower social classes. The Lynds' judgment of the schools was repeated in a series of other studies of communities in New England, the deep South, and the mid-West by W. Lloyd Warner and others. Researchers such as Warner, Robert Havighurst, and Martin Loeb concluded in a volume drawing on all these studies that the main function of the schools appeared to be that of sorting and certifying students for mobility, a process that tended to doom lower-class students to remain lower class.

The socio-political ramifications of videotape approach to learning may be profound and must be studied. Images may have a liberating effect. Print might be a tool of oppression. Socrates' argument would be rendered invalid by the use of videotape in a manner described in this study.

In Future Shock Alvin Toffler tells us that

> Within 30 years, the educational systems of the United States, and several western European countries as well, will have broken decisively with the mass production pedagogy of the past, and will have advanced into an era of educational diversity based on the liberating power of the new machines.[4]

Marshall McLuhan making a similar point has said that the African nations, having missed the Industrial Revolution, may find it easier to adjust to what he calls the "post-literate, retribalized" condition than will the advanced western nations. "Post-literate and retribalized" might be adjectives appropriate to urban black students.

This questioning of print is not meant to be a denigration of verbalism, per se. Verbal constructs may be necessary in making sense of the world we think we see. In Non-Verbal Communication, we learn that "The difficulty of forming accurate estimates of reality is not only due to the transitory nature of action, but is also due to the 'tricks' our eyes would play on us."[5] Everyone is familiar with optical illusions, the most familiar of which we may have experienced as children when we opened a box of Cracker Jacks. Some may remember two bananas, identical in size but when placed one in front of the other one, the one placed in front always appears to be larger. Jerome Bruner, the Harvard educational psychologist, has designed elementary school

---

[4]Alvin Toffler, Future Shock (New York: Random House, 1970), p. 276.

[5]Ruesh and Kees, op. cit.

curriculum and materials around this type of phenomena. He explains that to succeed in actually understanding the reality of illusory experiences, the child must employ some internalized verbal formula that shields him from the pull of perceptual appearance.

It may be that these verbal constructs may be necessary to understand any perceived phenomena. And it may be that faulty verbal constructs lead to faulty or wrong understandings of phenomena and consequently to inappropriate responses to the environment and ultimately to failure.

What is most important if these verbal constructs exist is that they do exist, and that they are verbal. Consider this: All through this study, the author has been plagued by a single thought--suppose a valid conclusion of this study were to be that urban black students can learn significantly more effectively using visual, pictorial stimuli? How would this relate to upward social mobility for them--upward social mobility which is based on print symbol manipulation? Well, if verbal constructs do exist as a prerequisite for understanding reality, then would not the point of their formation be the most advantageous staging point for instruction?

Time as a Factor

In speaking with people about this study, one often hears statements like, "Oh yes, I've heard of that done with polaroid cameras, or instamatics." These people are not

talking about experiments that are synonymous with the one described in this volume. Time is a most important factor in this experiment--time in the sense of instant replay and time in the sense of continuous action.

Alvin Toffler in Future Shock says,

> Every society has its own characteristic attitude toward past, present, and future. This time-bias, formed in response to the rate of change, is one of the least noticed, yet most powerful determinants of social behavior, and it is clearly reflected in the way the society prepares its young for adulthood.[6]

Toffler says again,

> A great deal of human behavior is motivated by attraction or antagonism toward the pace of life enforced on the individual by the society or group within which he is embedded. Failure to grasp this principle lies behind the dangerous incapacity of education and psychology to prepare people for fruitful roles in a super industrial society.[7]

Without time, change has no meaning. And in education, what we are seeking is change. Moreover, in the measurement of change, we are today far more advanced with respect to physical processes than social processes. We know far better, for example, how to measure the rate at which blood flows through the body than the rate at which a rumor flows through society.

Videotape replay will reveal to teachers the natural time sequences of their students' lives. It will reveal to

---

[6] Toffler, op. cit., p. 399.

[7] Ibid., p. 44.

students consciously, the time sequences of their own actions and the actions of people in their social and ethnic group and in their physical environment. Interesting, and of educational benefit, can be analyses of these real-life, time-motion sequences based on students' own perceptions. In teacher-directed classrooms, social processes such as "getting on welfare" or "getting a job" or even potentially muckraking subjects like "what the policeman does all day" might be taped and studied.

Recommendations for Further Research-- New Design Possibilities

One major advantage of using "mediafare" such as audiotape, videotape, and still pictures to record data is the permanence of the complete record. It is not subject to decay and can provide reliability checks. Moreover, the same content can be the base for new hypothesis testing not considered at the time the data were collected. Material that was originally viewed as worthless may become extremely valuable. Therefore, new experiments or modifications of the experimental design need not depend on a new field test.

But, even with possibility of using the same data to check several hypotheses, the notion of a single critical experiment is erroneous. There must be a series of linked experiments each testing a different outcropping of the hypothesis.

Some new experiments should match two P.S. 144 type situations and two I.S. 10 type situations. Then aspects of the P.S. 144 approach should be tried in the I.S. 10 and vice-versa. For example, one might try a total freedom-laissez-faire approach in a whole-time-block wherein the students would have access to the TV equipment all day for a month or two, or for a whole semester. Or one might try strong teacher direction in a segmented day wherein students had access to the equipment on a limited basis, perhaps for three afternoons per week. Several other possible modifications of the experimental design follow.

It might be possible to measure the amount of interest the videotape approach is generating in the students by attempting to establish indices outside of school. A questionnaire sent to parents either through sealed envelopes carried home by students or mailed directly to the home or perhaps presented to the parent in person on open school night or at any random parent-teacher conferences might elicit valuable information that might be rated along an interest scale.

Perhaps more could be learned about the effect of this television approach on the variable interest if the study were conducted in a school where students change classes, where there are timed periods. Class attendance in that kind of setting tends to reflect a greater degree of volition, since cutting a class is far less hazardous than missing school altogether.

In Crisis in the Classroom, Charles Silberman cites but does not document a study in which he says, "A careful count of the frequency and nature of student-teacher interchanges showed that teachers in the low-income classrooms discussed the curriculum with their students less than half as often as did the teachers in the middle-income rooms."[8] An index reflecting this phenomena might be valuable in a new evaluation scheme designed for this study. It could be set up on a pre-post basis with monitoring equipment or observer in the classroom for a given length of time before, during and after the TV equipment is introduced.

Some indications of a student's reaction to on-going classroom activities might be less demonstrable than the behaviors monitored in this study. Even though these behaviors might be less obvious, they might be more accurate indicators. For example, with regard to the variable "interest" attendance may be a measure of interest or it may not be. Some children--probably most--are forced to attend school whether they want to or not. But nobody is forced to smile, or to stare intently, or to look bored. If a system were to be set up to classify and rate these facial and other body expressions, more data could be provided to validate or refute the hypothesis. Quantification of the smiles could be valuable data. George Leonard in Education and Ecstasy says, "Even on narrow practical grounds, joy of learning will generally prove to in-

---

[8]Charles Silberman, Crisis in the Classroom (New York: Random House, 1970), p. 89.

crease efficiency of learning."[9]

Art work is another expressive personal documentation that might provide data about how children are responding to a curriculum based on images of self and environment. Non-Obtrusive Measures cites studies by Solley (1957) and Graddick (1961)[10] in which both investigators showed that the size of children's drawings of Santa Clause was larger before Christmas than after. The conclusion drawn was that a child's interest in Christmas was demonstrated by distortions in the size of the Santa Claus drawings. It is possible that a child's knowledge and attitudes about himself or his environment might change as a result of his framing, focusing, and recording an image of that self or that environment. It is also possible that the child's drawings might indicate if that change is taking place and the nature of it.

If most people would agree that reading (outside of school) is the most school related of avocations, then it should not be too difficult to see a correlation between outside reading and interest in school. Consequently, a count of library books checked out during the period, or pre-post tabulation would add valuable data to a study of this kind. A closer check on the quality of book and/or its closeness to

---

[9] Leonard, op. cit.

[10] Webb, Campbell, Schwartz, and Sechrest, op. cit., p. 109.

the on-going classroom activity could be made.

Unfortunately, both schools in which this study were field-tested had extremely limited library resources, making the kind of measurement and analysis suggested here impossible.

In a new experiment, task assignment--or who should do what in making the equipment function--should be completely voluntary so as to measure the effect of TV participation on interpersonal relationships. An interesting related experiment would be to set up the experiment as an after-school or a pre-school, or a recess time activity. Participation might then be considered a more accurate measurement of interest.

In designing this experiment, the author accepted the size of the class used in the experiments as given and fixed. It is quite possible to conceive of the experiment using small groups of children. As a matter of fact, the nature and functioning of the equipment dictates active involvement of only a few students at a time, the product of this involvement then being projected to the entire class. It would seem wise in a future study to consider the use of videotape in other than natural class groupings. It may be that this type of learning approach may be more related to small groups than to whole classes.

The use of the word, curriculum, in this study was largely limited to only one aspect of what might be considered a three-part educational process. Curriculum may be examined as it contribute to motivation, to information transfer,

and to application of learning. The focus in this study was on motivation.

The learning characteristics and the characteristic learning problems of black ghetto youth seem to indicate that motivation is the area of prime importance if a break-through is to be made toward effective education of these students. However, TV c n facilitate the two other areas, information transfer and application as well. Its use in these areas must be investigated and demonstrated.

The validity of this study centers around consideration of the variable interest. The assumption is that if it can be demonstrated, that the use of video recording equipment with a class will raise that class's interest, it will necessarily raise the class's motivation, thereby raising the class's learning potential and ultimately raise the class's actual achievement.

Some method of measuring the actual achievement as a result of the TV activity must be devised. In this study, pre-test post-test was considered, then discarded as a technique because it would have been hard to isolate the cause of a dramatic increase or decrease in scores. "Hawthorning" would certainly have had something to do with it. But what about an instrument that would measure, not the achievement, but the quality of learning as it was going on.

Dr. R. Ross Adey and his colleagues at the Space Laboratory of U.C.L.A.'s Brain Research Institute have discovered

hitherto unsuspected electrical happenings deep within the brain. They have found complex wave patterns during learning and recall.

Even if the class had to be wired-up and wearing electrodes in class, much valuable data could be collected.

Generally, devices to monitor the class should be concealed. Perhaps one-way glass could be used with a television camera mounted behind it. Perhaps a classroom with permanently installed cameras could be used, but it is the opinion of this author, based upon experience with permanently installed TV equipment at Marks Meadow University of Massachusetts Lab School, that the control of such equipment--focusing, zooming, panning, tilting--is an unwieldly and noisy process that makes it much less desirable than a one-way glass.

What is needed for audio recording is a system of several microphones (concealed and permanently mounted) that would feed into a multi-mike mixer. A research assistant would be needed to "ride gain" or control the incoming signals from the class. The classroom should be soundproof or acoustically treated. The reasearch assistant could operate both the TV camera and the audio equipment from behind the one-way glass.

Students as Consumers of Broadcast TV

In titling this study, we spoke of students recording

images of themselves and their environment, but throughout our study, we failed to include in that environment the kind of television that is a normal part of a child's life--broadcast TV. To be sure, we recorded some programming from broadcast television in our work at P.S. 144 while we were instructing the students in the operation of the gear (Audiotape index 015-073-120). But this is not enough. Daily we are bombarded with statistics on how much TV children watch. One most recent estimate puts the figure at 54 hours a week. Another startling statistic reveals that there are more households in the United States with television sets than there are households with telephone or baths.

The question was asked in Section I: "How do you bring the outside in?" This refers to the relationship between the outside environment a child experiences and the classroom itself. Father John Culkin, Director of the Center for Understanding Media in New York observes,

> The child lives totally immersed in a visual world and yet there is not one-half of one per cent of the elementary schools in the United States which spend one hour a week helping him to interpret and to become selective and discriminating about visual stimuli.[11]

Certainly, one of the main ways of bringing the outside in is to deal in school with the substance of what children deal with outside of school. A subsequent study should explore

---

[11] Action for Children's Television (New York: Avon Books, 1971), p. 22.

ways of having children decide what should be recorded for playback in school, considering all of the reasons or lack of reason surrounding that choice, and then planning the use of that material as curriculum. One need not refer only to programs. Commercials teach as well. What happens when the child sees in real life the toy that has been photographed to look like steel, but is actually made of cardboard? Sesame Street has found out that commercial techniques used successfully to sell cereals and toys to children can be put to work to teach the same children basic cognizant skills.

General Conclusion

Education can no longer be content with passing along the culture's knowledge, values, and ways of perceiving just when those things are shifting faster than we can perceive. Anyone who thinks the present curriculum makes sense is invited to explain to an intelligent 14-year-old why algebra or French or any other subject is essential for him. The answers adults give are either evasive or nonsensical. The answer is, of course, that education today is being strangled by a curriculum of the past. Society is not prepared to face the consequences, the social upheaval that a modern curriculum would bring about.

The old curriculum was supposed to lead toward understanding, broader knowledge, scientific method, good citizenship or, more specifically, toward better writing, speech,

figuring, grammar, geography and all that. But, classes of people were not supposed to change. Wealth was not to be redistributed. Disenfranchised people are not supposed to become politically powerful. This may account for the failure of education in both the urban and rural slums.

Many scholars studying the failure of slum schools place the reason for this failure on the inability of some ethnic cultures to develop the complex of attitudes--future orientation, a stress on individual rather than collective mobility, an emphasis on individual achievement, a sense of control over one's own destiny, etc. But as George Leonard says,

> This literature has contributed a great deal to our understanding of why "disadvantaged" children fail; with a few exceptions it has contributed very little to our understanding of why schools fail, or of how they might be changed in order to make learning successful for children from these backgrounds. Indeed the question hardly comes up in scholarly literature.[12]

It is the old curriculum that must go. Instead of a standardized elementary and secondary school curriculum in which all students are essentially exposed to the same data base, the same history, math, biology, literature, grammar, foreign languages, etc., education must attempt to create widely diversified data offerings. And children should be permitted greater choice.

The curriculum must be relevant, and to be relevant it

---

[12] Leonard, op. cit., p. 80.

must relate to the lives of the students outside of school as well as in the classroom. Lawrence A. Cremin says in The Genius of American Education that almost everybody who wrote about education in the past took it for granted that it is the community and the culture that educates. But school boards, teachers organizations, parent groups and community groups cannot, for political reasons, for economic reasons and because of misplaced idealism cannot particularize education, so as to make it relevant to the lives of its unique minorities. The unresolved issue of community control illustrates this problem.

What may be implied from this study of urban black learners and videotape is that here may be an approach that circumvents the monumental political problems of totally restructuring ghetto schools to achieve quality education, an approach that takes into account the unique characteristics of the urban black learner--what he is and where he's "at"--and then structures upon this awareness a radically new, but totally familiar learning environment. Here is an approach that seeks to bring a humane unity to a child's life--a unity based on the recognition that education is more than a preparation for future living, but a way of living and solving problems and having fun--here, now and forever.

BIBLIOGRAPHY

BIBLIOGRAPHY

Action for Children's Television. New York: Avon Books, 1971.

Bernstein, B. Some Sociological Determinants of Perception: An Enquiry into Sub-Cultural Differences. New York: Columbia University Press, 1968.

Brameld, Theodore. The Use of Explosive Ideas in Education. Pittsburgh: University of Pittsburgh Press, 1965.

Campbell, Donand and Stanley, Julian C. Experimental and Quasi Experimental Designs for Research. Chicago: Rand McNally Co., 1963.

Cartwright, Dorwin and Zander, Alvin, eds. Group Dynamics. New York: Harper & Row Publishers, 1968.

Crosby, Harry H. and Bond, George R., eds. The McLuhan Explosion. New York: American Book Company, 1968.

Fanon, Frantz. Black Skin, White Mask. Translated by Charles Lam Markmann. New York: Grove Press, Inc., 1967.

Fantini, Mario and Weinstein, Gerald. The Disadvantaged: Challenge to Education. New York: Harper & Row Publishers, 1968.

Fantini, Mario and Weinstein, Gerald. Making Urban Schools Work. New York: Holt, Rinehart & Winston, Inc., 1968.

Feininger, Andreas. Total Picture Control. New York: Crown Publishers, Inc., 1961.

Fuller, R. Buckminster and Marks, Robert W., eds. Ideas and Integrities. Canada: The Macmillan Company, 1963.

Fuller, R. Buckminster. Inventory of World Resources Human Trends and Needs Phase I. Carbondale, Ill.: Southern Illinois University Press, 1963.

Fuller, R. Buckminster. Nine Chains to the Moon. Carbondale and Edwardsville, Ill.: Southern Illinois University Press, 1938.

Fuller, R. Buckminster. No More Secondhand God. Carbondale and Edwardsville, Ill.: Southern Illinois University Press, 1963.

Goodman, Mary Ellen. Race Awareness in Young Children. New York: Macmillan Company, 1952.

Grier, William H., M.D. and Cobbs, Price M., M.D. Black Rage. New York: Basic Books, Inc., 1968.

Hall, Edward T. The Silent Language. New York: Fawcett Publication, Inc., 1959.

Harrington, Michael. The Other America. Baltimore, Md.: Penguin Books, Inc., 1962.

Hayakawa, S.I., ed. The Use and Misuse of Language. Greenwich, Conn.: Fawcett Publication, Inc., 1962.

Herndon, James. The Way It's S'Pozed to Be. New York: Bantam Books, 1965.

Jowett, Benjamin, trans. The Dialogues of Plato. Chicago: Encyclopedia Brittanica, 1952.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart & Winston, Inc., 1964.

Lacy, Dan. Freedom and Communications. Urbana, Ill.: University of Illinois Press, 1965.

Lawson, John Howard. Film: The Creative Process. New York: Hill & Wang Publications, 1964.

Leonard, George B. Education and Ecstasy. New York: Dell Publishing, 1968.

Lynd, Robert S. and Lynd, Helen M. Middletown: A Study in American Culture. New York: Harcourt Brace & World, 1929.

MacDonald, James B.; Anderson, Dan W.; and May, Frank B., eds. Strategies of Curriculum Development, Selected Writings of the Late Virgil E. Herrick. Columbus, Ohio, 1965.

McBride, Wilma, ed. Inquiry: Implications for Televised Instruction. Washington, D.C.: National Education Assoc., 1966.

McHale, John. R. Buckminster Fuller. New York: George Braziller, Inc., 1962.

McLuhan, Marshall. Understanding Media. New York: New American Library, Inc., 1964.

McLuhan, Marshall and Fiore, Quentin. The Medium is the Message. New York: Bantam Books, Inc., 1967.

Miller, Harry L. and Smiley, Marjorie. Education in the Metropolis. New York: The Free Press, 1967.

Murphy, Judith and Gross, Ronald. Learning by Television. Edited by Renata Stoephasins. New York: The Fund for the Advancement of Education, 1966.

Read, Herbert. The Redemption of the Robot. New York: Pocket Books, Inc., 1966.

Reid, J. Christopher and MacLennan, Donald W. Research in Instructional TV and Film. Washington, D.C.: Office of Education, 1967.

Riessman, Frank. The Culturally Deprived Child. New York: Harper & Row, Publishers, 1962.

Ruesh, Jurgen and Kees, Weldon. Non-Verbal Communication. Berkeley and Los Angeles: University of California Press, 1956.

Schramm, Wilbur, ed. The Science of Human Communication. New York: Basic Books, Inc., 1963.

Shands, Harley C., M.D. Thinking and Psychotherapy. Cambridge, Mass.: Harvard University Press, 1960.

Silberman, Charles. Crisis in Black and White. New York: Random House, 1964.

Silberman, Charles. Crisis in the Classroom. New York: Random House, 1970.

Snitzer, Herb. Living at Summerhill. New York: Collier Books, 1963.

Stearn, G., ed. McLuhan: Hot and Cool. New York: New American Library, 1967.

Toffler, Alvin. Future Shock. New York: Random House, 1970.

Vygotsky, L.S.; Hanfmann, Eugenia; and Vakar, Gertrude, eds. and trans. Thought and Language. Cambridge, Mass.: Massachusetts Institute of Technology, 1962.

Wade, Serena E. Media and the Disadvantaged: A Review of the Literature. ERIC Information Retrieval Center on the Disadvantaged at Teachers College. New York: Columbia University, 1963.

Webb, Eugene J.; Campbell, Donald T.; Schwartz, Richard B.; and Sechrest, Lee. Non-Obtrusive Measures: New Reactive Research in the Social Sciences. Chicago: Rand McNally & Company, 1966.

Whyte, W.H.; Bello, Francis; Freedgood, Seymour; Seligman, Daniel; and Jacobs, Jane, eds. The Exploding Metropolis. Garden City, New York: Doubleday & Company, 1957.

Wiman, Raymond V. and Meierhenry, Wesley C., eds. Education Media: Theory into Practice. Columbus, Ohio: Charles Merrill Publishing Company, 1969.

Wright, Nathan, Jr. Black Power and Urban Unrest. New York: Hawthorn Books, Inc., 1967.

Wymane, Jennifer D. and Gordon, Stephen F. Primer of Perception. New York: Reinhold Publishing Corp., 1967.

APPENDIX

Videotape Index

General Comments

Playback on Sony one-half inch video recorder.*

Set tape counter at 000 at appearance of sign in front of school saying P.S. 144.

000 - Pictures of school and environs--battered buildings, signs, people in windows, children playing--no sound.

152 - Mrs. G.'s class deciding what they will do with videotape recording equipment.

168 - Mrs. G.'s class visits a student's house. Student's stage an introduction of class to teacher and mother. Children dance and sing.

261 - Students take videotape equipment on field trip to park.

400 - Mrs. G.'s class discuss TV activity--children watch replay, discuss quality.

498 - I.S. 10 Manhattan--Mrs. W.'s class. Discussion of words learned from TV activity.

532 - Televised class pictures--teacher and students react.

560 - Class rehearses play--song "Choice of Colors."

---

*Recorded on Sony recorder purchased 1968 old format, prior to EIAJ standardization.

Tape #2

Set tape counter at 000 at appearance of first child's face.

000 - Continuation of rehearsal for class play.

333 - Tape ends.

Audiotape Index

General Comments

A. Listen for instructions at beginning of tape that tell when to set tape counter at 000.

B. Because of inadequacies in recording technique, please monitor recorder tone and volume controls constantly.

C. The numbers appearing between the tape index number and the transcript refer to the categories listed below.

(1) Any questions or comments that could lead to hard core curriculum.

(2) Places in classroom activity where students are presented with an opportunity to make a choice or where students make a choice.

(3) References to outside environment.

(4) Direct instruction by teacher or media specialist.

(5) Student volunteering.

(6) Student comments about themselves.

(7) Comments that indicate interest in the video-tape activity.

(8) Awareness of monitoring effect of activity.

(9) Self regulating behavior.

(10) Comments that reveal a relationship between the videotape activity and real life.

(11) Self-instruction by students.

(12) Comments and questions that could lead to soft-core curriculum (curriculum other than reading, math, social studies, science).

(13) Comments about the group or individuals in the group.

(14) Positive behavior or comments about the videotape activity.

(15) Modified behavior as a result of something perceived through TV.

D. Single quotation marks indicate an utterance by the media specialist.

Quotation marks indicate an utterance by someone in the class.

Mrs. G.'s Class--Tape 1 Red Leader Out

000			Orientation--looking at videotape
015	(3)		"Let's look at cartoons"
027			'the heads of the machine need cleaning watch'
033	(7)	(12)	"what's that stuff in that little bottle"
038			"Can that stuff hurt that machine?"
044			"If you put it in your mouth will it poison you?"
058			'I'll go back to 428'
073	(11)	(12)	"Oh you could get a Spanish station, right?"
083	(2)		'Which one shall we tape'
091	(2)		"We want to go to Henry house."
112	(10)		"I have a tape recorder but my sister"
119	(7)	(12)	"Mr. France, what happened that day we went to the park"
120	(7)	(14)	"Now let me change the channel"
127	(9)	(11)	"If you all break that thing off it's gonna cost a lot of money to get it fixed"
129	(2)		'Do we want to tape anymore, or do we want to do what we did last week'
130	(2)		"Look let's tape this"
131	(4)		"Push down this record button, turn it to play, and we'll be recording it'
133	(7)		"Show what we did last week"
135	(4)		'Stop it, put it on rewind'

141	(2)		"Tape what we did in the park"
142	(4)		'Put it on stop, rewind'
144	(5)		"Could I do it after Kenny"
150			'"OK. Let's get ready, Tyrone'"
162	(2)		"Let's go to Henry's house"
167	(4)		'It doesn't make any difference, Johnny, once this is on'
167	(8)		"The tape's not on it right"
169	(7)		"There go me"
170	(7)		"There go Tyrone"
193	(7)		"That's when we was talking about what we gon' do."
201	(7)		"We didn't see the part when we wuz in the park"
207	(5)		"Who gon' carry this? You can't carry this. Oh yes, I can."
227	(8)		"Hey that's on that tape"
247	(7)		"Is it playing? Oh huh."
257	(4)	(12)	'Why don't we try a girl on the camera first?"
260	(3)		'Where does he (Henry) live?'
269	(7)		"Is it playin', Mr. France?"
362	(4)		'This is the thing that we make the picture with. This is the camera--one person is going to be the director so each crew will have about five people.'
378	(9)		"Everybody shut up"
483	(2)		'O.K. Are you ready to try it yourselves'
484	(5)		"Yeah! Yeah!"

495	(7)	(14)	"Hello, Mr. France. Thank you for bringing the stuff and showing us how to work it."
506	(7)		"Mrs. G., I spoke on this here tape recorder. It's on. Mr. France let me speak."
523	(7)		"In P.S. 144. Come on and see all the TV stuff that Mr. France brought. Come on and see it, right now. Pick up a chair and tryin' to hit a boy in the head"
538			"The fight is over"
656	(2)		'"What else can we do with the camera? We could bring it to our homes, we could do almost anything. Over the weekend I want you to think about places we could take it. Some of the girls felt left out. What do you say, Sandra? What are you angry about?'"
662	(2)	(3)	"Oh let's go out and show"
670	(2)		'I'm not going to tell you what to do with it. If you're creative and you've got lots of imagination you can think of all kinds of things and ways.'
674	(8)	(12)	"Oooh, oooh."
676			"A jackass is a donkey."
677			"A colored man go with a white woman that's a light skin girl"
679			"Will you'll shut up and let the man talk"
			"In case he like her."
681	(13)		"I think what you did with it is very good and I want to keep using it with you."
683	(14)		Applause

688	(7)	(9)	"Let him talk, I want to hear what he got to say. I don't want to hear what you'all got to say"
689	(12)	(13)	'I think you're right about the girls being left out. I didn't see one girl on the television screen.'
691	(2)		""Cause Mrs. G. ain't let us go.'"
693	(2)		'Do you girls think you can do it?'
694	(2)	(5)	"Yeah! Yeah! We'll be so glad. Hey can we do it now? Next week?"
699	(8)	(4)	'Leave the mike alone.'
701	(2)		'"What would you like to see on the TV?'"
703	(5)		'"Now Kenny, if you want to say something, raise your hand.'"
707	(8)		'"Mr. France, is it on?'"
712			'"I thought maybe you didn't want them to know it's on.'"
712			'No, that's all right.'
713	(8)	(7)	"Turn it on."

Mrs. W's Class--Tape 1 Green Leader Out

011	(4)	(1)	'Why do you think it is that if you point the camera this way all the people are dark and if you point it this way we can see better'
015			"Cause of the light"
025			'What do you think we can do to correct that, because we don't have much time? Is there anything that we can do so that we can make the picture look as good as it did when Darlene was singing?'
105	(7)		*Commotion" '"Get away from that part of the room.'"
106			Rehearsal of play while student technicians tape.
229	(8)		Playback. '"Now look at yourselves'" Notice absolute quiet when tape is played back.
917	(4)	(5)	'"While the technicians are getting together I'd like to review a few things that we have learned from this TV experience.'"
923			I'm going to call out a word and I want someone to raise his hand and point out the word on the vocabulary chart. The word is monitor.
933			Please point out the word to me, to the class. Would anyone like to use that word in a sentence, Kevin.
947	(5)		"We have a TV monitor in our room"
950	(14)		'"Very good, I'm going to call the word camera.'"
960			All right. Who's going to use that in a sentence. And I hope you won't use the same sentence Kevin used. Denise.

967	(5)		"I move the camera"
967			"technician"
			'"Do you know a technician'"
			'"You don't know anyone? Mr. France? Do you know anyone else?'"
			"Mr. Frasier"
			'"How about Elaine?'"
			'"How about Richard yesterday? Put it in a complete senteice.'"
			'"Tripod'"

Mrs. W.'s Class--Tape 2 Green Leader Out

111			'"Can anybody read that list of words from the bottom up?'"
241	(14)		'"I think that's great'" (Using the TV to magnify some class portraits)

Mrs. W.'s Class--Tape 2 Red Leader Out

010	(9)		'"Please get this because I want them to see themselves'"
034			'"All right, let's sit and look at this. I want you to see some things'"
077	(13)		'"Michael is good. He's very good.'"
083	(8)	(4)	'"Elizabeth, I want to hear that. I want Elizabeth to hear herself. Can we play that back.'"
086	(8)		'We didn't record any sound'
088	(8)	(4)	'"I want Elizabeth to hear herself because she had never done a very good job of memorizing her stuff and talk slower, little girl.'"

092 (4) 'Look kids, over here on this thing that we're using: there's a plug for the mike and that mike should go from here and go here. We had it plugged (8) (2) directly into the camera. Shall we do it over or shall we see this through?

116 (4) 'Let's make one to make sure we're getting both the voice and picture'

188 (12) '"The floor manager has to get respect from you. In other words if he tells you to do something it comes from me. He's not trying to boss you around.'"

(15) '"I think Rona might work for a while as floor manager'"

200 (4) (12) 'You've got to say, Quiet on the set. Get everybody quiet. And then you've got to ask the cameraman if he's got the picture that he wants ready. You've got to say--Ready video--say it--Video are you ready?'

227 'Now you've got the picture that you want now we're ready to go. Turn back to zero. Let's go.'

326 (12) (14) (1) 'Can I get a couple of comments in on the camera work. What do you think (13) (9) Richard ought to be doing with the camera? Do you think he's getting the right kind of pictures? Little more focus. Got to be a little more careful of focus. Now you focus with this and That's how you get it clear. What other comments? I think he's doing a very good job but there's one problem. What do you think about the camera movement?'

"He should just keep it in one spot"

'Right, right. Do you agree with that? Yeah, Richard, keep it on the widest possible shot. Don't use that thing to make a close up at all, and don't move it so much. Move it very, very rarely. Could we try out someone else on camera.'

(5) 'Me! Me! Me!"

365 (4) (12) '"We will be going out tomorrow with the TV camera. Therefore we will not practice the play. We will use the TV camera for experience outside. I want to say something to you children. I really don't know whether you know how fortunate you are. Did you see the man who first landed on the moon? Did you watch that? Did you know that when you were looking at him he was actually putting his foot on the moon? Do you know why? Do you know why you saw it? Because someone was taking a picture of it as it was being done. Do you realize that that's just what happened in here today, and the day before, and the day before--that you were being televised right then and you could see it right away. In fact, one day we saw ourselves in motion while the camera was on. We saw exactly what you were doing. Do you really realize how great an opportunity you have. So I want you to think about that and when we get ready to go out tomorrow I will choose a new crew. I don't want you to ask me, I'll tell you.'"

Class Attendance Figures

P.S. 144--Mrs. G.'s. Class

Attendance school year 1969-1970	84%
Attendance April 20-May 15	90%
Attendance Mondays and Wednesdays, April 20-May 15	98%

I.S. 10--Mrs. W.'s Class

Attendance school year 1969-1970	86%
Attendance June 15-June 19, 1970	100%

Teacher Comments--P.S. 144--Excerpts

(1) - "I don't know if the suggestion came from me, so I may have been guilty of manipulating it a little bit." (trip to Henry's house)

(2) - "Each child lined up and read Henry's mother's letter, so it stimulated reading."

(3) - "Ideally, it should have come from kids" (idea for the trip).

(4) - "They're very happy when they see their own faces on TV--it gave Henry a tremendous sense of importance."

(5) - "The mother's effort in cleaning the house showed how important the whole thing was to her."

(6) - "The social studies value might be secondary to what it did for the kids emotionally and socially."

(7) - "The mother and aunt came to school (to see the replay), not for a negative reason, but for a positive reason.

(8) - "Tapes can be used constantly as material for instruction-composition lessons."

(9) - "Having the equipment work properly is very important because students can't tolerate too much frustration--going through a whole activity and then hearing RRRRRR--you lose the kids."

(10) - "Each time something came out really clear they were really excited."

(11) - "There's a certain self-consciousness brought about in the teacher--this is bad."

(12) - "There's a certain comraderie that's established, too, when they see each other on TV."

(13) - "It (TV) leads to child-oriented teaching."

(14) - "I felt the need for more structure."

(15) - "It's important to be there every day--as it is now, you're something special, like a guest."

Teacher Comments--I.S. 10--Excerpts

(1) - "Exciting--one of the best things that ever happened to the group of children--plain excitement and interest in the children."

(2) - "You could tell it was interesting by just looking in the children's eyes--sounds of their voices--you could tell by the way they talked among each other that they were excited."

(3) - "There were children in the class who had never talked before openly, who had never participated in the activities of the class who were now participating."

(4) - "I think they were amazed at seeing themselves so quickly and seeing themselves in action."

(5) - "I don't think that technically it was too hard a task because I had a dull class and it worked."

(6) - (Discipline) "At first I had a problem because of excitement--later they realized they had to act a certain way if we were to have it (TV)--I think that helped."

(7) - "To expedite things the teacher should make the decisions--in a sort of democratic fashion--she can throw out ideas but steer decisions back to what she wants anyway to save time, energy, etc.--too much is lost--nobody has that much time."

(8) - "I don't think parents would object to this activity since not that much is done at the end of the school year anyway."

(9) - "Other teachers were very jealous--I replied to other teachers, 'I happen to be one of the lucky ones!'"

(10) - (Administration) "When they found out it was going to be no great bother, they saw it as a feather in their caps."

(11) - "One child was a discipline problem, not only for me but in previous classes, but when we had the TV she was no problem because I think she saw her ugliness and she couldn't stand herself."

(12) - "I think a bright class would benefit as much as a dull class because a lot of the benefit of TV relates to personality characteristics that exist in all children regardless of their capabilities."

(13) - "I've never taught an all-white class but I don't think black children have different learning characteristics."

(14) - "I think TV can be used by any ordinary teacher-media specialist should be present in the beginning."

(15) - "TV can be helpful in motivation--I would carry my TV around getting motivation in the streets, real life, then go back to teach maybe a math lesson."

(16) - "For evaluation purposes there's nothing like playing it back."

(17) - "Today's crop of children don't want to read, they want to see and feel."